

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ALABAMA

UNITED STATES OF AMERICA

Plaintiff,

v.

PHARMACIA CORPORATION  
(p/k/a Monsanto Company)  
and SOLUTIA INC.,

Defendants.

CIVIL ACTION NO. CV-02-PT-0749-E

MOTION TO ENTER REVISED PARTIAL CONSENT DECREE

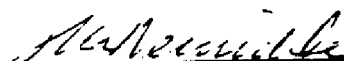
Plaintiff, the United States of America, unopposed by the Defendants, hereby moves for entry of the attached revised Partial Consent Decree. A Memorandum in Support of the Motion to Enter accompanies this Motion, along with a summary of the comments submitted by the public during the public comment period and the United States' responses to the comments. We are also herewith providing the Court with copies of all the comments submitted by the public.

The United States previously lodged a Partial Consent Decree on March 25, 2002. Since changes have been made to that Decree in response to the comments submitted by the public, we ask that the lodged decree be withdrawn and ask that the attached revised Partial

Consent Decree be approved and entered.

Respectfully submitted,

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MEMORANDUM IN SUPPORT OF MOTION  
TO ENTER PARTIAL REVISED CONSENT DECREE

I. INTRODUCTION

A. Procedural Background

On, March 25, 2002, a Partial Consent Decree regarding the Anniston PCB Superfund Site in Anniston, Calhoun County, Alabama, ("Site") between plaintiff the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), and Pharmacia Corporation (p/k/a Monsanto Company) and Solutia, Inc. ("Defendants") was lodged with the Court. Pursuant to 28 C.F.R. § 50.7, notice of lodging was published in the Federal Register on April 4, 2002 at 67 Fed. Reg. 16124. Upon request, the public comment period was extended from thirty (30) days to sixty (60) days.<sup>1/</sup> The public comment period closed on June 3, 2002. During

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1. The second notice of lodging was published in the Federal Register at 67 FR 20550. This publication extended the comment period and corrected an error in the first publication.

the comment period, over 370<sup>2/</sup> comments were submitted by the public. The United States' Summary of Comments and Responses to Comments is attached as Exhibit B, along with all of the comments.

None of the comments revealed that the lodged Partial Consent Decree was unfair, inadequate or inconsistent with the purposes of CERCLA. The United States nevertheless recognizes that the public harbored concerns as expressed in the comments about various components of the lodged Partial Consent Decree. In order to adequately allay those concerns expressed in the comments, the United States sought a number of modifications<sup>3/</sup> to the lodged Partial Consent Decree from the Defendants. As a result of those negotiations, the United States hereby withdraws the currently lodged Partial Consent Decree and replaces it with the revised Partial Consent Decree ("Decree") attached hereto as Exhibit A.

Because the proposed, revised Decree is fair, reasonable, in the public interest and fully consistent with the purposes of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), as discussed fully below and in the attached Summary and Response to Comments, the United States respectfully requests that the attached revised Decree be approved and entered by the Court.

B. The Complaint

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2. We are reluctant to state a precise number because several of the comments are not signed and appear to be in the same hand-writing. We also received submittals that do not actually comment on the Decree. In any event, we are providing the Court with *all* of the comments we received.

3. See, *infra* page 4 for a summary of the modifications.

The United States in its complaint seeks, *inter alia*:

(1) reimbursement of costs to be incurred by EPA and the Department of Justice for response actions at the Site; (2) performance of studies and response work by the Defendants at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP"), and (3) a declaratory judgment on liability for response costs that will be binding on any subsequent action or actions to recover further response costs pursuant to Section 113(g)(2), 42 U.S.C. §9613(g)(2).

C. The Proposed Revised Consent Decree

The revised Decree seeks to partially<sup>4</sup> resolve the claims of the Plaintiff against the Defendants by, *inter alia*, providing for: (1) the payment of EPA's oversight costs; (2) the performance of a Remedial Investigation/Feasibility Study (RI/FS) pursuant to the attached RI/FS Agreement and Statement of Work (SOW); (3) the performance of a Non-time Critical Removal (NTC Removal) action pursuant to the attached NTC Removal Agreement; and (4) continuation of a time critical removal action pursuant to the Removal Order attached to the Decree.

As noted above, the revised Decree was modified to address concerns raised by the commenters. The following changes have been made in the revised Decree from the prior lodged decree:

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4. The Parties acknowledge in the Decree that it does not resolve all of the United States' claims against Defendants under Sections 106, 107, and 113(g)(2) of CERCLA, 42 U.S.C. §§ 9606, 9607, 9613(g)(2), with respect to the Site. Subsequent settlements or litigation are anticipated as Site activities proceed under the Decree.

1. EPA will conduct the Human Health Risk Assessment component of the Baseline Risk Assessment, rather than the Defendants;

2. Cleanup of residential properties will be addressed pursuant the NTC Removal Agreement;<sup>2/</sup>

3. The disbursement of funds into the educational trust fund has been changed so that money is remitted every year;

4. Stipulated penalties have been increased in the RI/FS Agreement in order to better ensure compliance by the Defendants; and

5. The Defendants have agreed to waive their rights to challenge listing of the Site on the National Priorities List (NPL) should EPA determine to list the Site under the conditions set forth in the proposed Decree.

D. CERCLA Statutory Scheme

Congress enacted CERCLA in December 1980 in an effort to address the adverse health and environmental effects arising from thousands of sites where there were releases or threats of releases of hazardous substances into the environment. CERCLA, as amended, empowers the Executive Branch of the

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5. The NTC Removal Agreement was added to address concerns expressed by some of the commenters about the length of time an RI/FS takes to be completed. The NTC Removal Agreement requires the Defendants to perform an Engineering Evaluation Cost Analysis ("EE/CA") as provided for in the National Contingency Plan ("NCP"). This process is essentially a mini RI/FS and it is estimated that under this process cleanup of residential properties can begin substantially sooner than provided for in the lodged decree. Moreover, the residential properties covered by the NTC Removal Agreement will still be evaluated in the more extensive RI/FS evaluation and it is possible that additional cleanup activities may be required at the residences.

federal government with broad authority to clean up hazardous waste sites. 42 U.S.C. §§ 9601-9675.

CERCLA provides a threefold approach to the problem. First, under Section 104(a), 42 U.S.C. § 9604(a), the United States may take direct response actions to abate any actual or threatened release of a hazardous substance. Congress established a revolving fund, known as the "Superfund", in order to pay for these response actions. Second, under Section 106 of CERCLA, 42 U.S.C. § 9606, the United States may obtain equitable relief or issue administrative orders requiring responsible parties to abate such releases. Third, under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), the United States is entitled to seek reimbursement for the costs of response actions from responsible parties. See 42 U.S.C. § 9607(a)(1)-(4). Liability under CERCLA is strict, joint and several.<sup>6</sup>

E. The Anniston PCB Site

This matter relates to the Anniston PCB Site which consists of the area where hazardous substances, including PCBs (associated with the operations of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors) have come to be located.

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6. E.g., New York v. Shore Realty Corp., 759 F.2d 1032 (2d Cir. 1985); United States v. Monsanto Co., 858 F.2d 160 (4th Cir. 1988), cert. denied 109 S. Ct. 3156 (1989); United States v. R.W. Meyer, Inc., 889 F.2d 1497 (6th Cir. 1989) cert. denied, 110 S. Ct. 1527 (1990); United States v. NEPACCO, 810 F.2d 726 (8th Cir. 1986), cert. denied, 108 S.Ct. 146 (1987); Reichhold Chemicals, Inc. v. Textron, Inc., 888 F.Supp. 1116 (N.D. Fla. 1995).

Solutia's Anniston plant encompasses approximately 70 acres of land and is located about 1 mile west of downtown Anniston, Alabama. In 1917, the Southern Manganese Corporation (SMC) opened the plant, which began producing ferro-manganese, ferro-silicon, ferro-phosphorous compounds, and phosphoric acid. In the late 1920s, the plant also started producing biphenyls. SMC became Swann Chemical Company (SCC) in 1930, and in 1935, SCC was purchased by Monsanto Company. From 1935 to 1997, Monsanto Company operated the plant. Polychlorinated biphenyls (PCBs) were produced at the plant from 1929 until 1971. In 1997, Monsanto Company formed Solutia, Inc. and transferred ownership over certain of its chemical divisions. Solutia currently produces para-nitrophenol and polyphenyl compounds at the Anniston plant. Pharmacia was created through the merger of Monsanto Company ("former Monsanto") and Pharmacia and Upjohn on March 31, 2000.<sup>2/</sup>

During its operational history, the plant disposed of hazardous and nonhazardous waste at various areas, including the west end landfill and the south landfill, which are located adjacent to the plant. During the time that the west end landfill and the south landfill were used to dispose of wastes, hazardous substances, including PCBs, were released

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7. After the merger, the agricultural operations of the former Monsanto were transferred to a newly created subsidiary of Pharmacia named Monsanto Company.



from the landfills via soils and sediments being transported in surface water leaving the Defendants' Property. In addition, during the time that PCBs were manufactured by Monsanto Company at its Anniston plant, PCBs were discharged directly into a ditch which flowed into Snow Creek.<sup>8/</sup>

The cleanup of the Site presents extremely complicated technical issues because a large diverse geographic area is impacted. The area of contamination includes Defendants' Property, Snow and Choccolocco Creeks and their floodplains, as well as numerous residential and commercial properties.<sup>9/</sup>

## II. ARGUMENT

### A. Standard of Review for Consent Decrees involving the United States

Entry of a settlement agreement is a judicial act and, as such, requires approval by the Court. Review of a settlement agreement is committed to the informed discretion of the trial judge. United States v. Hooker Chemical & Plastics Corp., 776 F.2d 410, 411 (2d Cir. 1985); see also Officers for Justice, supra, 688 F.2d at 625-26; City of Detroit v. Grinnell Corp., 495 F.2d 448, 455 (2d Cir. 1974).

A court, however, does not have the power to modify a settlement; it may only accept or reject the terms to which

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8. See Affidavit of Robert G. Kaley, II, Ph.D., Exhibit A to the United States' Response to the Motion to Intervene.

9. See Declaration of Mario Villamarzo, Exhibit B to the United States' Response to the Motion to Intervene.

the parties have agreed. Williams v. City of New Orleans, 694 F.2d 987, 993 (5th Cir. 1982) ("In determining whether to approve or reject a proposed [consent] decree, the district court's function is not to tailor the relief itself. . . ."), *aff'd on rehearing en banc*, 729 F.2d 1554 (5th Cir. 1984); Officers for Justice v. Civil Service Commission, 688 F.2d 615, 630 (9th Cir. 1982), *cert. denied*, 459 U.S. 1217, 103 S. Ct. 1219 (1983).

District courts should approve consent decrees so long as they are not unconstitutional, unlawful, unreasonable, or contrary to public policy. Stovall v. City of Cocoa, Fla., 117 F. 3d 1238 (11<sup>th</sup> Cir. 1997). Also see United States v. Olin Corp., 927 F. Supp. 1502 (S.D. Ala. 1997), *reversed on other grounds*, 107 F. 3d 1506 (11<sup>th</sup> Cir. 1997) (Before entering a consent decree, the court has the duty to determine whether it is reasonable and does not violate the constitution, a federal statute, or controlling jurisprudence.)

This discretion should be exercised to further the strong policy favoring voluntary settlement of litigation. See Hooker Chemical & Plastics Corp., *supra*, 776 F.2d at 411; Citizens for a Better Environment v. Gorsuch, 718 F.2d 1117, 1126 (D.C. Cir. 1983), *cert. denied sub nom.*, Union Carbide Corp. v. Natural Resources Defense Council, Inc., 467 U.S. 1219, 104 S. Ct. 2668 (1984). The use of settlement agreements "encourages informal resolution of disputes, thereby lessening

the risks and costs of litigation." Securities and Exchange Commission v. Randolph, 736 F.2d 525, 528 (9th Cir. 1984); see also United States v. City of Alexandria, 614 F.2d 1358, 1362 (5th Cir. 1980). Both the parties and the public benefit from the "saving of time and money that results from the voluntary settlement of litigation." Citizens for a Better Environment, supra, 718 F.2d at 1126. The settlement agreement is a "highly useful tool for government agencies," for it "maximizes the effectiveness of limited law enforcement resources" by permitting the government to obtain compliance with the law without lengthy litigation. United States v. City of Jackson, 519 F.2d 1147, 1151 (5th Cir. 1975); see also United States v. Hooker Chemicals & Plastics Corp., 540 F. Supp. 1067, 1080 (W.D.N.Y. 1982).

The balancing of competing interests affected by the proposed Decree must be left, in the first instance, to the discretion of the Attorney General. United States v. Bechtel Corp., 648 F.2d 660, 666 (9th Cir.), cert. denied, 454 U.S. 1083, 102 S.Ct. 638 (1981).<sup>10/</sup> This principle is particularly important where, as here, the proposed Decree has been negotiated by the Justice Department for an expert federal administrative agency "specially equipped, trained and

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10. See also United States v. Associated Milk Producers, Inc., 534 F.2d 113, 117 (8th Cir.), cert. denied sub nom., National Farmers' Organization, Inc. v. United States, 429 U.S. 940, 97 S.Ct. 355 (1976) (Attorney General must retain discretion in "controlling government litigation and in determining what is in the public interest"); Kelly v. Thomas Solvent Co., 717 F.Supp. 507, 515 (W.D. Mich. 1989) (quoting Bechtel, supra).

oriented in the field . . . " United States v. National Broadcasting Co., Inc., 449 F. Supp. 1127, 1144 (C.D. Cal. 1978). Accordingly, there is a strong presumption in favor of approval of a consent decree proposed by the United States on behalf of EPA. See, e.g., SEC v. Randolph, 736 F.2d at 529 (9th Cir. 1984); Hooker Chemicals & Plastics Corp., supra, 540 F. Supp. at 1080.

A court is not required to make the same in-depth analysis of a proposed settlement that may be required to enter a judgment on the merits after trial; there is no requirement that the Court must compel the parties to try the case on the merits before approving a proposed settlement. Officers for Justice, supra, 688 F.2d at 625; City of Detroit, supra, 495 F.2d at 462; see also City of Jackson, supra, 519 F.2d at 1151 ("Although the court must approve a consent decree, in so doing it does not inquire into the precise legal rights of the respective parties . . ."). "The Court must eschew any rubber stamp approval in favor of an independent evaluation, yet, at the same time it must stop short of the detailed and thorough investigation that it would undertake if it were actually trying the case." Hooker Chemicals & Plastics Corp., supra, 540 F. Supp. at 1072, quoting City of Detroit, supra, 495 F.2d at 462. The nature of the inquiry to be undertaken by the trial court is, therefore, limited:

The trial court in approving a settlement need not inquire into the precise legal rights of the parties

nor reach and resolve the merits of the claims or controversy, but need only determine that the settlement is, fair, adequate, reasonable and appropriate under the particular facts . . . .

Metropolitan Housing Development Corp. v. Village of Arlington Heights, 616 F.2d 1006, 1014 (7th Cir. 1980).

The nature of a court's role in reviewing EPA action is limited. The court must give substantial deference to the Agency's engineering and scientific determinations, as well as its interpretations of federal environmental laws and regulations. Chevron, U.S.A. v. NRDC, 467 U.S. 837, 843-44 (1984); EPA v. National Crushed Stone Ass'n, 449 U.S. 64, 83 (1980); American Paper Institute v. EPA, 660 F.2d 954, 963 (4th Cir. 1981) (because technological and scientific issues are by their nature difficult to resolve by traditional principles of judicial decision making, the court "must look at the [agency's] decision not as the chemist, biologist or statistician that [it is] qualified neither by training nor experience to be, but as a reviewing court exercising . . . certain minimal standards of rationality.") In reviewing CERCLA consent decrees, courts defer to the judgment of the environmental agency that negotiates the decree and has the expertise to determine whether it helps or hinders the effort. State of Arizona v. Motorola, Inc., 139 F.R.D. 141 (D. Ariz. 1991).

U.S. v. Bay Area Battery, 895 F. Supp, 1524, 1528 (N.D. Fla. 1995), is a CERCLA case directly on point regarding the role of the court in reviewing a CERCLA consent decree.

It is not the Court's place to determine whether the decree represents an optimal settlement in the Court's view. United States v. Cannons Engineering Corp., 720 F.Supp. 1027, 1036 (D. Mass.1989), *aff'd*, 899 F.2d 79 (1st Cir.1990). "Where a court is reviewing a consent decree to which the government is a party, the balancing of competing interests affected by a proposed consent decree 'must be left, in the first instance, to the discretion of the Attorney General.'" Kelley v. Thomas Solvent Co., 717 F.Supp. 507, 515-16 (W.D.Mich.1989) (quoting United States v. Bechtel Corp., 648 F.2d 660, 666 (9th Cir.), *cert. denied*, 454 U.S. 1083, 102 S.Ct. 638, 70 L.Ed.2d 617 (1981)). When, as in this case, an agency committed to furthering the public interest has negotiated a decree, there is a presumption of validity. Kelley v. Thomas Solvent Co., 790 F.Supp. 731, 735 (W.D.Mich.1991); New York v. Exxon Corp., 697 F.Supp. 677, 692 (S.D.N.Y.1988); United States v. Rohm & Haas Co., 721 F.Supp. 666, 681 (D. N.J.1989).

Id. at 1528.

A court's role in reviewing a CERCLA consent decree is to "satisfy itself that the settlement is reasonable, fair, and consistent with the purposes that CERCLA is intended to serve." United States v. Cannons Engineering Corp., 899 F.2d 79, 85 (1st Cir.1990) (quoting H.R. Rep. No. 253, Pt. 3, 99th Cong., 1st Sess. 19 (1985) reprinted in 1986 U.S. Code Cong. &

Admin. News 3038, 3042).<sup>11/</sup> Also see United States v. Montrose Chemical Corp., 793 F. Supp. 237 (M.D. Cal. 1992); State of Arizona v. Motorola Corp., 139 F.R.D. 141 (D. Ariz. 1991).

"The court's task simply is to determine whether the settlement represents a reasonable compromise all the while bearing in mind the law's generally favorable disposition toward the voluntary settlement of litigation and CERCLA's specific preference for such resolution." United States v.

Rohm & Haas Co., 721 F. Supp. 666, 680-81 (D. N.J. 1989).

This standard is applied with the presumption of validity which is afforded settlements by the Attorney General for the EPA. See, Bay Area Battery, 895 F. Supp. at 1534, citing Cannons Engineering, 899 F. 2d at 89.

B. Standard of Review for CERCLA Actions is whether the settlement is reasonable, fair, and consistent with CERCLA

1. The Decree is Reasonable

Reasonableness of a consent decree under CERCLA is determined by looking at the following three criteria: 1) the adequacy of the work to be performed<sup>12/</sup>, 2) whether the United

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11. See also, U.S. v. Bay Area Battery, 895 F. Supp. 1524, 1528 (N.D. Fl. 1995); In re Cuyahoga Equip. Corp. (Debtor), Publicker Industries, Inc. (App.) v. U.S., 980 F. 2d 110, 118, 120 (2<sup>nd</sup> Cir. 1992); U.S. v. Hercules, 961 F. 2d 796, 800 (8<sup>th</sup> Cir. 1992); U.S. v. Charter Int'l Oil Co., 83 F.3d 510, 515 (1<sup>st</sup> Cir. 1996); U.S. v. Kramer, 19 F. Supp. 2d 273, 280 (D. N.J. 1998).

12. Although the court considers the adequacy of the response actions proposed through the deferential standard for review of consent decrees, this does not grant the court jurisdiction to hear a  
(continued...)

States obtains satisfactory compensation from the PRPs, and 3) the risks and delays associated with proceeding to litigation. See U.S. v. Cannons Engineering, 899 F. 2d at 89, 90.

The injunctive relief established by the proposed Decree is reasonable because it requires the Defendants to address the Site in a technically sound, cost-effective, timely manner in order to minimize the risks to human health and the environment. EPA has developed a basic strategy to clean up the most highly contaminated residential areas first pursuant to the incorporated Removal Order, to expedite the cleanup of residential properties through the NTC Removal Agreement, and to follow up with a detailed study to provide EPA with the information necessary to determine the best final cleanup solution for the entire Site through the RI/FS Agreement. After the RI/FS is completed, EPA will select a remedy to clean up the entire Site in the Record of Decision ("ROD") or RODs. The parties anticipate entering into negotiations on a separate Consent Decree in the future to address the remedy selected in the ROD(s), and to address all costs associated with the Site incurred by EPA, after the public participation period for the ROD(s).

The RI/FS process is required under CERCLA to develop the information necessary to select a final remedy that is protective of human health and the environment. 40 C.F.R. § 300.430(a)(2), (d)(1),

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(...continued)

challenge to EPA's selected response action. As noted in the United States' Memorandum in Support of the United States' Response to Motion to Intervene Filed by the Bowie Intervener-Applicants, under Section 113(h) of CERCLA, this Court does not have jurisdiction to hear a challenge to the response action chosen in the Decree under CERCLA or any other law because none of the five exceptions under Section 113(h) is met.



and (e)(1). By doing as much as practicable early in the process through the Removal Order and NTC Removal Agreement, EPA is expediting the cleanup of residential properties, while adhering to the remedy selection process required by CERCLA and the NCP. See, 42 U.S.C. § 121 and 40 C.F.R. § 300.430.

The Decree requires Defendants to reimburse the United States for all costs the United States incurs associated with the Decree. Defendants separately agreed to reimburse EPA \$6,053,420.90 for almost all of EPA's and ATSDR's past response costs incurred at the Site pursuant to a separate administrative agreement. See Exhibit C. The Decree also requires the Defendants to perform all work necessary to address the Site at this stage of the CERCLA process.

Although the United States has a very strong liability case against Defendants, the United States would not gain anything by proceeding to trial in the present case because the Decree contains all of the relief the United States would seek at this stage of the CERCLA process if it were to proceed to trial.

Thus, the Decree is reasonable because: 1) it requires Defendants to address the Site in the manner prescribed by CERCLA and its implementing regulations with EPA's strict oversight and to address residential contamination more expeditiously, 2) it requires the Defendants to reimburse the United States for all of its costs associated with the Decree, and 3) it obtains all of the relief the United States is entitled to at this stage of the CERCLA process.

2. The Decree is substantively and procedurally fair

Courts review CERCLA consent decrees for both substantive and procedural fairness. Bay Area Battery 895 F. Supp. at

1528, Cannons Engineering, 899 F.2d at 86. Since the Decree was negotiated at arms length among experienced counsel, the Decree is procedurally fair. Cannons Engineering, 899 F.2d at 87, Bay Area Battery, 895 F. Supp. at 1529.

Courts evaluate substantive fairness in CERCLA consent decrees with deference to EPA. See, Cannons Engineering, 899 F.2d at 88-89 (noting "a district court should give the EPA's expertise the benefit of the doubt when weighing substantive fairness; and "as long as the data the EPA uses falls along the broad spectrum of plausible approximations, judicial intrusion is unwarranted, regardless of whether the court would have opted to employ the same data in the same way.") This Decree is substantively fair because it requires the party responsible for the contamination to bear all of the costs of addressing it with EPA's strict oversight.

In the instant case, the Applicants to intervene submitted comments wherein they charged that the Decree was the product of collusion and arbitrary conduct on the part of EPA. However, it appears that their opposition is based on the fact that they are involved in an on-going state court case against the Defendants and not on any unfair or arbitrary provision or condition in the Decree. In fact, the Applicants have never explained how the Decree is inconsistent with CERCLA. Instead, they argue that the Agency charged by Congress to undertake cleanup of hazardous contamination should be removed from the cleanup process by this Court and that the state court should decide how to address the Site.

Alternatively, Applicants ask this Court to order injunctive relief in place of the actions selected by EPA and set forth in the Decree.

Applicants' argument that EPA should not address the Site under CERCLA because of Applicants' state court action is not only wrong but it is undermined by virtue of the fact that the state court issued an order on May 31, 2002 staying all injunctive matters before it, and the Alabama Supreme Court issued a separate stay on August 19, 2002, effectively staying all proceedings except the written submittal of evidence regarding property damage claims. A copy of the Alabama State Supreme Court ruling is attached hereto as Exhibit D. Moreover, as discussed in the United States' Response to the Motion to Intervene, the State Court's ruling appears to accept the conclusions of the Special Master<sup>13</sup> who said "[I]t is unclear how it would serve the interests of this litigation (meaning the state court case), or of the public, were the Court to order injunctive relief in the form of corrective remedial action that might subsequently need to be modified or even rescinded due to a conflict with federal requirements as a result of the CERCLA process." Citing Samples v. Conoco, Inc., 165 F. Supp. 2d 1303 (N.D. Fla. 2001). Thus, the Special Master recognized that it makes sense and better

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13. The State Court appointed a Special Master to assist the court. On May 31, 2002, the Special Master issued a Report and Recommendation on Defendants' Motion to Stay Injunctive Proceedings ("Report"), a copy of which is attached to the United States' Response to the Motion to Intervene.

serves the public for the cleanup to be done under CERCLA.<sup>14/</sup> The Special Master's Report is attached to the United States' Response to the Motion to Intervene.

The United States is carrying out Congress' mandate to protect human health and the environment under CERCLA. The Decree is the best method to address the threat posed by the Site because it ensures that the entire Site will be cleaned up pursuant to the strict requirements of CERCLA.

3. The Decree is consistent with the purposes of CERCLA

Courts reviewing whether a decree is consistent with the purposes of CERCLA have noted the following goals of CERCLA: 1) polluters responsible for contamination should pay to clean it up; 2) the Superfund should be preserved for sites that do not have PRPs who are capable of performing the work; and 3) settlements serve CERCLA's goal of reducing litigation and transaction costs. See, Cannons Engineering, 899 F. 2d. 79 (1<sup>st</sup> Cir. 1990), Kramer, 19 F. Supp. at 289, and Bay Area Battery, 895 F. Supp. at 1535. The Decree is consistent with the purposes of CERCLA because it requires to the party who is responsible for the contamination to clean it up with EPA's strict oversight, preserves the Superfund for other Sites, and reduces litigation and transaction costs so that the government can utilize its

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14. It is worth noting that Applicants have never claimed that their lawsuit will address the tens of thousands of citizens and their respective properties who are not involved in the State Court action. The United States' mandate to protect public health applies to each member of the impacted community irrespective of their involvement or lack thereof in the various private party lawsuits.

limited resources to oversee work at this Site and to pursue cleanup at other Sites.

C. Public comments

While the United States received numerous comments on the Decree, none of the comments demonstrates that the Decree is unfair, unreasonable, or inconsistent with the goals of CERCLA. In short, the comments do not provide any basis for the Court not to approve and enter the Decree.

The detailed responses to the comments are attached hereto. However, we summarize the comments below.

Many of the over than 370 comments submitted by the public expressed support for the Decree. In fact, 341 separate letters, containing 370 signatures, expressed support and/or approval of the Decree.

We received nineteen letters containing twenty-seven signatures expressing concern for some or all of the Decree. Of the nineteen letters expressing concerns, two were submitted by lawyers on behalf of approximately 20,000 clients involved in private lawsuits against the Defendants. In addition to the letters, we received a petition containing 786 signatures expressing concerns about the Decree.

Generally, the comments that were critical expressed the following concerns: 1) the lodged Decree will not lead to the expeditious cleanup of Anniston; 2) Defendants should not be permitted to conduct the RI/FS, 3) Defendants should not be permitted to conduct the risk assessment; 4) funding the educational trust is inadequate; 5) stipulated penalties

provided for are inadequate; 6) the lodged Decree does not contain a requirement for health studies; 7) the Site should be listed on the National Priorities List; and 8) the lodged Decree is the result of improper collusion between the United States and Defendants.

As mentioned, the comments did not establish that the Decree failed to meet the objectives of CERCLA, was unfair or unreasonable. The United States responded in detail to all of the comments above, as well as miscellaneous comments not categorized above. See the United States' Summary of Comments and Response to Comments attached hereto. Moreover, because the United States recognized that the public harbors certain concerns about the lodged Decree, the United States negotiated some changes to the lodged Decree in order to allay those concerns. Significantly, the United States negotiated changes that will provide for a more expedited cleanup of residential properties. In addition, EPA, rather than the Defendants, will conduct the human health component of the risk assessment. Other changes to the lodged Decree are explained in more detail in the attached Responses to Comments.

#### CONCLUSION

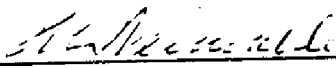
All interested parties have been afforded an opportunity to submit comments. The United States evaluated those comments closely, modified the lodged Decree in response to the comments, and provided detailed responses to the comments. The end result of an entered Decree will be the initiation of activities necessary to bring about a comprehensive cleanup of

the contamination in Anniston that is protective of public health and the environment. The facts and the law support entry of the proposed Decree. In view of the above, and as further shown by virtue of the changes to the lodged Decree and the responses to the comments set forth in Exhibit B, the United States respectfully requests that the Court approve and enter the proposed Decree.

DATED: October 18, 2002

Respectfully submitted,

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Acting Assistant Attorney General  
Environment and Natural Resources  
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**Exhibit A**

**to the MEMORANDUM IN SUPPORT OF MOTION TO ENTER PARTIAL REVISED  
CONSENT DECREE**

**Partial Consent Decree**



IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ALABAMA

UNITED STATES OF AMERICA

Plaintiff,

v.

PHARMACIA CORPORATION  
(p/k/a Monsanto Company) and  
SOLUTIA INC.,

Defendants.

CIVIL ACTION NO. CV-02-PT-0749-E

**PARTIAL CONSENT DECREE**

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## PARTIAL CONSENT DECREE

### I. BACKGROUND

A. The United States of America ("United States"), on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a complaint in this matter pursuant to Sections 106, 107, and 113(g)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9606, 9607, §9613(g)(2).

B. The United States in its complaint seeks, inter alia: (1) reimbursement of costs to be incurred by EPA and the Department of Justice for response actions at the Anniston PCB Superfund Site in Anniston, Calhoun County, Alabama, ("Site"); (2) performance of studies and response work by the Defendants at the Site consistent with the National Contingency Plan, 40 C.F.R. Part 300 (as amended) ("NCP"), and (3) a declaratory judgment on liability for response costs that will be binding on any subsequent action or actions to recover further response costs pursuant to Section 113(g)(2), 42 U.S.C. §9613(g)(2).

C. This Partial Consent Decree ("Consent Decree"), which was filed along with the United States complaint, seeks to partially resolve the claims of the Plaintiff against the Defendants by, inter alia, the payment of Future Response Costs, Administrative Order on Consent (AOC) Oversight Costs, the performance of a Remedial Investigation/Feasibility Study (RI/FS) pursuant to the attached RI/FS Agreement and Statement of Work (SOW), the performance of a Non-time Critical Removal (NTC Removal) pursuant to the attached NTC Removal Agreement and continuation of a time critical removal action pursuant to the attached Removal Order. The Parties acknowledge that this Consent Decree does not resolve all of the United States' claims against Defendants under Sections 106, 107, and 113(g)(2) of CERCLA, 42 U.S.C. §§ 9606, 9607, 9613(g)(2), with respect to the Site. The Parties acknowledge that it will be necessary to enter into a separate Consent Decree in the future to address the remedy selected in the Record of Decision (ROD) and to address all costs associated with the Site incurred by EPA after the public participation period for the ROD. Nothing in this Consent Decree, the RI/FS Agreement, the Removal Order, the NTC Removal Agreement, or the complaint filed with this Consent Decree shall be construed to grant the Defendants or any other party the right to seek judicial review of the ROD, or any other response actions taken by EPA at the Site. As provided in Paragraph 46, Defendants shall not assert, and may not maintain that the claims raised by the United States in any subsequent proceeding (including, but not limited to, the filing of another consent decree with this Court) were or should have been brought in the instant case.

D. In accordance with Section 122(j)(1) of CERCLA, 42 U.S.C. § 9622(j)(1), EPA notified the U.S. Department of Interior and the National Oceanic and Atmospheric Administration on November 19, 2001 of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship and encouraged the trustees to participate in the negotiation of this Consent Decree.

E. EPA notified the Alabama Department of Environmental Management on November 19, 2001 of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under State trusteeship and encouraged the trustee to participate in the negotiation of this Consent Decree.

F. The Site is not currently listed on the National Priorities List (NPL).

G. The Defendants that have entered into this Consent Decree do not admit any liability to the Plaintiff arising out of the transactions or occurrences alleged in the complaint, nor do they acknowledge that the release or threatened release of hazardous substances at or from the Site constitutes an imminent or substantial endangerment to the public health or welfare or the environment.

H. Solely for the purposes of Section 113(j) of CERCLA, 42 U.S.C. § 9613(j), the RI/FS Work, NTC Removal Work, and Removal Order Work to be performed by the Defendants pursuant to this Consent Decree, shall constitute a response action taken or ordered by the President.

I. On, March 25, 2002, the proposed Consent Decree between plaintiff the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), and the Defendants was lodged with the Court. Pursuant to 28 C.F.R. § 50.7, notice of lodging was published in the Federal Register on April 4, 2002 at 67 Fed. Reg. 16124. Upon request, the public comment period was extended from thirty (30) days to sixty (60) days.<sup>17</sup> The public comment period closed on June 3, 2002. During the comment period, over 370 comments were submitted by the public. The United States will provide all of the public's comments and the United States' response to them with its Motion to Enter the Consent Decree. This Consent Decree and its appendices include the following changes made in response to the comments: 1) RI/FS Agreement and SOW, Appendices A & B, were modified to provide for performance of the Human Health Risk Assessment by EPA; 2) Appendix G, NTC Removal Agreement, was added to require Defendants to conduct an Engineering Evaluation / Cost Analysis (EE/CA) for residential properties, which incorporates EPA's Streamlined Risk Evaluation (SRE), and to clean up the residential properties if EPA selects a response action within the parameters set forth in the attached NTC Removal Agreement; 3) Section XV of this Consent Decree was added to include an agreement by Defendants that they will not challenge the listing of the Site on the NPL a) if they are substantially out of compliance with the Consent Decree, or b) based upon changed Site conditions that result from the NTC Removal Agreement or Removal Order; 4) Section XIX of the RI/FS Agreement, Appendix A, was modified to increase the amount of the stipulated penalties; 5) Section VI of this Consent Decree, regarding funding for the educational trust, was modified to spread the payments out more evenly over the funding period; and 6) Section IX of the RI/FS Agreement Appendix A, was modified to allow the state to comment on the contractors selected by EPA.

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<sup>17</sup> The second notice of lodging was published in the federal register at 67 Fed. Reg. 20550. This publication extended the comment period and corrected an error in the first publication.

J. The Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and implementation of this Consent Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

## **II. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, and 9613(b). Venue is proper in the United States District Court for the Northern District of Alabama pursuant to 28 U.S.C. § 1391 because the Defendants' Property is located in this District. This Court also has personal jurisdiction over the Defendants. Solely for the purposes of this Consent Decree and the underlying complaint, Defendants waive all objections and defenses that they may have to jurisdiction of the Court or to venue in this District. Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

## **III. PARTIES BOUND**

2. This Consent Decree applies to and is binding upon the United States and upon Defendants and their successors and assigns. Any change in ownership or corporate status of a Defendant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter such Defendant's responsibilities under this Consent Decree.

3. With regard to the activities undertaken pursuant to this Consent Decree, each contractor and subcontractor shall be deemed to be in a contractual relationship with the Defendants within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3).

## **IV. DEFINITIONS**

4. Unless otherwise expressly provided herein, terms used in this Consent Decree which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Consent Decree or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply (provided, however, if an appendix defines one of the terms listed below, then the definition in the appendix shall apply to that appendix):

- A. "ADEM" shall mean the Alabama Department of Environmental Management and any successor departments or agencies of the State.

- B. "Anniston Lead Site" shall mean for the purposes of this Consent Decree, the Anniston Lead Site, which consists of the area where lead and other commingled hazardous substances, including PCBs, associated with the historical and ongoing industrial operations in and around Anniston, Alabama have come to be located.
- C. "AOC Oversight Costs" shall have the meaning set forth in the Removal Order attached to this Consent Decree.
- D. "Anniston PCB Site Special Account" shall mean the special account established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. §9622(b)(3).
- E. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.
- F. "Consent Decree" shall mean this Decree and all appendices (including the RI/FS Agreement, the NTC Removal Agreement, the Removal Order, and the SOW) attached hereto and listed in Section XVII.
- G. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.
- H. "Defendants" shall mean Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc.
- I. "Defendants' Property" shall mean the property owned by Defendants as of January 1, 2002, as marked on the attached map (Figure 1.)
- J. "Effective Date" shall be the date of entry by the Court of this Consent Decree as provided in Paragraph 54.
- K. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- L. "Future Response Costs" shall mean all costs, except ATSDR costs, that the United States incurs through the public participation period for the ROD with respect to the RI/FS Agreement, the NTC Removal Agreement, and/or the Consent Decree. Future Response Costs may include, but are not limited to, costs incurred by the U.S. Government in overseeing Respondents' implementation of the requirements of the RI/FS Agreement or NTC Removal Agreement, verifying the RI/FS Work or NTC Removal Work, or otherwise implementing, overseeing, or enforcing the RI/FS

Agreement or NTC Removal Agreement, and/or this Consent Decree and any activities performed by the government as part of the RI/FS or NTC Removal including community relations and any costs incurred while obtaining access. Costs shall include all direct and indirect costs, including, but not limited to, time and travel costs of EPA personnel and associated indirect costs, contractor costs, cooperative agreement costs, compliance monitoring, including the collection and analysis of split samples, inspection of RI/FS or NTC Removal activities, site visits, discussions regarding disputes that may arise as a result of the RI/FS Agreement, NTC Removal Agreement or Consent Decree, review and approval or disapproval of reports, and costs of redoing any of Respondents' tasks. Future Response Costs shall also include all Interim Response Costs. Provided, however, removal AOC Oversight Costs are not Future Response Costs pursuant to this Consent Decree. Defendants shall reimburse EPA for removal AOC Oversight Costs as provided in the Removal Order. Future Response Costs do not include costs that the United States incurs at the Anniston Lead Site.

- M. "Interim Response Costs" shall mean all costs, except ATSDR costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between January 4, 2001 and the Effective Date, or (b) incurred prior to the Effective Date but paid after that date. Provided, however, removal AOC Oversight Costs are not Interim Response Costs pursuant to this Consent Decree. Defendants shall reimburse EPA for removal AOC Oversight Costs as provided in the Removal Order. Interim Response Costs do not include costs paid by the United States in connection with the Anniston Lead Site.
- N. "Interest," shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.
- O. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- P. "NTC Removal Agreement" shall mean the Agreement for the Non-time Critical Removal at the Site, as set forth in Appendix G to this Consent Decree and incorporated herein.
- Q. "NTC Removal Work" shall mean all activities Defendants are required to perform pursuant to the attached NTC Removal Agreement.

- R. "October 27, 2000 AOC" shall mean the Administrative Order on Consent, docket no. 01-02-C, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 27, 2000. The October 27, 2000 AOC was rescinded and replaced by the Removal Order.
- S. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral or an upper case letter.
- T. "Parties" shall mean the United States and the Defendants.
- U. "Plaintiff" shall mean the United States.
- V. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 et seq. (also known as the Resource Conservation and Recovery Act).
- W. "RCRA Facility Investigation" or "RFI" shall mean the work being conducted pursuant to Defendants' RCRA Permit.
- X. "RCRA Permit" shall mean the RCRA Post Closure Permit, ALD 004019048, issued by ADEM on January 7, 1997 as modified on May 21, 2001, and any subsequent modifications thereto.
- Y. "Record of Decision" or "ROD" shall mean the official EPA decision document on the selection of a remedy that makes all determinations and findings required by CERCLA and the NCP.
- Z. "Remedial Investigation/Feasibility Study (RI/FS)" shall mean the response actions identified in 40 C.F.R. § 300.5 undertaken by Defendants pursuant to the RI/FS Agreement to determine the nature and extent of contamination at the Anniston PCB Site and develop and evaluate potential remedial alternatives.
- AA. "Removal Order" shall mean the Administrative Order on Consent, docket no. CER-04-2002-3752, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 5, 2001. The Removal Order is set forth in Appendix C to this Consent Decree and incorporated herein.
- BB. "Removal Order Work" shall mean all activities Defendants are required to perform pursuant to the attached Removal Order.
- CC. "RI/FS Agreement" shall mean the Agreement for the RI/FS at the Site, as set forth in Appendix A to this Consent Decree and incorporated herein.



- DD. "RI/FS Work" shall mean all activities Defendants are required to perform pursuant to the attached RI/FS Agreement. RI/FS Work does not include any activities or work EPA determines to be necessary at any other Site (including the Anniston Lead Site). RI/FS Work does not include any additional activities or work that EPA determines to be necessary after EPA approval of the certification of completion issued pursuant to Paragraph 87 of the RI/FS Agreement.
- EE. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.
- FF. "Site" shall mean, for the purposes of this Consent Decree, the Anniston PCB Site, which consists of the area where hazardous substances, including PCBs associated with releases or discharges as a result of the operations, including waste disposal, of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.
- GG. "State" shall mean the State of Alabama.
- HH. "Statement of Work" or "SOW" shall mean the Statement of Work for implementation of the RI/FS Agreement, as set forth in Appendix B to this Consent Decree and any modifications made in accordance with this Consent Decree and incorporated herein.
- II. "United States" shall mean the United States of America.
- JJ. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

## **V. GENERAL PROVISIONS**

### **5. Objectives of the Parties.**

The objectives of the Parties in entering into this Decree are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Remedial Investigation; (b) to determine and evaluate alternatives for remedial action (if any) to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study; (c) to conduct an EE/CA for residential properties; (d) to clean up the residential properties if the decision by EPA regarding the appropriate NTC Removal is within the parameters set forth in the attached NTC Removal Agreement; (e) to recover Future Response Costs and AOC Oversight Costs incurred by EPA with respect to the Site, (f) to create a foundation to benefit the citizens of west

Anniston, (g) to provide funding for a Technical Assistance Plan (TAP) and a Community Advisory Group (CAG) for the affected community, (h) to incorporate the existing Removal Order into this Consent Decree and, (i) to partially resolve the claims of the Plaintiff against the Defendants.

6. Commitments by Defendants.

a. Defendants shall finance and perform the RI/FS Work, Removal Order Work, and NTC Removal Work in accordance with this Consent Decree, the RI/FS Agreement, the SOW, the NTC Removal Agreement and the Removal Order and all work plans and other plans, standards, specifications, and schedules set forth herein or developed by Defendants and approved by EPA pursuant to this Consent Decree. Defendants shall also reimburse the United States for Future Response Costs as provided in this Consent Decree, the RI/FS Agreement, and the NTC Removal Agreement; and for AOC Oversight Costs as provided in the Removal Order. Defendants shall also provide funding for a foundation to benefit the citizens of west Anniston, a Technical Assistance Plan (TAP), and a Community Advisory Group (CAG). Defendants shall fund a foundation which will provide special education, tutoring, or other supplemental educational services for the children of west Anniston that have learning disabilities or otherwise need additional educational assistance.

b. The obligations of Defendants to finance and perform the RI/FS Work, NTC Removal Work and Removal Order Work and to pay amounts under this Consent Decree are joint and several. In the event of the insolvency or other failure of any one or more of the Defendants to implement the requirements of this Consent Decree, the remaining Defendants shall complete all such requirements.

7. Compliance With Applicable Law. All activities undertaken by Defendants pursuant to this Consent Decree shall be performed in accordance with the requirements of all applicable federal and state laws and regulations. The activities conducted pursuant to this Consent Decree, if approved by EPA, shall be considered to be consistent with the NCP.

8. EPA entered into a Removal Order for a removal action regarding the Anniston PCB Site which was effective on October 5, 2001. The Removal Order is hereby incorporated into this Consent Decree. Nothing in this Consent Decree shall modify Solutia Inc.'s obligations under the Removal Order, unless otherwise provided herein. The Dispute Resolution provisions of the Removal Order shall control any dispute regarding the Removal Order, and Solutia Inc. shall pay AOC Oversight Costs pursuant to the Removal Order.

9. EPA and Defendants executed an RI/FS Agreement which is attached hereto and incorporated herein. The effective date of the RI/FS Agreement, shall be the date this Consent Decree is entered by the Court. EPA and Defendants executed a NTC Removal Agreement which is attached hereto and incorporated herein. The effective date of the NTC Removal Agreement, shall be the date this Consent Decree is entered by the Court.

## **VI. CREATION OF A FOUNDATION FOR THE CITIZENS OF WEST ANNISTON**

10. Defendants shall create a foundation for the benefit of the residents of west Anniston within 180 days from the Effective Date of this Consent Decree. The foundation shall be established under applicable law governing non-profit charitable organizations in order to qualify for tax exempt treatment within the meaning of Section 501(c)(3) of the Internal Revenue Code. The foundation shall be created for the following purpose: to provide special education, tutoring, or other supplemental educational services for the children of west Anniston that have learning disabilities or otherwise need additional educational assistance.

11. Defendants shall wire transfer to the foundation or to an existing entity or entities selected by the foundation, or to an escrow account (designated for the foundation) a total of \$3,218,846 pursuant to the payment schedule noted below. The first payment shall be made within sixty (60) days from the Effective Date of this Consent Decree. Defendants shall make the payments required for years two through twelve annually between January 1 and January 31, beginning in the first January after the Effective Date of this Consent Decree. The payments required each year shall be as follows:

|                 |                  |
|-----------------|------------------|
| Year 1:         | \$214,221        |
| Year 2:         | \$222,790        |
| Year 3:         | \$231,702        |
| Year 4:         | \$240,970        |
| Year 5:         | \$250,609        |
| Year 6:         | \$260,633        |
| Year 7:         | \$271,058        |
| Year 8:         | \$281,900        |
| Year 9:         | \$293,177        |
| Year 10:        | \$304,904        |
| Year 11:        | \$317,099        |
| <u>Year 12:</u> | <u>\$329,783</u> |
| Total           | \$3,218,846      |

If Defendants fail to make the payments required pursuant to this Paragraph, Defendants shall pay Interest on the unpaid balance to the foundation or to an existing entity or entities selected by the foundation or to an escrow account (designated by the foundation). Defendants shall provide EPA with documentation indicating that the payments have been made within thirty (30) days from the date of payment.

12. The foundation shall seek input from the CAG created pursuant to this Consent Decree, any consultants retained by Defendants, as well as representatives of the community at large, including educators, the Superintendent of Schools, the School Board and other local officials, in order to determine the following:

- a) how these funds shall be expended;

- b) whether the funds shall go to an existing entity or entities, or whether a new entity or entities shall be created;
- c) how the new entity or entities should be structured if the funds do not go to an existing entity or entities; and
- d) what limitations shall be placed on the recipient regarding the use of the funds.

After receiving such input, the foundation shall make written determinations regarding a-d above. Defendants shall provide EPA a copy of the foundations written determinations and make them available to the public.

13. All proceeds shall be spent in accordance with the requirements of the foundations written determinations. Defendants shall provide EPA with an annual accounting every January for at least twelve years after the Effective Date of this Consent Decree documenting all expenditures pursuant to this Section. If all funds are not expended within twelve years from the Effective Date, Defendants shall continue to provide the annual accounting until all funds are expended. The accounting shall certify whether all expenditures were made in accordance with the foundations written determinations. Defendants will purchase insurance or a bond to assure that the foundation and entity or entities selected by the foundation perform in accordance with the foundations written determinations. In addition to the \$3,218,846 Defendants are required to pay pursuant to Paragraph 11, Defendants shall pay all costs of administering the foundation.

## **VII. STIPULATED PENALTIES**

14. Defendants shall be liable for stipulated penalties to the United States for failure to comply with the requirements of this Consent Decree as specified below. The following stipulated penalties shall accrue per violation per day for failure to make the payments required pursuant to Section VI (Creation of a Foundation For The Citizens of West Anniston).

| Penalty Per Violation Per Day | Period of Noncompliance |
|-------------------------------|-------------------------|
| \$750                         | 1st through 14th day    |
| \$2,000                       | 15th through 30th day   |
| \$5,000                       | 31st day and beyond     |

15. Following EPA's determination that Defendants have failed to comply with a requirement of this Consent Decree, EPA may give Defendants written notification of the same and describe the noncompliance. EPA may send the Defendants a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified the Defendants of a violation.

16. All penalties accruing under this Section shall be due and payable to the United States within thirty (30) days of the Defendants' receipt from EPA of a demand for payment of the penalties. All payments to the United States under this Section shall be paid by 1) certified or cashier's check made payable to the "EPA Hazardous Substance Superfund," shall be mailed to U.S. EPA Region 4,

Superfund Accounting, Attn: Collection Officer in Superfund, P.O. Box 100142, Atlanta, GA 30384, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID #04S9, the DOJ Case Number 90-11-2-07135/1 and the name and address of the party making payment, or 2) if the amount is greater than \$10,000 payment may be made by FedWire Electronic Funds Transfer ("EFT") pursuant to the instructions provided by Paula V. Batchelor of Region 4. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), or notification of electronic wire transfer of funds, shall be sent to Dustin F. Minor, U.S. EPA Region 4, Environmental Accountability Division, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960, and to Paula V. Batchelor, U.S. EPA Region 4, 4WD-PSB/11th floor, 61 Forsyth Street, S.W., Atlanta, GA, 30303-8960, or their successors.

17. The payment of penalties shall not alter in any way Defendants' obligation to complete the performance of the RI/FS Work, NTC Removal Work and Removal Order Work required under this Consent Decree.

18. If Defendants fail to pay stipulated penalties when due, the United States may institute proceedings to collect the penalties, as well as interest.

19. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States to seek any other remedies or sanctions available by virtue of Defendants' violation of this Decree or of the statutes and regulations upon which it is based, including, but not limited to, EPA's right to conduct all or part of the RI/FS itself or to seek penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l).

20. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Decree.

#### **VIII. DISPUTE RESOLUTION**

21. The Dispute Resolution provisions of the RI/FS Agreement shall be the exclusive mechanism to resolve disputes arising under or with respect to the RI/FS Agreement. The Dispute Resolution provisions of the NTC Removal Agreement shall be the exclusive mechanism to resolve disputes arising under or with respect to the NTC Removal Agreement. The Dispute Resolution provisions of the Removal Order shall be the exclusive mechanism to resolve disputes arising under or with respect to the Removal Order. This Dispute Resolution Section is only applicable to requirements that are contained in the Consent Decree itself, and is not applicable to disputes regarding the RI/FS Agreement, the NTC Removal Agreement, or the Removal Order.

22. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States to enforce obligations of the Defendants that have not been disputed in

accordance with this Section. As provided in Paragraph 21, this Dispute Resolution Section does not apply to any disputes regarding the RI/FS Agreement, the NTC Removal Agreement or the Removal Order.

23. Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed twenty (20) days from the time the dispute arises, unless it is modified by written agreement of the parties to the dispute. The dispute shall be considered to have arisen when one party sends the other parties a written Notice of Dispute.

24. Statements of Position.

a. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, then the position advanced by EPA shall be considered binding unless, within twenty-eight (28) days after the conclusion of the informal negotiation period, Defendants invoke the formal dispute resolution procedures of this Section by serving on the United States a written Statement of Position on the matter in dispute, including, but not limited to, any factual data, analysis or opinion supporting that position and any supporting documentation relied upon by the Defendants. The Statement of Position shall specify the Defendants' position as to whether formal dispute resolution should proceed under Paragraph 25 or Paragraph 26.

b. Within twenty-eight (28) days after receipt of Defendants' Statement of Position, EPA will serve on Defendants its Statement of Position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA. EPA's Statement of Position shall include a statement as to whether formal dispute resolution should proceed under Paragraph 25 or 26. Within fourteen (14) days after receipt of EPA's Statement of Position, Defendants may submit a Reply.

c. If there is disagreement between EPA and the Defendants as to whether dispute resolution should proceed under Paragraph 25 or 26, the parties to the dispute shall follow the procedures set forth in the paragraph determined by EPA to be applicable. However, if the Defendants ultimately appeal to the Court to resolve the dispute, the Court shall determine which paragraph is applicable in accordance with the standards of applicability set forth in Paragraphs 25 and 26.

25. Formal dispute resolution for disputes pertaining to the selection or adequacy of any response action and all other disputes that are accorded review on the administrative record under applicable principles of administrative law shall be conducted pursuant to the procedures set forth in this Paragraph. For purposes of this Paragraph, the adequacy of any response action includes, without limitation: (1) the adequacy or appropriateness of plans, procedures to implement plans, or any other items requiring approval by EPA under this Consent Decree; and (2) the adequacy of the performance of response actions taken pursuant to this Consent Decree. Nothing in this Consent Decree shall be construed to allow any dispute by Defendants regarding the validity of the ROD's provisions.

a. An administrative record of the dispute shall be maintained by EPA and shall contain all statements of position, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental statements of position by the parties to the dispute.

b. The Director of the Waste Management Division, EPA Region 4, will issue a final administrative decision resolving the dispute based on the administrative record described in Paragraph 25.a. This decision shall be binding upon the Defendants, subject only to the right to seek judicial review pursuant to Paragraph 25.c. and d.

c. Any administrative decision made by EPA pursuant to Paragraph 25.b. shall be reviewable by this Court, provided that a motion for judicial review of the decision is filed by the Defendants with the Court and served on all Parties within twenty (20) days of receipt of EPA's decision. The motion shall include a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Decree. The United States may file a response to Defendants' motion.

d. In proceedings on any dispute governed by this Paragraph, Defendants shall have the burden of demonstrating that the decision of the Waste Management Division Director is arbitrary and capricious or otherwise not in accordance with law. Judicial review of EPA's decision shall be on the administrative record compiled pursuant to Paragraph 25.a.

26. Formal dispute resolution for disputes that neither pertain to the selection or adequacy of any response action nor are otherwise accorded review on the administrative record under applicable principles of administrative law, shall be governed by this Paragraph.

a. Following receipt of Defendants' Statement of Position submitted pursuant to Paragraph 24, the Director of the Waste Management Division, EPA Region 4, will issue a final decision resolving the dispute. The Waste Management Division Director's decision shall be binding on the Defendants unless, within twenty (20) days of receipt of the decision, the Defendants file with the Court and serve on the parties a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States may file a response to Defendants' motion.

b. Notwithstanding Paragraph H of Section I (Background) of this Consent Decree, judicial review of any dispute governed by this Paragraph shall be governed by applicable principles of law.

27. The invocation of formal dispute resolution procedures under this Section shall not extend, postpone or affect in any way any obligation of the Defendants under this Consent Decree, not directly in dispute, unless EPA or the Court agrees otherwise. Stipulated penalties with respect to the disputed

matter shall continue to accrue but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that the Defendants do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VII (Stipulated Penalties).

#### **IX. REIMBURSEMENT OF RESPONSE COSTS**

28. Payments for Future Response Costs. Defendants shall pay to EPA all Future Response Costs as provided in the RI/FS Agreement and the NTC Removal Agreement.

29. Payments for AOC Oversight Costs. Defendants shall pay to EPA AOC Oversight Costs as provided in the Removal Order.

#### **X. COVENANTS NOT TO SUE BY PLAINTIFF**

30. In consideration of the actions that will be performed and the payments that will be made by the Defendants under the terms of the Consent Decree, and except as specifically provided in Paragraph 31 of this Section, the United States covenants not to sue or to take administrative action against Defendants pursuant to Sections 106 and 107(a) of CERCLA for performance of the RI/FS Work, NTC Removal Work and Removal Order Work and for recovery of Future Response Costs, and AOC Oversight Costs as defined herein. These covenants not to sue shall take effect upon EPA approval of the certification of completion submitted pursuant to Paragraph 87 of the RI/FS Agreement. These covenants not to sue are conditioned upon the satisfactory performance by Defendants of their obligations under this Consent Decree, the RI/FS Agreement, the NTC Removal Agreement and the Removal Order. These covenants not to sue extend only to the Defendants and do not extend to any other person.

31. General reservations of rights. The United States reserves, and this Consent Decree is without prejudice to, all rights against Defendants with respect to all matters not expressly included within Plaintiff's covenant not to sue. Notwithstanding any other provision of this Consent Decree, the United States reserves all rights against Defendants with respect to:

- a. claims based on a failure by Defendants to meet a requirement of this Consent Decree;
- b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Material outside of the Site;
- c. liability for future disposal of Waste Material at the Site, other than as provided in the ROD, the RI/FS Work, the NTC Removal Work, the Removal Order Work, or otherwise ordered by EPA;



- d. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- e. criminal liability;
- f. liability for violations of federal or state law which occur during or after implementation of the RI/FS Work, the NTC Removal Work and the Removal Order Work;
- g. liability for costs incurred or to be incurred by the United States that are not within the definition of Future Response Costs or AOC Oversight Costs,
- h. liability for the Site that is not within the definition of RI/FS Work, NTC Removal Work or Removal Order Work (including, but not limited to, injunctive relief or administrative order enforcement under Section 106 of CERCLA);
- i. liability for costs incurred or to be incurred by ATSDR related to the Site; and
- j. liability for the Anniston Lead Site.

32. Notwithstanding any other provision of this Consent Decree, the RI/FS Agreement, the NTC Removal Agreement and/or the Removal Order, the United States retains all authority and reserves all rights to take any and all response actions authorized by law.

33. EPA reserves the right to assert that pursuant to 42 U.S.C. § 9613(h) that no court shall have jurisdiction to review any challenges to any removal or remedial action selected under 42 U.S.C. § 9604, including, but not limited to, the remedy selected in the ROD, or to review any order issued under 42 U.S.C. § 9606(a), based on this Consent Decree including, but not limited to, the RI/FS Agreement, the Removal Order, the NTC Removal Agreement or the complaint filed with the Consent Decree.

34. EPA reserves the right to conduct all or a portion of the RI/FS Work, the NTC Removal Work, and the Removal Order Work itself at any point, to seek reimbursement from Defendants, and or to seek any other appropriate relief.

#### **XI. COVENANTS NOT TO SUE BY DEFENDANTS**

35. Covenant Not to Sue. Subject to the reservations in Paragraph 36, Defendants hereby covenant not to sue and agree not to assert any claims or causes of action against the United States with respect to the RI/FS Work, the NTC Removal Work and the Removal Order Work and for recovery of Future Response Costs and AOC Oversight Costs as defined herein or this Consent Decree, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113 or any other provision of law;

b. any claims against the United States, including any department, agency or instrumentality of the United States under CERCLA Sections 107 or 113 related to the Site; or

c. any claims arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Alabama Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law.

d. any direct or indirect claim for disbursement from the Anniston PCB Site Special Account.

36. The Defendants reserve, and this Consent Decree is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, any such claim shall not include a claim for any damages caused, in whole or in part, by the act or omission of any person, including any contractor, who is not a federal employee as that term is defined in 28 U.S.C. § 2671; nor shall any such claim include a claim based on EPA's selection of response actions, or the oversight or approval of the Defendants' plans or activities. The foregoing applies only to claims which are brought pursuant to any statute other than CERCLA and for which the waiver of sovereign immunity is found in a statute other than CERCLA.

37. Nothing in this Consent Decree shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

## **XII. EFFECT OF SETTLEMENT; CONTRIBUTION PROTECTION**

38. Nothing in this Consent Decree shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Consent Decree. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this decree may have under applicable law. Each of the Parties expressly reserves any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site and/or the Anniston Lead Site against any person not a Party hereto.

39. The Parties agree, and by entering this Consent Decree this Court finds, that the Defendants are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2), for matters addressed in this

Consent Decree. The "matters addressed" in this Consent Decree are Future Response Costs, AOC Oversight Costs, RI/FS Work, NTC Removal Work and Removal Order Work as defined herein.

40. The Defendants agree that with respect to any suit or claim for contribution brought by them for matters related to this Consent Decree they will notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

41. The Defendants also agree that with respect to any suit or claim for contribution brought against them for matters related to this Consent Decree they will notify in writing the United States within 10 days of service of the complaint on them. In addition, Defendants shall notify the United States within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

### **XIII. DISCLAIMER**

42. Defendants signing of this Consent Decree and taking actions under it shall not be considered an admission of liability and is not admissible in evidence against the Defendants in any judicial or administrative proceeding other than a proceeding by the United States, including EPA, to enforce this Consent Decree or a judgment relating to it. Defendants retain their rights to assert claims against other potentially responsible parties at the Site. However, the Defendants agree not to contest the validity or terms of this Consent Decree, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms.

### **XIV. OTHER CLAIMS**

43. Defendants agree not to assert, and may not maintain in this action or any subsequent administrative or judicial proceeding for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site that this Consent Decree, or the complaint filed with it, grants a court jurisdiction pursuant to 42 U.S.C. § 9613(h) to review any challenges to any removal or remedial action selected under 42 U.S.C. § 9604, including, but not limited to, the remedy selected in the ROD, or to review any order issued under 42 U.S.C. § 9606(a).

44. Nothing in this Consent Decree shall be construed to limit EPA's authority to take over all or a portion of the RI/FS Work, the NTC Removal Work, or the Removal Order Work including, but not limited to, the Ecological Risk Assessment.

45. Nothing in this Consent Decree shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, subsidiary or corporation not a signatory to this Consent Decree for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances (including, but not limited to, PCBs and/or lead), pollutants, or contaminants found at, taken to, or taken from the Site.

46. In any subsequent administrative or judicial proceeding (including, but not limited to, any subsequent consent decrees lodged with this Court) for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in the instant case.

47. Defendants shall bear their own costs and attorneys' fees.

#### **XV. AGREEMENT NOT TO CHALLENGE NPL LISTING**

48. Defendants agree not to challenge, either directly or indirectly, through an officer, employee, or corporate affiliate, any listing or proposed listing of the Site on the NPL, if EPA has determined that Defendants are in "noncompliance" because Defendants: 1) have ceased implementation of any portion of the RI/FS Work, NTC Removal Work, or Removal Order Work; 2) are seriously or repeatedly deficient or late in their performance of the RI/FS Work, NTC Removal Work, or Removal Order Work; 3) are implementing the RI/FS Work, NTC Removal Work, or Removal Order Work in a manner which may cause an endangerment to human health or the environment; or 4) are otherwise substantially out of compliance with this Consent Decree or any of its appendices.

49. If EPA proposes the Site for listing on the NPL without first making a determination of noncompliance pursuant to the preceding Paragraph, then Defendants reserve all rights, except as provided in Paragraph 53, that they may have to challenge the listing or proposed listing of the Site on the NPL.

50. If EPA makes a determination of noncompliance pursuant to Paragraph 48, then EPA shall notify Defendants of such determination in writing. EPA's written determination shall be final and unreviewable, unless Defendants invoke dispute resolution by sending EPA a Notice of Dispute pursuant to Paragraph 23 within 14 days from the date Defendants receive EPA's written determination.

51. If Defendants invoke dispute resolution pursuant to the preceding Paragraph, the dispute resolution regarding EPA's written determination shall be governed by Section VIII. The dispute shall be limited solely to whether pursuant to Paragraphs 48 and 49, Defendants have waived their right to challenge the listing or proposed listing of the Site. Dispute resolution pursuant to this Section shall not have any affect on the Defendants' obligations pursuant to the RI/FS Agreement, the NTC Removal Agreement, or the Removal Order.

52. Except as provided in the following Paragraph, the agreement by Defendants contained in this Section shall terminate upon EPA's approval of the certification of completion submitted pursuant to Paragraph 87 of the RI/FS Agreement.

53. Notwithstanding Paragraphs 48-52, Defendants agree not to challenge, based upon changed Site conditions that result from the NTC Removal Agreement or Removal Order, any listing or proposed listing of the Site on the NPL at anytime after the Effective Date of this Consent Decree.

#### **XVI. EFFECTIVE DATE, SUBSEQUENT MODIFICATION, AND RETENTION OF JURISDICTION**

54. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court, except as otherwise provided herein.

55. Schedules specified in the attached RI/FS Agreement, NTC Removal Agreement, and Removal Order for completion of the RI/FS Work, NTC Removal Work and Removal Order Work may be modified by agreement of EPA and the Defendants. All such modifications shall be made in writing.

56. No material modifications shall be made to the SOW without written notification to and written approval of the United States, Defendants, and the Court, if such modifications fundamentally alter the basic features of the RI/FS Work. Modifications to the SOW that do not materially alter the basic features of the RI/FS Work may be made by written agreement between EPA and the Defendants.

57. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Defendants will be construed as relieving the Defendants of their obligation to obtain such formal approval as may be required by the attached RI/FS Agreement, NTC Removal Agreement, or Removal Order. Any deliverables, plans, technical memoranda, reports (other than progress reports), specifications, schedules and attachments required by the attached RI/FS Agreement, NTC Removal Agreement, or Removal Order are, upon approval by EPA, incorporated into this Consent Decree.

58. This Court retains jurisdiction over both the subject matter of this Consent Decree and the Defendants to effectuate or enforce compliance with its terms. However, nothing in this Consent Decree, nor the complaint filed with it, shall provide this Court jurisdiction pursuant to 42 U.S.C. § 9613(h) to review any challenges to any removal or remedial action selected under 42 U.S.C. § 9604, including, but not limited to the remedy selected in the ROD, or to review any order issued under 42 U.S.C. § 9606(a), including, but not limited to, the RI/FS Agreement, the Removal Order, or the NTC Removal Agreement.

#### **XVII. APPENDICES**

59. The following appendices are attached to and incorporated into this Consent Decree:

"Appendix A" is the RI/FS Agreement.

"Appendix B" is the SOW.  
"Appendix C" is the Removal Order.  
"Appendix D" is Figure 1.  
"Appendix E" is the CAG Information.  
"Appendix F" is Table 1 of the RI/FS Agreement.

"Appendix G" is the NTC Removal Agreement.  
"Appendix H" is the Streamlined Risk Evaluation (SRE) for the NTC Removal Agreement.

### **XVIII. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT**

60. The United States lodged a Consent Decree with the Court in March of 2002 and put it out for public comment for 60 days. The United States received over 370 comments totaling approximately 1,000 pages. The United States will provide all of the public's comments and the United States response to them with its Motion to Enter to the Consent Decree.

61. Defendants consent to the entry of this Consent Decree without further notice. If for any reason the Court should decline to approve this Consent Decree in the form presented, this agreement is voidable at the sole discretion of any Party and the terms of the agreement may not be used as evidence in any litigation between the Parties. However, the Removal Order shall remain in affect as a stand alone agreement if the Court declines to approve this Consent Decree.

### **XIX. SIGNATORIES/SERVICE**

62. Each undersigned representative of a Defendant to this Consent Decree and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

63. Defendants hereby agree not to oppose entry of this Consent Decree by this Court or to challenge any provision of this Consent Decree unless the United States has notified the Defendants in writing that it no longer supports entry of the Consent Decree.

64. Each Defendant shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of that Party with respect to all matters arising under or relating to this Consent Decree. Each Defendant hereby agrees to accept service in that manner and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons.

### **XX. FINAL JUDGMENT**

65. This Consent Decree and its appendices constitute the final, complete, and exclusive agreement and understanding among the parties with respect to the settlement embodied in the Consent Decree. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Consent Decree.

66. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment with respect to a portion of the claims between and among the United States and the Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

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SO ORDERED THIS \_\_ DAY OF \_\_\_\_\_, 20\_\_.

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United States District Judge



THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Pharmacia Corporation and Solutia Inc., relating to the Anniston PCB Superfund Site.

FOR THE UNITED STATES OF AMERICA

10/22/02

Date

Kelly A. Johnson

Kelly Johnson

Acting Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C., 20044

10/15/02

Date

William Weinischke

William Weinischke

Senior Attorney  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611

(no signature required)

Alice H. Martin  
United States Attorney  
Northern District of Alabama  
U.S. Department of Justice  
1801 Fourth Avenue North  
Birmingham, AL 35203

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Pharmacia Corporation and Solutia Inc., relating to the Anniston PCB Superfund Site.

10/11/02  
Date

Winston A. Smith  
Winston A. Smith, Director  
Waste Management Division  
U.S. Environmental Protection Agency  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303-8960

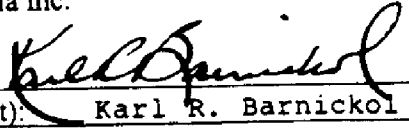
10/11/02  
Date

Dustin Minor  
Dustin Minor  
Associate Regional Counsel  
U.S. Environmental Protection Agency  
Region 4  
Atlanta Federal Center  
61 Forsyth Street, S.W.  
Atlanta, GA 30303-8960

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Pharmacia Corporation and Solutia Inc., relating to the Anniston PCB Superfund Site.

FOR Solutia Inc.

October 16, 2002  
Date

Signature:   
Name (print): Karl R. Barnickol  
Title: Senior Vice President, General Counsel and Secretary  
Address: 575 Maryville Centre Drive  
St. Louis, MO 63141

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name (print): Allan J. Topol  
Title: Partner  
Address: Covington & Burling  
1201 Pennsylvania Ave., N.W.  
Washington, D.C. 20004  
Ph. Number: 202-662-5402

THE UNDERSIGNED PARTY enters into this Consent Decree in the matter of United States v. Pharmacia Corporation and Solutia Inc., relating to the Anniston PCB Superfund Site.

FOR Pharmacia Corporation

October 16, 2002  
Date

Signature: [Handwritten Signature]  
Name (print): Richard T. Collins  
Title: Senior Vice President & General Counsel  
Address: Pharmacia Corporation  
110 Route 26 North  
Princeton, NJ 08542

Agent Authorized to Accept Service on Behalf of Above-signed Party:

Name (print): Allan J. Topol  
Title: Partner  
Address: Covington & Burling  
1201 Pennsylvania Ave., N.W.  
Washington, D.C. 20004  
Ph. Number: 202-662-5402

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**Exhibit B**

**to the MEMORANDUM IN SUPPORT OF MOTION TO ENTER PARTIAL REVISED  
CONSENT DECREE**

**United States' Summary of Comments and Responses to Comments**

UNITED STATES OF AMERICA

Plaintiff,

CIVIL ACTION NO. CV-02-PT-0749-E

v.

PHARMACIA CORPORATION  
(p/k/a Monsanto Company) and  
SOLUTIA INC.,

Defendants.

**UNITED STATES' SUMMARY OF COMMENTS  
AND RESPONSE TO COMMENTS**

**Introduction**

On March 25, 2002, a Partial Consent Decree ("Lodged Decree") was lodged with the Court regarding the Anniston PCB Superfund Site in Anniston, Calhoun County, Alabama, ("Site") between plaintiff the United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), and Pharmacia Corporation (p/k/a Monsanto Company) ("Pharmacia") and Solutia, Inc. ("Solutia."). Solutia and Pharmacia are hereinafter referred to collectively as "Defendants." Pursuant to 40 C.F.R. 300.430(c)(5)(ii) and 28 C.F.R. § 50.7, notice of lodging was published in the Federal Register on April 4, 2002, at 67 Fed. Reg. 16124. Upon request, the public comment period was extended from thirty (30) days to sixty (60) days.<sup>1</sup> The public comment period closed on June 3, 2002. The United States also held a public meeting in Anniston on March 16, 2002, to explain the Lodged Decree to the public and take their comments. The United States provided forms at the

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1. The second notice of lodging was published in the Federal Register at 67 FR 20550. This publication extended the comment period and corrected an error in the first publication.

*EXHIBIT B  
TO MEMORANDUM*

meeting for people to provide their written comments.

During the comment period, the United States received over 370 separate letters and one petition commenting on the Lodged Decree. Some letters were signed by more than one person. Comments were received from individuals, businesses, civic organizations, public interest groups, state agencies, municipal entities, and law firms. Of the more than 370 letters, approximately 341, containing approximately 370 signatures, supported entry of the Lodged Decree, while approximately 19 letters, containing approximately 27 signatures, expressed concern regarding part or all of the Lodged Decree. Of the 19 letters expressing concern, two were submitted by lawyers on behalf of approximately 20,000 clients involved in private lawsuits against Defendants. In addition to the 19 letters, a petition containing 786 signatures, expressed concerns regarding the Lodged Decree. Other letters expressed concern regarding the contamination in Anniston, but did not indicate whether they supported the Lodged Decree or not.

By law the United States is required to consider and respond to public comments it receives. 40 C.F.R. 300.430(c)(5)(ii) and 28 C.F.R. § 50.7 Over the last several months the United States has reviewed all of the comments and prepared the following responses. Because of the large number of comments and the fact that many were redundant in nature, the United States has grouped the comments into general categories and responded to each category. The United States only provides responses to the comments that expressed concern with the Lodged Decree. In addition, all comments submitted are being provided to the Court herewith. In several important areas, the United States recognized there were concerns expressed by the public and has renegotiated and modified the Lodged

Decree to allay those concerns.<sup>2</sup> The modifications to the Proposed Decree are detailed more fully below.

After review of all the public's comments, the United States, for the reasons set forth in its Memorandum in Support of Entry of the Proposed Decree, has determined that the relief established by the Proposed Decree is in the public's interest because it requires the Defendants to address the Site in a technically sound, cost-effective, and timely manner in order to minimize the risks to human health and the environment. The Proposed Decree requires Defendants to follow EPA's comprehensive cleanup strategy for Anniston. The Proposed Decree requires: (1) cleaning up the most highly contaminated residential areas first pursuant to the incorporated Removal Order<sup>3</sup>, (2) expediting the cleanup of residential properties through the Non-time Critical (NTC) Removal Agreement, and (3) a detailed study to provide EPA with the information necessary to determine the best final cleanup solution for the entire Site through the Remedial Investigation / Feasibility Study (RI/FS) Agreement.

#### **Summary of Comments Supportive of the Lodged Decree**

The United States received approximately 341 letters supporting the Lodged Decree. Most of the letters were submitted by individuals, although some were written on letterhead suggesting that they reflected the sentiments of the members of various organizations. For example, the Executive Director

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2. To avoid confusion, throughout this document the original lodged consent decree that the public commented on is referred to as the "Lodged Decree" while the new modified version the United States has negotiated and is presently asking the Court to enter is called the "Proposed Decree." The Proposed Decree is identical to Lodged Decree except for the specifically detailed substantive modifications noted below and a few minor changes.

3. Removal Order shall mean the Administrative Order on Consent, docket no. CER-04-2002-3752, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 5, 2001. The Removal Order is set forth in Appendix C of the Proposed Decree.



of the Calhoun County Economic Development Council wrote on behalf of the Council in support of the Lodged Decree. Other letters of support came from the City of Jacksonville, Alabama, the Calhoun County Chamber of Commerce, the International Chemical Workers Union Council, the United Way of East Central Alabama, the Business Council of Alabama, the Oxford Parks and Recreation Department, the Boys and Girls Club of East Central Alabama, and a group of school teachers from a local elementary school who noted their support for the \$3.2 million educational trust fund provided for in the Lodged Decree.

Approximately 190 of the letters of support indicated that they felt that the Lodged Decree was the best approach to getting the community cleaned up. Many of the letters (36) contained support for Solutia as a good corporate neighbor and citizen. Some of the commenters (20) remarked that Solutia was already doing a good job of cleaning up contamination in Anniston, and some (4) specifically noted that their own properties had been satisfactorily cleaned up by Solutia. A number of the letters (13) expressed misgivings about the private party tort suits against the Defendants. Some of the persons submitting favorable letters, in criticizing the private party actions, noted that some of the plaintiffs in the private party actions had refused to allow EPA and the Defendants to cleanup their properties.

In addition to the letters referenced above, approximately 120 other letters of support came from persons who identified themselves as employees or former employees of Defendants. Generally, these commenters expressed their belief that the Defendants were committed to cleaning up the community and that the Defendants were good corporate citizens of Anniston. Thus, there are three general themes expressed by Commenters in the approximately 341 supportive letters:

1. That the government was finally addressing the contamination in Anniston and that the Lodged Decree represents the first step in the rebuilding or healing the community.
2. That EPA should be involved in the cleanup and that the Lodged Decree represented the best course forward for a timely solution to pollution problems in Anniston.
3. That under the Lodged Decree, Solutia was fulfilling its obligations to Anniston. These Commenters generally believed that the company was a good corporate citizen and that the PCB problem had been overblown and caused harm to the community's reputation.

#### **Summary of Comments Critical Of Various Components of the Lodged Decree**

The approximately 19 negative comments and the petition critical of the Lodged Decree came from public interest groups, concerned citizens, public officials, and two lawyers representing more than 20,000 citizens involved in litigation against the Defendants. The Commenters included the following: 1) Community Against Pollution, Inc. ("CAP"); 2) City of Anniston ("City")<sup>4</sup>; 3) Alabama Attorney General's Office; 4) Alabama Department of Environmental Management ("ADEM"); 5) Hudson River Sloop Clearwater, Inc.; 6) Beasley, Allen, Crow, et. al., P.C. ("Beasley Allen") (on behalf of more than 17,000 clients); 7) Environmental Working Group, Riverkeeper, Inc. & U.S. Public Interest Research Group; 8) Donald W. Stewart, P.C. (on behalf of 3,500 clients); 9) Clean Water Action Council of N.E. Wisconsin, Inc.; and 10) Mothers and Daughters Protecting Children's Health (MADPCH). Generally, these comments were lengthy and very detailed. Each included a number of

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4. Although the City of Anniston's comments contained many concerns regarding the Lodged Decree, the City also acknowledged that it is relying on EPA and ADEM to address the contamination in Anniston, and that the City supports people providing access for EPA and ADEM to perform response activities in Anniston.

specific issues. The critical letters and the petitions expressed the following general concerns:

1. The Lodged Decree will not lead to the expeditious cleanup of Anniston.
2. Defendants should not be permitted to conduct the Risk Assessment.
3. EPA should conduct the RI/FS.
4. Funding of the education trust is inadequate.
5. Stipulated penalties provided for in the Lodged Decree are inadequate.
6. The Lodged Decree does not contain health studies.
7. The Site should be listed on the National Priorities List ("NPL").<sup>5/</sup>
8. The Lodged Decree was the result of improper collusion between the United States and the Defendants and that the Lodged Decree was entered into specifically to preempt ongoing state court litigation.
9. Miscellaneous Comments: these comments were very specific in nature and are dealt with at the end of this response.

#### **Summary of Modifications to the Lodged Decree**

Before reviewing the United States' detailed response to the comments, it is important to point out that the United States has negotiated a number of major changes to the Lodged Decree in direct response to concerns expressed by the public. The Lodged Decree has been modified as reflected in the new Proposed Decree as follows:

1. EPA, rather than the Defendants, will now be conducting the Human Health Risk Assessment component of the Baseline Risk Assessment. See, RI/FS Agreement and SOW, Appendices A & B of

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5. Some commenters, such as the City of Anniston and ADEM (in the attachments to their comments), stated that Anniston should not be listed on the NPL.

the Proposed Decree.

2. Residential properties will be addressed pursuant to another removal agreement through the Engineering Evaluation / Cost Analysis ("EE/CA") provisions of the National Contingency Plan (NCP). Under this process, cleanup of residential properties will be achieved much sooner than as originally provided for in the Lodged Decree. See, NTC Removal Agreement, Appendix G to the Proposed Decree.
3. The disbursement of funds into the educational trust fund has been changed so that money is remitted every year. See, Section VI of the Proposed Decree.
4. Stipulated penalties have been increased in the RI/FS Agreement in order to better ensure compliance by the Defendants. See, Section XIX of the RI/FS Agreement, Appendix A.
5. Defendants agreed that they will not challenge the listing of the Site on the NPL if they are substantially out of compliance with the Proposed Decree, and that they will not challenge any listing based upon changed Site conditions that result from the NTC Removal Agreement or Removal Order. See, Section XV of the Proposed Decree.

#### **United States Response To Comments**

**Comment:** *The Lodged Decree will not lead to the expeditious cleanup of Anniston and/or EPA should expedite the cleanup of Anniston.*

This comment was submitted by several parties, including Donald Stewart, the City of Anniston, and ADEM.

**Response:** *The Decree provides for the most effective, comprehensive and expeditious cleanup of the contamination in Anniston. Moreover, in response to public concerns, the United States and Defendants have modified the Lodged Decree to expedite the cleanup of all residential yards contaminated with PCBs.*

As set forth above, the Decree has a three-tiered strategy for dealing with PCB contamination in Anniston. First, the Proposed Decree requires immediate cleanup of the worst contaminated residential yards. Second, the Proposed Decree requires, after a short, several month planning period, the cleanup of every residential yard found to have over 1 part per million (ppm) PCBs in surface soils, if EPA determines that to be appropriate after the public comment period for the EE/CA. Third, the Proposed Decree requires a massive study pursuant to the strict requirements of CERCLA and the National Contingency Plan that will enable EPA to select a final remedy to address all areas which have been contaminated by releases from the Anniston plant by Defendants and their predecessors.

Specifically in response to concerns raised by the commenters regarding expediting the cleanup, the Proposed Decree was renegotiated and modified to add a CERCLA Non-Time-Critical Removal Action (NTC Removal Agreement) component to the cleanup to address residential properties in a more timely fashion. See, Appendix G to the Proposed Decree. EPA estimates this modification will allow cleanup of all contaminated residential yards to occur at least two years earlier than would have happened under the Lodged Decree. Pursuant to EPA's regulations, the NTC Removal Agreement requires the Defendants to perform an EE/CA to briefly evaluate alternatives to address residential yards. EPA will then select a response action to address the residential properties in the EE/CA and put it out for public comment. EPA is required to respond to the comments pursuant to the NCP. After receiving input from the public, EPA will select a preferred alternative. If EPA selects soil removal as the response action at properties containing 1 ppm PCBs or greater at the surface (and 10 ppm or greater below a depth of twelve inches), then Defendants will clean these properties up immediately, while the larger study pursuant to the RI/FS continues. If EPA selects something other

than soil removal at or above 1 ppm at the surface (and 10 ppm or greater below a depth of twelve inches), then it is EPA's intention to enter into a subsequent agreement with the Defendants to implement the response action selected by EPA. EPA further retains the right to order the Defendants to do the work if an agreement is not reached.

EPA has determined that use of CERCLA Non-Time Critical Removal Action authority to address the residential soil contamination at this Site is the most efficient mechanism to address residential properties under the NCP while providing maximum public participation. Given the broader scope of the NTC Removal Agreement, the public's willingness, or lack thereof to provide access, will be a major factor regarding the timeliness of EPA's response actions.

**Comment:** *EPA should conduct the Risk Assessment.*

This comment was submitted by many of the commenters including CAP and the Attorney General's Office.

**Response:** *While the level of EPA oversight over Defendants' performance of all obligations under the Decree, including the risk assessment, is significant and protective of the public, the United States and Defendants have modified the Proposed Decree so that EPA, not the Defendants, will conduct all aspects of the Risk Assessment associated with human health.*

After review of the extensive comments on this issue, for the public's peace of mind, the Proposed Decree has been modified to provide that EPA will conduct the Human Health component of the Risk Assessment. See, RI/FS Agreement and SOW, Appendices A & B of the Proposed Decree. Thus, EPA will conduct all portions of the Risk Assessment that look at how PCB

contamination may impact human health. The United States will strictly oversee the Defendants' conduct of the Ecological Risk Assessment. The Ecological Risk Assessment addresses environmental risks such as risks to fish and other wildlife posed by the PCB contamination. EPA believes that this change addresses the concerns raised by the commenters regarding the risk assessment because virtually all of the comments regarding the Lodged Decree focused on PCB impacts to people.

**Comment:** *Anniston faces complex environmental problems and is dependent upon EPA and ADEM to address the Site. A cooperative effort between the United States and the State of Alabama is the best way to address the Site.*

The City of Anniston provided this comment.

**Response:** *The United States agrees with this commenter and will continue to try to coordinate all of its activities with ADEM.*

The United States agrees that cooperation between the United States and the State of Alabama is the best approach to address the contamination in and around Anniston.

Both ADEM and the Alabama Attorneys General's Office filed comments expressing concerns about the Lodged Decree. Over the last several months EPA has held discussions with ADEM and the Attorney General's Office for the purpose of responding to their concerns and creating a cooperative working relationship. The Attorney General's Office sent EPA a letter dated July 10, 2002. In that letter, the Attorney General stated that many of its concerns had already been addressed by the United States, but that some still needed to be addressed. See, Exhibit A attached hereto, July 10, 2002,

Letter from Bill Pryor, Alabama Attorney General, to Thomas Sansonetti, Assistant Attorney General ENRD US DOJ. EPA has attempted to address the Attorney General's Office remaining concerns through the changes reflected in the Proposed Decree and in this response to comments.

The Attorney General's Office has facilitated MOU negotiations between EPA and ADEM over the past few months. EPA will do everything that it can to coordinate response actions with ADEM if the agencies are unable work out an MOU. EPA is committed to working with ADEM and the Attorney General's Office in order to achieve a comprehensive, timely cleanup of the Site that is protective of human health and the environment.

**Comment:** *EPA should conduct the entire cleanup and the RI/FS itself.*

This comment was made by several commenters, including Donald Stewart and Beasley Allen.

**Response:** *The United States respectfully disagrees that EPA conduct of the RI/FS and the cleanup is the best manner to address the Site.*

Commenters contend that the Defendants should not be allowed to perform the RI/FS because Defendants can not be trusted. Commenters stated that EPA has put the "fox in charge of the henhouse." The comments also claim that the Defendants are not technically competent to do the necessary work. EPA disagrees: Under CERCLA, the entire EPA Superfund program is based on the dual concepts of "enforcement first" and the "polluter pays." This means that EPA finds the polluters and forces them to cleanup under strict EPA supervision. Since the Superfund program's inception, over 70% of all remediation has been done by responsible parties with EPA oversight. EPA is mandated to preserve its limited cleanup resources for sites where there is no existing responsible party



that can be forced to conduct the cleanup. EPA's Superfund program has successfully overseen PRP cleanups at thousands of sites across the country. EPA has developed strict oversight protocols that will be followed at this Site.

One commenter also maintained that the Defendants are not "competent" to conduct the investigation required by the Proposed Decree. EPA disagrees. All of the actual work under the Decree in Anniston will be done by EPA-approved contractors that Defendants have hired. EPA has thoroughly reviewed the qualifications of the contractors used by Defendants to date and determined that they are competent to conduct environmental cleanup operations at the Site.

Furthermore, the Decree provides that "the qualifications of the persons undertaking the RI/FS Work for Defendants shall be subject to EPA's review, after consultation with the State, for verification that such persons meet minimum technical background and experience requirements. This Agreement is contingent on Defendants demonstration to EPA's satisfaction, after consultation with the State, that Defendants and their contractors are qualified to perform properly and promptly the actions set forth in this Agreement." See, RI/FS Agreement, Paragraph 28, page 12. EPA added the "after consultation with the State" requirement to the Proposed Decree at the request of the State. Pursuant to the Proposed Decree, Defendants are required to submit plans for all work to EPA for review and comment. EPA will ensure that Defendants do everything in accordance with CERCLA, the NCP, and EPA's policies and guidelines. Defendants may not begin any work under the Proposed Decree until EPA approves Defendants' work plans. After the work plans are approved, EPA will ensure that all work is done in accordance with the work plans through close supervision of all of the work.

Some commenters, including Donald Stewart, alleged that work done by Defendants in the

past was inadequate and gave examples where Defendants performed certain actions "improperly." EPA believes that Defendants' actions over the last two years pursuant to the removal orders conducted with EPA's oversight are the best example of how Defendants can be expected to perform pursuant to the Proposed Decree. Defendants' contractors have been performing extensive sampling and cleanup activities pursuant to the removal orders since October of 2000. Defendants have performed all of the work required by the removal orders competently, in the manner prescribed by EPA. Thus, Defendants have demonstrated their competency to perform the work required by the Proposed Decree. Moreover, if Defendants fail to perform the work pursuant to EPA's satisfaction, EPA reserves the right to take over the work itself or order it redone.

Beasley Allen incorrectly states in their comment, citing a letter by the United States to Defendants, that the United States wanted to carry out the RI/FS itself in the early stages of the negotiations. The letter in reference simply states that "We cannot agree to let Solutia Inc. and Pharmacia . . . conduct an RI/FS which would be less comprehensive than it would be if EPA performed it. Thus, if Solutia/Monsanto wants to perform the RI/FS, it will have to determine the full extent of contamination at the Site." See, Exhibit B to Beasley Allen's comments, February 27, 2001 Letter from DOJ to Defendants. It is obvious from the rest of the paragraph that EPA contemplates having the RI/FS done by Defendants. The RI/FS Agreement attached to the Proposed Decree requires Defendants to perform an RI/FS that will be equivalent to an RI/FS done by EPA.

**Comment:** *The Lodged Decree does not contain health studies.*

This concern was included in most of the critical comments.

**Response:** *The United States acknowledges that the Proposed Decree does not contain any requirement for health studies.*

EPA strongly supports the efforts of other federal, state, and local health agencies to provide health studies and other medical support for the Anniston community. However, this Proposed Decree is an EPA Superfund consent decree related to the cleanup of PCB contamination in Anniston. EPA does not have the legal authority, medical resources, or health expertise, to conduct health studies in Anniston. EPA has been working closely with its sister health agency the Agency for Toxic Substances and Disease Registry (ATSDR) to ensure that community health and medical needs are addressed. Towards that end, EPA has advised ATSDR that it will continue to fully support efforts by ATSDR to address the Anniston community in accordance with the legal authority provided to ATSDR under CERCLA. See, Exhibit B attached hereto, August 1, 2002, Letter from A. Stanley Meiburg, Deputy Regional Administrator, EPA Region 4, to Dr. Henry Falk, Assistant Administrator, ATSDR. ATSDR has already done extensive work in the Anniston community, including blood sampling. See Declaration of Robert E. Safay, Exhibit F to the United States' Response to the Motion to Intervene. ATSDR will continue to conduct health related activities in and around Anniston and EPA will continue to cooperate with ATSDR and support ATSDR's efforts. See, Exhibit C attached hereto, October 3, 2002 Letter from Dr. Henry Falk, Assistant Administrator, ATSDR, to A. Stanley Meiburg, Deputy Regional Administrator, EPA Region 4, for a discussion of the activities ATSDR currently intends to conduct in Anniston.

Finally, in a separate EPA administrative cost recovery agreement, Defendants have agreed to

reimburse EPA for the approximately \$2,000,000<sup>6</sup> that ATSDR has already expended in Anniston. See, Exhibit C, to the Memorandum in Support of Motion to Enter Partial Consent Decree. The United States intends to seek to recover any future costs incurred by ATSDR from Defendants.

**Comment:** *The Site should be listed on the National Priorities List ("NPL").*

Many commenters raised the issue of the NPL. However the comments were split over the need for listing of the Anniston Superfund Site on the NPL. Several commenters, including public interest groups, CAP, and the petition argued for listing the Site. The City of Anniston and ADEM (in its attachments) argued against it.

**Response:** *All of the work done pursuant to the Proposed Decree will be done in the same manner, following the same standards and guidelines, as it would be if the Site were listed on the NPL. Nevertheless, to facilitate listing if that were to become necessary, the Proposed Decree was modified to preclude Defendants from challenging EPA's listing of the Site 1) if Defendants are substantially out of compliance with the Proposed Decree and EPA determines it is necessary to list the Site, and 2) based upon changed Site conditions that result from the NTC Removal Agreement or Removal Order.*

Pursuant to the Proposed Decree all of the work done in Anniston will be done in the same manner, following the same standards and guidelines, as it would be if the Site were listed on the NPL. Unfortunately, many of the commenters misunderstood the actual effect of NPL listing. The primary

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6. Approximately \$2,000,000 of the \$6,053,420.90 Defendants agreed to pay in Past Response Costs were ATSDR's Past Response Costs.

legal difference between NPL sites and non-NPL sites is that EPA cannot spend taxpayer's money from the Superfund to perform a "remedial action" unless a site is on the NPL. In Anniston, there is no need for EPA to expend Superfund "remedial" cleanup dollars because there are financially viable responsible parties to perform and pay for the work. Also, the Proposed Decree covers only the first phases of the Superfund cleanup, i.e., the RI/FS and the removal actions. These are not legally considered "remedial actions" under CERCLA, thus, if necessary, EPA can spend its own money to perform these actions whether the Site is on the NPL or not. Once the work in the Proposed Decree is complete, EPA anticipates entering into a subsequent enforcement agreement with the Defendants to require them to perform the final Remedial Design/ Remedial Action (RD/RA) at the Site. EPA does not need to list the Site on the NPL to require a complete and total cleanup of Anniston by the Defendants.

There are a few other requirements for NPL sites that EPA has made sure are provided for in the Proposed Decree. For example, a Public Health Assessment has been done by ATSDR and Technical Assistance Plan (TAP) grants are provided for in the Proposed Decree. See, Paragraph 29(B) of the RI/FS Agreement, Appendix A to the Proposed Decree.

Since EPA is obtaining an NPL equivalent cleanup pursuant to the Proposed Decree and because the City of Anniston and ADEM strongly oppose listing the Site on the NPL, EPA has not listed the Site. It is worth noting that site listing is a separate process (which requires EPA to conduct notice and comment rule making) which is not related to the Proposed Decree. If EPA decides to list the Site in the future, the Proposed Decree will not have any affect on EPA's ability to list the Site. Also, EPA has modified the Lodged Decree by adding a provision to the Proposed Decree whereby

the Defendants waive all rights to legally oppose EPA's listing of the Site 1) if they are substantially out of compliance with the Proposed Decree, and 2) based upon changed Site conditions that result from the NTC Removal Agreement or Removal Order. See, Section XV of the Proposed Decree. This further minimizes the risk of delay to an NPL listing if EPA decides to list the Site in the future.

One of the commenters incorrectly stated that NPL listing ensures that EPA has the power to sue for treble damages if Defendants fail to comply with the Proposed Decree. NPL listing has no affect on EPA's ability to seek treble damages for failure to perform the RI/FS and removal work required by the Proposed Decree. Instead treble damages are provided under § 107(c)(3) for failure to comply with an administrative order issued by EPA. In fact, both the Removal Order and the NTC Removal Agreement expressly provide that: "Respondent may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3)."

A commenter also incorrectly stated that NPL listing allows EPA to hold Defendants liable for areas outside of the defined site area. NPL listing in this case would have no affect on the area for which Defendants are liable. EPA has ensured that Defendants address the entire area for which they may be responsible in the Proposed Decree. The Proposed Decree provides:

"Site" shall mean, for the purposes of this Consent Decree, the Anniston PCB Site, which consists of the area where hazardous substances, including PCBs associated with releases or discharges as a result of the operations, including waste disposal, of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.

See, Section IV(FF) of the Proposed Decree. Thus, the Site which must be addressed pursuant to the

Proposed Decree is not limited by any predesignated boundaries, and the definition of Site in the Proposed Decree ensures that Defendants must address the entire area for which they may be responsible.

Another commenter claims that the Administration's approach undermines the enforcement first/polluter pays principle, strong cleanups, and community participation standards. However, the Proposed Decree is consistent with the polluter pays principle because it requires Defendants to bear all of the costs of the response actions, including EPA's oversight costs. The Proposed Decree also includes all of the community participation required at NPL sites, plus through the Community Advisory Group ("CAG") process, additional community involvement beyond what is normally required. In addition, EPA has a community relations center (CRC) in Anniston that is staffed on a daily basis available to allow the citizens of Anniston to learn about EPA's activities in Anniston and provide their input to EPA. As of October 8, 2002, EPA has received 1029 visitors and 6564 phone calls to the CRC.

Finally, a commenter incorrectly stated that listing the Site on the NPL would require a comprehensive health study. Although Section 104(i)(6)(A) requires ATSDR to perform a public health assessment at all sites listed on the NPL, Section 104(i)(6)(B) also provides that ATSDR may perform health assessments at any site at the request of any individual. 42 U.S.C. 9604(i)(6)(A-B). ATSDR has already performed a public health assessment in Anniston pursuant to section 104(i)(6)(B). In addition, ATSDR has conducted other health consultations and investigations in Anniston. See Declaration of Robert E. Safay, Exhibit F to the United States' Response to the Motion to Intervene. The authority for ATSDR to conduct more comprehensive studies, like the one requested by the

commenter, is contained in Section 104(i)(7-9), and requires the Administrator of ATSDR to make the necessary determinations pursuant to these sections before conducting such studies. 42 U.S.C. § 9604(i)(7-9). As noted in the attached letter from EPA to ATSDR, EPA will continue to support ATSDR in whatever additional health studies ATSDR determines are necessary pursuant to ATSDR's CERCLA authority. See, Exhibit B Meiburg Letter. See also, Exhibit C, Dr. Falk Letter, discussing the activities ATSDR currently intends to conduct in Anniston.

**Comment:** *The Proposed Decree was the result of improper collusion between the United States and the Defendants and was entered into specifically to preempt ongoing state court litigation.*

Variations on this comment were in many of the letters opposing the Lodged Decree, including the comments submitted by Donald Stewart, ADEM, and the Attorney General's Office.

**Response:** *The United States strenuously disagrees with these comments.*

The Lodged and Proposed Decrees were signed by the United States because they represent the best PCB cleanup for Anniston's citizenry. The Lodged Decree was developed after more than a year of arms length negotiation between EPA and the Defendants. The Lodged and Proposed Decrees mandate a comprehensive process to address all of the PCBs in Anniston and ensures the work will be done by the responsible parties in a technically sound, cost-effective, timely manner in order to minimize the risks to human health and the environment.

Anniston is a top priority for EPA. EPA remains committed to addressing Anniston in an expedited, thorough, and comprehensive fashion. To date over 900 properties have been sampled by



EPA and Solutia for PCBs and EPA and ATSDR have already spent more than \$6,000,000 in Anniston. A summary of EPA's recent actions in Anniston is included below. This summary puts the timing of the Lodged Decree into context with EPA's other activities in Anniston and clearly shows that the Lodged Decree was developed completely independently of any state court case and was not the result of improper collusion by the United States.

#### EPA Activities in Anniston since 1998.

On December 31, 1998, EPA Administrator Carol Browner received a letter from the West Anniston Environmental Justice Task Force, now known as Citizens Against Pollution (CAP), asking for EPA action in regard to PCB contamination in Anniston, Alabama. CAP indicated that the residential contamination extended beyond the areas previously addressed. In June of 1999, EPA conducted soil and air sampling around the facility in response to the citizens' concerns.

In July of 1999, ADEM requested that EPA take the lead role in administering certain off-site remediation activities under CERCLA. In response, EPA began sampling off-facility properties in west Anniston in February of 2000 in order to gain a general understanding of the scope and extent of PCB contamination in west Anniston. Since February of 2000, EPA has sampled approximately 900 residential, public, and commercial properties during numerous sampling events.

In February of 2000, EPA established a local EPA CRC staffed on a daily basis in downtown Anniston, Alabama. EPA's goal has been to develop a successful community outreach network so that all of the citizens of west Anniston can find a receptive audience for their concerns and questions. EPA has also taken steps to ensure that local government, community, and civic organizations are able to give the Agency input regarding EPA's cleanup activities in Anniston.

In April of 2000, Alabama Governor Don Siegelman wrote President Clinton requesting federal assistance to remedy the environmental contamination and resultant human exposures caused by PCBs in Anniston, Alabama. EPA Region 4 responded to Governor Siegelman's letter on behalf of President Clinton. EPA's response updated Governor Siegelman about EPA's ongoing activities in Anniston, and assured the Governor that Anniston would continue to be a top priority for EPA Region 4.

In October of 2000, Solutia and EPA entered into a Consent Order, which was revised

by an amended Order in October of 2001. The Consent Order is incorporated by reference and made a part of the Proposed Decree. Under the Consent Order, Solutia agreed to cleanup the 11<sup>th</sup> Street ditch, sample the 9<sup>th</sup> Street ditch, complete the residential sampling for EPA in the areas covered by the Order, and address any property where PCBs are found at a level that could cause short-term health concerns. This work is being done under close supervision by EPA. Pursuant to this Order, any home where PCB levels in the yard exceed short-term risk levels, Solutia is required to temporarily relocate the residents, remove the contaminated soil, and replace it with clean fill. Of the more than 900 homes that have been sampled by EPA and Solutia thus far for PCBs, 25 properties require cleanup because they exceed the short-term cleanup levels.

In 2001, EPA, at the request of the community, conducted an independent review of the ongoing ADEM supervised cleanup of Solutia's property, including the two landfills which were historically used to dispose of wastes at the Anniston plant. EPA utilized its Environmental Response Team (ERT) to conduct this review. ERT is a specialized group within EPA which provides expertise and support at the request of the Regions at significant sites posing unique problems. The ERT published a report of its findings in May of 2001. In many respects, the ERT Report supports ADEM's activities on the property, but also indicates several areas where additional study and work need to be done to ensure that there are not ongoing releases from the facility. Throughout 2001 and early 2002, EPA and ADEM attempted to reach agreement regarding the ERT recommendations, however those discussions were inconclusive and to date none of the ERT recommendations have been implemented. The Proposed Decree requires, among other things, that the Defendants implement all of the ERT recommendations. Ultimately, EPA determined that the most sensible and effective approach for addressing the contamination in Anniston was to address it utilizing the overarching authority of CERCLA.

As early as January 2001, negotiations began with Defendants regarding the Lodged Decree itself, a few months after EPA entered into the October 27, 2000 AOC with Solutia. Informal negotiations regarding the Lodged Decree continued until EPA issued Special Notice letters to Defendants on November 19, 2001. The November 19, 2001, Special Notice Letters began a formal 90 day negotiation period pursuant to section 122(e) of CERCLA. 42 U.S.C. § 9622(e). Thus, Defendants were supposed to conclude negotiations with EPA by February 2002. EPA agreed to extend the negotiations beyond the 90 day period for approximately one month to finalize negotiations, which led to the Decree being lodged on March 25, 2002. In fact, a Special Master appointed by a state court recently determined that, "[I]t is apparent that negotiations between EPA and Defendants were in progress well before the January 7, 2002 trial." See footnote 8 at p. 4 of the Special Master's Report attached hereto.

See, Section II. BACKGROUND, Memorandum in Support of the United States' Response to Motion to Intervene Filed by the Bowie Intervener-Applicants.

As shown by the summary above, the Lodged Decree was clearly the culmination of several years of work by EPA in Anniston and was not related to any state court lawsuit.

In a similar vein, the Attorney General's Office questioned the timing of the Lodged Decree, with respect to the second Removal Order which was issued in October of 2001. However, negotiations regarding the Lodged Decree actually began before negotiations regarding the second Removal Order. See, Exhibit A to Beasley Allen's comments, January 2, 2001 Letter from EPA to Defendants. The second Removal Order was identical to the October 27, 2000 AOC in most respects, with the addition of a few geographic areas that were not covered by the October 27, 2000 AOC. The first two removal orders were designed to address the immediate threat posed by properties containing levels that are unsafe for the short term. As such, the first two removal orders, were only partial fixes to the problems in Anniston, and therefore, the Proposed Decree is necessary to address the long term threats posed by the Site.

The Attorney General's Office also incorrectly stated that the Lodged Decree provides little progress toward remediation. The RI/FS process called for in the Proposed Decree is an essential step required by CERCLA and the NCP before EPA can select a final remedy. As noted in the NCP, "the purpose of the remedial investigation/feasibility study (RI/FS) is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy." 40 C.F.R. § 300.430(a)(2); see also, 40 C.F.R. §§ 300.430(d)(1) and 300.430(e)(1). Thus, the Proposed Decree is an essential step in the CERCLA process which must be completed before EPA can select a remedy to address the long term threat posed by the Site. The Proposed Decree requires that Defendants undertake a major study and evaluation of the PCB contamination in Anniston following the comprehensive and strict requirements of

the federal Superfund process. The study will evaluate the extent of the contamination, the risks it poses, and the final cleanup options for the Site. The study will be rigorously overseen by EPA. Following completion of the study, EPA will select a final remedy after an extensive public input process. EPA then anticipates negotiating another consent decree with the Defendants to implement the remedy, or use its authority under CERCLA to order the Defendants to implement the remedy, or list the Site on the NPL and use Superfund money to perform the remedy and seek reimbursement from the Defendants. As noted herein, the Proposed Decree has been modified to expedite the cleanup of the residential properties through the NTC Removal Agreement, while the long term study regarding the final remedy for the entire Site proceeds pursuant to the RI/FS.

Commenters, including the Attorney General's Office, also stated that a partial consent decree prior to selecting a remedy is unusual. Section 122 of the CERCLA provides that EPA may do RI/FS Agreements administratively or judicially. See 42 U.S.C. 9622 and 40 C.F.R. § 300.430(c)(5)(ii). EPA determined that proceeding judicially, as is allowed by the statute, was appropriate. The Consent Decree provides the public the opportunity to be involved in the process through the mandatory judicial comment period, and includes more than a typical RI/FS, such as the educational trust.

The Attorney General's Office incorrectly stated that EPA chose to include Pharmacia as a party to the Lodged Decree at "the last minute" in order to provide it protection from the state court trial which began in January of 2002. However, EPA originally notified Pharmacia of its potential liability under CERCLA on August 31, 2000, demanded that Pharmacia reimburse EPA for its past and future costs at the Site, and requested that Pharmacia perform a removal action at the Site. EPA informed Defendants in writing on February 27, 2001, that both Solutia and Pharmacia would have to

sign the Consent Decree. See, Exhibit B to Beasley Allen's comments, February 27, 2001 Letter from DOJ to Defendants. EPA followed up the General Notice Letter with a Special Notice Letter to Pharmacia on November 19, 2001. Pharmacia also participated in and signed the administrative agreement for EPA's past costs.

Commenters, including the Attorney General's Office, also stated that it was unusual that the Lodged Decree added the area covered by RCRA permit at "the last minute." However, the definition of the Site under initial drafts of the consent decree never excluded the area covered by the RCRA permit. EPA decided that, because of 1) the technical and legal complexity of the pollution problem in Anniston, and 2) the widespread nature of the contamination in distinct geographical areas with numerous land uses, the entire cleanup including the landfills should be conducted under the authority of the federal Superfund statute.

The public, including CAP, urged EPA to extend the Superfund umbrella over the entire Site after EPA began large scale residential sampling in early 2000. In fact, CAP repeated its request that EPA address the entire Site under Superfund as late as February of 2002 in a meeting at EPA's offices in Atlanta. See, Exhibit D attached hereto, Agenda, February 13, 2002 meeting, agenda item "Memorandum of Understanding Status (who is responsible for what)". EPA informed CAP at this meeting that EPA was considering whether to extend Superfund authority over the entire Site, that EPA was discussing this issue with ADEM, and that EPA expected to make a final determination regarding the issue in the near future.

Finally, a commenter noted that EPA officials had openly expressed concern about the possibility of a state court ordering injunctive relief for Anniston that might conflict with EPA's planned

cleanup actions. The commenter concluded that these statements prove that EPA's real purpose for the Lodged Decree was to limit the power of the state court to order injunctive relief. As stated above, EPA began negotiations regarding the Lodged Decree over a year before the state court trial even began. EPA acknowledges that there was concern that a state court may order inconsistent injunctive relief that could impede EPA's planned cleanup activities. However, preempting the state court was not the reason EPA negotiated the Lodged Decree. EPA entered into the Lodged and Proposed Decrees because they represent the best method to address the threats posed by the Site and protect human health and the environment in Anniston. The United States EPA has a mandate to protect human health and the environment under CERCLA regardless of whether there is an ongoing state court action which may or may not address part of the Site.

The United States' response in its Memorandum in Support of the United States' Response to Motion to Intervene Filed by the Bowie Intervener-Applicants ("Memorandum") fully addresses the commenter's concern regarding preemption of the state court by pointing out that CERCLA does not prohibit parties from bringing state claims provided they do not conflict with CERCLA. The Memorandum states in part that:

Except as provided in Sections 113(h) and 122(e)(6) of CERCLA, 42 U.S.C. §§ 9613(h) and 9622(e)(6), CERCLA does not impair the rights of parties to pursue common law actions for harms caused by hazardous substances. See CERCLA Section 310(h). . . . For example, the Applicants complain that the Lodged Decree does not provide for medical monitoring or an epidemiological study. However, there is nothing in the Proposed Decree that precludes the Applicants from pursuing those claims in their state court action. The recent case of Samples v. Conoco, Inc., 165 F. Supp. 2d 1303, 1315 (N.D. Fla. 2001), is directly on point, holding that CERCLA does not prohibit parties from bringing nuisance, trespass, or similar actions under state law for remedies within the control of state courts provided they do not conflict with CERCLA. The Proposed Decree requires [among other things] the Defendants to

conduct a remedial investigation and feasibility study, to continue to conduct emergency cleanups where the concentrations of contaminants warrant immediate action, reimburse the United States' response costs, and to set up an educational trust fund. There is nothing about these actions that is prejudicial to the Applicants. In fact, recently in the Bowie (state court) case, the Special Master addressed this point. Relying in part on Samples v. Conoco, she concludes that since CERCLA does not preempt common law remedies that do not conflict with it, the state court should proceed on the issue of medical monitoring. See Special Master's Report at p. 5.<sup>7</sup> Applicants are also proceeding, unimpeded by EPA's response actions, in the state court on the issues of damages and other aspects of their tort case.

**Comment:** *The City expressed appreciation for the creation of the educational trust fund but also concerns about the disbursement of funding.*

**Response:** *The United States, in response to comments regarding the educational trust, modified the Proposed Decree accordingly.*

The comment expressed concern that funding during the first five years of the trust was insufficient. Additionally, the comment reflects concern regarding whether the trust fund will be spent appropriately. Finally, the commenter believed that mechanisms for enforcing the fund are not adequate and that penalties for violating trust fund requirements should be paid to the trust fund instead of to the United States.

The United States and Defendants modified the Proposed Decree in response to the comments to provide for more equal funding throughout the twelve years Defendants are required to fund the trust. The United States is confident that the terms of the Proposed Decree ensure that the trust funds will be

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7. See also, E.I. Dupont De Nemours Co., 59 F.3d 121, 125-126 (holding because plaintiffs' medical monitoring claims do not "challenge" any federal removal or remedial action, they are not barred by CERCLA Section 113(h)).

properly expended. The following summary of the educational trust provisions of the Proposed Decree demonstrates that it adequately addresses all of these concerns regarding the trust. See, Section VI of the Proposed Decree.

The Proposed Decree requires Defendants to create a nonprofit foundation for the benefit of the residents of west Anniston to provide special education, tutoring, or other supplemental educational services for the children of west Anniston that have learning disabilities or otherwise need additional educational assistance. The Proposed Decree requires Defendants to seek input from the CAG created pursuant to the Proposed Decree, any consultants retained by Defendants, as well as representatives of the community at large, including educators, the Superintendent of Schools, the School Board and other local officials, in order to determine the following:

- a) how the funds shall be expended;
- b) whether the funds shall go to an existing entity or entities, or whether a new entity or entities shall be created;
- c) how the new entity or entities should be structured if the funds do not go to an existing entity or entities; and
- d) what limitations shall be placed on the recipient regarding the use of the funds.

The Proposed Decree requires the established foundation to provide EPA a written determination regarding (a-d) above, and to make them available to the public. Furthermore, the Proposed Decree requires all proceeds to be spent in accordance with the foundations written determinations.

Defendants are also required to provide EPA with an annual accounting documenting all expenditures and to certify that all expenditures were made in accordance with the foundations written determinations. Defendants are also required to purchase insurance or a bond to assure that the



foundation and entity or entities selected by the foundation perform in accordance with the foundations written determinations. Finally, Defendants are required to pay all costs of administering the foundation. Thus, the Proposed Decree has sufficient mechanisms to ensure that the educational trust will be spent for the purposes for which it is being created.

While we too would like for more educational funding for the benefit of Anniston, we believe \$3.2 million represents a significant sum of money. By law, penalties must be paid the U.S. Treasury and cannot be diverted to the trust fund.

**Comment:** *Some commenters expressed concern that the amount of funding provided under the Lodged Decree for technical assistance is insufficient.*

The City of Anniston and a public interest group provided this comment.

**Response:** *The United States respectfully disagrees.*

The amount of funding provided for in the TAP is greater than the amount of funding generally provided at other similar sites under CERCLA. Pursuant to CERCLA and its regulations, EPA has authority to provide a technical assistant grant ("TAG grant") of up to \$50,000 to assist communities in interpreting EPA's activities at sites listed or proposed on the NPL. At large complex sites such as Anniston, EPA may agree to issue a subsequent grant or grants if EPA determines it is necessary. Since the Site is not listed or proposed for listing on the NPL, EPA has required the Defendants to provide up to \$150,000 in TAP grants through the public participation period for the Record Of Decision (ROD). See, Paragraph 29(B) of the RI/FS Agreement, Appendix A to the Proposed Decree, and Task II of the SOW, Appendix B to the Proposed Decree.

**Comment:** *CAG (Community Advisory Group) membership should be broader than just representatives of West Anniston and the Defendants should fund the administration of the CAG.*

The City of Anniston and several other commenters made this comment.

**Response:** *The United States agrees but believes the terms of the Proposed Decree are adequate regarding the CAG.*

The RI/FS Agreement and SOW require Defendants to submit a Community Advisory Group Plan (CAGP) for establishing and funding development of a CAG and for providing meeting space and facilitators for the CAG for periodic meetings. EPA has the authority to require Defendants to amend the CAGP as directed by EPA. See, Paragraph 29(B) of the RI/FS Agreement, Appendix A to the Proposed Decree, and Task II of the SOW, Appendix B to the Proposed Decree. EPA will seek input from the City, as well as the general public, regarding who should be on the CAG, and how it shall operate prior to approving the CAGP. Thus, comments regarding the structure of the CAG will be considered by EPA after the Proposed Decree is entered.

**Comment:** *The Proposed Decree may preclude local municipalities from receiving brownfield funding.*

The City and ADEM provided this comment.

**Response:** *Whether the Proposed Decree bars future brownfield grant applications can only be determined by the grants and the properties covered by the grants.*

The Proposed Decree does not preclude the City from applying for future brownfield grants.

The City may apply for brownfield grants in Anniston and EPA will evaluate such applications on a property by property basis. However, EPA's brownfield funds are best reserved for properties that will not otherwise be addressed pursuant to another program. Under section 101(39) of the recent amendments to CERCLA, brownfield grants are not available for properties that will be addressed by a CERCLA consent decree, or properties that are being addressed pursuant to a RCRA permit because such properties are not a "Brownfield Site" as that term is defined in the statute.<sup>8</sup> 42 U.S.C. 9601(39).

If the city applies for a brownfield grant for a property which EPA knows is contaminated by releases from Defendants' Anniston plant, then such property will not be eligible for a Brownfield grant. However, EPA will require Defendants to address any such property under CERCLA. EPA will, upon request, provide the City with any information, such as sampling results, it may have regarding specific properties to help the City try to determine if a specific property will be potentially eligible for a grant before the City submits a formal application.

**Comment:** *Stipulated Penalties should be higher to ensure that Defendants comply with the Lodged Decree.*

Several commenters raised this issue, including the petitioners.

**Response:** *Although the stipulated penalties in the Lodged Decree were significant, in response to this comment, the United States negotiated with the Defendants and obtained higher*

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8 . Although EPA has the authority to make site by site determinations to provide brownfield grants for RCRA permitted facilities, it is unlikely that EPA would choose to issue a grant to a property that Solutia was already required to cleanup pursuant to its RCRA permit.

*stipulated penalties under the RI/FS Agreement.*

The United States has increased the amount of stipulated penalties in the RI/FS Agreement. See, Section XIX of the RI/FS Agreement, Appendix A. Additionally, to better ensure compliance, EPA has extensive authority and control over all work performed by the Defendants pursuant to the Proposed Decree. The United States will ensure that the work performed by the Defendants meets all the standards and guidelines established by law and EPA. EPA has authority to approve all work plans and work to be performed and it reserves the right to perform the work itself if EPA determines it is necessary. If the Defendants violate the Proposed Decree, in addition to stipulated penalties, they run the risk of EPA asserting a treble damages claim pursuant to CERCLA Section 107(c)(3) for violations of the NTC Removal Agreement and the Removal Order. Finally, the Proposed Decree has been modified to provide that Defendants waive their right to challenge EPA's listing of the Site on the NPL if they are substantially out of compliance with the Proposed Decree.

**Comment:** *EPA failed to take action when it first became aware of the contamination in Anniston and EPA has acted more aggressively at other sites.*

Several commenters, including Donald Stewart made this comment.

**Response:** *The Proposed Decree is the best method to ensure that Anniston is cleaned up in a comprehensive and timely manner that is protective of human health and the environment.*

Anniston has been a top priority for EPA since EPA's Superfund program learned of the widespread nature of the PCB contamination throughout residential neighborhoods in west Anniston. If EPA knew in the past what it has learned over the past several years, EPA would have acted sooner to

address the contamination in Anniston. Whether EPA should have acted sooner, based upon what it knew about Defendants' operations, is not relevant to whether the Proposed Decree should be entered now. EPA can not change the past. However, the Proposed Decree provides for the best mechanism to ensure that the Anniston PCB Site is cleaned up in a timely and comprehensive manner pursuant to the strict requirements of CERCLA.

Since EPA has yet to select a remedy for the Site, it is not useful to compare how EPA is addressing Anniston with how EPA has addressed other Sites. As stated herein, the RI/FS called for in the Proposed Decree is an essential step required by CERCLA and the NCP before EPA can select a final remedy for the Site. The RI/FS called for by the Proposed Decree is a comprehensive RI/FS in accordance with strict requirements of CERCLA and the NCP. Following completion of the RI/FS, EPA will select a final remedy after an extensive public input process. It is premature to compare how EPA has addressed other Sites before EPA determines how it is going to address this Site. Furthermore, all Superfund sites have unique features which make it difficult to make meaningful comparisons.

**Comment:** *Why was the Site listed in the Federal Register under the Clean Air Act? Why did the Federal Register notice say the public comment period was thirty days instead of sixty days? The petition, as well as other commenters, made this comment.*

**Response:** *The reference to the Clean Air Act in the first publication in the Federal Register was an error which was corrected by the second Federal Register notice. The time period for public comments is customarily thirty days. At the request of the public, the time period was*

*extended an additional thirty days as noted in the second Federal Register publication and the error regarding reference to the Clean Air Act was corrected.*

**Comment:** *Why is the Lodged Decree partial and is it normal to enter into partial decrees?*

The petition and a public interest group included this comment.

**Response:** *The Proposed Decree is "partial" because it only resolves some of the United States' claims against the Defendants contained in the complaint.*

By labeling the Proposed Decree a "partial" consent decree, the United States is notifying the Court that the Proposed Decree does not resolve all of the United States' claims against the Defendants contained in its complaint. The United States filed a complaint against the Defendants essentially seeking a total cleanup of the PCBs in Anniston and reimbursement of all of the United States' costs associated with the Site. The Proposed Decree is a "partial" decree because it does not address all of the relief the United States is seeking in its complaint. In this phase of the cleanup, EPA will use the RI/FS to gather information necessary to select a final remedy for the Site in the ROD. Once EPA issues the ROD, the United States will seek to enter into another consent decree with Defendants to address the remainder of the claims contained in the United States' complaint. The Proposed Decree is complete with respect to the stage EPA is at in the CERCLA process, but partial with respect to the total relief EPA intends to seek pursuant to the complaint.

**Comment:** *The Lodged Decree departs from EPA's model guidance.*

The petition and a public interest group included this comment

**Response:** *EPA respectfully disagrees with this comment.*

Because its programs are national in scope, EPA strives for consistency in its settlements through the use of model agreements and guidance documents. EPA models and guidance documents were utilized to provide the basis for the Proposed Decree and its attachments. In fact, the RI/FS Agreement, the Removal Order, and the NTC Removal Agreement adhere closely to EPA models.

**Comment:** *The community should have been made aware of what the parties to the Lodged Decree were negotiating.*

The petition and a public interest group included this comment.

**Response:** *EPA met with the community prior to initiating negotiations, met with the community regularly throughout the negotiations, and brought the communities concerns to the negotiation table. However, negotiations between the United States and PRPs are conducted confidentially.*

Negotiations between parties are conducted confidentially. However, throughout the negotiation process EPA conducted extensive community outreach activities to ensure that it understood the public's concerns. EPA met with local community groups and took input from the public prior to beginning negotiations. Two local community groups, including CAP, provided EPA letters regarding what they would like EPA to obtain in the negotiations. See, Exhibit E attached hereto, August 14, 2000 letter from CAP to EPA, and Exhibit F, August 15, 2000 letter from Sweet Valley/Cobbtown Environmental Justice Task Force to EPA. In addition, EPA has opened and maintained a community relations office in Anniston for the purpose of working with the community. A

the request of the community, the United States requested that Defendants provide relief beyond what is customarily provided under CERCLA, such as a comprehensive environmental health program and supplemental education. See, Exhibit A to Beasley Allen's comments, January 2, 2001 Letter from EPA to Defendants. Ultimately Defendants agreed to provide the \$3.2 million for supplemental education, but refused to provide the comprehensive environmental health program.<sup>9</sup>

Moreover, the best method for the public to participate in the settlement process is through the public comment process. Notably, as a result of concerns expressed by the community, significant changes have been made to the Proposed Decree.

**Comment:** *Why has the community not been introduced to Stan Meiburg? Is he an expert on Anniston?*

The petition included this comment.

**Response:** *Stan Meiburg is the Deputy Regional Administrator for EPA Region 4 in Atlanta. Mr. Meiburg is regularly briefed on this matter and is committed to achieving a cleanup in Anniston that is fully protective of public health and the environment.*

**Comment:** *The Lodged Decree is ambiguous on treatability studies.*

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9. As noted previously herein, ATSDR, not EPA, is the agency with the expertise and authority under CERCLA to perform health studies. The Proposed Decree already addresses all of the communities' concerns and suggestions that the United States would seek to address if it were to litigate this case.



The petition included this comment.

**Response:** *The United States respectfully disagrees with this comment. Treatability studies are fully addressed in the RI/FS Agreement and SOW.*

Section IX of the RI/FS, Paragraph 29(D)(1-6) and the Statement of Work, Task 4 address treatability studies in detail. These sections are closely based on EPA's model RI/FS and SOW documents.

**Comment:** *The Lodged Decree is inconsistent with the RCRA/CERCLA deferral policy and will be slower than a cleanup conducted by ADEM.*

**Response:** *EPA chose to address the site comprehensively in this case in order to ensure that the resources of both EPA and ADEM are available to address the threats posed by the Site.*

EPA's decision to address the entire Anniston PCB Site under CERCLA, including the landfills and Defendants' Property, was based upon site specific reasons and will not have any affect on how EPA applies the policy at other sites in Alabama or elsewhere. EPA's September 24, 1996 policy, Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities ("Deferral Policy") is a "policy" and does not create any legal rights on behalf of ADEM. The Deferral Policy specifically provides that it may be more appropriate for the federal CERCLA program to take the lead at some Sites. The Policy also notes that in some cases deferral may not be appropriate and notes that

the agencies should coordinate their approaches in such cases, as EPA has attempted to do through discussions with ADEM.

EPA has departed from the deferral policy because EPA determined that integrating this complex cleanup process under one statute made sense and is in the public interest in this case. As noted from in the Site summary contained on page 13, EPA got involved in Anniston at the request of ADEM, local citizens, and the Governor. EPA ultimately decided that, because of 1) the technical and legal complexity of the pollution problem in Anniston, and 2) the widespread nature of the contamination in distinct geographical areas with numerous land uses, the entire cleanup including the landfills should be conducted under the joint authority of the federal Superfund program and ADEM.

ADEM claims that the Lodged Decree will delay the cleanup of Anniston because it will slow down the process. To support their claim that the Proposed Decree will delay the cleanup of Anniston, ADEM claims that joint regulation by EPA and ADEM at other sites has delayed the cleanup of these sites. EPA disagrees with this claim, but does not believe it would be useful to address other sites in the response to comments for the Proposed Decree for this Site. The Proposed Decree will expedite the cleanup of Anniston and ensure that cleanup activities conducted by EPA outside of Defendants' Property are coordinated with activities done on Defendants' Property. EPA has the resources and expertise to ensure that Defendants address the Site pursuant to the Proposed Decree in a comprehensive and timely fashion pursuant to the strict requirements of the federal Superfund statute. The Proposed Decree will expedite the cleanup of Anniston through the use of the resources of EPA and the authority of the federal Superfund statute.

**Comment:** *Commenters, including ADEM, claim that the recent amendments to CERCLA preclude EPA from addressing the Site under CERCLA, because ADEM is addressing it under RCRA.*

**Response:** *The plain meaning of the statute clearly indicates that EPA is not precluded from addressing the Site under CERCLA.*

CERCLA was recently amended by Section 128 of CERCLA entitled "State Response Programs." One of the purposes of Section 128 is to provide grant funding for brownfield sites. Another purpose is to provide an enforcement bar (subject to certain exceptions) to CERCLA enforcement actions at "eligible response sites." Under Section 128(b) EPA is precluded from taking an enforcement action under Sections 106(a) or 107 at "eligible response sites" that are being addressed by the State. Since the term "eligible response site" under the new amendments cross references the term "brownfield site," the enforcement bar under CERCLA only applies to "eligible response sites" which includes (subject to certain exceptions) "brownfield sites." Therefore, if a facility<sup>10/</sup> is not a "brownfield site," then it is not an "eligible response site," and the enforcement bar does not apply. The enforcement bar contained in Section 128 does not apply to the Anniston PCB Site because it is not an "eligible response site" or a "brownfield site." Therefore EPA may address the Site under CERCLA.

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10. The definition of "facility" under CERCLA includes "any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located." 42 U.S.C. § 9601(9)(B).

The Anniston PCB Site is not a "brownfield site" because it is subject to an ongoing removal action, is the subject of a removal order with EPA under CERCLA, has been issued a permit under ADEM's authorized RCRA program, and is subject to corrective action under RCRA. See, 42 U.S.C. § 101(39)(A)(i, iii, iv, and v).<sup>11</sup>

Furthermore, even if the Anniston PCB Site were a "brownfield site," it would not be an "eligible response site" because it is excluded from the definition of "eligible response site" by Section 101(41)(C)(i). The Anniston PCB Site is not an "eligible response site" because it obtains a preliminary score sufficient for possible listing on the NPL, a preliminary assessment has been done, and EPA has consulted with the State about ranking the Site. See, 42 U.S.C. 101(41)(C)(i).<sup>12</sup>

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11. 42 U.S.C. § 101(39)(A) provides excludes the following from the definition of "brownfield site:"

- (i) a facility that is the subject of a planned or ongoing removal action under this title;
- (iii) a facility that is the subject of a unilateral administrative order, a court order, an administrative order on consent or judicial consent decree that has been issued to or entered into by the parties under this Act;
- (iv) a facility that is the subject of a unilateral administrative order, a court order, an administrative order on consent or judicial consent decree that has been issued to or entered into by the parties, or a facility to which a permit has been issued by the United States or an authorized State under the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) . . . ;
- (v) a facility that—(I) is subject to corrective action under section 3004(u) or 3008(h) of the Solid Waste Disposal Act (42 U.S.C. 6924(u), 6928(h)); and (II) to which a corrective action permit or order has been issued or modified to require the implementation of corrective measures.

12. Section 101(41)(C)(i) provides:

- (i) a facility for which the President - (I) conducts or has conducted a preliminary assessment or site inspection; and (II) after consultation with the State, determines or has determined that the site obtains a preliminary score sufficient for possible listing on the NPL . . . ; unless the President has made a determination that no further Federal action will be taken . . .

Since the Site is not an "eligible response site" or a "brownfield site" the enforcement bar does not apply and EPA may address the Site under CERCLA.

**Comment:** *ADEM claims that the Lodged Decree is precluded because EPA delegated ADEM the authority to conduct the RCRA program in Alabama.*

**Response:** *EPA's delegation of the RCRA program to ADEM in Alabama does not preclude EPA from addressing the Site under CERCLA, because EPA's CERCLA authority is not affected by such delegation.*

There is no merit to ADEM's claim that EPA is precluded from exercising its CERCLA jurisdiction over the Site because EPA delegated ADEM the authority to conduct the RCRA program in Alabama. ADEM retains its RCRA authority in Alabama, and at this Site. As noted by the commenters, including ADEM, CERCLA does not preempt Alabama from imposing any additional liability or requirements with respect to the release of hazardous substances within Alabama. 42 U.S.C. § 9614(a). Thus, the Proposed Decree does not preclude ADEM from continuing to enforce its RCRA permit.

#### CONCLUSION

The United States appreciates the interest evidenced by the many comments submitted by the public. The United States has negotiated with the Defendants to obtain significant changes to the Proposed Decree to address some of the concerns expressed in the comments. The United States has

endeavored to fully respond to all significant comments.

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I am the Chief of the South Site Management Branch of the Waste Management Division of EPA, Region 4 in Atlanta. I have read the foregoing responses to comments and I am informed and believe that the responses to the comments are true.

BY: 

DATE: 10/22/02

Carol Monell  
Chief, South Site Management Branch  
Waste Management Division  
Region 4  
U.S. Environmental Protection Agency

**Exhibits to the United States' Summary of Comments and Responses to  
Comments**

**of the MEMORANDUM IN SUPPORT OF MOTION TO ENTER PARTIAL REVISED  
CONSENT DECREE**

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P. 02/03



STATE OF ALABAMA  
OFFICE OF THE ATTORNEY GENERAL

July 10, 2002

Bill Peyer  
ATTORNEY GENERAL

ALABAMA STATE HOUSE  
11 SOUTH LINDSEY STREET  
MONTGOMERY, AL 36104  
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334-533-3333

The Honorable Thomas Sasonetti  
Assistant Attorney General  
for the Environment and Natural Resources Division  
U.S. Department of Justice  
950 Pennsylvania Avenue  
Room 2141  
Washington, D.C. 20530

RE: United States v. Pharmacia Corporation (p/k/a. Monsanto Company) and Solutia, Inc.  
D. J. Ref. 90-11-2-07135/1  
Civil Action No. CV-02-PT-0749-B

Dear Mr. Sasonetti:

I appreciated the opportunity to speak with you recently by telephone concerning the possibility of the Department of Justice and the State of Alabama beginning a dialogue aimed at resolving concerns regarding the above-styled case. It is my hope that this discussion will lead to either changes in the proposed consent decree or, at least, a mutually acceptable understanding of the intent of that decree. As I mentioned, the brief recently filed by the United States opposing intervention, which asserted that the consent decree would not pre-empt the state law claims of the State, the Alabama Department of Environmental Management, and the private plaintiffs, goes far in addressing the concerns of the State of Alabama expressed in its comments as to the consent decree.

Our concerns with the proposed consent decree involve three areas. The first is that of medical monitoring. The State of Alabama strongly believes in the necessity of monitoring the health of all persons with elevated blood levels of PCBs (including both those in the plaintiff class and those not) in the affected areas, including Anniston and downstream communities, for the diseases and ailments thought to be the result of PCB exposure. The precise scope and protocol for this monitoring could be determined within a reasonable period of time (perhaps a year) by federal agencies with the proper expertise in these matters: the Center for Disease Control and the Agency for Toxic Substances and Disease Registry, in consultation with the Alabama Department of Public Health. It is my understanding that the United States recognizes that some type of medical monitoring may be required, but considers the need for medical monitoring to be a matter within the discretion of ATSDR to be determined at a future point in the CERCLA process. I am informed, however, that ATSDR and the Alabama Department of Public Health are presently discussing the scope of a preliminary study of this

EXHIBIT A  
TO RESPONSE TO COMMENT



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The Honorable Thomas Sansonetti  
 July 10, 2002  
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type that may be expanded to the type of study suggested above. The inclusion of language, either in the consent decree or in a written understanding with the State, which recognizes that broad medical monitoring, either paid for or reimbursable by Solutia, may be initiated in the near future would provide much needed assurance to the people in the affected areas.

Our second concern is that the proposed consent decree allows Solutia to maintain too much control of the scientific investigation that will provide the basis for the RI/FS, particularly the risk assessment. In the state court litigation, the jury has found that Solutia suppressed material facts as to the nature and extent of the contamination, and Judge Laird has stated in open court that he agrees with this conclusion. There is, therefore, a profound lack of community trust in Solutia to be honest in any investigation that will determine the extent of its financial burden for cleanup. It is my understanding that the selection of contractors to perform the investigation is, under present EPA protocol, subject to veto by EPA. Although this arrangement may be sufficient in other situations, it is not here, given the degree of justifiable community suspicion of Solutia. The State would strongly urge that the protocol for this particular investigation specify, either in the consent decree or in a written understanding with the State outside the decree, that the contractors be affirmatively selected by EPA (with input from ADEM) and, while paid by Solutia, report and be accountable to EPA. In addition, considering the community concern about Solutia, and that the risk assessment will largely determine the level of clean-up at the Anniston site, we would strongly urge that EPA return to its original position and perform the risk assessment itself.

The third concern is over the split of administrative control over the site as a whole between EPA and the Alabama Department of Environmental Management. The proposed consent decree does not address the question whether the expansion of EPA's CERCLA jurisdiction to include the area under ADEM's RCRA permit pre-empt the RCRA permit, or whether this state permit remains separately enforceable. ADEM has stated that this question, as well as other issues regarding the division of authority over decisions affecting the areas under both agencies, will have to be addressed formally before its concerns with the consent decree are eliminated. As you are aware, ADEM has intervened in the state court action as a party separate from the State. Because ADEM is a separate party, the State considers these issues of administrative control to be of greater concern to ADEM than to the State itself. We would suggest that a meeting between EPA and ADEM reviving discussions on an MOU is now appropriate, and would gladly play the role of facilitator between EPA and ADEM in resolving these issues.

I look forward to your prompt response regarding this important matter.

Sincerely,

  
 Bill Fryer

BP/WDL/tb



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AUG - 1 2002

Henry Falk, M.D., M.P.H.  
 Assistant Administrator  
 ATSDR-OAA  
 1600 Clifton Road NE (MS- E28)  
 Atlanta, GA 30333

Dear Dr. Falk:

Thank you for your letter of June 19<sup>th</sup> offering ATSDR support to EPA in our further investigations of the Anniston PCB site. You offered support in three areas: (1) determination of the extent of contamination, (2) defining who might be the exposed population, and (3) investigating the PCB levels in the exposed population.

EPA's mission under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) at sites like Anniston is to provide a remedy that will protect people and wildlife from harmful levels of exposure now and in the future. Any chosen remedy is based on a risk assessment, which is used to determine protective levels of contamination in environmental media. The risk assessment requires a comprehensive characterization of contaminant levels in each affected media in order to develop exposure-point concentrations. Literature toxicity data and conservative assumptions for each pathway of exposure are then used in the risk assessment to determine regulatory protective levels.

The environmental data collected to determine the degree and extent of contamination are vital to both the EPA risk assessment and the ATSDR health assessment for the site. Your help in reviewing the Work Plan for the Remedial Investigation will be critical in achieving a sampling plan that serves both agencies' needs. In addition, an ATSDR assessment of environmental sampling data relative to pathways of exposure and sensitive populations would be helpful for both the risk and health assessment processes.

We very much appreciate your offer of support in investigating the PCB levels in exposed populations by obtaining blood PCB data from Anniston-area residents. It is not clear to us at this stage whether blood data will be needed for the risk assessment process. However, EPA supports the conducting of health studies in this population and understands the importance of blood data for verifying the exposure aspects of any health study. This is an area in which your expertise will be of great value to us.

Many of the written comments received on the recent proposed Consent Decree supported the presence of a health study component. However, we realize that different members of the community have somewhat different expectations and desires about what the specific health studies might be. In responding to these concerns, it would be helpful to add an attachment from

2

ATSDR that addresses your agency's planned activities, including the three health related areas provided for under section 104(i)(7-9) of CERCLA. I understand that ATSDR has been exploring with the Alabama State Department of Health how to conduct appropriate health study work in the Anniston area. EPA will support ATSDR and assist, within our statutory authority, whatever health related activities ATSDR determines are appropriate for the Anniston PCB site.

We are grateful for your offer of support and appreciate the close cooperation we have had with ATSDR in addressing these concerns. I look forward to continuing to work together to address the health related concerns of the Anniston community.

Sincerely,



A. Stanley Meiburg  
Deputy Regional Administrator

cc: Marianne Horinko  
Dick Green  
Carol Monell  
Elmer Akin



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service *EAD*

Agency for Toxic Substances and Disease Registry  
Atlanta, GA 30333

OCT 03 2002

2002 OCT -1 P 12: 05  
REGIONAL ADMINISTRATOR  
U.S. EPA REGION 4  
OFFICE OF

A. Stanley Meiburg  
Deputy Regional Administrator  
U.S. Environmental Protection Agency  
Region 4  
61 Forsyth Street  
Atlanta, Georgia 30303-8960

Dear Mr. Meiburg:

Thank you for your letter dated August 1, 2002, regarding the potential for health study activity in Anniston, Alabama. In January 2002, the Agency for Toxic Substances and Disease Registry (ATSDR) held a polychlorinated biphenyls (PCB) expert panel session with seven nationally-recognized experts in the field of epidemiology, biology, and medicine. As a result of the meeting, ATSDR gathered a number of options for health study activity, ranging from the review of available health outcome data among Anniston residents to analytic studies designed to test the relationship between exposure to PCBs and particular health outcomes.

As a result of both the expert panel session and the Congressional testimony we provided in April, our agency has been working with the state health department, local elected officials, and community representatives to develop a health study proposal. In consultation with community residents and in cooperation with the Alabama Department of Public Health, ATSDR has proposed to implement a multi-faceted health study for the Anniston community. This approach will begin to address some of the questions regarding the extent of contamination and the levels of PCBs in the exposed population as well as examine associations between specific health outcomes and PCBs. This would include: characterization of PCB exposure, including the collection of serum PCB samples, an evaluation of existing health outcome information, the implementation of multi-year epidemiologic investigations, and an assessment of access to health care and educational services in Anniston. The document enclosed provides additional information regarding this proposal.

We very much appreciate your offer to assist with health-related activities within your statutory authority and will continue to work with EPA to better characterize exposure among the residents of Anniston, Alabama. As the new fiscal year (FY) approaches and when our agency obtains budget information for FY 2003, we will be able to further elaborate on these options. We will share those plans with you as they evolve.

*EXHIBIT C*

*TO RESPONSE TO COMMENT*

Page 2 - Mr. Meiburg

Please feel free to contact me at (404) 498-0004 regarding our activities in Anniston. I look forward to working with you on this very important initiative.

Sincerely,



Henry Falk, M.D., M.P.H.  
Assistant Administrator  
Rear Admiral, U.S.P.H.S. (Retired)

Enclosure

### **Additional Information**

The Agency for Toxic Exposure and Disease Registry, Division of Health Studies, proposes to conduct a multi-faceted health study in Anniston, Alabama. These activities will be dependent upon funding for FY 2003 and future years.

The study includes four areas:

- (1) a more thorough characterization of PCB exposure in Anniston through the collection of serum samples from Anniston residents,
- (2) an evaluation of existing health outcome information, including cancer registry data and vital statistics,
- (3) the implementation of multi-year epidemiologic investigation(s) which would be accomplished through a Request for Proposal. The Division of Health Studies will write a Program Announcement, allowing the recipients the opportunity to design their own research for up to three years, and
- (4) an assessment of access to health care and educational services in Anniston, including a survey of health care needs and support for a community-based project to identify and assist children with learning and developmental disabilities.

**AGENDA  
FEBRUARY 13, 2002**

**INTRODUCTIONS:**

**PURPOSE OF MEETING:** David B. Baker Sr., President

**UP-DATE ON PCB ISSUES:**

- Short term clean up
- Remediation Process, status of remedial order (how many of the community requests has been incorporated in the order, etc)
- Consent Decree status (concerning PCB contamination and a major study by Solutia and Pharmacia Corporation)
- Memorandum of Understanding status (who is responsible for what)
- NPL Listing status
- New actions (testing of residential properties that received soil from mall, etc)
- Residential testing (Oxford)

**UP-DATE ON LEAD ISSUES**

- Clean-up
- Sampling status
- New or proposed issues

**OTHER ISSUES:**

- Compliance and other enforcements in Anniston concerning Industry
- Congressional hearing status
- Brownfield status: protocol for clean up with Chalk Line
- Habitat : protocol for clean up before building and testing for contamination
- Work plan for sampling by Solutia (how often is retesting suppose to take place, has there been any and what are the results if so)

**FOLLOW-UP ISSUES FROM LAST MEETING:**

- Dust levels in Rev Long's house
- Air sampling ADEM's report.

*Handwritten notes:* - ADEM will send a report  
Lester will come (ADEM) [initials]

*Handwritten note:* Move the Museum or Move the People

*Handwritten note:* At Staff - via community board

EXHIBIT 1

TO RESPONSE TO COMM

## Community Against Pollution, Inc.

(CAP)

1012 West 15<sup>th</sup> Street

Anniston, Al 36201

Phone: (256) 236-6773 or (256) 236-6475

Fax: (256) 236-6248

David Baker, President

August 14, 2000

Morgan Sout  
Tech. Advisory

James Whitley  
Board Member

Jeffrey Williams  
Vice-President

Janice Hall  
Chief Coordinator

Mark Morgan  
Co-Coordinator  
Public Relations

Elaise Emory  
Treasurer

Rev. Thomas Long  
Facilitator

Sylvester Harris  
Board Member

Mr. Dick Green, Director  
Waste Management Division  
U S Environmental Protection Agency  
Region 4  
Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-8960

Dear Mr. Green:

After several meetings with you and your staff as well as the staff at the Anniston's office, CAP want to reiterate that the landfill on Highway 202 has to be moved or the people have to be moved.

The landfill that sits on highway 202 still remains a source of contamination in our community. **IT IS A THREAT THAT WILL NOT GO AWAY!!!**

We would like to bring to your attention the people that live in these areas below and other areas that are in the perimeter of the landfill are no longer feeling safe where 3 1/4 millions of tons of PCB's and other dioxin is a threat to human health, now LEAD that can continue to be harmful to our lives.

ZINN PARK  
10<sup>TH</sup>, 11<sup>TH</sup>, 12<sup>TH</sup>, AND 13<sup>TH</sup> STREET  
FRONT STREET  
MCDANIEL AVE.  
HUNTER STREET

Please consider not only permanent relocations, safety of our community, a health clinic, monitoring of our health, homes dusted for PCB, and also students tested for lead since lead poisoning causes low IQ, and learning disabilities. There are two schools that are in the perimeter of the landfill; they are: 12<sup>th</sup> Street Head Start and Cobb Avenue Elementary School. This would be a good time to have students tested since school has started.

EX. E to RESPONSE TO COMMENT

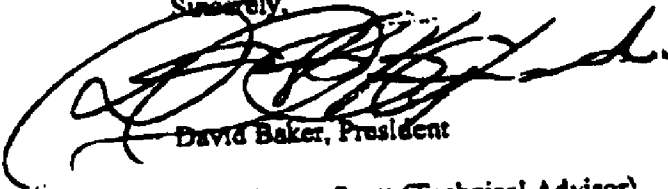


(2)

We, (CAP) hope you can understand the seriousness of this matter. Our health is at stake; the very things we value most. We are not responsible for the contamination that has caused us to worry about our health as well as our properties that we worked so hard to get. If this contamination were in your yard, your town, wouldn't you be concerned? Of course you would. You would want any and everybody to do what they can to clean up the contamination regardless of what it took. This is all we asked. We are in dire need of someone that cares about people.

Please, be advised that at this time we are requesting that both CAP and Sweet Valley Cobb Town Task Force have an emergency meeting with your Technical Team to discuss emergency and long term enforcement order that may be issued. We want to be part of both.

Sincerely,



David Baker, President

Cc: Margan Scott (Technical Advisor)  
Cassandra Roberts (SV/CT)  
EPA (Anniston's Office)

**Sweet Valley/Cobbtown Environmental  
Justice Task Force**  
P. O. Box 531  
Eastaboga, Alabama 36260  
Phone: (256) 831-7600 Fax (256) 835-5958

August 15, 2000

Mr. Dick Green, Director  
Waste Management Division  
U. S. Environmental Protection Agency  
Region 4  
Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-8960

Dear Mr. Green:

This letter is written from the Sweet Valley/Cobbtown Environmental Justice Task Force community to voice our requests and concerns to the Waste Management Division. We would like to thank your leadership and the Environmental Protection Agency Region 4 (EPA) for the time spent in our community. Primary concerns at this moment are insuring meaningful involvement in the Administrative Order progress table. Our community has been ignored for over 40 years and we feel in the spirit of the President's Executive Order on Environmental Justice (12898) we have a principal right and legal right to be stakeholders at this time in the creation of the Enforcement Orders, and also associated work plans.

Over the years we have attended many meetings that only seem like an opportunity to vent our frustrations. We need appropriate strong Enforcement Orders process that will benefit our community and not be merely listening sessions. We want full participation also in the Administrative Order work plans. We want to be active stakeholders in creating the short term (30) and long term Enforcement Orders coordinated by the EPA.

Our community must meaningfully be involved as EPA has stated in the Concept and Definitions of Environmental Justice defined by the Environmental Protection Agency (EPA):

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with the respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups should bear a disproportionate share of negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of federal, state, local and tribal programs and policies. Meaningful involvement means that people have a say in decisions about actions that will affect them; the public contribution will influence the decision; and the decision-makers seek out and facilitate the involvement of those potentially affected."

We have identified some of our recommended line items and comments for the First Administrative Order. These line items are not conclusive, and should be considered preliminary from our organization. We may be providing you with more as time passes.

- 6) The equivalent of a Technical Assistance Grant (TAG) for both oversight of environmental and health issues. Target \$120,000 for each environmental tag and health tag (two year term). This amount for the community is appropriate due to the high magnitude and large scale complexity of environmental and health activities. Although this amount will be more than a normal EPA TAG for a regular NPL site, we think this is critically needed.
- 7) Finance PCB blood testing, especially everyone above 1 ppm of PCB in soil.
- 8) A fair and reasonable relocation offered to residences by EPA standards and not by Solutia standards.
- 9) A continuation of extensive soil, air and water testing.
- 10) In public areas that show risk from exposure, such as schools, accommodations should be provided for protecting children even if necessary.
- 11) Testing beyond the "RCRA" fence line of the landfills by CERCLA, to confirm any run-off of contamination back into the community.
- 12) Dye Trace study on above and underground streams to better understand runoff from Solutia property.
- 13) Accommodations be given to neighbors that are adjacent to the properties being cleaned-up (temporary relocation), etc.
- 14) Don't limit the site assessment to the creek area and drainage area.
- 15) Testing for indoor house dust on all residences in the identified area where contaminants have been found in soil.
- 16) Place indoor air monitors inside homes where flooding as occurred underneath the homes. Testing soil underneath floorboards.
- 17) Finance health education programs for the community relative to the Contamination.
- 18) Provide money for diagnosis and treatment of residence especially children who may be expose.

Aug-15-00 15:19;

Page 1/1

We have put much thought into these primary line items and hopefully this will began the participation process of the Enforcement Orders. The community wants to work closely with EPA to restore a clean and safe environment and protect our health. Please feel free to call or have any your staff to call if there are any questions at daytime (256) 231-1731.

Sincerely,



Cassandra Roberts, President  
Sweet Valley/Cobbtown Environmental Justice Task Force

cc: David Baker  
EPA Community Relation Office

**Exhibit C**

**to the MEMORANDUM IN SUPPORT OF MOTION TO ENTER PARTIAL REVISED  
CONSENT DECREE**

**CERCLA Section 122 (h)(1) Agreement for Recovery of Past Response  
Costs and Past ATSDR Costs**

**CERCLA SECTION 122(h)(1) AGREEMENT  
FOR RECOVERY OF PAST RESPONSE COSTS AND PAST ATSDR COSTS**

|                                   |   |                                    |
|-----------------------------------|---|------------------------------------|
| IN THE MATTER OF:                 | ) | AGREEMENT FOR RECOVERY             |
|                                   | ) | OF PAST RESPONSE COSTS AND         |
|                                   | ) | PAST ATSDR COSTS                   |
| Anniston PCB Site                 | ) |                                    |
| Anniston, Calhoun County, Alabama | ) |                                    |
|                                   | ) | U.S. EPA Region 4                  |
|                                   | ) | CERCLA Docket No. CER-04-2002-3777 |
| PHARMACIA CORPORATION             | ) |                                    |
| (p/k/a Monsanto Company) and      | ) |                                    |
| SOLUTION INC.,                    | ) |                                    |
| SETTLING PARTIES                  | ) | PROCEEDING UNDER SECTION           |
|                                   | ) | 122(h)(1) OF CERCLA                |
|                                   | ) | 42 U.S.C. § 9622(h)(1)             |

*EXHIBIT C  
TO MEMORANDUM*

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## **I. JURISDICTION**

1. This Agreement is entered into pursuant to the authority vested in the Administrator of the U.S. Environmental Protection Agency ("EPA") by Section 122(h)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. § 9622(h)(1), which authority has been delegated to the Regional Administrators of the EPA by EPA Delegation No. 14-14-D and redelegated to the Director of the Waste Management Division by EPA Delegation No. 8-14-C and further redelegated to the Chief of the Program Services Branch.

2. This Agreement is made and entered into by EPA and Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc. ("Settling Parties"). Each Settling Party consents to and will not contest EPA's jurisdiction to enter into this Agreement or to implement or enforce its terms.

## **II. BACKGROUND**

3. This Agreement concerns the Anniston PCB Site ("Site") located in Anniston, Calhoun County, Alabama. EPA alleges that the Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9). "Site" shall mean, for the purposes of this Agreement the area where hazardous substances, including PCBs (associated with the historical and ongoing operations of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors) have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.

4. From 1935 to 1997, Monsanto Company operated the plant. Polychlorinated biphenyls (PCBs) were produced at the plant from 1929 until 1971. In 1997, Monsanto Company formed Solutia Inc. and transferred ownership over certain of its chemical divisions. Solutia Inc. currently produces para-nitrophenol and polyphenyl compounds at the Anniston plant. During its operational history, the plant disposed of hazardous and nonhazardous waste at the west end landfill and the south landfill, which are located adjacent to the plant. During the time that the west end landfill and the south landfill were used to dispose of wastes, there was a potential for hazardous substances, including PCBs, to be released from the landfills via soils and sediments being transported in surface water leaving the Defendants' Property. In addition, during the time that PCBs were manufactured by Monsanto Company at its Anniston plant, an aqueous stream flowing to a discharge point (currently identified as DSN0001) on Monsanto Company's Anniston plant Site contained PCBs, and discharge from that discharge point flowed to a ditch, the waters of which flowed toward Snow Creek. Sampling by EPA, Solutia Inc., ADEM, and other parties has indicated that sediments in drainage ditches and waterways leading away from the plant, including Snow Creek, and Choccolocco Creek, as well as sedimentary material in the floodplains of these waterways, contain varying levels of PCBs and other contaminants.



5. In response to the release or threatened release of hazardous substances at or from the Site, EPA undertook response actions at the Site pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604.

6. In performing this response action, EPA incurred response costs at or in connection with the Site.

7. EPA alleges that Settling Parties are responsible parties pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and are jointly and severally liable for response costs incurred at or in connection with the Site.

8. EPA and Settling Parties desire to resolve Settling Parties' alleged civil liability for Past Response Costs and Past ATSDR Costs without litigation and without the admission or adjudication of any issue of fact or law.

### **III. PARTIES BOUND**

9. This Agreement shall be binding upon EPA and upon Settling Parties and their successors and assigns. Any change in ownership or corporate or other legal status of a Settling Party, including but not limited to, any transfer of assets or real or personal property, shall in no way alter such Settling Party's responsibilities under this Agreement. Each signatory to this Agreement certifies that he or she is authorized to enter into the terms and conditions of this Agreement and to bind legally the party represented by him or her.

### **IV. DEFINITIONS**

10. Unless otherwise expressly provided herein, terms used in this Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Agreement, the following definitions shall apply:

a. AOC Oversight Costs shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to AOC CER-04-2002-3752, verifying the work, or otherwise implementing, overseeing, or enforcing AOC CER-04-2002-3752; as well as, all costs, including, but not limited to, direct and indirect costs, that the United States incurred prior to the effective date of AOC CER-04-2002-3752 in reviewing or developing plans, reports and other items pursuant to AOC 01-02-C, or otherwise implementing, overseeing, or enforcing AOC 01-02-C.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, *et seq.*

c. "Agreement" shall mean this Agreement.

d. "Day" shall mean a calendar day. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments, agencies or instrumentalities of the United States.

f. "Interest" shall mean interest at the current rate specified for interest on investments of the Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).

g. "Paragraph" shall mean a portion of this Agreement identified by an arabic numeral or a lower case letter.

h. "Parties" shall mean EPA and the Settling Parties.

i. "Past ATSDR Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the Agency for Toxic Substances and Disease Registry ("ATSDR") paid at or in connection with the Site through August 26, 2000, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date.

j. "Past Response Costs" shall mean all costs, except ATSDR costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through January 4, 2001, plus Interest on all such costs which has accrued pursuant to 42 U.S.C. § 9607(a) through such date. Provided, however, AOC Oversight Costs are not Past Response Costs pursuant to this Consent Decree. The Settling Parties shall reimburse EPA for removal AOC Oversight Costs as provided in AOC CER-04-2002-3752. Past Response Costs do not include costs that the United States paid at or in connection with the Anniston Lead Site through January 4, 2001.

k. "RCRA Permit" shall mean the RCRA Post Closure Permit, ALD 004019048, issued by ADEM on January 7, 1997 as modified on May 21, 2001, and any subsequent modifications thereto.

l. "Section" shall mean a portion of this Agreement identified by a roman numeral.

m. "Settling Parties" shall mean Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc.

n. "Site" shall mean, for the purposes of this Agreement, the Anniston PCB Site, which consists of the area where hazardous substances, including PCBs (associated with the historical and ongoing operations of the Anniston plant by Solutia Inc., Monsanto Company, and

their predecessors) have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.

o. "United States" shall mean the United States of America, including its departments, agencies and instrumentalities.

**V. REIMBURSEMENT OF RESPONSE COSTS**

11. a. Settling Parties shall pay to the EPA \$6,053,420.90 in payment for Past ATSDR Costs, Past Response Costs, and Interest through the effective date of this Agreement, plus an additional sum for Interest on that amount calculated from the effective date of this Agreement through the date of payment. Payment may be made in four installments as provided below or Settling Parties may pay off the balance of principal and interest at any time within three years from the effective date of this Agreement.

b. The first payment of \$1,500,000 shall be made within thirty (30) days of the effective date of this Agreement. The second payment of \$1,500,000 shall be made within one year of the effective date of this Agreement. The third payment of \$1,500,000 shall be made within two years of the effective date of this Agreement. The final payment for the outstanding balance of principal and interest shall be made within three years from the effective date of this Agreement.

c. The total amount to be paid by the Settling Parties pursuant to this Paragraph shall be deposited in the Anniston PCB Site Special Account within the EPA Hazardous Substance Superfund, or transferred by EPA to the EPA Hazardous Substance Superfund. If EPA spends any funds from the Anniston PCB Site Special Account for future response actions at or in connection with the Site, such costs shall be potentially recoverable from the Settling Parties, or any other potentially responsible party, and Settling Parties shall not object to their recoverability because such funds were placed into the Anniston PCB Site Special Account as payments for Past Response Costs and Past ATSDR Costs.

12. Payments shall be made by certified or cashier's checks (or electronic funds transfer(EFT)) made payable to "Anniston PCB Site Special Account." The checks or EFTs shall reference the name and address of the parties making payment, the Site name, the EPA Region and Site/Spill ID Number 04S9, and the EPA docket number for this action. The checks shall be sent to:

U.S. EPA Region 4  
Superfund Accounting  
Attn: Collection Officer in Superfund  
P.O. Box 100142  
Atlanta, GA 30384

13. At the time of payment, the Settling Parties shall send notice that such payment has been made to:

Paula V. Batchelor  
U.S. EPA Region 4  
4WD-PSB/11th floor  
61 Forsyth Street, S.W.  
Atlanta, GA 30303-8960

Dustin F. Minor, Esq.  
U.S. EPA Region 4  
Environmental Accountability Division  
61 Forsyth Street, S.W.  
Atlanta, GA 30303-8960

or their successors.

#### **VI. FAILURE TO COMPLY WITH AGREEMENT**

14. In the event that any payments required by Paragraph 11 are not made when due, Interest shall continue to accrue on the unpaid balance through the date of payment.

15. If any amounts due to EPA under Paragraph 11 are not paid by the required dates, Settling Parties shall pay to EPA, as a stipulated penalty, in addition to the Interest required by Paragraph 14, \$3,000 per violation per day that such payment is late.

16. Stipulated penalties are due and payable within 30 days of the date of demand for payment of the penalties. All payments to EPA under this Paragraph shall be identified as "stipulated penalties" and shall be made in accordance with Paragraphs 12 and 13.

17. Penalties shall accrue as provided above regardless of whether EPA has notified the Settling Parties of the violation or made a demand for payment, but need only be paid upon demand. All penalties shall begin to accrue on the day after performance is due, or the day a violation occurs, and shall continue to accrue through the final day of correction of the noncompliance or completion of the activity. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Agreement.

18. In addition to the Interest and Stipulated Penalty payments required by this Section and any other remedies or sanctions available to EPA by virtue of Settling Parties' failure to comply with the requirements of this Agreement, any Settling Party who fails or refuses to comply with any term or condition of this Agreement shall be subject to enforcement action pursuant to Section 122(h)(3) of CERCLA, 42 U.S.C. § 9622(h)(3). If the United States, on behalf of EPA, brings an action to enforce this Agreement, Settling Parties shall reimburse the United States for all costs of such action, including but not limited to costs of attorney time.

19. The obligations of Settling Parties to pay amounts owed to EPA under this Agreement are joint and several. In the event of the failure of any one or more Settling Parties to make the payments required under this Agreement, the remaining Settling Parties shall be responsible for such payments.

20. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive payment of any portion of the stipulated penalties that have accrued pursuant to this Agreement.

#### **VII. COVENANT NOT TO SUE BY EPA**

21. Except as specifically provided in Paragraph 22 (Reservations of Rights by EPA), EPA covenants not to sue Settling Parties pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), to recover Past Response Costs or Past ATSDR Costs. This covenant shall take effect upon receipt by EPA of all amounts required by Section V (Reimbursement of Response Costs) and Section VI, Paragraphs 14 (Interest on Late Payments) and 15 (Stipulated Penalty for Late Payment). This covenant not to sue is conditioned upon the satisfactory performance by Settling Parties of their obligations under this Agreement. This covenant not to sue extends only to Settling Parties and does not extend to any other person.

#### **VIII. RESERVATIONS OF RIGHTS BY EPA**

22. The covenant not to sue by EPA set forth in Paragraph 21 does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Agreement is without prejudice to, all rights against Settling Parties with respect to all other matters, including but not limited to:

- a. liability for failure of Settling Parties to meet a requirement of this Agreement;
- b. liability for costs incurred or to be incurred by the United States that are not within the definition of Past Response Costs or Past ATSDR Costs;
- c. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and
- f. liability for the Anniston Lead Site.

23. Nothing in this Agreement is intended to be nor shall it be construed as a release, covenant not to sue, or compromise of any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which the United States may have against any person, firm, corporation or other entity not a signatory to this Agreement.

**IX. COVENANT NOT TO SUE BY SETTLING PARTIES**

24. Settling Parties agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to Past Response Costs, Past ATSDR Costs or this Agreement, including but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claims arising out of the response actions at the Site for which the Past Response Costs or Past ATSDR Costs were incurred;

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to Past Response Costs or Past ATSDR Costs; and

d. any direct or indirect claim for disbursement from the Anniston PCB Site Special Account.

25. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. 300.700(d).

**X. EFFECT OF SETTLEMENT/CONTRIBUTION PROTECTION**

26. Nothing in this Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Agreement. EPA and Settling Parties each reserve any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto.

27. EPA and Settling Parties agree that the actions undertaken by Settling Parties in accordance with this Agreement do not constitute an admission of any liability by any Settling Party. Settling Parties do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Agreement, the validity of the facts or allegations contained in Section II of this Agreement.

28. The Parties agree that Settling Parties are entitled, as of the effective date of this Agreement, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Agreement. The "matters addressed" in this Agreement are Past Response Costs and Past ATSDR Costs.

29. Each Settling Party agrees that with respect to any suit or claim for contribution brought by it for matters related to this Agreement, it will notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Settling Party also agrees that, with respect to any suit or claim for contribution brought against it for matters related to this Agreement, it will notify EPA in writing within 10 days of service of the complaint or claim upon it. In addition, each Settling Party shall notify EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial, for matters related to this Agreement.

30. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Settling Parties shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant not to sue by EPA set forth in Paragraph 21.

#### **XI. RETENTION OF RECORDS**

31. Until ten (10) years after the effective date of this Agreement, each Settling Party shall preserve and retain all records and documents now in its possession or control, or which come into its possession or control, that relate in any manner to response actions taken at the Site or to the liability of any person for response actions conducted and to be conducted at the Site, regardless of any corporate retention policy to the contrary.

32. After the conclusion of the document retention period in the preceding Paragraph, Settling Parties shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Settling Parties shall deliver any such records or documents to EPA. Settling Parties may assert that certain documents, records, or other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Settling Parties assert such a privilege, they shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted. However, no documents, reports, or other information created or generated pursuant to the requirements of this or any other judicial or administrative settlement with the United States shall be withheld on the grounds that they are privileged. If a claim of privilege applies only to a portion of a document, the document shall be provided to EPA in redacted form to mask the privileged information only. Settling Parties shall retain all records and documents that they claim to be privileged until EPA has had a reasonable opportunity to dispute the privilege claim and any such dispute has been resolved in Settling Parties' favor.

33. By signing this Agreement, each Settling Party certifies individually that, if requested by EPA, it will conduct a thorough, comprehensive, good faith search for documents, and will fully and accurately disclose to EPA, all information currently in its possession, or in the possession of its officers, directors, employees, contractors or agents, which relates in any way to the ownership, operation or control of the Site, or to the ownership, possession, generation, treatment, transportation, storage or disposal of a hazardous substance, pollutant or contaminant at or in connection with the Site.

34. By signing this Agreement, each Settling Party certifies individually that, to the best of its knowledge and belief, it has:

a. not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information relating to its potential liability regarding the Site, after notification of potential liability by EPA or the filing of a suit against the Settling Party regarding the Site; and

b. fully complied with any and all EPA requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of the Resource, Conservation and Recovery Act, 42 U.S.C. § 6927.

**XII. NOTICES AND SUBMISSIONS**

35. Whenever, under the terms of this Agreement, notice is required to be given or a document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of this Agreement with respect to EPA and Settling Parties.

As to EPA:

Dustin F. Minor, Esq.  
Environmental Accountability Division  
U.S. EPA Region 4  
61 Forsyth Street, S.W.  
Atlanta, GA 30303-8960

As to Settling Parties:

Craig Branchfield  
Manager, Remedial Projects  
Solutia, Inc.  
702 Clydesdale Avenue  
Anniston, Alabama 36201



**XIII. INTEGRATION**

36. This Agreement constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Agreement. The Parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Agreement.

**XIV. PUBLIC COMMENT**

37. This Agreement shall be subject to a public comment period of not less than 30 days pursuant to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i). In accordance with Section 122(i)(3) of CERCLA, EPA may modify or withdraw its consent to this Agreement if comments received disclose facts or considerations which indicate that this Agreement is inappropriate, improper or inadequate.

**XV. ATTORNEY GENERAL APPROVAL**


38. The Attorney General or his designee has approved the settlement embodied in this Agreement in accordance with Section 122(h)(1) of CERCLA, 42 U.S.C. § 9622(h)(1).

**XVI. EFFECTIVE DATE**

39. The effective date of this Agreement shall be the date upon which EPA issues written notice that the public comment period pursuant to Paragraph 37 has closed and that comments received, if any, do not require modification of or EPA withdrawal from this Agreement.

IT IS SO AGREED:

U.S. Environmental Protection Agency

By:   
*fr* Franklin Hill, Chief  
Program Services Branch  
Waste Management Division

3-29-02  
Date

THE UNDERSIGNED SETTLING PARTY enters into this Agreement in the matter relating to the Anniston PCB Site located in Anniston, Calhoun County, Alabama:

FOR SETTLING PARTY:

Name of Settling Party:

PHARMACIA CORPORATION  
(p/k/a Monsanto Company)

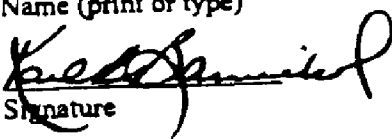
Address (print or type):

|     |                           |  |
|-----|---------------------------|--|
| By: | <u>Richard T. Collier</u> | <u>Senior Vice President &amp; General Counsel</u> |
|     | Name (print or type)      | Title  |
|     | <u>Richard T. Collier</u> | <u>3/19/02</u>                                     |
|     | Signature                 | Date   |

THE UNDERSIGNED SETTLING PARTY enters into this Agreement in the matter relating to the Anniston PCB Site located in Anniston, Calhoun County, Alabama:

FOR SETTLING PARTY:

|                          |   |
|--------------------------|---|
| Name of Settling Party:  | <u>SOLUTION INC.</u>                              |
| Address (print or type): | 575 Maryville Centre Drive<br>St. Louis, MO 63141 |

|     |  |   |
|-----|--|---|
| By: | Karl R. Barnickol  | Senior Vice President,<br>General Counsel and Secretary |
|     | _____<br>Name (print or type)  | _____<br>Title  |
|     | <br>Signature | _____<br>3/19/02<br>Date                                |

**Exhibit D**

**to the MEMORANDUM IN SUPPORT OF MOTION TO ENTER PARTIAL REVISED  
CONSENT DECREE**

**ALABAMA STATE SUPREME COURT Ruling Regarding Stay**



**RECEIVED**  
8/20/02  
Orig. to Lick 2  
Lick 2  
Baker (FAX)  
Hess (FAX)  
Kil (FAX)  
WAL/JFW/ACT/WEL  
WEL  
Goford

*FAX to  
A. Top*

IN THE SUPREME COURT OF ALABAMA  
August 19, 2002

1011393

Ex parte Monsanto Company and Solutia, Inc. PETITION FOR WRIT OF  
MANDAMUS: CIVIL (In re: Sabrina Abernathy et al. v. Monsanto Company et  
al.) (Etowah Circuit Court: CV-01-832).

ORDER

The petitioners having filed a motion to stay trial court's proceedings, and the same having been duly submitted and considered by the Court,

IT IS ORDERED that all proceedings in this case other than the presentation of written evidence regarding property damage claims in the Circuit Court of Etowah County, Alabama, are stayed pending further orders of this court.

Houston, See, Lyons, Brown, Harwood, Woodall, and Stuart, JJ., concur.  
Moore, C. J., dissents.

I Robert G. Esdale, Sr., as Clerk of the Supreme Court of Alabama, do hereby certify that the foregoing is a full, true and correct copy of the instrument(s) herewith set out as same appear(s) of record in said Court.  
Witness my hand this 19<sup>th</sup> day of Aug, 2002.  
*Robert G. Esdale, Sr.*  
Clerk, Supreme Court of Alabama

EXHIBIT D  
TO MEMORANDUM

---

**Exhibit A**

**to the PARTIAL CONSENT DECREE**

**Agreement for Remedial Investigation/Feasibility Study (RI/FS)**

---

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4**

**ANNISTON PCB SITE**

**AGREEMENT FOR REMEDIAL INVESTIGATION / FEASIBILITY STUDY(RI/FS)**



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## **I. INTRODUCTION**

1. This Agreement is entered into voluntarily by the United States Environmental Protection Agency (EPA) and Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc. ("Defendants"). The Agreement concerns, inter alia, the preparation of, performance of, and reimbursement for costs incurred by EPA in connection with, a remedial investigation and feasibility study (RI/FS) for the Anniston PCB Site located in and around Anniston, Alabama ("Site").

## **II. JURISDICTION**

2. This Agreement is entered into under the authority vested in the President of the United States by Sections 104, 122(a) and 122(d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9622(a), 9622(d)(3) (CERCLA). This authority was delegated by the President to the Administrator of EPA by Exec. Order No. 12580, dated January 23, 1987, 52 Fed. Reg. 2923 (Jan. 29, 1987), and was further delegated to the Regional Administrator of Region IV EPA and redelegated to the Chief, South Site Management Branch, Waste Management Division.

3. The Defendants agree to undertake all actions required by the terms and conditions of this Agreement. In any action by EPA or the United States to enforce the terms of this Agreement, Defendants consent to and agree not to contest the authority or jurisdiction of EPA to issue or enforce this Agreement, and agree not to contest the validity of this Agreement or its terms.

## **III. PARTIES BOUND**

4. This Agreement shall apply to and be binding upon EPA and shall be binding upon the Defendants, their agents, successors, assigns, officers, directors and principals. Defendants are jointly and severally responsible for carrying out all actions required of them by this Agreement. The signatories to this Agreement certify that they are authorized to execute and legally bind the parties they represent to this Agreement. No change in the ownership or corporate status of the Defendants or of the facility or Site shall alter Defendants' responsibilities under this Agreement.

5. The Defendants shall provide a copy of this Agreement to any subsequent owners or successors before ownership rights or stock or assets in a corporate acquisition are transferred. Defendants shall provide a copy of this Agreement to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any RI/FS Work performed under this Agreement, within fourteen (14) days after the Effective Date of this Agreement or the date of retaining their services, whichever is later. Defendants shall condition any such contracts upon satisfactory compliance with this Agreement. Notwithstanding the terms of any contract, Defendants are responsible for compliance with this Agreement and for ensuring that their subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Agreement.

#### **IV. DEFINITIONS**

- A. "ADEM" shall mean the Alabama Department of Environmental Management and any successor departments or agencies of the State.
- B. "Anniston Lead Site" shall mean for the purposes of the Consent Decree and this Agreement, the Anniston Lead Site, which consists of the area where lead and other commingled hazardous substances, including PCBs, associated with the historical and ongoing industrial operations in and around Anniston, Alabama have come to be located.
- C. "AOC Oversight Costs" shall have the meaning set forth in the Removal Order attached to the Consent Decree.
- D. "Anniston PCB Site Special Account" shall mean the special account established at the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. §9622(b)(3).
- E. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.
- F. "Consent Decree" shall mean the Decree and all appendices (including this RI/FS Agreement, the NTC Removal Agreement, the Removal Order, and the SOW) listed in Section XVII of the Decree.
- G. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under the Consent Decree, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.
- H. "Defendants" shall mean Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc.
- I. "Defendants' Property" shall mean the property owned by Defendants as of January 1, 2002, as marked on the attached map (Figure 1.)
- J. "Effective Date" shall be the date of entry by the Court of the Consent Decree as provided in Paragraph 54 of the Consent Decree.
- K. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

- L. "Future Response Costs" shall mean all costs, except ATSDR costs, that the United States incurs through the public participation period for the ROD with respect to this RI/FS Agreement, the NTC Removal Agreement, and/or the Consent Decree. Future Response Costs may include, but are not limited to, costs incurred by the U.S. Government in overseeing Defendants' implementation of the requirements of this RI/FS Agreement or NTC Removal Agreement, verifying the RI/FS Work or NTC Removal Work, or otherwise implementing, overseeing, or enforcing this RI/FS Agreement or NTC Removal Agreement, and/or the Consent Decree and any activities performed by the government as part of the RI/FS or NTC Removal including community relations and any costs incurred while obtaining access. Costs shall include all direct and indirect costs, including, but not limited to, time and travel costs of EPA personnel and associated indirect costs, contractor costs, cooperative agreement costs, compliance monitoring, including the collection and analysis of split samples, inspection of RI/FS or NTC Removal activities, site visits, discussions regarding disputes that may arise as a result of this RI/FS Agreement, NTC Removal Agreement or Consent Decree, review and approval or disapproval of reports, and costs of redoing any of Defendants' tasks. Future Response Costs shall also include all Interim Response Costs. Provided, however, removal AOC Oversight Costs are not Future Response Costs pursuant to the Consent Decree. Defendants shall reimburse EPA for removal AOC Oversight Costs as provided in the Removal Order. Future Response Costs do not include costs that the United States incurs at the Anniston Lead Site.
- M. "Interim Response Costs" shall mean all costs, except ATSDR costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between January 4, 2001 and the Effective Date, or (b) incurred prior to the Effective Date but paid after that date. Provided, however, removal AOC Oversight Costs are not Interim Response Costs pursuant to the Consent Decree. Defendants shall reimburse EPA for removal AOC Oversight Costs as provided in the Removal Order. Interim Response Costs do not include costs paid by the United States in connection with the Anniston Lead Site.
- N. "Interest," shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.
- O. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of

CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

- P. "NTC Removal Agreement" shall mean the Agreement for the Non-time Critical Removal at the Site, as set forth in Appendix G to the Consent Decree.
- Q. "NTC Removal Work" shall mean all activities Defendants are required to perform pursuant to the NTC Removal Agreement.
- R. "October 27, 2000 AOC" shall mean the Administrative Order on Consent, docket no. 01-02-C, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 27, 2000. The October 27, 2000 AOC was rescinded and replaced by the Removal Order.
- S. "Paragraph" shall mean a portion of this RI/FS Agreement identified by an Arabic numeral or an upper case letter.
- T. "Parties" shall mean the United States and the Defendants.
- U. "Plaintiff" shall mean the United States.
- V. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 et seq. (also known as the Resource Conservation and Recovery Act).
- W. "RCRA Facility Investigation" or "RFI" shall mean the work being conducted pursuant to Defendants' RCRA Permit.
- X. "RCRA Permit" shall mean the RCRA Post Closure Permit, ALD 004019048, issued by ADEM on January 7, 1997 as modified on May 21, 2001, and any subsequent modifications thereto.
- Y. "Record of Decision" or "ROD" shall mean the official EPA decision document on the selection of a remedy that makes all determinations and findings required by CERCLA and the NCP.
- Z. "Remedial Investigation/Feasibility Study (RI/FS)" shall mean the response actions identified in 40 C.F.R. § 300.5 undertaken by Defendants pursuant to this Agreement to determine the nature and extent of contamination at the Anniston PCB Site and develop and evaluate potential remedial alternatives.

- AA. "Removal Order" shall mean the Administrative Order on Consent, docket no. CER-04-2002-3752, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 5, 2001. The Removal Order is set forth in Appendix C to the Consent Decree and incorporated herein.
- BB. "Removal Order Work" shall mean all activities Defendants are required to perform pursuant to the attached Removal Order.
- CC. "RI/FS Agreement" or "Agreement" shall mean this Agreement for the RI/FS at the Site.
- DD. "RI/FS Work" shall mean all activities Defendants are required to perform pursuant to this Agreement. RI/FS Work does not include any activities or work EPA determines to be necessary at any other Site (including the Anniston Lead Site). RI/FS Work does not include any additional activities or work that EPA determines to be necessary after EPA approval of the certification of completion issued pursuant to Paragraph 87 of this Agreement.
- EE. "Section" shall mean a portion of this Agreement identified by a Roman numeral.
- FF. "Site" shall mean, for the purposes of this Agreement and the Consent Decree, the Anniston PCB Site, which consists of the area where hazardous substances, including PCBs associated with releases or discharges as a result of the operations, including waste disposal, of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.
- GG. "State" shall mean the State of Alabama.
- HH. "Statement of Work" or "SOW" shall mean the Statement of Work for implementation of this RI/FS Agreement, as set forth in Appendix B to the Consent Decree and any modifications made in accordance with the Consent Decree and incorporated herein.
- II. "United States" shall mean the United States of America.
- JJ. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

## **V. STATEMENT OF PURPOSE**

6. In entering into this Agreement, the objectives of EPA and the Defendants are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Remedial Investigation; (b) to determine and evaluate alternatives for remedial action (if any) to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study; (c) to provide for reimbursement of Future Response Costs; and (d) to provide funding for a Technical Assistance Plan (TAP) and a Community Advisory Group (CAG) for the affected community.

7. Defendants and EPA agree that for purposes of this RI/FS Agreement, potential constituents of concern (COCs) initially include those constituents listed in Table 1 (Appendix F) associated with releases or discharges from Defendants' current or prior manufacturing operations, including waste disposal. EPA reserves the right to require that a subset of samples collected by Defendants be analyzed for constituents not identified in Table 1. EPA may add additional constituents to Table 1 based on results of future sampling and association with past or current operations of the Site by Defendants or their predecessors. Additionally, should EPA determine that constituents listed in Table 1 found in a subsection of the Site are not associated with Defendants' current or prior manufacturing operations, Defendants shall not be required to conduct further sampling for such COCs to the extent they are not associated with Defendants' current or prior manufacturing operations.

8. The activities conducted under this Agreement are subject to approval by EPA and shall provide all appropriate necessary information for the RI/FS, the Human Health and Ecological Risk Assessments, and for a record of decision (ROD) that is consistent with CERCLA and the National Contingency Plan (NCP), 40 C.F.R. Part 300. The activities conducted under this Agreement shall be conducted in compliance with all applicable EPA guidances, policies, and procedures.

## **VI. FACTUAL BACKGROUND**

9. Solutia Inc.'s Anniston plant encompasses approximately 70 acres of land and is located about 1 mile west of downtown Anniston, Alabama. The plant is bounded to the north by the Norfolk Southern and Erie railroads, to the east by Clydesdale Avenue, to the west by First Avenue, and to the south by U.S. Highway 202. In 1917, the Southern Manganese Corporation (SMC) opened the plant, which began producing ferro-manganese, ferro-silicon, ferro-phosphorous compounds, and phosphoric acid. In the late 1920s, the plant also started producing biphenyls. SMC became Swann Chemical Company (SCC) in 1930, and in 1935, SCC was purchased by Monsanto Company. From 1935 to 1997, Monsanto Company operated the plant. Polychlorinated biphenyls (PCBs) were produced at the plant from 1929 until 1971. In 1997, Monsanto Company formed Solutia Inc. and transferred

ownership over certain of its chemical divisions. Solutia Inc. currently produces para-nitrophenol and polyphenyl compounds at the Anniston plant. Pharmacia was created through the merger of Monsanto Company ("former Monsanto") and Pharmacia and Upjohn on March 31, 2000. After the merger, the agricultural operations of the former Monsanto were transferred to a newly created subsidiary of Pharmacia named Monsanto Company.

10. During its operational history, the plant disposed of hazardous and nonhazardous waste at various areas, including the west end landfill and the south landfill, which are located adjacent to the plant. The west end landfill encompasses six acres of land, located on the southwestern side of the plant. The west end landfill was used for disposal of the plant's wastes from the mid-1930s until approximately 1960. In 1960, Monsanto Company began disposing of wastes at the south landfill. Disposal of wastes at the south landfill ceased in approximately 1988. During the time that the west end landfill and the south landfill were used to dispose of wastes, there was a potential for hazardous substances, including PCBs, to be released from the landfills via soils and sediments being transported in surface water leaving the Defendants' Property. In addition, during the time that PCBs were manufactured by Monsanto Company at its Anniston plant, an aqueous stream flowing to a discharge point (currently identified as DSN0001) on Monsanto Company's Anniston plant Site contained PCBs, and discharge from that discharge point flowed to a ditch, the waters of which flowed toward Snow Creek. Sampling by EPA, Solutia Inc., ADEM, and other parties has indicated that sediments in drainage ditches leading away from the plant, Snow Creek, and Choccolocco Creek, as well as sedimentary material in the floodplains of these waterways, contain varying levels of PCBs and other contaminants.

11. Solutia Inc. has a RCRA permit for Defendants' Property, which was issued by ADEM. Pursuant to its RCRA permit, Solutia Inc. performed extensive "Interim Measures" on the west end landfill, the south landfill, and areas east and north of the plant during the mid to late 1990s to attempt to eliminate the potential for release of hazardous substances, including PCBs, associated with soils and sediments. Solutia Inc. is also engaged in an extensive program under the RCRA permit to investigate and address PCBs in sediments and floodplain soils in the waterways leading away from the plant. EPA has provided oversight of the RCRA permit.

12. PCBs are listed at 40 C.F.R. § 302.4, as hazardous substances, as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

13. The Agency for Toxic Substances and Disease Registry (ATSDR) Health Consultation related to PCBs in Anniston was released for public comment on February 14, 2000. The ATSDR Health Consultation addresses, among other things, whether PCBs in soil are a threat to the public health in Anniston. The ATSDR Health Consultation was careful to note that the exposure estimates may overestimate or underestimate health risks in Anniston because there is an inadequate description of sampling and analytical methods for some of the data. Subject to the reservations noted above, the ATSDR Health Consultation concluded that PCBs in soil in parts of Anniston present a public health



hazard of cancerous and non-cancerous health effects for persons with prolonged exposure, and PCBs in residential soil may present a public health hazard for thyroid and neurodevelopmental effects. The ATSDR Health Consultation also concluded that further sampling and evaluation are needed to fully assess the scope of contamination and exposure and that further investigation should be done to allow ATSDR to make more specific recommendations for protecting public health. Solutia Inc. commented extensively on the Health Consultation. To date, ATSDR has not responded to public comment and has not issued a final version of the document. EPA has (and will continue) to share its sampling results with ATSDR to assist ATSDR with any future health studies which ATSDR may conduct in Anniston. On October 22, 2001, ATSDR issued an Exposure Investigation that concluded that, in the 18 families studied, PCB blood levels in children were not elevated and 5 of 43 adults had elevated (>20 ppb) blood levels. ATSDR also concluded that blood PCB levels were not correlated with soil or house dust PCB levels. Finally, in the Responses to Comments, ATSDR acknowledged that some of the information on which the draft conclusions in the February 14, 2000, draft Health Consultation were based was incorrect and that the final health consultation will be revised in accordance with the new information.

14. EPA has been performing an investigation in Anniston under CERCLA to evaluate the threat to public health, welfare, or the environment posed by hazardous substances, including PCBs in Anniston. EPA has sampled the soil at hundreds of properties through multiple sampling phases in Anniston for PCBs since June of 1999. Many of the properties tested contain PCBs. For example, EPA sampled residences and businesses near the plant from June 28-30, 1999, for PCBs. The results from these samples indicated that some soils at residences and businesses in the vicinity of the plant contain PCBs. The level of PCBs detected during the June sampling event ranged from non-detect to 15.24 mg/kg. EPA also sampled residences, businesses, and creeks near the plant during February of 2000. The level of PCBs detected during the February 2000 sampling event ranged from non-detect to 317 mg/kg.

15. On August 31, 2000, EPA notified Solutia Inc. and Pharmacia Corporation of their potential liability under CERCLA, requested that they reimburse EPA for EPA's past and future costs at the Site, and that they perform a removal action at the Site.

16. In May of 2001, EPA's Environmental Response Team (ERT) released its "Final Summary Report of Technical Review and Evaluation of Potential PCB Releases" (ERT Report) for the Anniston PCB Site in Anniston, Alabama. The ERT Report was conducted to evaluate the potential for on-going releases of PCBs from Defendants' Property through the following environmental pathways: 1) soil, 2) groundwater, 3) surface water, 4) sediment, and 5) air. The ERT Report states that additional information is necessary to determine if there are ongoing PCB releases from these environmental pathways.

17. The Site is not currently listed on the national priorities list (NPL).

18. Solutia Inc. is the "owner" and/or "operator" of a portion of the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1). Solutia Inc. was the "owner" and/or "operator" of a portion of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2). Solutia Inc. was an arranger for disposal of hazardous substances at the Site within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

19. Pharmacia Corporation (p/k/a Monsanto Company) was the "owner" and/or "operator" of a portion of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2). Pharmacia Corporation (p/k/a Monsanto Company) arranged for disposal of hazardous substances at the Site within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

20. EPA entered into an Administrative Order on Consent, docket no. 01-02-C, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 27, 2000. On October 5, 2001, Order no. 01-02-C was withdrawn and replaced by Order no. CER-04-2002-3752.

## **VII. STATUTORY BACKGROUND**

21. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

22. Wastes and constituents thereof at the Site, sent to the Site, disposed of at the Site, and/or transported to the Site included in Paragraph 12 are "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), or constitute "any pollutant or contaminant" that may present an imminent and substantial danger to public health or welfare under Section 104(a)(1) of CERCLA.

23. The presence of hazardous substances at the Site or the past, present or potential migration of hazardous substances currently located at or emanating from the Site, constitute actual and/or threatened "releases" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

24. Defendants are a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

25. Defendants are responsible parties under Sections 107 and 122 of CERCLA, 42 U.S.C. §§ 9607 and 9622.

26. The actions required by this Agreement are necessary to protect the public health or welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with

CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

### **VIII. NOTICE**

27. By providing a copy of this Agreement to the State, EPA is notifying the State of Alabama that this Agreement is being issued and that EPA is the lead agency for coordinating, overseeing, and enforcing the response actions required by the Agreement.

### **IX. RI/FS WORK TO BE PERFORMED**

28. All RI/FS Work performed under this Agreement shall be under the direction and supervision of qualified personnel. Defendants have notified EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out the RI/FS, and the Ecological Risk Assessment to be performed pursuant to this Agreement. With respect to any proposed contractor, the Defendants have submitted information that states that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

The qualifications of the persons undertaking the RI/FS Work for Defendants shall be subject to EPA's review, after consultation with the State, for verification that such persons meet minimum technical background and experience requirements. This Agreement is contingent on Defendants demonstration to EPA's satisfaction, after consultation with the State, that Defendants and their contractors are qualified to perform properly and promptly the actions set forth in this Agreement.

If EPA disapproves in writing any person(s)' qualifications, Defendants shall notify EPA and the State of the identity and qualifications of the replacement(s) within 30 days of the written notice. If EPA subsequently disapproves of the replacement(s), EPA reserves the right to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Defendants. During the course of the RI/FS, Defendants shall notify EPA and the State in writing of any changes or additions in the personnel used to carry out such RI/FS Work, providing their names, titles, and qualifications. EPA shall have the same right to approve, after consultation with the State, changes and additions to personnel as it has hereunder regarding the initial notification.

29. Defendants shall conduct activities and submit deliverables as provided by the attached RI/FS Statement of Work, which is incorporated herein by reference, for the development of the RI/FS. All such RI/FS Work shall be conducted in accordance with CERCLA, the NCP, and EPA

guidance including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01), "Guidance for Data Useability in Risk Assessment" (EPA/540/G-90/008) and guidances referenced therein, and guidances referenced in the Statement of Work, as may be amended or modified by EPA. The general activities that Defendants are required to perform are identified below, followed by a list of deliverables. The tasks that Defendants must perform are described more fully in the Statement of Work and guidances. The activities and the deliverables identified below shall be developed as provisions in the RI/FS Work Plan and Sampling and Analysis Plan, and shall be submitted to EPA as provided. All RI/FS Work performed under the Agreement shall be in accordance with the schedules herein, and in full accordance with the standards, specifications, and other requirements of the RI/FS Work Plan and Sampling and Analysis Plan, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time. This Site may be divided into Operable Units, as defined in 40 C.F.R. § 300.5, to allow EPA to address discrete portions of the Site in a more expeditious fashion. If the Site is divided into Operable Units, Defendants shall submit appropriate deliverables, as EPA determines necessary, for each Operable Unit.

A. Task I: Scoping. Defendants have submitted and EPA has approved a Technical Memorandum defining the Site-specific objectives of the RI/FS and the general management approach for the Site, as stated in the attached Statement of Work. If EPA requires revisions to the Technical Memorandum, in whole or in part, Defendants shall amend and submit to EPA a revised Technical Memorandum which is responsive to all EPA comments, within fifteen (15) days of receiving EPA's comments. Defendants shall conduct the scoping activities as described in the attached Statement of Work and referenced guidances. Defendants shall provide EPA with the following deliverables:

1. Technical Memorandum on Preliminary Remedial Action Objectives and Alternatives. Defendants have submitted and EPA has approved a complete Technical Memorandum on Preliminary Remedial Action Objectives and Alternatives. If EPA requires revisions to the Technical Memorandum on Preliminary Remedial Action Objectives and Alternatives, in whole or in part, Defendants shall amend and submit to EPA a revised Technical Memorandum on Preliminary Remedial Action Objectives and Alternatives which is responsive to all EPA comments, within fifteen (15) days of receiving EPA's comments.

2. Phase I Conceptual Site Model Report. Within forty-five (45) days of the date of the United States Motion to Enter the Consent Decree, Defendants shall submit to EPA a complete Phase I Conceptual Site Model Report using data collected pursuant to Defendants' RCRA Facility Investigation and the Site Removal Order. If EPA disapproves or requires revisions to the Phase I Site Conceptual Model report, in whole or in part, Defendants shall amend and submit to EPA a revised Report which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

3. RI/FS Work Plan. Within forty-five (45) days of EPA's approval of the Phase I Site Conceptual Model Report, Defendants shall submit to EPA a complete RI/FS Work Plan. If EPA disapproves of or requires revisions to the RI/FS Work Plan, in whole or in part, Defendants shall amend and submit to EPA a revised Work Plan which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

4. Sampling and Analysis Plan. Within forty-five (45) days of EPA's approval of the Phase I Site Conceptual Model Report, Defendants shall submit to EPA the Sampling and Analysis Plan. This plan shall consist of a field sampling plan (FSP) and a quality assurance project plan (QAPP), as described in the Statement of Work and guidances, including, without limitation, "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), and "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA 240/B-01/003, March 2001). In an effort to improve electronic management of site-specific data, EPA requires the submission of all data in the categories mentioned below in a standardized digital format. EPA has under development and will provide a Data Dictionary (DD), a List of Valid Values (LVV), and sample Electronic Data Deliverables (EDDs) to facilitate this data submission requirement. Digital data checker software will be provided by EPA for both laboratory and field data. These data checkers shall read the ASCII files generated by the specified EDD, check the file for completeness and compatibility with the LVV file and report the results of these checks. All data packages must pass the data checkers prior to their submission to the Agency. Types of data to be submitted in digital format include (but are not limited to) the following categories: Site Identification, Data Provider, Sample Location, Laboratory ID Information, Field and Laboratory Equipment and methods Used, Field Measurement Results, Laboratory Analytical Results, Geology and Monitoring Well Construction, Depth to Water in monitoring wells, Surface Water Levels, etc. If EPA disapproves of or requires revisions to the Sampling and Analysis Plan, in whole or in part, Defendants shall amend and submit to EPA a revised Sampling and Analysis Plan which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

5. Site Health and Safety Plan. Within forty-five (45) days of EPA's approval of the Phase I Site Conceptual Model Report, Defendants shall submit to EPA the Site Health and Safety Plan. If EPA requires revisions to the Site Health and Safety Plan, in whole or in part, Defendants shall amend and submit to EPA a revised Site Health and Safety Plan which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

B. Task II: Community Relations Plan. EPA will prepare a community relations plan, in accordance with EPA guidance and the NCP. Defendants shall provide information supporting EPA's community relations programs through the public participation period for the ROD.

1. Defendants shall prepare a plan (hereinafter referred to as the Technical Assistance Plan (TAP)) for providing and administering up to \$150,000.00 of Defendants' funds to be used by selected representatives of the community, as defined in the SOW, for the purpose of providing

technical assistance at the Site through the public participation period for the ROD. If EPA disapproves of or requires revisions to the TAP, in whole or in part, Defendants shall amend and submit to EPA a revised TAP which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

2. Defendants shall prepare a plan (hereinafter referred to as the Community Advisory Group Plan (CAGP) for providing and administering funding necessary for the development of a Community Advisory Group (CAG), and for providing meeting space for the CAG for periodic meetings during the response activities conducted pursuant to this Agreement through the public participation period for the ROD. If EPA disapproves of or requires revisions to the CAGP, in whole or in part, Defendants shall amend and submit to EPA a revised CAGP which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

C. Task III: Site Characterization. Following EPA approval or modification of the Work Plan and Sampling and Analysis Plan, but not prior to entry of the Consent Decree, Defendants shall implement the provisions of these plans to characterize the Site. Defendants shall complete Site characterization in accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan. Defendants shall provide EPA with analytical data in an electronic format (i.e., computer disk) showing the location, medium and results within thirty (30) days of receipt of validated laboratory results. Within seven (7) days of completion of field activities, Defendants shall notify EPA in writing. During Site characterization, Defendants shall provide EPA with the following deliverables, as described in the Statement of Work and Work Plan:

1. Technical Memorandum on Modeling of Site Characteristics. Where Defendants propose that modeling is appropriate, Defendants shall submit a Technical Memorandum on Modeling of Site Characteristics, as described in the SOW, in accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan. If EPA disapproves of or requires revisions to the Technical Memorandum on Modeling of Site Characteristics, in whole or in part, Defendants shall amend and submit to EPA a revised Technical Memorandum on Modeling of Site Characteristics which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

2. Preliminary Site Characteristics Summary. In accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan, Defendants shall submit a Site characterization summary to EPA. If EPA disapproves of or requires revisions to the Site characterization summary, in whole or in part, Defendants shall amend and submit to EPA a revised Site characterization summary which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

D. Task IV: Treatability Studies. Defendants shall conduct treatability studies, except where Defendants can demonstrate to EPA's satisfaction that they are not needed. Major components

of the treatability studies include determination of the need for and scope of studies, the design of the studies, and the completion of the studies, as described in the Statement of Work. During treatability studies, Defendants shall provide EPA with the following deliverables:

1. Identification of Candidate Technologies Memorandum. This memorandum shall be submitted in accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan. If EPA disapproves of or requires revisions to the technical memorandum identifying candidate technologies, in whole or in part, Defendants shall amend and submit to EPA a revised technical memorandum identifying candidate technologies which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

2. Technical Memorandum on Steps and Data. If EPA determines that treatability testing is required, Defendants shall submit a Technical Memorandum on Steps and Data in accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan. If EPA disapproves of or requires revisions to the Technical Memorandum on Steps and Data, in whole or in part, Defendants shall amend and submit to EPA a revised Technical Memorandum on Steps and Data which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

3. Treatability Testing Work Plan. In accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan, Defendants shall submit a Treatability Testing Work Plan. If EPA disapproves of or requires revisions to the Treatability Testing Work Plan, in whole or in part, Defendants shall amend and submit to EPA a revised Treatability Testing Work Plan which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

4. Treatability Study Sampling and Analysis Plan. Within thirty (30) days of identification of the need for a separate or revised QAPP or FSP, Defendants shall submit a Treatability Study Sampling and Analysis Plan. If EPA disapproves of or requires revisions to the Treatability Study Sampling and Analysis Plan, in whole or in part, Defendants shall amend and submit to EPA a revised Treatability Study Sampling and Analysis Plan which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

5. Treatability Study Site Health and Safety Plan. Within thirty (30) days of the identification of the need for a revised Health and Safety Plan, Defendants shall submit a Treatability Study Site Health and Safety Plan. If EPA requires revisions to the Treatability Study Site Health and Safety Plan, in whole or in part, Defendants shall amend and submit to EPA a revised Treatability Study Site Health and Safety Plan which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

6. Treatability Study Evaluation Report. In accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan, Defendants shall submit a Treatability Study Evaluation Report as provided in the Statement of Work and Work Plan. If EPA disapproves or requires revisions to the Treatability Study Evaluation Report, in whole or in part, Defendants shall amend and submit to EPA a revised Treatability Study Evaluation Report which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

E. Task V: Risk Assessment EPA will perform the Human Health Risk Assessment. Defendants shall support EPA in the effort by providing various information as EPA determines necessary. The major components of the Human Health Risk Assessment include contaminant identification, exposure assessment, toxicity assessment, and human health risk characterization.

EPA will provide, after review of the Defendants' site characterization summary, the Human Health Risk Assessment to Defendants so that Defendants can begin drafting the Feasibility Study (FS) Report. The Human Health Risk Assessment and the Ecological Risk Assessment will provide sufficient information concerning the risks such that Defendants can begin drafting the Feasibility Study ("FS") Report.

1. Human Health Risk Assessment. EPA shall perform the Human Health Risk Assessment. The major components of the Human Health Risk Assessment include contaminant identification, exposure assessment, toxicity assessment, and human health risk characterization. The Streamlined Risk Evaluation (SRE) done by EPA for the NTC Removal Agreement, attached hereto as Exhibit H, shall be referenced and discussed in the Human Health Risk Assessment.

2. Ecological Risk Assessment. Defendants shall perform an Ecological Risk Assessment. The major components of the Ecological Risk Assessment include contaminant identification, exposure assessment, toxicity assessment, and ecological risk characterization. The major tasks necessary for Defendants to conduct an Ecological Risk Assessment are outlined in "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments," Review Draft dated September 26, 1994. If determined necessary by EPA, Defendants shall use a "food web model" to aid EPA in determining cleanup goals based on the Ecological Risk Assessment. EPA and Defendants will provide for meaningful public participation in the Risk Assessments by following the "Risk Assessment Guidance For Superfund: Volume 1 - Human Health Evaluation Manual Supplement to Part A: Community Involvement in Superfund Risk Assessments," March 1999.

In accordance with the schedule submitted by Defendants as part of the EPA approved Work Plan, Defendants shall prepare an Ecological Risk Assessment Report based on the data collected during the Site characterization which shall be submitted to EPA and made available to the public. If EPA disapproves or requires revisions to the Ecological Risk Assessment Report, in whole or in part, Defendants shall amend and submit to EPA and make available to the public a revised Ecological



Risk Assessment Report which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments. EPA will release the final Ecological Risk Assessment Report to the public following release of the final RI Report. EPA will prepare a Human Health Risk Assessment Report based on existing data and the data collected by Defendants during the Site Characterization. EPA will release the Human Health Risk Assessment Report to the public at the same time it releases the final RI Report and the Ecological Risk Assessment Report prepared by Defendants. All three reports will be put into the administrative record for the Site.

EPA will respond in the Responsiveness Summary of the ROD to all significant comments on the Human Health and Ecological Risk Assessments that are submitted during the Proposed Plan's formal comment period.

F. Draft Remedial Investigation Report Defendants shall submit a draft Remedial Investigation Report consistent with the Statement of Work, Work Plan, and Sampling and Analysis Plan. If EPA disapproves of or requires revisions to the Remedial Investigation Report, in whole or in part, Defendants shall amend and submit to EPA a revised Remedial Investigation Report which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

G. Task VI: Development and Screening of Alternatives. Defendants shall develop an appropriate range of waste management options that will be evaluated through the development and screening of alternatives, as provided in the Statement of Work and Work Plan. During the development and screening of alternatives, Defendants shall provide EPA with the following deliverables:

1. Memorandum on Remedial Action Objectives. Within thirty (30) days of completion of the Ecological Risk Assessment performed by Defendants and the Human Health Risk Assessment performed by EPA, Defendants shall submit a Memorandum on Remedial Action Objectives. If EPA disapproves of or requires revisions to the Memorandum on Remedial Action Objectives, in whole or in part, Defendants shall amend and submit to EPA a revised Memorandum on Remedial Action Objectives which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

2. Memorandum on Development and Preliminary Screening of Alternatives, Assembled Alternatives Screening Results and Final Screening. Within thirty (30) days of submittal of the Memorandum on Remedial Action Objectives, Defendants shall submit a memorandum summarizing the development and screening of remedial alternatives, including an alternatives array document as described in the Statement of Work. If EPA disapproves of or requires revisions to the Memorandum on Development and Preliminary Screening of Alternatives, Assembled Alternatives Screening Results and Final Screening, in whole or in part, Defendants shall amend and submit to EPA a revised Memorandum on Development and Preliminary Screening of Alternatives, Assembled

Alternatives Screening Results and Final Screening which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments.

**H. Task VII: Detailed Analysis of Alternatives.** Defendants shall conduct a detailed analysis of remedial alternatives, as described in the Statement of Work and Work Plan. During the detailed analysis of alternatives, Defendants shall provide EPA with the following deliverables and presentation:

**1. Report on Comparative Analysis and Presentation to EPA.** Within thirty (30) days of submission of a memorandum on the development and screening of remedial alternatives, Defendants shall submit a report on comparative analysis to EPA summarizing the results of the comparative analysis performed between the remedial alternatives. If EPA disapproves of or requires revisions to the report on comparative analysis, Defendants shall amend and submit to EPA a revised report on comparative analysis which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments. Within twenty (20) days of submitting the original report on comparative analysis, Defendants shall make a presentation to EPA during which Defendants shall summarize the findings of the remedial investigation and remedial action objectives, and present the results of the nine criteria evaluation and comparative analysis, as described in the Statement of Work.

**2. Draft Feasibility Study Report.** Within sixty (60) days of the presentation to EPA, Defendants shall submit a draft Feasibility Study Report which reflects the findings in the Human Health and Ecological Risk Assessments. Defendants shall refer to Table 6-5 of the RI/FS Guidance for report content and format. If EPA disapproves of or requires revisions to the draft Feasibility Study Report in whole or in part, Defendants shall amend and submit to EPA a revised Feasibility Study Report which is responsive to all EPA comments, within thirty (30) days of receiving EPA's comments. The report as amended, and the administrative record, shall provide the basis for the Proposed Plan under CERCLA Sections 113(k) and 117(a) by EPA, and shall document the development and analysis of remedial alternatives.

30. EPA reserves the right to comment on, modify and direct changes for all deliverables. At EPA's discretion, Defendants must fully correct all deficiencies and incorporate and integrate all information and comments supplied by EPA either in subsequent or resubmitted deliverables.

31. Defendants shall not proceed further with any subsequent activities or tasks based upon the following deliverables until receiving EPA approval for the following deliverables: Phase I Conceptual Site Model Report, RI/FS Work Plan and Sampling and Analysis Plan, draft Remedial Investigation Report (including the Ecological Risk Assessment Report), Treatability Testing Work Plan and Sampling and Analysis Plan (if required), and draft Feasibility Study Report. While awaiting EPA approval on these deliverables, Defendants shall proceed with all other tasks and activities which may

be conducted independently of these deliverables, in accordance with the schedule set forth in this Agreement.

32. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed.

33. For all remaining deliverables not enumerated above in Paragraph 31, Defendants shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Defendants from proceeding further, either temporarily or permanently, on any task, activity or deliverable associated with this RI/FS Agreement at any point during the RI/FS.

34. In the event that Defendants amend or revise a report, plan or other submittal upon receipt of EPA comments, if EPA subsequently disapproves of the revised submittal, or if subsequent submittals do not fully reflect EPA's directions for changes, EPA retains the right to seek stipulated and statutory penalties; perform its own studies, complete the RI/FS (or any portion of the RI/FS, including, but not limited to the Ecological Risk Assessment) under CERCLA and the NCP, and seek reimbursement from the Defendants for its costs; and/or seek any other appropriate relief.

35. In the event that EPA takes over some of the tasks, but not the preparation of the RI/FS, Defendants shall incorporate and integrate information supplied by EPA into the final RI/FS report.

36. Neither failure of EPA to expressly approve or disapprove of Defendants' submissions within a specified time period(s), nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Defendants' deliverables, Defendants are responsible for preparing deliverables acceptable to EPA.

37. Defendants shall, prior to any off-Site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state, to ADEM, and to EPA's Designated Project Coordinator of such shipment of hazardous substances. However, the notification of shipments shall not apply to any such off-Site shipments when the total volume of such shipments will not exceed 10 cubic yards.

(a) The notification shall be in writing, and shall include the following information, where available: (1) the name and location of the facility to which the hazardous substances are to be shipped; (2) the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the shipment of the hazardous substances; and (4) the method of transportation. Defendants shall notify the receiving state of major changes in the shipment plan, such as decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.

(b) The identity of the receiving facility and state will be determined by Defendants following the award of the contract for the RI/FS. Defendants shall provide all relevant information, including information under the categories noted above, on the off-Site shipments, as soon as practical after the award of the contract and before the hazardous substances are actually shipped.

## **X. MODIFICATION OF THE WORK PLAN**

38. If at any time during the RI/FS process, Defendants identify a need for additional data, a memorandum documenting the need for additional data shall be submitted to the EPA Project Coordinator within thirty (30) days of identification. EPA in its discretion will determine whether the additional data will be collected by Defendants and whether it will be incorporated into reports and deliverables.

39. In the event of conditions posing an immediate threat to human health or welfare or the environment, Defendants shall notify EPA and the State immediately. In the event of unanticipated or changed circumstances at the Site, Defendants shall notify the EPA Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In addition to the authorities in the NCP, in the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the Work Plan, EPA shall modify or amend, or require Defendants to modify or amend, the Work Plan in writing accordingly. Any modifications or amendments done by Defendants shall be subject to EPA approval. Defendants shall perform the Work Plan as modified or amended.

40. EPA may determine that in addition to tasks defined in the initially approved Work Plan, other additional RI/FS Work may be necessary to accomplish the objectives of this RI/FS Agreement in the Statement of Work for the RI/FS. EPA may require that the Defendants perform these response actions in addition to those required by the initially approved Work Plan, including any approved modifications, if it determines that such actions are necessary for a complete RI/FS. Defendants shall confirm their willingness to perform the additional RI/FS Work in writing to the EPA within fourteen (14) days of receipt of the EPA request or Defendants shall invoke dispute resolution. Subject to EPA resolution of any dispute, Defendants shall implement the additional tasks which EPA determines are necessary. The additional RI/FS Work shall be completed according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the Work Plan or written Work Plan supplement. EPA reserves the right to conduct the RI/FS Work itself at any point, to seek reimbursement from Defendants, and/or to seek any other appropriate relief.

41. Schedules specified in this Agreement for submittal of deliverables may be modified by agreement of EPA and the Defendants. All such modifications shall be made in writing.

## **XI. QUALITY ASSURANCE**

42. Defendants shall assure that the RI/FS Work performed, samples taken and analyses conducted conform to the requirements of the Statement of Work, the QAPP and guidances identified therein. Defendants will assure that field personnel used by Defendants are properly trained in the use of field equipment and in chain of custody procedures. Defendants shall only use laboratories which have a documented quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs." (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) to meet the quality system requirements.

## **XII. FINAL RI/FS, PROPOSED PLAN, PUBLIC COMMENT, RECORD OF DECISION, ADMINISTRATIVE RECORD**

43. EPA retains the responsibility for the release to the public of the RI/FS report. EPA retains responsibility for the preparation and the release to the public of the Proposed Plan and ROD in accordance with CERCLA and the NCP. Investigation and response activities related to the residential properties are the subject of the NTC Removal Agreement and the Removal Order. However, the Parties understand that the residential properties are part of the Site, which is the subject of this RI/FS. EPA agrees to take into account all investigations and response actions done pursuant to the NTC Removal Agreement and the Removal Order when selecting the remedy in the Proposed Plan and the ROD. However, EPA and Defendants agree that the cleanup levels contained in the NTC Removal Agreement, the Removal Order, and the SRE shall have no precedential effect on the clean up numbers selected in the Proposed Plan and the ROD. EPA will select the final clean up numbers for the entire Site, including the residential properties, in the Proposed Plan and the ROD.

44. EPA shall provide Defendants with the final RI/FS report, Proposed Plan and ROD.

45. EPA will determine the contents of the administrative record file for selection of the remedial action. Defendants must submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Defendants shall provide to EPA copies of plans, task memoranda including documentation of field modifications, recommendations for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Defendants must additionally submit to EPA any previous studies conducted under state, local or federal authorities relating to selection of the response action, and all communications between Defendants and state, local or other federal authorities concerning selection of the response action. At EPA's discretion, Defendants may establish a community information repository at or near the Site, to house one copy of the administrative record.

## **XIII. PROGRESS REPORTS AND MEETINGS**

46. Defendants shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion. EPA will provide Defendants at least fourteen (14) days notice prior to such meetings, unless EPA determines it is necessary to meet on shorter notice due to the exigencies of the situation.

47. In addition to the deliverables set forth in this Agreement, Defendants shall provide to EPA, ADEM, and the TAP designees monthly progress reports by the 10th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Agreement during that month, (2) include all results of sampling and tests and all other data received by the Defendants, (3) describe RI/FS Work planned for the next two months with schedules relating such RI/FS Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays. EPA and Defendants may agree that a single monthly progress may be used for this RI/FS Agreement, the NTC Removal Agreement, and the Removal Order.

#### **XIV. SAMPLING, ACCESS, AND DATA AVAILABILITY/ADMISSIBILITY**

48. All results of sampling, tests, modeling or other data (including raw data) generated by Defendants, or on Defendants' behalf, during implementation of this Agreement, shall be submitted to EPA, ADEM, and the TAP designees in the subsequent monthly progress report as described in Section XIII of this Agreement. EPA will make available to the Defendants validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

49. Defendants will verbally notify EPA at least 15 days prior to conducting significant field events as described in the Statement of Work, Work Plan or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Defendants shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected by the Defendants in implementing this Agreement. All split samples of Defendants shall be analyzed by the methods identified in the QAPP.

50. At all reasonable times, EPA and its authorized representatives shall have the authority to enter and freely move about all property at the Site and off-Site areas where RI/FS Work, if any, is being performed, for the purposes of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Site or Defendants and their contractors pursuant to this Agreement; reviewing the progress of the Defendants in carrying out the terms of this Agreement; conducting tests as EPA or its authorized representatives deem necessary; using a camera, sound recording device or other documentary type equipment after notifying Defendants of the use of any such hidden equipment; and verifying the data submitted to EPA by the Defendants. The Defendants shall

allow these persons to inspect and copy all records, files, photographs, documents, sampling and monitoring data, and other writings related to RI/FS Work undertaken in carrying out this Agreement. Nothing herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under federal law. All parties with access to the Site under this Paragraph shall comply with all approved health and safety plans.

51. The Defendants may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this Agreement under 40 C.F.R. § 2.203, provided such claim is allowed by Section 104(E)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). This claim shall be asserted in the manner described by 40 C.F.R. § 2.203(b) and substantiated at the time the claim is made. Information determined to be confidential by EPA will be given the protection specified in 40 C.F.R. Part 2. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the State without further notice to the Defendants. Defendants agree not to assert confidentiality claims with respect to any data related to Site conditions, sampling, or monitoring.

52. In entering into this Agreement, Defendants waive any objections to any data gathered, generated, or evaluated by EPA, the State or Defendants in the performance or oversight of the RI/FS Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the Agreement or any EPA-approved work plans or Sampling and Analysis Plans. If Defendants object to any other data relating to the RI/FS, Defendants shall submit to EPA a report that identifies and explains their objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 30 days of the monthly progress report containing the data.

53. If the Site, or the off-Site area that is to be used for the RI/FS, is owned in whole or in part by parties other than those bound by this Agreement, Defendants shall make best efforts to obtain access from such parties. Best efforts include sending within the timeframes specified in the approved Work Plan an access agreement approved by EPA to all resident(s), owner(s), and/or non-resident owner(s) from whom access is needed to conduct the RI/FS. Defendants shall send all of the access agreements requesting access via certified mail, return receipt requested. If Defendants do not receive the necessary access agreements within forty-five (45) days from the date the correspondence was sent, Defendants shall notify EPA in writing so that EPA may begin to assist Defendants to obtain access. Defendants shall continue to use best efforts to attempt to obtain access from such parties for one hundred and twenty (120) days from the date the access agreement was sent.

EPA will assume responsibility for obtaining access from any party that fails to provide access after Defendants have used best efforts to obtain access for one hundred and twenty (120) days from the date the access agreement was sent. For any party from whom Defendants were unable to obtain access, Defendants shall, upon EPA's request, provide EPA a copy of all correspondences, county records, and any other evidence or information Defendants have regarding the resident(s), owners(s),

and/or non-resident owner(s) from whom Defendants were unable to obtain access. EPA may assist Defendants in gaining access, to the extent necessary to effectuate the actions described herein, using such means as EPA deems appropriate. EPA acknowledges that if Defendants have attempted to obtain access to properties in the manner described above, and are unable to do so, then Defendants will not be liable for stipulated penalties for failure to meet any schedules identified in this RI/FS Agreement, the SOW, or the Work Plans approved pursuant to the SOW with respect to properties for which access was denied.

To the extent that any resident(s), owners(s), and/or non-resident owner(s) is adverse to Defendants in a legal proceeding and is represented by counsel, Defendants may send the appropriate correspondence to any such person's counsel only.

The access agreements shall provide access for EPA, its contractors and oversight officials, the State and its contractors, and the Defendants or their authorized representatives, and such agreements shall specify that Defendants are not EPA's representative with respect to liability associated with Site activities. Copies of such agreements shall be provided to EPA prior to Defendants' initiation of field activities. If access agreements are not obtained within the time referenced above, EPA may perform those tasks or activities with EPA contractors. In the event that EPA performs those tasks or activities with EPA contractors, Defendants shall perform all other activities not requiring access to that portion of the Site. Defendants additionally shall integrate the results of any such tasks undertaken by EPA into their reports and deliverables. Furthermore, the Defendants agree to indemnify the U.S. Government as specified in Section XXII of this Agreement. Defendants also shall reimburse EPA for all costs and attorney fees incurred by the United States to obtain access for the Defendants, including just compensation.

#### **XV. DESIGNATED PROJECT COORDINATORS**

54. Documents including reports, approvals, disapprovals, and other correspondence which must be submitted under this Agreement, shall be sent by certified mail, return receipt requested, or overnight delivery requiring signature, to the following addressees or to any other addressees which the Defendants and EPA designate in writing:

- (a) Ten copies of all documents to be submitted to EPA should be sent to:  
Pam Scully  
EPA Project Coordinator  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street S.W.  
Atlanta, GA 30303-8960

(b) Copies of documents sent to EPA should be sent to ADEM for review and comment at the following address:



Steve Cobb  
Chief, Hazardous Waste Branch  
Alabama Department of Environmental Management  
1400 Coliseum Blvd.  
Montgomery, AL 36130-1463

(c) Documents to be submitted to the Defendants should be sent to:

Craig Branchfield  
Manager, Remedial Projects  
Solutia, Inc.  
702 Clydesdale Avenue  
Anniston, Alabama 36201

55. On or before the Effective Date of this Agreement, EPA and the Defendants shall each designate their own Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this Agreement. To the maximum extent possible, communications between the Defendants and EPA shall be directed to the Project Coordinator by mail, with copies to such other persons as EPA, the State, and Defendants may respectively designate. Communications include, but are not limited to, all documents, reports, approvals, and other correspondence submitted under this Agreement.

56. EPA and the Defendants each have the right to change their respective Project Coordinator. The other party must be notified in writing at least 10 days prior to the change.

57. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the National Contingency Plan, to halt any RI/FS Work required by this Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Agreement shall not be cause for the stoppage or delay of RI/FS Work.

58. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). The oversight assistant may observe RI/FS Work and make inquiries in the absence of EPA, but is not authorized to modify the Work Plan.

## **XVI. OTHER APPLICABLE LAWS**

59. Defendants shall comply with all laws that are applicable when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-Site, including studies, where such action is selected and carried out in compliance with Section 121 of CERCLA.

#### **XVII. RECORD PRESERVATION**

60. All records and documents in EPA's and Defendants' possession that relate in any way to the Site shall be preserved during the conduct of this Agreement and for a minimum of 10 years after commencement of construction of any remedial action. The Defendants shall acquire and retain copies of all documents that relate to the Site and are in the possession of their employees, agents, accountants, contractors, or attorneys. After this 10 year period, the Defendants shall notify EPA at least 90 days before the documents are scheduled to be destroyed. If EPA requests that the documents be saved, the Defendants shall, at no cost to EPA, give EPA the documents or copies of the documents.

#### **XVIII. DISPUTE RESOLUTION**

61. Any disputes concerning activities or deliverables required under this Agreement for which dispute resolution has been expressly provided for, shall be resolved as follows: If the Defendants object to any EPA notice of disapproval or requirement made pursuant to this Agreement, Defendants shall notify EPA's Project Coordinator in writing of their objections within 14 days of receipt of the disapproval notice or requirement. Defendants' written objections shall define the dispute, state the basis of Defendants' objections, and be sent certified mail, return receipt requested. EPA and the Defendants then have an additional 14 days to reach agreement. If an agreement is not reached within 14 days, Defendants may request a determination by EPA's Waste Management Division Director. The Waste Management Division Director's determination is EPA's final decision. Defendants shall proceed in accordance with EPA's final decision regarding the matter in dispute, regardless of whether Defendants agree with the decision. If the Defendants do not agree to perform or do not actually perform the RI/FS Work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the RI/FS Work itself, to seek reimbursement from the Defendants, to seek enforcement of the decision, to seek stipulated penalties, and/or to seek any other appropriate relief.

62. Defendants are not relieved of their obligations to perform and conduct activities and submit deliverables on the schedule set forth in the Work Plan, while a matter is pending in dispute resolution. The invocation of dispute resolution does not stay stipulated penalties under this Agreement, except during the period in which the decision is pending before the Waste Management Division Director.

#### **XIX. DELAY IN PERFORMANCE/STIPULATED PENALTIES**

63. For each day that the Defendants fail to complete a deliverable in a timely manner or fail to produce a deliverable of acceptable quality, or otherwise fail to perform in accordance with the requirements of this Agreement, Defendants shall be liable for stipulated penalties. Penalties begin to accrue on the day that performance is due or a violation occurs, and extend through the period of correction. Where a revised submission by Defendants is required, stipulated penalties shall continue to accrue until a satisfactory deliverable is produced. EPA will provide written notice for violations that are not based on timeliness; nevertheless, penalties shall accrue from the day a violation commences. Payment shall be due within 30 days of receipt of a demand letter from EPA.

64. Defendants shall pay interest on the unpaid balance, which shall begin to accrue at the end of the 30-day period, at the rate established by the Department of Treasury pursuant to 30 U.S.C. § 3717. Defendants shall further pay a handling charge of 1 percent, to be assessed at the end of each 31 day period, and a 6 percent per annum penalty charge, to be assessed if the penalty is not paid in full within ninety (90) days after it is due.

65. All payments to the United States under this Section shall be paid by 1) certified or cashier's check made payable to the "EPA Hazardous Substance Superfund," shall be mailed to U.S. EPA Region 4, Superfund Accounting, Attn: Collection Officer in Superfund, P.O. Box 100142, Atlanta, GA 30384, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID #04S9, the DOJ Case Number 90-11-2-07135/1 and the name and address of the party making payment, or 2) if the amount is greater than \$10,000 payment may be made by FedWire Electronic Funds Transfer ("EFT") pursuant to the instructions provided by Paula V. Batchelor of Region 4. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), or notification of electronic wire transfer of funds, shall be sent to Dustin F. Minor, U.S. EPA Region 4, Environmental Accountability Division, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960, and to Paula V. Batchelor, U.S. EPA Region 4, 4WD-PSB/11th floor, 61 Forsyth Street, S.W., Atlanta, GA, 30303-8960, or their successors.

66. a. For the following major deliverables, stipulated penalties shall accrue in the amount of \$500 per day, per violation, for the first seven days of noncompliance; \$2,000 per day, per violation, for the 8th through 14th day of noncompliance; \$3,000 per day, per violation, for the 15th day through the 30th day; and \$4,000 per day per violation for all violations lasting beyond 30 days.

**b. Major Deliverables**

- 1) An original and any revised Work Plan.
- 2) An original and any revised Sampling and Analysis Plan.
- 3) An original and any revised Remedial Investigation Report (including the Ecological Risk Assessment).
- 4) An original and any revised Treatability Testing Work Plan.
- 5) An original and any revised Phase I Conceptual Site Model Report.

- 6) An original and any revised Treatability Study Sampling and Analysis Plan.
- 7) An original and any revised Feasibility Study Report.

67. a. For the following interim deliverables, stipulated penalties shall accrue in the amount of \$250 per day, per violation, for the first week of noncompliance; \$500 per day, per violation, for the 8th through 14th day of noncompliance; \$750 per day, per violation, for the 15th day through the 30th day of noncompliance; and \$1,500 per day per violation for all violations lasting beyond 30 days.

b. Interim Deliverables

- 1) Technical Memorandum on Site Specific Objectives and General Management Approach.
- 2) Technical Memorandum on Preliminary Remedial Action Objectives and Alternatives.
- 3) Technical Assistance Plan.
- 4) Community Advisory Group Plan.
- 5) Technical Memorandum on Modeling of Site Characteristics.
- 6) Preliminary Site characterization summary.
- 7) Summary of RI data (electronically formatted).
- 8) Identification of Candidate Technologies Memorandum.
- 9) Technical Memorandum on Steps and Data.
- 10) Treatability Study Evaluation Report.
- 11) Preliminary Screening-Level Ecological Risk Assessment, Exposure Estimate and Risk Calculation.
- 12) Baseline Ecological Risk Assessment Problem Formulation.
- 13) Ecological Study Design and Data Quality Objectives.
- 14) Ecological Field Verification of Sampling Design.
- 15) Deviations from Work Plan for Site Investigation and Analysis.
- 16) Ecological Risk Characterization and Remedial Goal Options.
- 17) Draft Ecological Risk Assessment Report.
- 18) Memorandum on Remedial Action Objectives.
- 19) Memorandum on Development and Preliminary Screening of Alternatives, Assembled Alternatives Screening Results and Final Screening.
- 20) Comparative analysis report.
- 21) Monthly progress reports.

68. The following stipulated penalties shall accrue per violation per day for failure to complete any activities required by this Agreement (including, but not limited to, the payment of Future Response

Costs) within the specified time schedules established by and approved under this Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Agreement:

| <u>Penalty Per Violation Per Day</u> | <u>Period of Noncompliance</u> |
|--------------------------------------|--------------------------------|
| \$2,000                              | 1st through 14th day           |
| \$3,000                              | 15th through 30th day          |
| \$5,000                              | 31st day and beyond            |

69. Defendants may dispute whether they violated this Agreement (but Defendants may not dispute the amount of the stipulated penalties per violation) by invoking the dispute resolution procedures under Section XVIII herein. Penalties shall accrue but need not be paid during the dispute resolution period. If Defendants do not prevail upon resolution, all penalties shall be due to EPA within 30 days of resolution of the dispute. If Defendants prevail upon resolution, no penalties shall be paid.

70. In the event that EPA provides for corrections to be reflected in the next deliverable and does not require resubmission of that deliverable, stipulated penalties for that interim deliverable shall cease to accrue on the date of such decision by EPA.

71. The stipulated penalties provisions do not preclude EPA from pursuing any other remedies or sanctions which are available to EPA because of the Defendants' failure to comply with this Agreement, including but not limited to conduct all or part of the RI/FS (including, but not limited to the Ecological Risk Assessment) by EPA. Payment of stipulated penalties does not alter Defendants' obligation to complete performance under this Agreement.

## XX. FORCE MAJEURE

72. "Force majeure", for purposes of this Agreement, is defined as any event arising from causes entirely beyond the control of the Defendants and of any entity controlled by Defendants, including their contractors and subcontractors, that delays the timely performance of any obligation under this Agreement notwithstanding Defendants' best efforts to avoid the delay. The requirement that the Defendants exercise "best efforts to avoid the delay" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent practicable. Increased costs or expenses of any RI/FS Work to be performed under this Agreement or the financial difficulty of Defendants to perform such RI/FS Work shall not be considered a force majeure event. However, failure to obtain access in accordance with the provisions of Paragraph 53 shall be considered a force majeure event.

73. If any event occurs or has occurred that may delay the performance of any obligation under this Agreement, whether or not caused by a force majeure event, Defendants shall notify by

telephone the Remedial Project Manager or, in his or her absence, the Director of the Hazardous Waste Management Division, EPA Region 4, within 48 hours of when the Defendants knew or should have known that the event might cause a delay. Within five business days thereafter, Defendants shall provide in writing the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to mitigate the effect of the delay; and a statement as to whether, in the opinion of Defendants, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendants shall exercise best efforts to avoid or minimize any delay and any effects of a delay. Failure to comply with the above requirements shall preclude Defendants from asserting any claim of force majeure.

74. If EPA agrees that the delay or anticipated delay is attributable to force majeure, the time for performance of the obligations under this Agreement that are directly affected by the force majeure event shall be extended by agreement of the parties for a period of time not to exceed the actual duration of the delay caused by the force majeure event. An extension of the time for performance of the obligation directly affected by the force majeure event shall not, of itself, extend the time for performance of any subsequent obligation.

75. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, or does not agree with Defendants on the length of the extension, the issue shall be subject to the dispute resolution procedures set forth in Section XVIII of this Agreement. In any such proceeding, to qualify for a force majeure defense, Defendants shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay was or will be warranted under the circumstances, that Defendants did exercise or are exercising due diligence by using their best efforts to avoid and mitigate the effects of the delay, and that Defendants complied with the requirements of Paragraph 72 and 73.

76. Should Defendants carry the burden set forth in Paragraph 75, the delay at issue shall be deemed not to be a violation of the affected obligation of this Agreement.

## **XXI. REIMBURSEMENT OF FUTURE RESPONSE COSTS**

77. Estimates for Future Response Costs EPA and Defendants will meet on an annual basis to discuss estimates for Future Response Costs related to this RI/FS Agreement for the upcoming year. EPA will provide estimates of EPA and EPA-contractor costs for

Future Response Costs as defined in Section IV of this agreement. These estimates are for informational purposes only and shall not affect the requirement to pay Future Response Costs, as provided in the following Paragraph and in the NTC Removal Agreement, in any way.

78. Payments for Future Response Costs.

a. Defendants shall pay to EPA all Future Response Costs incurred in a manner not inconsistent with the National Contingency Plan. On a periodic basis the United States will send Defendants a bill requiring payment that includes a Region 4 cost summary and a DOJ cost summary. Defendants shall make all payments within 30 days of Defendants' receipt of each bill requiring payment, except as otherwise provided herein. All payments to the United States under this Section shall be paid by 1) certified or cashier's check made payable to the "Anniston PCB Site Special Account," shall be mailed to U.S. EPA Region 4, Superfund Accounting, Attn: Collection Officer in Superfund, P.O. Box 100142, Atlanta, GA 30384, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID #04S9, the DOJ Case Number 90-11-2-07135/1 and the name and address of the party making payment, or 2) if the amount is greater than \$10,000 payment may be made by FedWire Electronic Funds Transfer ("EFT") pursuant to the instructions provided by Paula V. Batchelor of Region 4. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), or notification of electronic wire transfer of funds, shall be sent to Dustin F. Minor, U.S. EPA Region 4, Environmental Accountability Division, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960, and to Paula V. Batchelor, U.S. EPA Region 4, 4WD-PSB/11th floor, 61 Forsyth Street, S.W., Atlanta, GA, 30303-8960, or their successors.

b. The total amount to be paid by Defendants pursuant to this Paragraph shall be deposited in the Anniston PCB Site Special Account within the EPA Hazardous Substance Superfund to be retained and used at EPA's unreviewable discretion to conduct or finance response actions at or in connection with the Anniston PCB Site, or transferred by EPA to the EPA Hazardous Substance Superfund. If EPA spends any funds from the Anniston PCB Site Special Account for future response actions at or in connection with the Site, such costs shall be potentially recoverable from Defendants, or any other potentially responsible party, and Defendants shall not object to their recoverability because such funds were placed into the Anniston PCB Site Special Account as payments for Future Response Costs.

79. Defendants agree to limit any disputes concerning costs to accounting errors, the inclusion of costs outside the scope of this Agreement, and the inclusion of costs incurred in a manner inconsistent with the National Contingency Plan. Defendants shall identify any contested costs and the basis of their objection. If Defendants request additional cost documentation in writing within thirty (30) days of receipt of the bill, EPA shall provide all requested cost documentation related to the dispute which it would be required to produce under the Freedom of Information Act, 5 U.S.C. § 552, as amended. Such objection shall be made in writing within thirty (30) days of receipt of the bill. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. Defendants shall have an additional thirty (30) day period, after receipt of any additional

cost documentation requested, to further identify the contested Future Response Costs and the basis for the objection. In the event of an objection (even if Defendants have requested additional cost documentation), the Defendants shall within the thirty (30) days of receipt of the original bill pay all undisputed costs in accordance with the schedule set forth above. Disputed costs shall be paid by Defendants into an interest bearing escrow account while the dispute is pending. Defendants bear the burden of establishing an EPA accounting error, the inclusion of costs outside the scope of this Agreement, or the inclusion of costs incurred in a manner inconsistent with the National Contingency Plan.

80. In the event that the payments required by Paragraph 78.a. are not made within 30 days of the Defendants' receipt of the bill, Defendants shall pay Interest on the unpaid balance and be subject to Stipulated Penalties. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of the Defendants' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiffs by virtue of Defendants' failure to make timely payments under this Section including, but not limited to, payment of stipulated penalties pursuant to Paragraph 68. The Defendants shall make all payments required by this Paragraph in the manner described in Paragraph 78.

81. A copy of the check, or notification of an EFT, should be sent simultaneously to the EPA Project Coordinator.

## **XXII. INSURANCE AND INDEMNIFICATION**

82. (a) Prior to commencement of any RI/FS Work under this Agreement, Defendants shall secure, and shall maintain in force for the duration of this Agreement, and for two years after the completion of all activities required by this Agreement, Comprehensive General Liability ("CGL") and automobile insurance, with limits of \$ 5 million dollars, combined single limit, naming as insured the United States. The CGL insurance shall include Contractual Liability Insurance in the amount of \$ 1 million per occurrence, and Umbrella Liability Insurance in the amount of \$2 million per occurrence.

(b) Defendants shall also secure, and maintain in force for the duration of this Agreement and for two years after the completion of all activities required by this Agreement the following:

- i. Professional Errors and Omissions Insurance in the amount of \$1,000,000.00 per occurrence.
- ii. Pollution Liability Insurance in the amount of \$1,000,000.00 per occurrence, covering as appropriate both general liability and professional liability arising from pollution conditions

(c) For the duration of this Agreement, Defendants shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of



employer's liability insurance and workmen's compensation insurance for all persons performing RI/FS Work on behalf of the Defendants, in furtherance of this Agreement.

(d) If Defendants demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then with respect to that contractor or subcontractor Defendants need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

(e) Prior to commencement of any RI/FS Work under this Agreement, and annually thereafter on the anniversary of the Effective Date of this Agreement, Defendants shall provide to EPA certificates of such insurance and a copy of each insurance policy.

83. At least 7 days prior to commencing any RI/FS Work under this Agreement, Defendants shall certify to EPA that the required insurance has been obtained by that contractor.

84. The Defendants agree to indemnify and hold the United States Government, its agencies, departments, agents, and employees harmless from any and all claims or causes of action arising from or on account of acts or omissions of Defendants, their employees, agents, servants, receivers, successors, or assignees, or any persons including, but not limited to, firms, corporations, subsidiaries and contractors, in carrying out activities under this Agreement. The United States Government or any agency or authorized representative thereof shall not be held as a party to any contract entered into by Defendants in carrying out activities under this Agreement.

#### **XXIII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION**

85. The Effective Date of this RI/FS Agreement, shall be the date the Consent Decree is entered by the Court.

86. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Defendants will be construed as relieving the Defendants of their obligation to obtain such formal approval as may be required by this Agreement. Any deliverables, plans, technical memoranda, reports (other than progress reports), specifications, schedules and attachments required by this Agreement are, upon approval by EPA, incorporated into this Agreement.

#### **XXIV. TERMINATION AND SATISFACTION**

87. This Agreement shall terminate when Defendants demonstrate in writing and certify to the satisfaction of EPA that all activities required under this RI/FS Agreement, the NTC Removal Agreement, the Removal Order, and the SOW, including any additional RI/FS Work has been performed and that payments of Future Response Costs, AOC Oversight Costs, and any stipulated

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penalties demanded by EPA, have been made and EPA has approved the certification. This notice shall not, however, terminate Defendants' obligation to comply with Sections XVII and XXI of this Agreement, Section VI of the Consent Decree, and any continuing obligations required by the NTC Removal Agreement and/or the Removal Order after the Notice of Completion is issued pursuant to the NTC Removal Agreement and/or the Removal Order.

88. The certification shall be signed by a responsible official representing each Defendant. Each representative shall make the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate, and complete." For purposes of this Agreement, a responsible official is a corporate official who is in charge of a principal business function.

The undersigned representative of Defendant certifies that they are fully authorized to enter into the terms and conditions of this Agreement and to bind the party they represent to this document.

Agreed this 16th day of October, 2002.

Solutia Inc.

By:   
Karl R. Barnickol (Typed Name)

Its: Senior Vice President,  
General Counsel and Secretary

The undersigned representative of Defendant certifies that they are fully authorized to enter into the terms and conditions of this Agreement and to bind the party they represent to this document.


Agreed this 16th day of October, 2002.

Pharmacia Corporation

By: [Signature]  
[Typed Name] (Typed Name)

Its: Senior Vice President & General Counsel

It is Agreed this 11 day of OCT, 2002.

BY:   
Carol Monell  
Chief, South Site Management Branch  
Waste Management Division  
Region 4  
U.S. Environmental Protection Agency

DATE: 10/11/02

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**Exhibit B**

**to the PARTIAL CONSENT DECREE**

**Statement of Work**

**STATEMENT OF WORK  
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY  
ANNISTON PCB SITE  
ANNISTON, ALABAMA**

**INTRODUCTION**

The purpose of this remedial investigation/feasibility study (RI/FS) is to investigate the nature and extent of contamination at the Anniston PCB Site and develop and evaluate potential remedial alternatives. The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI influences the development of remedial alternatives in the FS, which in turn affects the data needs and the scope of treatability studies.

Defendants will conduct this RI/FS and will produce draft RI and FS reports that are in accordance with this Statement of Work, the "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance that EPA uses in conducting a RI/FS (a list of the primary guidance is attached), as well as any additional requirements in the Consent Decree. The RI/FS Guidance describes the report format and the required report content. Defendants will furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the Consent Decree.

At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA Section 121. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report, as adopted by EPA, with the Administrative Record, will form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

The RI/FS investigation will take into account the extensive amount of data that have been collected pursuant to the Administrative Order on Consent between the Defendants and EPA, effective date October 5, 2001 (hereinafter Site Removal Order), and the RCRA Facility Investigation (RFI) being completed pursuant to Defendants' RCRA Permit.

As specified in CERCLA Section 104(a)(1), as amended by SARA, EPA will provide oversight of the Defendants' activities throughout the RI/FS. The Defendants will support EPA's initiation and conduct of activities related to the implementation of oversight activities.

## **TASK 1 - SCOPING (RI/FS Guidance, Chapter 2)**

Scoping is the initial planning process of the RI/FS. During this time, the Site-specific objectives of the RI/FS, including the preliminary remediation goals (PRGs), are determined by Defendants subject to approval by EPA. Scoping is continued, repeated as necessary, and refined throughout the RI/FS process.

In addition to developing the Site specific objectives of the RI/FS, EPA and Defendants will determine a general management approach for the Site.

Consistent with the general management approach, the specific project scope will be planned by Defendants and EPA. Defendants will document the specific project scope in a work plan. Because the work required to perform a RI/FS is not fully known at the onset, and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study.

The Site objectives for the Anniston PCB Site located in Calhoun County in the State of Alabama have been determined preliminarily, based on available information, to be the following:

1. Review of existing information pertaining to the Site. This includes a review of Work Plans and the associated data generated during the Site Removal Action, work plans and associated data generated during the Defendants' RFI being conducted under its RCRA permit, EPA Preremedial Reports, EPA's Environmental Photographic Interpretation Center photos, the Preliminary Natural Resources Survey, other reports from local, State and Federal agencies, court records, information from local businesses such as local well drillers and waste haulers and generators, facility records, and information from facility owners and employees and nearby citizens.
2. Review of relevant guidance (see attached references) to understand the remedial process. This information shall be used in performing the RI/FS and preparing all deliverables under this SOW.
3. Identification of all Federal and State applicable or relevant and appropriate requirements (ARARs).
4. Determination of the nature and lateral and vertical extent of contamination (waste types, concentrations and distributions) for all affected media including air, ground water, soil, surface water, sediment, and biota, etc.



5. Performance of a well survey within a one mile radius of the Site including determining water uses, well construction methods used, the number and age of users, and the volume and rate of water usage.
6. Identification and screening of potential treatment technologies along with containment/disposal requirements for residuals or untreated wastes.
7. Assembly of technologies into a minimum of three Remedial Action Alternatives (i.e., no action, containment, and treatment) and screening of the alternatives.
8. Performance of bench or pilot Treatability Studies as necessary.
9. Detailed analysis of Remedial Action Alternatives.
10. Sample collection/data analysis of the information necessary to conduct an Ecological Risk Assessment. These tasks are outlined in Supplemental Guidance to RAGS: Region 4 Bulletins- Ecological Risk Assessment (November 1995) and the "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments."
11. Possible performance of a cultural resources survey to determine if the Site has any archaeological or historic value. The need for conducting a cultural resources survey must be evaluated during the project planning stage of the RI/FS, and if EPA determines that a cultural resources survey is necessary, the strategy for developing the cultural resources survey must be included in the Remedial Investigation Work Plan.

The Site Management Strategy for the Site includes the following:

1. A complete investigation of the Site including any and all off-Site contamination which may have been caused by contaminants originating from the Site.
2. Use of the RI to identify any other Potentially Responsible Parties that may be involved.
3. An initial Work Plan that must incorporate the existing data gained from the Site Removal Action and Defendants' RFI, and initial evaluation of the Site as a whole.
4. Interim remedial measures which may be required.
5. EPA oversight of the Defendants' conduct of the work to ensure compliance with applicable laws, regulations, and guidance and to ensure that the work proceeds in a timely fashion.
6. EPA's preparation of the Human Health Risk Assessment.

7. Defendants' preparation of the Ecological Risk Assessment.

8. EPA management of the remedy selection and Record of Decision phase with input from the State Agencies, Natural Resource Trustees, and the public.

When scoping the specific aspects of a project, the Defendants must meet with EPA to discuss all project planning decisions and special concerns associated with the Site. Defendants shall perform the following activities as a function of the project planning process.

A. Site Background (2.2)<sup>4</sup>

Defendants will gather and analyze the existing Site background information to assist in planning the scope of the RI/FS.

1. Collect and analyze existing data and document the need for additional data (2.2.2; 2.2.6; 2.2.7)

Before planning RI/FS activities, all existing Site data will be thoroughly compiled and reviewed by the Defendants. Specifically, this will include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This will also include results from any previous sampling events that may have been conducted. The Defendants will refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. This information will be utilized in determining additional data needed to characterize the Site, better define potential applicable or relevant and appropriate requirements (ARARs), and develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) will be established subject to EPA approval which specify the usefulness of existing data. Decisions on the necessary data and DQOs will be made by EPA.

B. Project Planning (2.2)

Once the Defendants have collected and analyzed existing data, the specific project scope will be planned. Project planning activities include those tasks described below as well as identifying data needs, preparing a Phase I Conceptual Site Model, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Defendants will meet with EPA regarding the following activities and before the drafting of the scoping deliverables below. These tasks are described in Section C of this task since they result in the development of specific required deliverables.

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<sup>4</sup> This "(2.2)" and successive numbers in parenthesis reference sections in the following guidance: "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

1. Refine and document preliminary remedial action objectives and alternatives (2.2.3)

Once existing Site information has been analyzed and an understanding of the potential Site risks has been determined by Defendants subject to approval by EPA, Defendants will review and, if necessary, refine the remedial action objectives that have been approved by EPA for each actually or potentially contaminated medium. The revised remedial action objectives will be documented in a technical memorandum and subject to EPA approval. The Defendants will then identify a preliminary range of broadly defined potential remedial action alternatives and associated technologies. The range of potential alternatives should encompass where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; removal; and a no-action alternative.

2. Document the need for treatability studies (2.2.4)

Treatability studies will be required except where the Defendants can demonstrate to EPA's satisfaction that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) will be planned to occur concurrently with Site characterization activities (see Tasks 3 and 5).

3. Begin preliminary identification of potential ARARs (2.2.5)

Defendants will conduct a preliminary identification of potential state and federal ARARs (chemical-specific, location-specific and action-specific) to assist in the refinement of remedial action objectives, and the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

C. Scoping Deliverables (2.3)

At the conclusion of the project planning phase, the Defendants will submit a Phase I Conceptual Site Model Report. Following EPA approval of this report, an RI/FS work plan, a sampling and analysis plan (SAP), and a Site health and safety plan will be prepared and submitted by the Defendants. The RI/FS Work Plan and SAP must be reviewed and approved by EPA prior to the initiation of field activities.

1. Phase I Conceptual Site Model Report

Defendants shall use existing data at the Site including, but not limited to, data collected pursuant to the Site Removal Action and RFI to develop a Phase I Conceptual Site Model (CSM) of the Site. The purpose of this activity will be to ensure existing data are used to the maximum extent practicable in the development of the RI Work Plan.

Exposure assumptions developed in the Phase I CSM must be supported with data and must be consistent with Agency policy. For each exposure pathway, the release source, the transport media (e.g., surface water, air, etc.) and the exposure route (oral, inhalation, dermal) must be clearly delineated for both human and ecological receptors. Both present and reasonably anticipated future uses at the Site must be developed and presented in the CSM. The Human Health Evaluation Manual, Part A and the supplemental guidance entitled Standard Default Exposure Factors (OSWER Directive 9285.6-03) should be consulted in development of exposure assumptions. EPA referenced default exposure assumptions or default assumptions from other EPA-approved sources should be used when Site-specific data are not available.

Defendants shall include the exposure scenarios with a description of the assumptions made, data used, and a figure showing the CSM. If it is appropriate to use fate and transport models to estimate the exposure concentration at points spatially separate from monitoring points or media not sampled, these models shall be presented and discussed. Representative data must be utilized and the limitations and uncertainties associated with the models must be documented. The Exposure Assessment Section shall contain exposure concentrations typically based on the ninety-five (95) percent upper confidence limit on the arithmetic average or other appropriate statistical methods approved by EPA for deriving the exposure concentration.

The Phase I CSM Report shall also identify data gaps, if any exist, in the CSM that may require further evaluation during the RI process.

## 2. RI/FS Work Plan (2.3.1)

A Work Plan documenting the decisions and evaluations completed during the scoping process and in the Phase I CSM Report will be submitted to EPA for review and approval. The Work Plan should be developed in conjunction with the SAP and the Site health and safety plan, although each plan may be delivered under separate cover. The Work Plan will include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan must include the rationale for performing the required activities.

Specifically, the Work Plan will present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan will include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, geology, demographics, ecological, cultural and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by Defendants, local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site.

In addition, the plan will include a description of the Site management strategy approved by EPA during scoping, a preliminary identification of remedial alternatives, and data needs for evaluation of remedial alternatives. The plan will reflect coordination with treatability study requirements (see Tasks 1 and 4). It will include a process for and manner of identifying Federal and state ARARs (chemical-specific, location-specific and action-specific).

Finally, the Work Plan will include a detailed description of the tasks to be performed, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to EPA. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to EPA and meetings with presentations to EPA at the conclusion of each major phase of the RI/FS. The Defendants will refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan.

Because of the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. The Defendants will submit a technical memorandum documenting the need for additional data, and identifying the DQOs whenever such requirements are identified. In any event, the Defendants are responsible for fulfilling additional data and analysis needs identified by EPA consistent with the general scope and objectives of this RI/FS.

### 3. Sampling and Analysis Plan (2.3.2)

Defendants will prepare a sampling and analysis plan (SAP) to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a field sampling plan (FSP) and a quality assurance project plan (QAPP). The FSP will define in detail the sampling and data-gathering methods that will be used on the project. It will include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP will describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The QAPP will be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001) and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98 018, February 1998). The DQOs will at a minimum reflect use of analytic methods to identifying contamination and remediating contamination consistent with the levels for remedial action objectives identified in the proposed National Contingency Plan, pages 51425-26 and 51433 (December 21, 1988). In addition, the QAPP will address sampling procedures, sample custody, analytical procedures, and data reduction, validation, reporting and personnel qualifications. Field personnel should be available for EPA QA/QC training and orientation where applicable. Defendants will demonstrate, in advance to EPA's satisfaction, that each laboratory it

may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. Each laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. The Defendants shall only use laboratories which have a documented Quality Assurance Program which complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs." (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by EPA. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA review and approval. EPA may require that Defendants submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment and material specifications. Defendants will provide assurances that EPA has access to laboratory personnel, equipment and records for sample collection, transportation and analysis. In an effort to improve electronic management of site-specific data, EPA requires the submission of all data in the categories mentioned below in a standardized digital format. EPA has under development and will provide a Data Dictionary (DD), a List of Valid Values (LVV), and sample Electronic Data Deliverables (EDDs) to facilitate this data submission requirement. Digital data checker software will be provided by EPA for both laboratory and field data. These data checkers shall read the ASCII files generated by the specified EDD, check the file for completeness and compatibility with the LVV file and report the results of these checks. All data packages must pass the data checkers prior to their submission to the Agency. Types of data to be submitted in digital format include (but are not limited to) the following categories: Site Identification, Data Provider, Sample Location, Laboratory ID Information, Field and Laboratory Equipment and methods Used, Field Measurement Results, Laboratory Analytical Results, Geology and Monitoring Well Construction, Depth to Water in monitoring wells, Surface Water Levels, etc.

#### 4. Site Health and Safety Plan (2.3.3)

A health and safety plan will be prepared in conformance with the Defendants' health and safety program, and in compliance with OSHA regulations and protocols. The health and safety plan will include the 11 elements described in the RI/FS Guidance, such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. It should be noted that EPA does not "approve" Defendants' health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

## **TASK 2 - COMMUNITY RELATIONS**

Although implementation of the community relations plan is EPA's responsibility, Defendants shall assist EPA by providing information regarding the Site's history, participating in public meetings, or by preparing fact sheets for distribution to the general public. EPA will make these materials available to all interested parties for comment and place them in the Administrative Record. (EPA is not required, however, to formally respond to significant comments except during the formal public comment period on the proposed plan.) At EPA's discretion, Defendants shall establish a community information repository at or near the Site, to house one copy of the Administrative Record. The extent of PRP involvement in community relations activities is left to the discretion of EPA. All PRP-conducted community relations activities related to these agreements will be subject to oversight by EPA.

In addition, Defendants shall prepare a plan (hereinafter referred to as the Technical Assistance Plan (TAP)), subject to EPA's approval, for providing and administering up to \$150,000.00 of Defendants' money to fund qualified citizen groups to hire technical advisors, independent from Defendants, to help interpret and comment on Site-related documents developed under this SOW and through the public participation period for the ROD. Within forty-five (45) days after the Effective Date of this Consent Decree, the Defendants shall submit the TAP to EPA. The TAP shall provide for an initial payment of up to \$50,000. The TAP may be renewed twice, in \$50,000 increments, if EPA, in its sole discretion, determines that renewal is necessary to help interpret and comment on Site-related documents developed under this SOW and through the public participation period for the ROD.

As part of the TAP, Defendants must propose a method, including an application process and eligibility criteria, for awarding and administering the funds referenced above. Any eligible citizen group must be: 1) a representative group of individuals potentially affected by the Site, 2) incorporated as a nonprofit organization for the purposes of the Site or otherwise established as a charitable organization that operates within the geographical range of the Site and is already incorporated as a nonprofit organization, and 3) able to demonstrate its capability to adequately and responsibly manage any funds awarded.

Any group is ineligible if it is: 1) potentially responsible for contamination problems at the Site, 2) an academic institution, 3) a political subdivision, 4) a group whose ability to represent the interest of affected individuals might be limited as a result of receiving paid services from a Potentially Responsible Party ("PRP"), or 5) a group established or sustained by government entities, a Potentially Responsible Party, or any ineligible entity.

Funds may be awarded to only one qualified group at a time for purposes of this Consent Decree and SOW. In addition, at a minimum, the technical advisor must possess the following credentials: 1) demonstrated knowledge of hazardous or toxic wastes issues by proven work experience in such fields in excess of five (5) years; 2) a bachelor of science in a relevant discipline (e.g., biochemistry, toxicology, environmental sciences, engineering); 3) ability to translate technical information into terms understandable to lay persons; 4) experience in making technical presentations in a public meeting or hearing setting; and 5) demonstrated writing skills. The technical advisor may not be a party to or be

associated with an organization that is a party to or a witness, including an expert witness, in any current or past legal proceeding adverse to Defendants. Any unobligated funds shall revert to Defendants upon the end of the public participation period for the ROD.

For purposes of resolving any disputes that may arise between Defendants, the technical advisor, and/or the selected citizen group concerning the administration and/or use of the funds under the TAP, Defendants shall, as part of their TAP, propose a method for resolution, which will include the use of binding arbitration. As part of the dispute resolution proposal, Defendants must provide the method for selecting a third-party arbitrator that allows for the selection of an arbitrator acceptable to all parties involved in the dispute. Additionally, the dispute resolution provision must require that before the services of an arbitrator are invoked, the Parties must comply with the following procedures: 1) the Party that raises a complaint must submit that complaint in writing to the Party who is the subject of the complaint; 2) the recipient of the complaint must provide the first Party with a written response within fifteen (15) calendar days of receipt of the complaint; 3) the Parties then have fifteen (15) calendar days to resolve the dispute; and 4) if the disagreement cannot be resolved at this level, then the services of a third-party arbitrator will be sought. The written decision of the arbitrator will be the final decision.

Subject to EPA's approval Defendants may hire a third party (hereinafter referred to as the TAP Coordinator) to coordinate and administer the TAP. However, any such TAP Coordinator must be approved by EPA. Defendants must demonstrate that the TAP Coordinator is qualified to perform this task. If the Defendants opt to hire a TAP Coordinator, they must submit in writing that person's name, title, and qualifications to EPA within fifteen (15) days of EPA's approval of the TAP. Additionally, the Defendants must designate within fifteen (15) days of EPA's approval of the TAP an outreach coordinator who will be responsive to the public's inquiries and questions about the Site, including information about the application process and administration of the TAP.

To the extent practicable, Defendants shall select the TAP recipient and administer the appropriate funds to such group by the date on which the Draft RI/FS Workplan is due to EPA.

In addition, Defendants shall prepare a plan (hereinafter referred to as the Community Advisory Group Plan (CAGP) for providing and administering funding necessary for the development and ongoing operations of a Community Advisory Group (CAG), and for providing meeting space and facilitators for the CAG for periodic meetings during the response activities conducted pursuant to this Consent Decree through the public participation period for the ROD. The CAG shall be established in a manner consistent with the attached CAG information from EPA's website. Within forty-five (45) days after the Effective Date of this Consent Decree, the Defendants shall submit the CAGP to EPA.

In addition to devising and administering the TAP and the CAG, other community relations responsibilities EPA may assign to the Defendants shall be specified in the community relations plan. The Defendants must provide EPA quarterly progress reports regarding the implementation of the TAP and the CAG. The progress reports may be completed as part of the monthly progress reports.



EPA will prepare a Human Health Risk Assessment Report based on existing data and the data collected by Defendants during the Site Characterization. EPA will release the Human Health Risk Assessment Report to the public at the same time it releases the final RI Report and the Ecological Risk Assessment Report prepared by Defendants. All three reports will be put into the administrative record for the Site. EPA, however, is not required to formally respond to comments except during the formal comment period which occurs after a Proposed Plan is issued.

### **TASK 3 - SITE CHARACTERIZATION (RI/FS Guidance, Chapter 3)**

As part of the RI, Defendants will perform the activities described in this task, including the preparation of a site characterization summary and RI report. The overall objective of site characterization is to describe areas of the Site that may pose a threat to human health or the environment. This is accomplished by first determining the Site's physiography, geology, and hydrology. Surface and subsurface pathways of migration will be defined. The Defendants will identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their concentrations at incremental locations to background in the affected media. The Defendants will also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and health and safety plan are implemented. Field data will be collected and analyzed to provide the information required to accomplish the objectives of the study. The Defendants will notify EPA at least two weeks in advance of the field work. Field work may include ecological field surveys, field lay out of sampling locations, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Defendants will demonstrate that the laboratory and type of laboratory analyses that will be utilized during site characterization meets the specific QA/QC requirements and the DQOS of the site investigation as specified in the SAP. Field activities are often iterative, and to satisfy the objectives of the RI/FS it may be necessary for the Defendants to supplement the work specified in the initial Work Plan. In addition to the deliverables below, Defendants will provide a monthly progress report and participate in meetings at major points in the RI/FS.

#### **A. Field Investigation (3.2)**

The field investigation includes the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities will be performed by Defendants in accordance with the Work Plan and the SAP. At a minimum, these activities shall address the following:

1. Access

For all properties where access is required to conduct the field investigation in areas owned by or in possession of someone other than Defendant, Defendant shall obtain access in the manner described in the RI/FS agreement.

2. Implement and document field support activities (3.2.1)

Defendants will initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. Defendants will notify EPA at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. Defendants will also notify EPA in writing upon completion of field support activities.

3. Investigate and define Site characteristics (3.2.2)

The Defendants will collect data on the characteristics of the Site in accordance with the Work Plan. This information will be ascertained through a combination of physical measurements, observations, and sampling efforts and will be utilized to refine the CSM. In defining the Site's physical characteristics Defendants will also obtain sufficient engineering data (such as pumping characteristics) for the projection of contaminant fate and transport, and development and screening of remedial action alternatives, including information to assess treatment technologies.

4. Define sources of contamination (3.2.3)

The Defendants will locate each source of contamination. For each location, the areal extent and depth of contamination will be determined by sampling in accordance with the Work Plan .

The Defendants shall conduct sufficient sampling to define the boundaries of the contaminant sources to the level established in the QAPP and DQOs.

Defining the source of contamination will include analyzing the potential for contaminant release (e.g., long term leaching from soil, transfer to air), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

5. Describe the nature and extent of contamination (3.2.4)

The Defendants will gather information to describe the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Defendants will utilize the information concerning Site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The

Defendants will then implement any study program or modeling techniques identified in the Work Plan or SAP to quantify the concentration of contaminants in the various media at the Site. In addition, Defendants will gather data for calculations of contaminant fate and transport. This process will be continued until the area and depth of contamination are known to the level established in the QAPP and DQOs. EPA shall use the information on the nature and extent of contamination to determine the level of risk to human health presented by the Site. Defendants shall use this information to perform the Ecological Risk Assessment and to help to determine aspects of the appropriate Remedial Action Alternatives to be evaluated.

#### B. Data Analysis (3.4)

##### Evaluate Site characteristics (3.4.1)

The Defendants will analyze and evaluate the data to describe the: 1) Site physical and biological characteristics, 2) contaminant source characteristics, 3) nature and extent of contamination and 4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses will be used in the in the analysis of contaminant fate and transport. The fate and transport evaluation will include an analysis of the actual and potential magnitude of releases from the sources, the horizontal and vertical spread of contamination and the mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis.

Defendants shall identify and address, in a manner approved by EPA, any data gaps that are needed to complete the baseline risk assessment. (See "Guidance for Data Usability in Risk Assessment - OSWER Directive # 9285.7-05 - October 1990.) Defendants will provide a detailed description of the statistical approach that will be used to estimate the relevant exposure point concentration (EPC) for the purposes of evaluating Site-related risks. Defendants shall perform an analysis using the current EPA default procedure requiring the calculation of the 95% upper confidence limit (UCL) of the arithmetic mean using the Land H-statistic (EPA, 1989). However, alternative approaches are available, including surface area weighting, jackknife estimations, and spatial bootstrapping (EPA, 1997), which may be considered as well.

The data analysis process shall also include any information relevant to Site characteristics necessary for evaluation of the need for remedial action in the baseline risk assessment and for the development and evaluation of remedial alternatives. Analysis of data collected during site characterization will meet the DQOs developed in the QAPP stated in the SAP (or revised during the RI).

#### C. Data Management Procedures (3.5)

Defendants will consistently document the quality and validity of field and laboratory data compiled during the RI.

1. Document field activities (3.5.1)

Information gathered during site characterization will be consistently documented and adequately recorded by Defendants in well-maintained field logs and laboratory reports. The documentation method(s) shall be specified in the Work Plan and/or the SAP. Field logs shall be used to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports shall document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

2. Maintain sample management and tracking (3.5.2; 3.5.3.)

Defendants will maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and used in the evaluation of remedial alternatives. Analytical results developed under the Work Plan will not be included in any site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, Defendants will establish a data security system to safeguard chain-of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

D. Site Characterization Deliverables (3.7)

The Defendants will prepare the preliminary site characterization summary and the remedial investigation report.

1. Preliminary Site Characterization Summary (3.7.2)

After completing field sampling and analysis, the Defendants will prepare a concise characterization summary. This summary will review the investigative activities that have taken place, and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site including the affected medium, location, physical state, concentration of contaminants, and quantity. In addition, the location, dimensions, physical condition and varying concentrations of each contaminant throughout each source and the extent of contaminant migration through each of the affected media will be documented. The RI data shall be presented in a computer disk format utilizing Lotus 1-2-3 or other equivalent commonly used computer software to facilitate EPA's preparation of the Human Health Risk Assessment. The Site Characterization Summary shall provide EPA with a preliminary reference for developing the Human Health Risk Assessment, and remediation goals, evaluating the development and screening of Remedial Action Alternatives and the refinement and identification of ARARs.

## 2. Remedial Investigation (RI) (3.7.3)

The Defendants will prepare and submit a draft RI report to EPA for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination and the fate and transport of contaminants. The Defendants will refer to the RI/FS Guidance for an outline of the report format and contents. Following comment by EPA, the Defendants will prepare a final RI report which satisfactorily addresses EPA's comments.

## **TASK 4 - TREATABILITY STUDIES (RI/FS Guidance, Chapter 5)**

If determined by EPA to be necessary, treatability testing will be performed by the Defendants to assist in the detailed analysis of alternatives. In addition, if applicable, testing results and results and operating conditions will be used in the detailed design of the selected remedial technology. The following activities will be performed by the Defendants.

### A. Determination of Candidate Technologies and of the Need for Testing (5.2; 5.4)

The Defendants will identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies will cover the range of technologies required for alternatives analysis (Task 6 a.) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 2 and 6, respectively).

#### 1. Conduct literature survey and determine the need for treatability testing (5.2)

The Defendants will conduct a literature survey to gather information on performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated, or cannot be adequately evaluated, or cannot be adequately evaluated for this Site on the basis of available information, treatability testing will be conducted. Where it is determined by EPA that treatability testing is required, and unless the Defendants can demonstrate to EPA's satisfaction that they are not needed, the Defendants will submit to EPA a Technical Memorandum on Steps and Data outlining the steps and data necessary to evaluate and initiate the treatability testing program.

#### 2. Evaluate treatability studies (5.4)

Once a decision has been made to perform treatability studies, the Defendants and EPA will decide on the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Defendants will either submit a separate treatability testing Work Plan or an amendment to the original Site Work Plan for EPA review and approval.

#### B. Treatability Testing and Deliverables (5.5; 5.6; 5.8)

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted include a Work Plan, a SAP, and a final treatability evaluation report. EPA may also require a treatability study and safety plan, where appropriate.

##### 1. Treatability Testing Work Plan (5.5)

The Defendants will prepare a treatability testing Work Plan or amendment to the original Site Work Plan for EPA review and approval describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing should be documented as well. If pilot scale treatability testing is to be performed, the pilot-scale Work Plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-Site, permitting requirements will be addressed.

##### 2. Treatability study SAP (5.5)

If the original QAPP or FSP is not adequate for defining the activities to be performed during the treatability test, a separate treatability study SAP or amendment to the original Site SAP will be prepared by the Defendants for EPA review and approval. Task 1, Item C of this Statement of Work provides additional information on the requirements of the SAP.

##### 3. Treatability study health and safety plan (5.5)

If the original health and safety plan is not adequate for defining the defining the activities to be performed during the treatment tests, a separate or amended health and safety plan will be developed by the Defendants. Task 1, Item C of this statement of work provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study health and safety plan.

#### 4. Treatability study evaluation report (5.6)

Following completion of treatability testing, the Defendants will analyze and interpret the testing results in a technical report to EPA. Depending on the sequences of activities, this report may be a part of the RI/FS report or a separate deliverable. The report will evaluate each technology's effectiveness, implementability, cost and actual results as compared with predicted results. The report will also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

### **TASK 5 - BASELINE RISK ASSESSMENT**

EPA will perform the Human Health Risk Assessment and provide it to Defendants at the completion of the site characterization activities. This will be combined with Defendants Ecological Risk Assessment and together will form the Baseline Risk Assessment (BRA). The BRA identifies and characterizes the toxicity and effects of the hazardous substances present, describes contamination fate and transport, evaluates the potential for human exposure, and assesses the risk of potential impact or threats on human health. The BRA will provide EPA a basis for determining whether or not remedial action is necessary, a justification for performing any remedial action that may be required, and a risk basis for clean up goals.

#### **A. Human Health Risk Assessment**

EPA will develop the human health portion of the BRA in accordance with the Environmental Protection Agency's (EPA's) Interim Final Risk Assessment Guidance for Superfund (RAGS) - Volume I - Human Health Evaluation Manual (Part A) (December 1989), Development of Risk-Based Remediation Goals (Part B) (December 1991), and Standardized Planning, Reporting, and Review of Superfund Risk Assessments (Part D) (December 1997). These documents describe and illustrate the process of gathering and assessing human health risk information in addition to developing remediation goals. Other resources that EPA will utilize when performing the Human Health Risk Assessment include: Exposure Factors Handbook (EPA/600/P-95/002Fa, August 1997), Land Use in the CERCLA Remedy Selection Process, OSWER Directive NO. 9355.7-04, May 25, 1995; Soil Screening Guidance: Technical Background Document, 9355.4-17A, EPA/1501 R-95/128, May 1996; Soil Screening Guidance: User's Guide, 9355.4-3, April 1996; The Integrated Risk Information System (IRIS); the Health Effects Assessment Summary Tables (HEAST); the Supplemental Guidance to RAGS Region 4 Bulletins-Human Risk Assessment (November 1995). EPA will consider other guidance for the Human Health Risk Assessment as necessary.

The Human Health Risk Assessment process consists of the four components listed below.

#### 1. Data Collection and Evaluation:

EPA will review the information that is available on the hazardous substances present at the Site and identify the chemicals of potential concern (COPCs). The process of identifying COPCs should follow the guidance provided in Region 4's guidance and RAGS Parts A and D. The data shall be tabulated according to the guidance provided in RAGS Part D. This portion of the Human Health Risk Assessment will include a discussion of the rationale for the identification of the COPCs.

## 2. Exposure Assessment and Documentation:

EPA will identify actual and potential exposure points and pathways. Exposure assumptions must be supported with data and must be consistent with Agency policy. For each exposure point, the release source, the transport media (e.g., ground water, surface water, air, etc.) and the exposure route (oral, inhalation, dermal) must be clearly delineated in a Site Conceptual model (RI/FS Guidance Figure 2-2). Both present and future risks at the Site must be developed and presented, using reasonable maximum exposure (RME) scenarios. The Human Health Evaluation Manual, Part A and the supplemental guidance entitled Standard Default Exposure Factors (OSWER Directive 9285.6-03) should be consulted in development of exposure assumptions. EPA referenced default exposure assumptions or default assumptions from other approved sources should be used when Site specific data are not available. EPA will include, in the Human Health Risk Assessment, the exposure scenarios with a description of the assumptions made and the use of data and a figure showing the Site conceptual model. If it is appropriate to use fate and transport models to estimate the exposure concentration at points spatially separate from monitoring points or media not sampled, these models shall be presented and discussed. Representative data must be utilized and the limitations and uncertainties associated with the models must be documented. The Exposure Assessment Section in the Human Health Risk Assessment shall contain exposure concentrations typically based on the 95 percent upper confidence limit on the arithmetic average. The exposure concentration shall be used with the exposure assumptions to determine chemical-specific intake levels for each exposure scenario.

## 3. Toxicity Assessment and Documentation:

EPA will utilize the information in IRIS, HEAST, and if needed, other similar data bases and other information sources as discussed in the Region 4 guidance, to provide a toxicity assessment of the COPCs. EPA will consult RAGS Part D and Region 4's guidance for specific guidance on what information is needed. This assessment will include the types of adverse health effects associated with chemical exposures (including potential carcinogenicity or the toxic effect observed in deriving the Reference Dose (RfD)), the relationships between magnitude of exposures and adverse effects, and the related uncertainties of contaminant toxicity (e.g., the weight of evidence for a chemical's carcinogenicity or the degree of confidence in the RfD).

## 4. Risk Characterization:



EPA will integrate the information developed during the exposure and toxicity assessments to characterize and quantify the current and potential risks to human health and the environment posed by the Site. The risk characterization will identify the uncertainties associated with contaminants, toxicities, and exposure assumptions and other guidance provided in the February 1995 Guidance for Risk Characterization from EPA's Science Policy Council. EPA will consult RAGS Part D and Region 4's guidance for specific guidance on what information is needed.

The human health risk assessment should also include a "central tendency" analysis for the contaminants of concern (COCs) that are identified. This analysis can be used as information to provide perspective for the risk manager and compliance with Agency guidance. Any risk values other than those representing the RME (reasonable maximum exposure)(i.e., central tendency) should be placed in the uncertainty sub-section of the risk characterization section of the Human Health Risk Assessment. The Supplemental Guidance to RAGS: Region 4 Bulletins (November, 1995) should be consulted for further guidance on central tendency issues.

In order to coordinate conduct of the RI/FS and the Human Health Risk Assessment, Defendants shall supply to EPA any information which Defendants believe is relevant to the Human Health Risk Assessment. EPA and Defendants will meet on a periodic basis, at the request of either Party, to discuss the Human Health Risk Assessment. EPA will inform Defendants of the status of the risk assessment and make available drafts of documents being prepared for the Human Health Risk Assessment for Defendants review prior to such meetings. Defendants may make comments or suggestions regarding the Human Health Risk Assessment which EPA, at its discretion, may accept or reject.

Defendants may request that EPA convene a peer review panel regarding the Human Health Risk Assessment in accordance with the EPA Science Policy Council January 1998 Peer Review Handbook, EPA 100-B-98-001. If EPA agrees to convene a peer review panel the terms and conditions for establishing the peer review panel shall be discussed by the Parties. If an agreement can not be reached, the terms and conditions of the peer review panel shall be at the sole discretion of EPA.

#### B. Ecological Risk Assessment

As a component of the BRA, the Defendants shall prepare an Ecological Risk Assessment which assesses the risk of potential impacts or threats to the ecology (including both flora and fauna).

Defendants shall provide a detailed description of risk evaluation methods contained in previously prepared work plans used in the assessments of potential risks to human health and the environment including activities conducted under the RFI that is being conducted pursuant to Defendants' RCRA Permit. EPA's memorandum of September 1996, encourages the coordination of the specific standards and administrative requirements for closure of RCRA regulated units with other cleanup activities,

including those proposed under CERCLA. Therefore, EPA will consider the procedures developed during these previous Site-related investigations.

For preparing the ecological risk assessment, Defendants shall utilize the Supplemental Guidance to RAGS: Region 4 Bulletins-Ecological Risk Assessment (November, 1995) and the Ecological Risk Assessment Guidance for Superfund Process for Design and Conducting Ecological Risk Assessments (June 1997). EPA shall identify other guidance for human health and ecological assessment as necessary.

A Draft Ecological Risk Assessment Report shall be submitted at the completion of site characterization and included in the Draft RI Report (see Task 3). Following comment by EPA, Defendants shall prepare a Final Ecological Risk Assessment Report that will be included in the Final RI Report along with EPA's Human Health Risk Assessment to form the Baseline Risk Assessment.

Defendants shall evaluate and assess the risk to the ecological receptors posed by Site contaminants. The primary Agency guidance that must be followed in evaluating the Site for ecological risks are: Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (EPA 540-R-97-006, June 2, 1997), known as ERAGs, and Region 4's Regional Guidance, Supplemental Guidance to RAGS: Region 4 Bulletins, Ecological Risk Assessment.

The Screening-Level Ecological Risk Assessment (Steps 1 and 2) is the preliminary phase of the risk assessment process which is used to identify contaminants (chemicals of potential concern [COPCs]) that warrant further consideration in the Baseline Risk Assessment Problem Formulation (Step 3). The Ecological Risk Assessment is composed of the following tasks:

1. Screening-Level Ecological Risk Assessment (Steps 1)

Defendants shall review the existing information (Preliminary Assessment, Site Investigation, Expanded Site Investigation, and/or additional information), describe the ecological setting (utilizing the Ecological Checklist found in Appendix A of the ERAGS Process document) and identify contaminants known or suspected to exist at the Site.

2. Screening-Level Exposure Estimate and Risk Calculation

Defendants shall compare the maximum concentrations present in each media to Region 4 Ecological Screening Values and Screening Hazard Quotients. Three tables should be developed for each media to be included in the screening assessment: 1) a list of contaminants whose maximum concentration exceed the Ecological Screening Values, 2) a list of contaminants whose maximum concentration does not exceed the screening values but whose Practical Quantification Limit exceeds the Ecological Screening Values, and 3) a list of contaminants for which there are no screening values. The document containing these first two steps of the ERA process will be submitted to the Agency for review and approval. If

the screening assessment demonstrates the potential for unacceptable risks to ecological receptors, then the ERA process will continue with the following steps.

3. **Baseline Risk Assessment Problem Formulation**

Defendants will develop the problem formulation by refining the ecological chemicals of preliminary concern; further characterizing ecological effects of contaminants; reviewing and refining information on contaminant fate and transport, complete exposure pathways, and ecosystems potentially at risk; selecting assessment endpoints; and developing a conceptual model with working hypotheses or questions that the site investigation will address. The document containing this step shall be submitted to the Agency for review and approval.

4. **Study Design and Data Quality Objective Process**

Defendants shall develop a study design defining the measurement endpoints, data quality objectives and statistical considerations, methods of analysis; and a work plan and sampling and analysis plan for the ecological investigation outlining the data that will be collected during the remedial investigation and the risk assessment methods which will be used in interpreting the data. This document shall be submitted to the Agency for review and approval.

5. **Field Verification of Sampling Design**

Defendants shall verify the field collection methods to assure the implementability of the sampling plan. A document describing this verification procedure and any suggested modifications of the study design, work plan, or sampling and analysis plan shall be submitted to the Agency for review and approval.

6. **Site Investigation and Analysis Phase**

Defendants shall conduct the site investigation to collect the data to be used in the analysis phase as described in the Work Plan and the Sampling and Analysis Plan. Any deviation from the work plan shall be documented and submitted to the Agency for review and approval.

7. **Risk Characterization**

Defendants shall develop the Risk Characterization integrating the results of the exposure profile and exposure-response analyses. The result of this characterization will determine if there are unacceptable risks posed to ecological receptors by Site-related contaminants. If there are unacceptable risks, contaminant levels protective of ecological receptors should be determined and reported as remedial goal options (RGOs). A document containing the Risk Characterization and the RGO development shall be submitted to the Agency for review and approval.

## 8. Risk Management

Defendants shall address the ecological impacts of the remedial options in the Feasibility Study. This document shall be submitted to the Agency for review and approval.

### C. Remedial Goal Options:

The Human Health and Ecological Risk Assessments shall include a section that outlines the Remedial Goal Options (RGOs) for the chemicals and media of concern that are protective of human health, the ecology and ground water. This section should include both ARARs and health-based cleanup goals. This section should contain a table with media cleanup levels for each chemical that contributes to a pathway that exceeds a  $1 \times 10^{-4}$  risk (or what ever risk level is chosen as the remediation trigger by the risk manager) or a HI of 1 or greater or exceeds a state or federal chemical-specific ARAR for each scenario evaluated. Chemicals need not be included if their individual carcinogenic risk contribution to a pathway is less than  $1 \times 10^{-6}$  or their noncarcinogenic HQ is less than 0.1. For the human health risk assessment, the table should include the  $1 \times 10^{-4}$ ,  $1 \times 10^{-5}$ , and  $1 \times 10^{-6}$  risk levels for each chemical, media and scenario (land use) and the HQ 0.1, 1 and 3 levels as well as any chemical-specific ARAR values (state and federal). The values should be developed by combining the exposure levels to each chemical by a receptor from all appropriate routes of exposure (i.e. inhalation, ingestion and dermal) within a pathway and rearranging the Site-specific average-dose equations used in the Human Health Risk Assessment to solve for the concentration term. The resulting table should present one set of RGOs for each media and each land use (e.g., residential (child and adult) and industrial). Ecological RGOs should be developed at No Observable Adverse Effects Level (NOAEL) and Lowest Observable Adverse Effects Level (LOAEL) protection levels for each assessment endpoint.

The purpose of developing RGOs is to provide the RPM with the maximum risk-related media level options on which to develop remediation aspects of the Feasibility Study and Proposed Plan. RAGS Part B is not appropriate for the development of RGOs since Site-specific exposure information is available at this stage in the risk assessment process. These Site-specific RGOs replace the generic PRGs in providing the final risk-based guidance for remedial action. The results of the ecological risk assessment should be the identification of remediation goals for the ecological COCs that would be protective for the receptors. These remediation goal options should be presented for the relevant environmental media.

### D. Report Preparation

The Ecological Risk Assessment Report shall be submitted in accordance with the RI/FS agreement.

The Ecological Risk Assessment Report shall include an environmental assessment that evaluates the environmental risk posed by the Site contaminants of concern. The report shall be revised, as necessary, based on EPA's comments and submitted to EPA for approval.

## **TASK 6 - DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES (RI/FS Guidance, Chapter 4)**

The development and screening of remedial alternatives shall be performed in order to develop an appropriate range of waste management options that will be evaluated. This range of alternatives should include as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but varying in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; removal; and a no-action alternative. The following activities will be performed as a function of the development and screening of remedial alternatives.

### **A. Development and Screening of Remedial Alternatives (4.2)**

Defendants will begin to develop and evaluate a range of appropriate waste management options that, at a minimum, ensure protection of human health and the environment, concurrent with the RI site characterization task.

#### **1. Refine and document remedial action objectives (4.2.1)**

Based on the Baseline Risk Assessment, Defendants will review and, if necessary, modify the Site-specific remedial action objectives, especially the PRGs, that will be prepared by Defendants subject to approval by EPA. The revised PRGs will be documented in a technical memorandum that will be approved by EPA. These modified PRGs will specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

#### **2. Develop general response action (4.2.2)**

Defendants will develop general actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the remedial action objectives.

#### **3. Identify areas or volumes of media (4.2.3)**

Defendants will identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The chemical and physical characterization of the Site will also be taken into account.

#### **4. Identify, screen, and document remedial technologies (4.2.4; 4.2.5)**

If deemed necessary by EPA, Defendants will identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented at the Site. General response actions will be refined to specify remedial technology types. Technology process options for each of the technology types will be identified either concurrent with the identification of technology types, or following the screening of the considered technology types. Process options will be evaluated on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The technology types and process options will be summarized for inclusion in a technical memorandum. The reasons for eliminating alternatives must be specified.

#### 5. Assemble and document alternatives (4.2.6)

The Defendants will assemble selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives will represent a range of treatment and containment combinations that will address either the Site or the operable unit as a whole. A summary of the assembled alternatives and their related action-specific ARARS will be prepared by the Defendants for inclusion in a technical memorandum. The reasons for eliminating alternatives during the preliminary screening process must be specified.

#### 6. Refine alternatives

If deemed necessary by EPA, Defendants will refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information will be collected for an adequate comparison of alternatives. PRGs for each chemical in each medium will also be modified as necessary to incorporate any new risk assessment information presented in the Baseline Risk Assessment Report. Additionally, action-specific ARARs will be updated as the remedial alternatives are refined.

#### 7. Conduct and document screening evaluation of each alternative (4.3)

Defendants may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives will be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening will preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives will include options that use treatment technologies and permanent solutions to the maximum extent practicable.

#### B. Alternatives Development and Screening Deliverables (4.5)

Defendants will prepare a technical memorandum summarizing the work performed in and the results of each task above, including an alternatives array summary and identifying the action-specific ARARs for the alternatives that remain after screening. These will be modified by Defendants if required by EPA's comments to assure identification of a complete and appropriate range of viable alternatives to be considered in the detailed analysis. This deliverable will document the methods, rationale, and results of the alternatives screening process.

### **TASK 7 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES (RI/FS Guidance, Chapter 6)**

Defendants will conduct a detailed analysis of remedial alternatives to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by Defendants during the FS.

#### **A. Detailed Analysis of Alternatives (6.2)**

Defendants will conduct a detailed analysis of alternatives that will consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

##### **1. Apply nine criteria and document analysis (6.2.1 - 6.2.4)**

Defendants will apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARS; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: 1) overall protection of human health and the environment; 2) compliance with ARARS; 3) long-term effectiveness and permanence; 4) reduction of toxicity, mobility, or volume; 5) short-term effectiveness; 6) implementability; 7) cost; 8) state (or support agency) acceptance; and 9) community acceptance. (Note: criteria 8 and 9 are considered after the RI/FS report has been released to the general public.) For each alternative the Defendants should provide: 1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and 2) a discussion of the individual criterion assessment. If the Defendants do not have direct input on criteria 8 (state (or support agency) acceptance) and 9 (community acceptance), these will be addressed by EPA.

##### **2. Compare alternatives against each other and document the comparison of alternatives (6.2.5; 6.2.6)**

The Defendants will perform a comparative analysis between the remedial alternatives. That is, each alternative will be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Defendants will prepare a technical memorandum summarizing the results of the comparative analysis.

B. Feasibility Study Report (6.5)

Defendants will prepare a draft FS report for EPA review and comment. This report, as ultimately adopted or amended by EPA, will provide a basis for EPA's remedy selection and will document the development and analysis of remedial alternatives. Defendants will refer to the RI/FS Guidance for an outline of the report format and the required report content. Defendants will prepare a final FS report that incorporates any amendments by EPA and satisfactorily addresses EPA's comments concerning the draft FS report.



## SUMMARY OF MAJOR DELIVERABLES<sup>2</sup>

| <b>TASK/DELIVERABLE</b>  | <b>MANAGEMENT CATEGORY</b> |
|--|----------------------------|
| <b>TASK 1 SCOPING</b>  |                            |
| - Technical Memorandum on Site-Specific Objectives and General Management Approach | Review and Approve         |
| - Technical Memorandum on Preliminary Remedial Action Objectives and Alternatives  | Review and Approve         |
| - Phase I Conceptual Site Model Report   | Review and Approve         |
| - RI/FS Work Plan  | Review and Approve         |
| - Sampling and Analysis Plan (SAP)   | Review and Approve         |
| - Site Health and Safety Plan  | Review and Comment         |
| <b>TASK 2 - COMMUNITY RELATIONS</b>  |                            |
| - Technical Assistance Plan  | Review and Approve         |
| - Community Advisory Group Plan  | Review and Approve         |
| <b>TASK 3 SITE CHARACTERIZATION</b>  |                            |
| - Technical Memorandum on Modeling of Site Characteristics (where appropriate)     | Review and Approve         |
| - Preliminary Site Characterization Summary  | Review and Comment         |
| - Draft Remedial Investigation (RI) Report   | Review and Approve         |
| <b>TASK 4 TREATABILITY STUDIES</b>   |                            |
| - Technical Memorandum Identifying Candidate Technologies                          | Review and Approve         |
| - Technical Memorandum on  |                            |

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<sup>2</sup> See RI/FS agreement for additional reporting requirements and further instructions on submittal of deliverables.

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|---|--------------------|
| Steps and Data  | Review and Comment |
| - Treatability Testing Work Plan (or amendment to original)                 | Review and Approve |
| - Treatability Study SAP (or amendment to original)                         | Review and Approve |
| - Treatability Study Site Health and Safety Plan (or amendment to original) | Review and Comment |
| - Treatability Study Evaluation Report                                      | Review and Approve |

#### **TASK 5 ECOLOGICAL RISK ASSESSMENT**

- |  |                    |
|--|--------------------|
| - Preliminary Screening-Level Ecological Risk Assessment, Exposure Estimate and Risk Calculation (Steps 1 and 2) | Review and Approve |
| - Ecological Risk Assessment Problem Formulation (Step 3)  | Review and Approve |
| - Ecological Study Design and Data Quality Objectives (Step 4)   | Review and Approve |
| - Ecological Field Verification of Sampling Design (Step 5)  | Review and Approve |
| - Deviations from Work Plan for Site Investigation and Analysis (Step 6)   | Review and Approve |
| - Ecological Risk Characterization and Remedial Goal Options (Step 7)  | Review and Approve |
| - Draft Ecological Risk Assessment Report  | Review and Approve |
| - Final Ecological Risk Assessment Report  | Review and Approve |

#### **TASK 6 DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES**

- |   |                    |
|---|--------------------|
| - Technical Memorandum Documenting Revised Remedial Action Objectives       | Review and Approve |
| - Technical Memorandum on Remedial Technologies, Alternatives and Screening | Review and Approve |

#### **TASK 7 DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES**

- |  |                    |
|--|--------------------|
| - Technical Memorandum Summarizing Results of Comparative Analysis of Alternatives | Review and Approve |
|--|--------------------|

### REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process:

1. The ( revised) National Contingency Plan
2. "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01
3. "Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.
4. "Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies, Volume I" U.S. EPA, Office of Waste Programs Enforcement, July 1, 1991, OSWER Directive No. 9835.1(c).
5. "Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies, Volume II" U.S. EPA, Office Of Waste Programs Enforcement, July 1, 1991, OSWER Directive No. 9835.1(d).
6. "A Compendium of Superfund Field Operations Methods," Two Volumes, U.S. EPA., Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
7. "Guidance for the Data Quality Objectives Process (QA-G-4)," (EPA/500/R-96/055, August 2000).
8. "Guidance for the Data Quality Objectives Process for Hazardous Waste Sites (QA/G-4HW)," (EPA/600/R-00/007, January 2000).
9. "Guidance for the Preparation of Standard Operating Procedures (QA-G-6)," (EPA/240/B-01/004, March 2001).
10. "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001).
11. "EPA Requirements for Quality Assurance Project Plans (QA/R-5)," (EPA/240/B-01/003, March 2001).
12. "Guidance for Quality Assurance Project Plans (QA/G-5)," (EPA/600/R-98/018, February 1998).
13. "Users Guide to the EPA Contract Laboratory," U.S. EPA., Sample Management Office, January 1991, OSWER Directive No. 9240.0-01D.

14. "Interim Guidance with Applicable or Relevant and Appropriate Requirements,' U.S. EPA, OFFICE of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
15. "CERCLA Compliance with Other Laws Manual," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.
16. "Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites," U.S. U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.
17. "Draft Guidance on Superfund Decision Documents," U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.- 02
18. "Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part A), EPA/540/1-89/002
19. "Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part B. Development of Risk-based Preliminary Remediation Goals), EPA/540/R-92/003
20. "Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part D. Standardized Planning, Reporting, and Review of Superfund Risk Assessments), EPA 540-R-97-033
21. "Ecological Risk Assessment Guidance for Superfund: Process for Designing & Conducting Ecological Risk Assessments," U.S. EPA, OSWER Directive No. 9285.7-25, February 1997.
22. "Guidance for Data Usability in Risk Assessment," October, 1990, EPA/540/G-90/008
23. "Performance of Risk Assessments in Remedial Investigation/Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)," August 28, 1990, OSWER Directive No.9835.15.
24. "Supplemental Guidance on Performing Risk Assessment in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)," July 2, 1991, OSWER Directive No. 9835.15(a).
25. "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions," April 22, 1991, OSWER Directive No. 9355.0-30.
26. "Health and Safety Requirements of Employees Employed in Field Activities." U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.
27. OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).
28. "Interim Guidance on Administrative Records for Selection of CERCLA Response Actions," U.S. EPA, Office of Waste Programs Enforcement, March 1,1989, OSWER Directive No. 9833.3A.
29. "Community Relations in Superfund: A Handbook," U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9230.0#3B.
30. "Community Relations During Enforcement Activities And Development of the Administrative Record," U.S. EPA, Office of Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1a.

31. Coordination Between RCRA Corrective Action and Closure and CERCLA Site Activities (EPA, September, 1996)
32. Exposure Factors Handbook (EPA/600/P-95/002Fa, August 1997)
33. Land Use in the CERCLA Remedy Selection Process, OSWER Directive NO. 9355.7-04, May 25, 1995
34. Soil Screening Guidance: Technical Background Document, 9355.4-17A, EPA/1501 R-95/128, May 1996
35. Soil Screening Guidance: User's Guide, 9355.4-3, April 1996
36. Supplemental Guidance to RAGS Region 4 Bulletins-Human Risk Assessment (November 1995)
37. RCRA Cleanup Reforms of 1999 (EPA/530/F-99-018, July 1999)
38. Guide for Conducting Treatability Studies Under CERCLA, Final. U.S. EPA, Office of Solid Waste and Emergency Response, EPA/540/R-92/071a, October 1992.
39. Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM), Enforcement and Investigations Branch, US-EPA, Region 4, SESD, Athens, Georgia, May 1996 with subsequent revisions.
40. Guide to Management of Investigative-Derived Wastes, U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9345.3-03FS, January 1992.
41. Risk Assessment Guidance For Superfund: Volume 1 - Human Health Evaluation Manual Supplement to Part A: Community Involvement in Superfund Risk Assessments, OSWER 9285.7-01E-P, March 1999.

**Exhibit C**

to the **PARTIAL CONSENT DECREE**

**Administrative Order On Consent For Removal Action**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

October 3, 2001

Via facsimile and regular mail

Karen Ballotta  
Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
Washington D.C. 20044-7566

SUBJ: Anniston PCB Site  
Administrative Order on Consent

Dear Ms. Ballotta:

The United States Environmental Protection Agency (EPA) hereby notifies Solutia Inc. that EPA signed the enclosed Anniston PCB Site (Site) Administrative Order on Consent (Order), docket no. CER-04-2002-3752, on October 3, 2001. Solutia Inc. previously signed the Order on September 25, 2001. Under Section XXI of the AOC, the effective date of the AOC is two days after Solutia Inc. receives notification that the Order has been signed by EPA Region 4. Thus, the effective date of this Order will be two days after you receive this facsimile, or October 5, 2001. Pursuant to Section I of this Order, Order No. 01-02-C shall be withdrawn and terminated upon the effective date of this Order, or October 5, 2001.

Please call me at (404)562-9548 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Dustin F. Minor".

Dustin F. Minor  
Associate Regional Counsel

Enclosure (via regular mail only)

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 4

IN THE MATTER OF:  
Anniston PCB Site  
Anniston, Calhoun County, Alabama

Solutia Inc.

Respondent

ADMINISTRATIVE ORDER ON  
CONSENT FOR REMOVAL ACTION

U.S. EPA Region 4  
CERCLA  
CER-04-2002-3752

Proceeding Under Sections 104, 106(a), 107  
and 122 of the Comprehensive  
Environmental Response, Compensation,  
and Liability Act, as amended, 42 U.S.C.  
§§ 9604, 9606(a), 9607 and 9622



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## I. JURISDICTION AND GENERAL PROVISIONS

This Administrative Order on Consent ("Order") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Solutia Inc. ("Respondent"). This Order provides for the performance of the removal action by Respondent and the reimbursement of AOC Oversight Costs incurred by the United States in connection with contamination located in and around Anniston, Calhoun County, Alabama, the "Anniston PCB Site" or the "Site." This Order requires Respondent to conduct the removal action described herein to abate what EPA believes to be an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.

EPA and Respondent entered into an Administrative Order on Consent (Order), docket no. 01-02-C, for a removal action regarding the Anniston PCB Site (Site) which was effective on October 27, 2000. Upon the effective date of this Order, Order no. 01-02-C shall be withdrawn and terminated.

This Order is issued pursuant to the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622, as amended ("CERCLA"), and delegated to the Administrator of EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the EPA Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-C and 14-14-D: Cost Recovery through the Director, Waste Management Division to the Chief, Emergency Response and Removal Branch by EPA Region IV Delegation No. 14-14-C.

EPA has notified the State of Alabama (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

Respondent's participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order (including, but not limited to, findings relating to endangerment to the public health, welfare, or the environment) except in a proceeding to enforce the terms of this Order. Respondent agrees to comply with and be bound by the terms of this Order. Respondent further agrees that it will not contest the basis or validity of this Order or its terms.

EPA determined that it was necessary to enter into this Order to address the short term sampling and removal activities at the Site. Respondent agrees to pursue negotiations that will address additional issues concerning the Site.

## II. PARTIES BOUND

This Order applies to and is binding upon EPA, and upon Respondent and Respondent's heirs, successors, and assigns. Any change in ownership or corporate status of Respondent including,

but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Order.

Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Order and comply with this Order. Respondent shall be responsible for any noncompliance with this Order.

### III. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Order or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"ADEM" shall mean the Alabama Department of Environmental Management and any successor departments or agencies of the State.

"AOC Oversight Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this AOC, verifying the work, or otherwise implementing, overseeing, or enforcing this AOC; as well as, all costs, including, but not limited to, direct and indirect costs, that the United States incurred prior to the effective date of this Order in reviewing or developing plans, reports and other items pursuant to the October 27, 2000 AOC, or otherwise implementing, overseeing, or enforcing the October 27, 2000 AOC.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et seq.*

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall be the effective date of this Order as provided in Section XXI (Effective Date).

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"October 27, 2000 AOC" shall mean the Administrative Order on Consent between EPA and Respondent with docket no. 01-02-C.

"Order" shall mean this Order and all appendices attached hereto. In the event of conflict between this Order and any appendix, this Order shall control.

"Parties" shall mean the United States and the Respondent.

"Quintard Mall Expansion Material" shall mean material that was excavated from property owned by Quintard Mall, Ltd. during the expansion of Quintard Mall, completed in late 2000, and sold, conveyed or otherwise transferred by Quintard Mall, Ltd. or its contractor or subcontractors for use as fill material at properties other than the Quintard Mall site.

"Respondent" shall mean Solutia Inc.

"RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 *et seq.* (also known as the Resource Conservation and Recovery Act).

"Section" shall mean a portion of this Order identified by a roman numeral, unless the Section precedes a numeric provision of a statute or regulation of the United States.

"Site" shall mean for the purposes of this Order, the Anniston PCB Site, which consists of residential, commercial, and public properties located in and around Anniston, Calhoun County, Alabama that contain or may contain hazardous substances, including polychlorinated biphenyl (PCB) impacted soil.

"State" shall mean the State of Alabama.

"United States" shall mean the United States of America.

"Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); and (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

#### **IV. EPA'S FINDINGS OF FACT**

EPA's findings are set forth below. EPA's findings are made solely for purposes of this Order and for no other purposes.

- A. The Anniston PCB Site consists of residential, commercial, and public properties located in and around Anniston, Calhoun County, Alabama that contain or may contain hazardous substances, including polychlorinated biphenyl (PCB) impacted soil.
- B. Solutia Inc. is Respondent.
- C. Solutia Inc.'s Anniston plant encompasses approximately 70 acres of land and is located about 1 mile west of downtown Anniston, Alabama. The plant is bounded to the north by the Norfolk Southern and Erie railroads, to the east by Clydesdale Avenue, to the west by First Avenue, and to the south by U.S. Highway 202.
- D. In 1917, the Southern Manganese Corporation (SMC) opened the plant, which began producing ferro-manganese, ferro-silicon, ferro-phosphorous compounds, and phosphoric acid. In the late 1920s, the plant also started producing biphenyls. SMC became Swann Chemical Company (SCC) in 1930, and in 1935, SCC was purchased by Monsanto Company. From 1935 to 1997, Monsanto Company operated the plant. Respondent represents that PCBs were produced at the plant from 1929 until 1971. In 1997, Monsanto Company formed Solutia Inc. and transferred ownership over certain of its chemical divisions. Solutia Inc. currently produces para-nitrophenol and polyphenyl compounds at the Anniston plant.
- E. During its operational history, the plant disposed of hazardous and nonhazardous waste at two landfills, the west end landfill and the south landfill, which are located adjacent to the plant. The west end landfill encompasses six acres of land, located on the southwestern side of the plant. The west end landfill is built on native clay soil and was used for disposal of the plant's wastes from the mid-1930s until approximately 1960. Respondent represents that in 1960, the west end landfill was transferred to the Alabama Power Company, and Monsanto Company began disposing of wastes at the south landfill. The south landfill is located on the southeast portion of the plant across U.S. Highway 202 and is situated on the lower northeastern slope of Coldwater Mountain. Respondent represents that the south landfill consists of 10 individual cells, of which two cells were used for the disposal of hazardous wastes, as defined under RCRA, from the plant. These two cells have been closed pursuant to RCRA regulations. Disposal of wastes at the south landfill ceased in approximately 1988. In 1993, Alabama Power Company transferred the west end landfill to Monsanto Company and leased a small parcel of land to the north of the west end landfill for its utility lines.
- F. During the time that the west end landfill and the south landfill were used to dispose of wastes, there was a potential for PCBs to be released from the landfills via soils and sediments being transported in surface water leaving the facility. Solutia Inc. has undertaken extensive "Interim Measures" in order to eliminate the potential for such releases. In addition, during the time that PCBs were manufactured by Monsanto Company at its Anniston plant, an aqueous stream

flowing to a discharge point (currently identified as DSN0001) on Monsanto Company's Anniston plant site contained PCBs, and discharge from that discharge point flowed to a ditch, the waters of which flowed toward Snow Creek. Sampling by EPA, Solutia Inc., ADEM, and other parties has indicated that some sediments in drainage ditches leading away from the plant, Snow Creek, and Choccolocco Creek, as well as some sedimentary material in the floodplains of these waterways, contain varying levels of PCBs.

- G. Solutia Inc. has a RCRA permit for the facility, which is regulated by ADEM. Pursuant to its RCRA permit, Solutia Inc. has performed extensive "Interim Measures" on the west end landfill, the south landfill, and areas east and north of the plant during the mid to late 1990s to eliminate the potential for release of PCBs associated with soils and sediments. Solutia Inc. is also engaged in an extensive program under the RCRA permit to investigate and address PCBs in sediments and floodplain soils in the waterways leading away from the plant. EPA has provided oversight of the RCRA permit.
- H. EPA has been performing its own investigation in Anniston under CERCLA to evaluate any threat to public health, welfare, or the environment posed by PCBs in Anniston.
- I. The Agency for Toxic Substances and Disease Registry (ATSDR) Health Consultation related to PCBs in Anniston was released for public comment on February 14, 2000. The ATSDR Health Consultation addresses, among other things, whether PCBs in soil are a threat to the public health in Anniston. The ATSDR Health Consultation was careful to note that the exposure estimates may overestimate or underestimate health risks in Anniston because there is an inadequate description of sampling and analytical methods for some of the data. Subject to the reservations noted above, the ATSDR Health Consultation concluded that PCBs in soil in parts of Anniston present a public health hazard of cancerous and non-cancerous health effects for persons with prolonged exposure, and PCBs in residential soil may present a public health hazard for thyroid and neurodevelopmental effects after exposure durations of less than 1 year. The ATSDR Health Consultation also concluded that further sampling and evaluation are needed to fully assess the scope of contamination and exposure and that further investigation should be done to allow ATSDR to make more specific recommendations for protecting public health. Solutia Inc. commented extensively on the Health Consultation. To date, ATSDR has not responded to public comment and has not issued a final version of the document.
- J. EPA has (and will continue) to share its sampling results with ATSDR to assist ATSDR with any future health studies which ATSDR may conduct in Anniston.
- K. EPA has sampled the soil at hundreds of properties through multiple sampling phases in Anniston for PCBs since June of 1999. The results indicate that many of

the properties tested contain PCBs. For example, EPA sampled residents and businesses near the plant from June 28-30, 1999, for PCBs. The results from these samples indicated that some soils at residences and businesses in the vicinity of the plant contain PCBs. The level of PCBs detected during this June sampling event ranged from non-detect to 15.24 mg/kg. EPA also sampled residences, businesses, and creeks near the plant during February of 2000. The level of PCBs detected during this February sampling event ranged from non-detect to 317 mg/kg.

- L. Based on previous sampling activities conducted by EPA and other parties in Anniston, EPA has a reasonable basis to believe that the properties which will be sampled pursuant to this Order may contain PCBs.
- M. In June of 2000, EPA, with the assistance of ATSDR, established a five point composite sample value of 10 mg/kg of total PCBs as the removal trigger level for PCBs in residential properties in Anniston. For any property where a sample meets or exceeds the trigger level, EPA determined that action should be taken to disassociate the residents from the soil containing PCBs.
- N. EPA has identified nineteen (19) properties, that met or exceeded this removal trigger level. EPA anticipates that additional properties may be identified from prior sampling events, and that Respondent may identify additional properties pursuant to the sampling required pursuant to this Order.
- O. On August 31, 2000, EPA notified Respondent of its potential liability under CERCLA, demanded that Respondent reimburse EPA for its past and future costs at the Site, and requested that Respondent perform a removal action at the Site.

Respondent's participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order (including, but not limited to, findings relating to endangerment to the public health, welfare, or the environment) except in a proceeding to enforce the terms of this Order. Respondent denies that it is a source of any hazardous substances at the Site other than PCBs.

#### V. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

1. The Anniston PCB Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
2. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), including but not limited to PCBs.

3. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

4. Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

a. Respondent Solutia Inc. is the "owner" and/or "operator" of the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

b. Respondent Solutia Inc. was the "owner" and/or "operator" of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the Site as defined by Sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).

6. The conditions present at the Site constitute an imminent and substantial endangerment to public health, welfare, or the environment. Factors that shall be considered in determining the appropriateness of a removal action are set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300 ("NCP").

7. The actual or threatened release of hazardous substances at or from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

8. The removal action required by this Order is necessary to protect the public health, welfare, or the environment, and is not inconsistent with the NCP or CERCLA.

Respondent's participation in this Order shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this Order (including, but not limited to, findings relating to endangerment to the public health, welfare, or the environment) except in a proceeding to enforce the terms of this Order. Respondent denies that it is a source of any hazardous substances at the Site other than PCBs.

## VI. ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Respondent shall comply with the following provisions, including but not limited to all attachments to this Order, and all documents incorporated by reference into this Order, and perform the following actions:



## 1. Designation of Contractor, Project Coordinator, and On-Scene Coordinator

Respondent has previously notified EPA of Respondent's qualifications to perform the removal action required by the October 27, 2000 AOC, and of the names and qualifications of Respondent's contractors. Those notifications are deemed submitted under this Order. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the removal action under this Order at least ten (10) working days prior to commencement of such removal action. EPA retains the right to disapprove of any, or all, of the contractors and/or subcontractors retained by the Respondent, or of Respondent's choice of itself to do the removal action. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor or notify EPA that it will perform the removal action itself within ten (10) working days following EPA's disapproval and shall notify EPA of that contractor's name and qualifications within fifteen (15) working days of EPA's disapproval.

The Project Coordinator previously designated by Respondent pursuant to the October 27, 2000 AOC shall be deemed designated under this Order. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of any Project Coordinator named by Respondent. If EPA disapproves of a selected Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within ten (10) working days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Order shall constitute receipt by Respondent.

EPA has designated Steve Spurlin of the EPA, Region IV Emergency Response and Removal Branch as its On-Scene Coordinator ("OSC"). Respondent shall direct all submissions required by this Order to the OSC at the following address:

U.S. Environmental Protection Agency, Region 4  
Steve Spurlin, On Scene Coordinator  
Waste Management Division  
Atlanta Federal Center  
61 Forsyth Street, S.W.  
Atlanta, GA 30303

EPA and Respondent shall have the right, subject to the immediately preceding paragraph, to change its/their designated OSC or Project Coordinator. Respondent shall notify EPA, ten (10) working days before such a change is made. The initial notification may be made orally but it shall be promptly followed by a written notice.

## 2.0 Work To Be Performed

The overall purposes of the time critical removal action required by this Order are to determine the extent of PCBs, lead, and other hazardous substances as provided in this Order in Zones 1, 2, 3, 6 and "F" identified pursuant to Figure 1 of this Order, and the Oxford Lake Neighborhood ("OLN") Zone identified in Figure 2 of this Order, and to conduct appropriate removal activities

needed to reduce the short-term threat to human health, welfare, or the environment posed by PCBs within Zones 1, 2, 3, 6 "F," and "OLN." Respondent shall perform, at a minimum, the following removal activities:

- a. Conduct composite surface soil sampling as directed by EPA, at residential properties in Zones 1, 2, 3, 6, "F," and "OLN" that have not been sampled by EPA for PCBs. In addition, conduct composite surface soil sampling, as directed by EPA, for residential properties or portions of residential properties in Zones 1, 2, 3, 6, "F," and "OLN" that were previously sampled by EPA but which have field screen data only. As stated in the October 27, 2000 AOC, highest priority for work completed prior to the effective date of this Order has been given to Zone 3, followed by Zones 2, 1, "F," and 6. After the effective date of this Order, Respondent shall, to the maximum extent practicable and taking into account work already completed under the October 27, 2000 AOC, prioritize Zone "OLN" between Zones 3 and 2. Sampling efforts in each zone shall be prioritized in a manner such that initial efforts will focus on areas associated with drainage pathways. Should the sampling data indicate that PCB impacts in an area do not warrant further short-term analysis, the OSC will have the authority to direct sampling efforts in that area to be stopped. If the OSC directs sampling to be stopped in any of the Zones described above, the OSC will retain authority to require Respondent to re-initiate sampling in these Zones if the OSC determines that it is appropriate.
- b. Conduct a removal response at the nineteen (19) properties identified in Exhibit D for which composite sampling results indicate the presence of PCBs in surface soils at a concentration of 10 mg/kg or greater. Based on the composite sampling results, the frontyard, backyard, or both shall be subject to a removal action.
- c. Conduct a removal response at properties having composite sample PCB levels in surface soils at 10 mg/kg or greater which are identified by EPA after sample collection and data review is completed for EPA's current and previous sampling events. Based on the composite sampling results, the frontyard, backyard, or both shall be subject to a removal action.
- d. Conduct a removal response at properties having composite sample PCB levels in surface soils at 10 mg/kg or greater which are identified during sampling conducted by Respondent pursuant to this Order, or were identified during sampling conducted by Respondent pursuant to the October 27, 2000 AOC. Based on the composite sampling results, the frontyard, backyard, or both shall be subject to a removal action.
- e. Respondent's removal response options shall include, but are not limited to, removal, engineered controls, or a combination thereof, of soils, sediments,

or debris. Respondent shall submit for approval the proposed removal response for each property within the timeframe specified in the Removal Work Plan referred to in paragraph 2.1(a). EPA shall make the final determination regarding the appropriate removal response for each property.

- f. For those residential properties identified pursuant to this Order having composite sample PCB levels in surface soils at 10 mg/kg or greater, and where removal of soil is the selected removal response, the removal action shall meet EPA's Clean-up Goal. EPA's Clean-up Goal shall require the removal of the top three (3) inches of soil from the impacted area as identified in paragraphs 2.0(b), (c), and (d). Respondent shall then conduct additional composite sampling and removal of soils in these areas (except as noted in paragraph 2.0(i) below) until remaining soils within the next nine (9) inches of soil (twelve (12) inches below original grade) have PCB levels below two (2) mg/kg. Soils in these areas below a depth of twelve (12) inches shall be removed until the PCB concentration based on composite sampling is below 10 mg/kg.

EPA chose 2 mg/kg as the PCB surface soil Clean-up Goal for this removal action because 2 mg/kg is protective of the public health, welfare, and the environment for the short term. However, EPA's selection of 2 mg/kg as the PCB Clean-up Goal for this removal action will in no way affect EPA's selection of the final long-term protective clean up level for the Site. EPA has not yet determined what the long term clean up level for the Site will be. If EPA selects a long term clean up level lower than 2 mg/kg, it may be necessary to reassess whether the response actions performed on properties pursuant to this Order are sufficient.

- g. During the removal response action for a property, and when directed by the OSC, Respondent shall offer temporary relocation for all residents living at the property and any residents living on property whose property line touches a property at which a removal response is being conducted. In addition, Respondent shall provide for temporary relocation of any other residents living in the vicinity of the property at which a removal response is being conducted if EPA determines it is necessary for health and safety reasons. Any temporary relocations conducted pursuant to this Order must, at a minimum, meet the requirements of the Uniform Relocation Act (URA), 42 U.S.C. § 4601 et. seq.

- h. Unless otherwise specified, constituents to be included for sampling of residential properties under this Order include PCBs and lead.

EPA is currently investigating the potential sources of lead at the Site. EPA has not yet determined whether Respondent is a source of lead contamination at the Site. By agreeing to sample residential properties for

lead pursuant to this Order, Respondent does not acknowledge or admit, and in fact denies, that Respondent is a source of lead at the Site.

- i. For those properties having composite sample PCB levels at 10 mg/kg or higher in surface soils, identified by EPA or Respondent, Respondent shall make an exposure evaluation of the areas under any structures (i.e. crawl space, storage area, unfinished basement, etc.). The evaluation shall identify such areas and assess the potential exposure such areas pose to individuals who may use or live at each property. Respondent shall sample any such area if EPA determines that it poses a potential direct contact threat. A determination regarding the need for a removal response for these areas will be made by EPA on a case-by-case basis.
- j. Conduct a removal response action on the portion of 11<sup>th</sup> Street ditch identified in Figure 1.
- k. Sample the portion of the creek near West 9<sup>th</sup> Street and Eulaton Street identified in Figure 1. Constituents to be sampled will include at a minimum PCBs and priority pollutant metals listed in 40 CFR Part 423 Appendix "A".
- l. To ensure that properties subject to a removal response action pursuant to this Order are not recontaminated with PCBs at a level of 10 mg/kg or higher, Respondent shall conduct monitoring and sampling, as necessary, of such properties until EPA determines that all source areas which may cause recontamination have been addressed sufficiently.<sup>1</sup> At a minimum, Respondent shall monitor all such properties after episodic flood conditions. Any such properties impacted by potentially contaminated flood waters shall be resampled to ensure that previously addressed areas are not being recontaminated. Respondent shall conduct an additional removal response action at any area that is recontaminated at or above 10 mg/kg in surface soils pursuant to the terms and conditions set forth in this Order.
- m. Respondent shall conduct dust sampling in all homes with PCB levels at or above 10 mg/kg at which a removal response action is undertaken pursuant to this Order. Sampling shall be completed prior to the residents re-entry into their residence if temporary relocation was required pursuant to paragraph 2.0 (g). Respondent shall clean up the inside of these homes if the dust sampling results are equal to or greater than 2 mg/kg. In addition,

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<sup>1</sup> This Order does not address the source areas which may potentially recontaminate properties subject to a removal response action pursuant to this Order. EPA and Respondent are currently involved in negotiations to address the long term threat posed by the Site.

Respondent shall have the option to clean up the inside of the home before receiving the dust sampling results.

- n. Respondent shall continue to provide EPA with office space for the On-Scene Coordinators. The space shall be sufficient in size to provide for the following: 1) working space for two OSC's, 2) a centralized conference or meeting area sufficient for small technical meetings, and 3) a working space for EPA's oversight support contractors with adequate counter and shelving areas to allow for sample handling and field equipment storage.
- o. Respondent shall submit for approval an Acquired Property Workplan (APW) pursuant to paragraph 2.1(i) within thirty (45) days from the effective date of this Order.
- p. All soils excavated from the Oxford Lake Softball Complex Fields A, C, and D (Figure 3) with PCB concentrations below 50 ppm shall be stockpiled and secured in an area adjacent to the fields and shall be maintained in accordance with the January 2001 Best Management Practices Plan Oxford Lake Softball Complex submitted to EPA by letter dated March 7, 2001.
- q. Respondent shall cap stockpiled soils under an asphalt parking lot or other suitable cap approved by EPA in an area adjacent to the softball fields within one year from the effective date of this Order. If EPA, after consultation with the City of Oxford, determines that the proposed cap is not acceptable prior to the approval of the Oxford Ballfield Removal Action Work Plan (OBRAWP) referenced in paragraph 2.1(j), or if Respondent fails to complete the cap within one year from the effective date of this Order, then Respondent shall remove the stockpiled material and dispose of it at an EPA approved facility.
- r. As provided in paragraph 2.1(m), Respondent shall notify EPA of any additional properties that Respondent identifies, or has identified, which may have received Quintard Mall Expansion Material.
- s. Conduct sampling for properties that may have received Quintard Mall Expansion Material that are identified after the effective date of this Order by Respondent (pursuant to paragraph 2.0(r)), or by EPA. The OSC shall determine whether the sampling shall be conducted consistent with the EPA approved SAP required pursuant to paragraph 2.1(f), or in the manner provided for in the February 9, 2001 Quintard Mall Expansion Off-Site Soil Characterization Report previously submitted to EPA.
- t. For those properties identified after the effective date of this Order, as having received Quintard Mall Expansion Material, that have composite sample PCB levels in surface soils at 10 mg/kg or greater, Respondent shall

conduct a removal response pursuant to the Removal Work Plan discussed in paragraph 2.1(m). For those properties that may have received Quintard Mall Expansion Material and that were subject to a response action initiated by Respondent prior to the effective date of this Order, EPA may require Respondent to conduct an additional removal response action if EPA composite surface soil sampling indicates that any of these properties have composite sample PCB levels in surface soils at 10 mg/kg or greater.

## 2.1 Work Plan and Implementation

As part of the Work Plans described below, the Respondent must submit a schedule for the above required activities which shall include specific initiation and completion dates. As stated in the October 27, 2000 AOC, highest priority for work completed prior to the effective date of this Order was given to Zone 3, followed by Zones 2, 1, "F," and 6. After the effective date of this Order, to the maximum extent practicable and taking into account sampling events already completed under the October 27, 2000 AOC, Respondent shall prioritize sampling events in the following order: Zone 3 followed by Zones "OLN," 2, 1, "F," and 6. Within the time frame noted below, Respondent shall submit to EPA for approval Work Plans for performing the removal response actions set forth above. The Work Plans shall provide a description of, and an expeditious schedule for, the actions required by this Order.

EPA may approve, disapprove, require revisions to, or modify the Work Plans. If EPA requires revisions to any of the Work Plans, Respondent shall submit a revised Work Plan within (15) working days of receipt of EPA's notification of the required revisions. Respondent shall implement each Work Plan as finally approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, each Work Plan, schedule, and any subsequent modifications shall be fully enforceable under this Order. Respondent shall notify EPA at least 48 hours prior to performing any on-Site work pursuant to each EPA-approved Work Plan. Respondent shall not commence or undertake any removal activities on-Site without prior EPA approval.

Respondent shall attempt to obtain access to all properties for which access is needed to perform the response actions required by this Order according to the procedures set forth in Section VI(3), and within the timeframes noted in this Order, the Access Schedule referred to in paragraph 2.1(g), or the Work Plans approved pursuant to this Order. If Respondent is denied access (after attempting to obtain access in the manner described in Section VI(3)) to any properties for which access is necessary pursuant to this Order, then all schedules in this Order and the Work Plans approved pursuant to this Order, which require access in order to comply with such schedules, shall be extended (with respect to the properties for which access is denied only) until ten (10) days after Respondent or EPA (on behalf of Respondent) obtains access to any such properties. However, any such schedule extension(s) shall not apply with respect to properties for which Respondent obtains access within the timeframes specified in this Order or the Work Plans approved pursuant to this Order.

- a. The Removal Work Plan previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted and approved under this Order. If any changes or additions to the Removal Work Plan are necessary to satisfy the terms of this Order, Respondent shall submit an addendum within thirty (30) days from the effective date of this Order.
- b. It is anticipated that the approach approved by EPA for the properties identified in paragraph 2.0(b) will serve as the template for the removal response action at similar properties identified by Respondent pursuant to this Order. Respondent shall submit to EPA for approval within thirty (30) days of Respondent's receipt of data having composite sample PCB levels at 10 mg/kg or greater in surface soils, an addendum to the original Removal Work Plan and to the original Health & Safety Plan. This addendum will address properties identified pursuant to paragraphs 2.0(c) and (d) above. The addendum shall include a schedule, as well as details of any modifications to the original Removal Work Plan and the original Health and Safety Plan specific to the newly identified properties.
- c. The Indoor Sampling Plan for dust sampling of properties that require a removal response action because they have a composite PCB level equal to or greater than 10 mg/kg in surface soils that was previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted and approved under this Order. If any changes or additions to the Indoor Sampling Plan are necessary to satisfy the terms of this Order, Respondent shall submit such an addendum within thirty (30) days from the effective date of this Order.
- d. The 11th Street Ditch sampling plan previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted and approved under this Order. If any changes or additions to the 11th Street Ditch sampling plan are necessary to satisfy the terms of this Order, Respondent shall submit an addendum to the 11th Street Ditch sampling plan within thirty (30) days from the effective date of this Order. Prior to the effective date of this Order, Respondent mobilized to the Site to initiate the removal response actions required by paragraph 2.0(b) above and shall remain mobilized pursuant to this Order. Also, prior to the effective date of this Order, Respondent completed the sampling required by the 11th Street Ditch sampling plan, and received the laboratory data (as provided in paragraph 2.1(h)).

The 11th Street Ditch Removal Response Action Work Plan previously submitted by Respondent pursuant to the October 27, 2000 AOC shall be deemed submitted under this Order. Within fourteen (14) days of EPA's approval of the 11th Street Ditch Removal Response Action Work Plan, Respondent shall submit a schedule to EPA for approval detailing those activities required to complete the response actions approved in the 11th Street Ditch Removal Response Action Work Plan and the time required to complete each activity. The Work Plan shall require a removal response action in the identified areas which shall prevent the potential for direct

contact with soils and sediments with a PCB concentration of 10 mg/kg or higher, and shall prevent the release of soils and sediments with a PCB concentration exceeding 1 mg/kg.

- e. The West 9th Street and Eulaton Creek sampling plan previously submitted by Respondent and approved pursuant to the October 27, 2000 Order AOC shall be deemed submitted and approved under this Order. If any changes or additions to the West 9th Street and Eulaton Creek sampling plan are necessary to satisfy the terms of this Order, Respondent shall submit an addendum to the West 9th Street and Eulaton Creek sampling plan within thirty (30) days from the effective date of this Order.
- f. The Sampling and Analysis Plan (SAP) previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted and approved under this Order. If any changes or additions to the SAP are necessary to satisfy the terms of this Order, Respondent shall submit an addendum to the SAP within thirty (30) days from the effective date of this Order.
- g. The Access Schedule previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted and approved under this Order. If any changes or additions to the Access Schedule are necessary to satisfy the terms of this Order, Respondent shall submit an addendum to the Access Schedule within thirty (30) days from the effective date of this Order. Within thirty (30) days of obtaining EPA's approval of the SAP and obtaining access to at least one property, Respondent shall mobilize to initiate the required sampling for the applicable sampling event.
- h. The Data Management Work Plan (DMWP) previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted under this Order. If any changes or additions to the DMWP are necessary to satisfy the terms of this Order, Respondent shall submit an addendum to the DMWP within thirty (30) days from the effective date of this Order.
- i. The APW referenced in paragraph 2.0(o) shall set forth the proposed removal response for acquired properties, a description of how Respondent proposes to deal with tenants at acquired properties, and a schedule for addressing acquired properties.
- j. The Oxford Ballfield Removal Action Work Plan (OBRAWP) previously submitted by Respondent to EPA for approval shall be deemed submitted under this Order. The OBRAWP provides a description of the proposed removal response required in paragraph 2.0(q) above, including design drawings, a Best Management Practices Plan for erosion control during construction, a Health and Safety Plan, a long term operations and maintenance plan, and a schedule for implementation. The OBRAWP also includes a description of how material will be sampled,



removed, and disposed of offsite at an EPA approved facility if either of the following occur: 1) the proposed cap is not completed within one year from the effective date of this Order, or 2) EPA, after consultation with the City of Oxford, determines that capping is inappropriate prior to EPA's approval of the OBRAWP.

- k. Prior to the effective date of this Order, Respondent mobilized to the Site to initiate the removal response actions required by paragraph 2.0(q) above and shall remain mobilized pursuant to this Order.
- l. Within ninety (90) days of completion of the work defined in the OBRAWP, Respondent shall submit a completion report to EPA that will include a description of the work completed and as-built drawings of the work completed.
- m. Respondent shall submit for approval a Quintard Mall Off-Site Soil Removal Work Plan (QMOSRWP) within thirty (30) days of the following: a) receipt of validated data indicating that a property that may have received Quintard Mall Expansion Material contains PCB levels in surface soils at a concentration of 10 mg/kg or greater, or b) receipt of notice from EPA regarding a property that may have received Quintard Mall Expansion Material, which was subject to a removal response action initiated by Respondent prior to the effective date of this Order, upon which EPA requires an additional removal response action pursuant to paragraph 2.0(t) above. The QMOSRWP shall include a description of the proposed removal procedures for PCB impacted soil, and a schedule for the above required activities which shall include specific initiation and completion dates.

## 2.2 Health and Safety Plan

With the submission of each Work Plan, Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of work under this Order. Each plan shall be prepared in accordance with EPA's current Standard Operating Safety Guide, dated November 1984, and currently updated July 1988. In addition, each plan shall comply with all current applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 CFR Part 1910. Health and safety plans previously submitted and approved pursuant to the October 27, 2000 AOC shall be deemed submitted and approved under this Order. Respondent shall submit a health and safety plan with the submission of any additional Work Plans required by this Order. Respondent shall incorporate all changes to the plan(s) recommended by EPA, and implement the plan(s) during the pendency of the removal action.

## 2.3 Quality Assurance and Sampling

All sampling and analyses performed pursuant to this Order shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow the following documents, as appropriate, as guidance for

QA/QC and sampling: "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures," OSWER Directive Number 9360.4-01; dated January 1990; "Compendium of ERT Procedures," OSWER Directives Numbered 9360.4-04 through 9360.4-08.

The Quality Assurance Plan (QAPP) for conducting the sampling required pursuant to this Order previously submitted by Respondent and approved pursuant to the October 27, 2000 AOC shall be deemed submitted under this Order. The QAPP must be in accordance with EPA Guidance for QAPPS, EPA QA/G-5.

Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Respondent shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Respondent while performing work under this Order. Respondent shall notify EPA not less than thirty (30) days in advance of any sample collection activity, unless the OSC agrees in writing to a shorter timeframe with regard to a specific sampling event. EPA shall have the right to take any additional samples that it deems necessary.

#### 2.4 Post-Removal Site Control

In accordance with the Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for post-removal Site control consistent with Section 300.415(k) of the NCP and OSWER Directive 9360.2-02. Upon EPA approval, Respondent shall implement such controls and shall provide EPA with documentation of all post-removal Site control arrangements.

#### 2.5 Reporting

Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Order on the eighth (8th) day of each month after the effective date of this Order until termination of this Order, unless otherwise directed by the OSC in writing. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems. If Respondent owns any portion of the Site, at least thirty (30) days prior to the conveyance of any interest in real property at the Site, Respondent shall give written notice that the property is subject to this Order to the transferee and written notice to EPA of the proposed conveyance, including the name and address of the transferee. Respondent agrees to require that its successor comply with the immediately preceding sentence and Section VI(3) - Access to Property and Information.

## 2.6 Final Report

Within ninety (90) days after completion of all removal response actions required under this Order, the Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Order. The final report shall conform with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and OSWER Directive No. 9360.3-03 - "Removal Response Reporting." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Order, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

## 3. Access to Property and Information

Respondent shall attempt to obtain access to the Site and off-Site areas to which access is necessary to implement this Order, and shall provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this Order. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and ADEM representatives. Such access provided and/or obtained by Respondent shall permit these individuals to move freely in order to conduct actions which EPA determines to be necessary. Respondent shall submit to EPA, upon receipt, the results of all sampling or tests and all other data generated by Respondent or its contractor(s), or on the Respondent's behalf during implementation of this Order.

- a. For all properties (other than Oxford Lake Park) where a response action under this Order is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall send (within the timeframes specified in this Order, the AS, or the Work Plans approved pursuant to this Order) the applicable correspondence (as provided below) to all resident(s), owner(s), and/or non-resident owner(s) from whom access is needed to perform a response action pursuant to this Order. The correspondence and agreement attached to this Order as Exhibit A shall be sent to all resident(s), owner(s), and/or non-resident owner(s) whose property Respondent is required to sample (in order to determine if further action is necessary) pursuant to this Order. The correspondence and agreement attached to this Order as Exhibit B shall be sent to all resident(s), owner(s), and/or non-resident owner(s) whose property's composite sampling results indicate the presence of PCBs in surface soils at a concentration of 10 mg/kg or greater, and whose property

Respondent needs access to in order to perform a removal response action pursuant this Order.

Respondent shall attempt to identify all resident(s), owner(s), and/or non-resident owner(s) from whom Respondent should obtain access in order to perform any actions required pursuant to this Order by using, at a minimum, the Calhoun County's official records.

Respondent shall send all of the correspondence requesting access pursuant to this Order via certified mail, return receipt requested. If Respondent does not receive the necessary access agreements within thirty (30) days from the date that the resident(s), owner(s), and/or non-resident owner(s) received it, Respondent shall notify EPA in writing, within ten (10) days from the date that the applicable access agreement was due, that Respondent was unable to obtain access from any such party. If the resident(s), owner(s), and/or non-resident owner(s) fail to sign for the certified correspondence within thirty (30) days from the date the correspondence was mailed by Respondent, Respondent shall notify EPA, within thirty-five (35) days from the date the correspondence was originally mailed by Respondent, that Respondent was unable to obtain access from any such party. For any party from whom Respondent was unable to obtain access, Respondent shall maintain a copy of all correspondences, county records, and any other evidence or information Respondent has regarding the resident(s), owner(s), and/or non-resident owner(s) from whom Respondent was unable to obtain access, and provide it to EPA upon request. Respondent shall provide to EPA within 14 days of each denial of access, an "EPA Notification of Noncompliance (Sampling)" which contains all of the information in the model "EPA Notification of Noncompliance (Sampling)" in Exhibit C. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorneys' fees incurred by the United States in obtaining such access. EPA acknowledges that if Respondent has attempted to obtain access to properties subject to this Order in the manner described above, and is unable to do so, then Respondent will not be liable for stipulated penalties for failure to meet any schedules in this Order or the Work Plans approved pursuant to this Order with respect to properties for which access is denied. To the extent that any resident(s), owner(s), and/or non-resident owner(s) is adverse to Solutia Inc. in a legal proceeding and is represented by counsel, Respondent may send the appropriate correspondence and agreement discussed in Section VI(3) to any such person's counsel only.

- b. For Oxford Lake Park, Respondent shall use its best efforts to obtain all necessary access agreements within fifteen (15) days after the effective date of this Order, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. Respondent shall describe in writing its efforts to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions for Oxford Lake Park described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorneys' fees incurred by the United States in obtaining such access.

#### 4. Record Retention, Documentation, Availability of Information

Respondent shall preserve all documents and information relating to work performed under this Order, or relating to the hazardous substances found on or released from the Site, for ten years following completion of the removal response actions required by this Order. At the end of this ten year-period and thirty (30) days before any document or information is destroyed, Respondent shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Respondent shall provide documents and information retained under this Section at any time before expiration of the ten year- period at the written request of EPA.

Respondent may assert a business confidentiality claim pursuant to 40 CFR § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this Order, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Respondent. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Respondent.

Respondent shall maintain a running log of privileged documents on a document-by-document basis, containing the date, author(s), addressee(s), subject, the privilege or grounds claimed (e.g., attorney work product, attorney-client), and the factual basis for assertion of the privilege. Respondent shall keep the "privilege log" on file and available for inspection. EPA may at any time challenge claims of privilege.

#### 5. Off-Site Shipments

All hazardous substances, pollutants, or contaminants removed off-Site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, pursuant to Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and the off-site rule at 40 CFR 300.440. EPA will provide information on the acceptability of a facility under Section 121(d)(3) of CERCLA and 40 CFR 300.440.

It is understood that, pursuant to this provision and the statutes and regulations cited herein, material containing PCBs at levels less than 50 mg/kg may be disposed of at a facility permitted for the disposal of non-hazardous wastes under Subtitle D of RCRA or appropriate State law, provided that such material does not contain elevated levels of other hazardous substances that would prohibit it from being disposed of at a non-hazardous waste facility.

#### 6. Compliance With Other Laws

Respondent shall perform all actions required pursuant to this Order in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section

121(e) and 40 CFR Section 300.415(i). In accordance with 40 CFR Section 300.415(i), all on-Site actions required pursuant to this Order shall, as determined by EPA, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. (See "The Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991). Respondent shall identify ARARs in the Work Plan subject to EPA approval.

#### 7. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the actions conducted pursuant to this Order causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Order, including, but not limited to the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC at (404)562-8743 or, in the event of his/her unavailability, shall notify the EPA Hotline at (800)424-8802 of the incident or Site conditions. If Respondent fails to respond, EPA may respond to the release or endangerment and reserve the right to pursue cost recovery.

In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify EPA's OSC and the National Response Center at telephone number (800) 424-8802. Respondent shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA Section 103(c) and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §§ 11001 *et seq.*

#### VII. AUTHORITY OF THE EPA ON-SCENE COORDINATOR

The OSC shall be responsible for overseeing the Respondent's implementation of this Order. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this Order, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

#### VIII. REIMBURSEMENT OF COSTS

Respondent shall reimburse EPA for all AOC Oversight Costs, which were incurred in a manner not inconsistent with the NCP, incurred by the United States.

On a periodic basis, EPA shall submit to Respondent a bill for AOC Oversight Costs that includes a SCORPIOS report (or if Region 4 is no longer using SCORPIOS, the type of cost summary report Region 4 is using at the time of the bill). Respondent shall, within thirty (30) days of receipt of the bill, remit a cashier's or certified check for the amount of the bill made payable to the "Hazardous Substance Superfund," to the following address:

United States Environmental Protection Agency  
Region IV  
Superfund Accounting  
P.O. Box 100142  
Atlanta, Georgia 30384  
Attn: Collection Officer in Superfund

Respondent shall simultaneously transmit a copy of the check to Ms. Paula V. Batchelor at:

U.S. Environmental Protection Agency  
CERCLA Program Services Branch  
Waste Management Division  
61 Forsyth Street S.W.  
Atlanta, GA 30303

Payments shall be designated as "AOC Oversight Costs - Anniston PCB Site" and shall reference the payor's name and address, the EPA site identification number 04-S9, and the docket number of this Order.

In the event that the payments for AOC Oversight Costs are not made within thirty (30) days of the Respondent's receipt of the bill, Respondent shall pay interest on the unpaid balance. Interest is established at the rate specified in Section 107(a) of CERCLA. The interest for Respondent's failure to make timely payments on AOC Oversight Costs shall begin to accrue on the date of the Respondent's receipt of the bill. Interest shall accrue at the rate specified through the date of the payment. Payments of interest made under this paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section.

Respondent may dispute all or part of a bill for AOC Oversight Costs submitted under this Order, if Respondent alleges that EPA has made an accounting error, or if Respondent alleges that a cost item is inconsistent with the NCP, or that a cost is not appropriate for reimbursement under the terms of this Order.

If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs into the Hazardous Substance Fund as specified above on or before the due date. Within the same time period, Respondent shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent shall simultaneously transmit a copy of both checks to the OSC. Respondent shall ensure that the prevailing party or parties in

the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within ten (10) days after the dispute is resolved.

#### **IX. DISPUTE RESOLUTION**

The parties to this Order shall attempt to resolve, expeditiously and informally, any disagreements concerning this Order.

If the Respondent objects to any EPA action taken pursuant to this Order, including billings for AOC Oversight Costs, the Respondent shall notify EPA in writing of its objection(s) within thirty (30) days of receipt of notice of such action, unless the objection(s) has/have been informally resolved.

EPA and Respondent shall within thirty (30) days from EPA's receipt of the Respondent's written objections attempt to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended at the sole discretion of EPA. EPA's decision regarding an extension of the Negotiation Period shall not constitute an EPA action subject to dispute resolution or a final agency action giving rise to judicial review.

Any agreement reached by the parties pursuant to this Section shall be in writing, signed by both parties, and shall upon the signature by both parties be incorporated into and become an enforceable element of this Order. If the parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Director, Waste Management Division level or higher will issue a written decision on the dispute to the Respondent. The decision of EPA shall be incorporated into and become an enforceable element of this Order upon Respondent's receipt of the EPA decision regarding the dispute. Respondent's obligations under this Order shall not be tolled by submission of any objection for dispute resolution under this Section.

Following resolution of the dispute, as provided by this Section, Respondent's shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. No EPA decision made pursuant to this Section shall constitute a final agency action giving rise to judicial review prior to a judicial action brought by the United States to enforce the decision.

#### **X. FORCE MAJEURE**

Respondent agrees to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, that delays or prevents performance of any obligation under this Order despite



Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance.

Respondent shall notify EPA orally within forty-eight (48) hours after the event, and in writing within seven (7) days after Respondent becomes or should have become aware of events, which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Respondent shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this Section shall waive any claim of force majeure by the Respondent.

If EPA determines a delay in performance of a requirement under this Order is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by EPA. Such an extension shall not alter Respondent's obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

#### XI. STIPULATED AND STATUTORY PENALTIES

For each day, or portion thereof, that Respondent fails to perform, fully, any requirement of this Order in accordance with the schedule established pursuant to this Order and any plans approved pursuant to this Order, Respondent shall be liable as follows:

| Period of Failure to Comply | Penalty Per Violation Per Day |
|-----------------------------|-------------------------------|
| 1st through 7th day         | \$500.00                      |
| 8th through 15th day        | \$1,000.00                    |
| 16th day and beyond         | \$5,000.00                    |

Upon receipt of written demand by EPA, Respondent shall make payment to EPA within thirty (30) days. Interest shall accrue on late payments as of the date the payment is due which is the date of the violation or act of non-compliance triggering the stipulated penalties.

Even if violations are simultaneous, separate penalties shall accrue for separate violations of this Order. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether EPA has notified Respondent of a violation or act of noncompliance. The payment of penalties shall not alter in any way Respondent's obligation to complete the performance of the work required under this Order.

Violation of any provision of this Order may subject Respondent to civil penalties of up to twenty-seven thousand five-hundred dollars (\$27,500) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Respondent may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

Should Respondent violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

## XII. RESERVATION OF RIGHTS

Except as specifically provided in this Order, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law. EPA reserves the right to bring an action against Respondent under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this Order or the Site and not reimbursed by Respondent.

## XIII. OTHER CLAIMS

By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. Neither the United States nor EPA shall be deemed a party to any contract entered into by the Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

Except as expressly provided in Section XIV - Covenant Not To Sue, nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against the Respondent or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a).

This Order does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Respondent waives any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this Order.

No action or decision by EPA pursuant to this Order shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

#### XIV. COVENANT NOT TO SUE

Except as otherwise specifically provided in this Order, upon issuance of the EPA notice referred to in Section XIX - Notice of Completion, EPA covenants not to sue Respondent for judicial imposition of damages or civil penalties or to take administrative action against Respondent for any failure to perform removal actions agreed to in this Order except as otherwise reserved herein.

Except as otherwise specifically provided in this Order, in consideration and upon Respondent's payment of the AOC Oversight Costs specified in Section VIII of this Order, EPA covenants not to sue or to take administrative action against Respondent's under Section 107(a) of CERCLA for recovery of AOC Oversight Costs incurred by the United States in connection with this removal action or this Order. This covenant not to sue shall take effect upon the receipt by EPA of the payments required by Section VIII - Reimbursement of Costs.

These covenants not to sue are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Order. These covenants not to sue extend only to the Respondent and do not extend to any other person.

#### XV. CONTRIBUTION PROTECTION

With regard to claims for contribution against Respondent for matters addressed in this Order, the Parties hereto agree that the Respondent is entitled to protection from contribution actions or claims to the extent provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4).

Nothing in this Order precludes the United States or the Respondent from asserting any claims, causes of action or demands against any persons not parties to this Order for indemnification, contribution, or cost recovery.

#### XVI. INDEMNIFICATION

Respondent agrees to indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (A) arising from, or on account of, acts or omissions of Respondent, Respondent's officers, heirs, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out actions pursuant to this Order; and (B) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent, and (any one or more) persons for performance of work on or relating to the Site, including claims on account of construction delays. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding paragraph.

Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between (any one or more of) Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

#### XVII. INSURANCE

The proof of insurance previously submitted by Respondent to EPA pursuant to the October 27, 2000 AOC shall be deemed submitted under this Order. Respondent shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of five (5) million dollars, combined single limit. Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy, if Respondent has not done so already. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

#### XVIII. MODIFICATIONS

Requirements of this Order may be modified in writing by mutual agreement of the parties.

If Respondent seeks permission to deviate from any approved Work Plan or schedule, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed Work Plan modification and its basis.

No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified.

#### XIX. NOTICE OF COMPLETION

When EPA determines, after EPA's review of the Final Report, that all removal actions have been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, EPA will provide notice to the Respondent. If EPA determines that any removal actions have not been completed in accordance with this Order, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice.

Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Order.

**XX. SEVERABILITY**

If a court issues an order that invalidates any provision of this Order or finds that Respondent has sufficient cause not to comply with one or more provisions of this Order, Respondent shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

**XXI. EFFECTIVE DATE**

All aspects of this Order shall be effective (2) days after Respondent receives notification that the Order has been signed by EPA Region 4.

The undersigned representative of Respondent certifies that they are fully authorized to enter into the terms and conditions of this Order and to bind the party they represent to this document.

Agreed this 25<sup>th</sup> day of September, 2001.

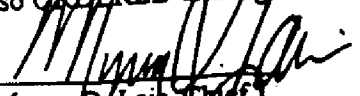
Solutia Inc.

By: 

Karl R. Barnickol (Typed Name)

Its: Senior Vice President, General Counsel, and Secretary

It is so ORDERED and Agreed this 3<sup>d</sup> day of October, 2001:

BY: 

DATE: 10/3/2001

Myron D. Lair, Chief  
Emergency Response and Removal Branch, Region IV  
U.S. Environmental Protection Agency

EFFECTIVE DATE: 10/5/2001

---

**Exhibit A**  
**SAMPLING CORRESPONDENCE**  
**AND**  
**LICENSE AGREEMENT**



**Exhibit A**

**SAMPLING CORRESPONDENCE**

{Name}  
{Address}

Re: Property Located at {address}

Dear \_\_\_\_\_:

Solutia Inc. and the United States Environmental Protection Agency (EPA) have entered into an administrative agreement requiring Solutia to perform certain tasks in and around the Anniston area with EPA oversight. At EPA's request and pursuant to the administrative agreement, Solutia has agreed to investigate residential properties in certain areas in and around Anniston for the presence of polychlorinated biphenyls ("PCBs") and lead. The above referenced property is within one of the areas in which Solutia agreed to investigate.

So that Solutia can perform its investigation, Solutia requests that you grant permission for Solutia, EPA, the Alabama Department of Environmental Management (ADEM), and their contractors and representatives to enter your property by signing the enclosed License Agreement and returning it to me in the enclosed, self-addressed, stamped envelope within thirty days from the day you receive this letter.

Solutia will need to obtain soil samples from your front and back yards. Those samples will then be analyzed at an EPA-approved laboratory for the presence of PCBs and lead. Under the administrative agreement, Solutia has agreed to remove or otherwise address soils where the initial sampling reveals the presence of PCBs at levels equal to or greater than 10 parts per million. After your soil is analyzed, Solutia will provide you with copies of the sampling results. If the results indicate a presence of PCBs at levels equal to or greater than 10 parts per million, Solutia will request access to undertake additional response activities to address PCB impacted areas on your property. The initial sampling and any additional work performed on your property will not cost you any money and will be designed to minimize any inconvenience to you.

If you have any questions regarding the attached License Agreement, please do not hesitate to give me a call. I can be reached at \_\_\_\_\_. Alternatively, you may call Steve Spurlin, EPA's on-scene coordinator responsible for overseeing Solutia's activities under the administrative agreement. Mr. Spurlin can be reached at EPA's Community Relations Center in Anniston at (256)236-2599.

We thank you for your cooperation and appreciate your prompt attention to this matter.



**Exhibit A**

**SAMPLING LICENSE AGREEMENT**

This License Agreement is made between \_\_\_\_\_  
\_\_\_\_\_ a landowner (or tenant) in Calhoun County, Alabama, owning (or leasing)  
property located at \_\_\_\_\_  
("Owner") (or "Tenant), and Solutia Inc., 702 Clydesdale Avenue, Anniston, Alabama, 36201-5390.

1. Owner (or Tenant) hereby grants to Solutia, EPA, ADEM, and their contractors and representatives a revocable license to enter upon real property owned by Owner (or leased by Tenant) located at \_\_\_\_\_ (the "Property"), for the following purpose: Taking soil samples from the Property and analyzing such samples for the presence of polychlorinated biphenyls ("PCBs") and lead. This access shall permit the collection of soil samples from the unimproved portions of the Property and any soils beneath any structures on the Property, including crawl space areas or unfinished basements.
2. Solutia agrees, upon completion of the sampling and testing to be performed, that all material and equipment shall be removed from the Property, except for improvements agreed to by Owner (if Tenant is signing this license, put Owners name here). The Property will be restored as nearly as possible to its original state and condition.
3. Solutia assumes responsibility for, and agrees to indemnify Owner (or Tenant) for, any liability for losses, expenses, damages, demands, and claims in connection with or arising out of any injury to persons or damage to property sustained in connection with or arising out of performance of the work hereunder.
4. Solutia assumes responsibility and liability for violations of Federal, State, or local law incurred in connection with or arising out of performance of the work hereunder.
5. Owner (or Tenant) shall advise Solutia of any utility lines or other hazardous or potentially hazardous conditions that Owner (or Tenant) is aware of that might reasonably be expected to be affected by the work to be performed.
6. This Agreement contains the entire agreement among the parties, and no other agreements, whether oral or written, between the parties with respect to the subject matter of this Agreement shall be binding or valid, except as provided above.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2000.

By:

\_\_\_\_\_

Print/Typed Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**SOLUTIA INC.**

By:

Title: \_\_\_\_\_  
\_\_\_\_\_

---

**Exhibit B**  
**SOIL REMOVAL CORRESPONDENCE**  
**AND**  
**LICENSE AGREEMENT**

Exhibit B

**SOIL REMOVAL CORRESPONDENCE**

{Name}  
{Address}

Re: Property Located at (address)

Dear \_\_\_\_\_:

Solutia Inc. and the United States Environmental Protection Agency (EPA) have entered into an administrative agreement requiring Solutia to perform certain tasks in and around the Anniston area with EPA oversight. As you are aware, EPA and/or Solutia previously sampled your property for the presence of PCBs and found a level of PCBs in a composite sample equal to or greater than 10 parts per million in your (front/back/or whole) yard. At EPA's request and pursuant to the administrative agreement, Solutia has agreed to perform a removal action on your property to address the presence of PCBs in your (front/back/or whole) yard. In addition, Solutia has agreed pursuant to the administrative agreement to sample dust in in your home for the presence of PCBs, and if the dust samples indicate PCB concentrations equal to or greater than 2 parts per million, Solutia has agreed to clean the inside of your home.

So that Solutia can perform the removal action, Solutia requests that you grant permission for Solutia, EPA, the Alabama Department of Environmental Management (ADEM), and their contractors and representatives to enter your property for the following purposes: 1) to address PCB impacted soils on your property; and 2) to sample the dust inside of your home for PCBs, and if necessary to clean it up. You may grant permission for the above described activities by signing the enclosed License Agreement and returning it to me in the enclosed, self-addressed, stamped envelope within thirty days from the day you receive this letter.

Before Solutia performs any removal action on your property, the action will be explained to you in writing. Depending on the scope of the removal action necessary on your property, it may be necessary to temporarily relocate all of the residents living in the home during the removal action. Any temporary relocation offered pursuant to the administrative agreement between EPA and Solutia Inc. will be in accordance with applicable Federal and State law. The work performed on your property, including any temporary relocation during the removal action, will not cost you any money and will be designed to minimize any inconvenience to you.

If you have any questions regarding the attached License Agreement, please do not hesitate to give me a call. I can be reached at \_\_\_\_\_. Alternatively, you may call Steve Spurlin, EPA's on-scene coordinator responsible for overseeing Solutia's activities under the administrative agreement. Mr. Spurlin can be reached at EPA's Community Relations Center in Anniston at (256)236-2599.

We thank you for your cooperation and appreciate your prompt attention to this matter.

Sincerely,

---

Solutia Inc.

Exhibit B

**SOIL-REMOVAL LICENSE AGREEMENT**

This License Agreement is made between \_\_\_\_\_  
\_\_\_\_\_ a landowner (or tenant) in Calhoun County, Alabama, owning property located  
at \_\_\_\_\_ ("Owner") (or  
"Tenant"), and Solutia Inc., 702 Clydesdale Avenue, Anniston, Alabama, 36201-5390.

1. Owner (or Tenant) hereby grants to Solutia, EPA, ADEM, and their contractors and representatives a revocable license to enter upon real property owned by Owner (or leased by Tenant) located at \_\_\_\_\_ (the "Property"), for one or more of the following purposes:

1.1 Removing soils from the Property, disposing of soils from the Property, performing engineered controls (including, but not limited to, drainage modification and grading) at the Property, and restoring the Property as nearly as possible to its original state and condition in accordance with a work plan to be provided to Owner (or Tenant) prior to the initiation of any work on the Property.

1.2 Sampling soils on the Property for the presence of PCBs and/or lead in order to determine the scope and extent of the cleanup.

1.3 Sampling dust in the interior of improvements on the Property, analyzing such samples for the presence of PCBs, and if the dust samples indicate PCB concentrations equal to or greater than 2 parts per million, cleaning to remove PCBs from the interior of the improvements.

2. Solutia agrees, upon completion of the sampling, testing, and any soil removal response action and/or restoration to be performed, that all material and equipment shall be removed from the Property, except for improvements agreed to by Owner (if Tenant is signing this license, put Owners name here). The Property will be restored as nearly as possible to its original state and condition.

3. Solutia assumes responsibility for, and agrees to indemnify Owner (or Tenant) for, any liability for losses, expenses, damages, demands, and claims in connection with or arising out of any injury to persons or damage to property sustained in connection with or arising out of performance of the work hereunder.

4. Solutia assumes responsibility and liability for violations of Federal, State, or local law incurred in connection with or arising out of performance of the work hereunder.



5. Owner (or Tenant) shall advise Solutia of any utility lines or other hazardous or potentially hazardous conditions that Owner (or Tenant) is aware of that might reasonably be expected to be affected by the work to be performed.

6. This Agreement contains the entire agreement among the parties, and no other agreements, whether oral or written, between the parties with respect to the subject matter of this Agreement shall be binding or valid, except as provided above.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2000.

By:

\_\_\_\_\_

Print/Typed Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

SOLUTIA INC.

By:

\_\_\_\_\_

Title: \_\_\_\_\_

**Exhibit C**

**"EPA NOTIFICATION OF NONCOMPLIANCE (SAMPLING)"**

**EPA NOTIFICATION OF NONCOMPLIANCE (SAMPLING)**  
**Anniston PCB Site**  
**Administrative Order On Consent**

| Sampling Letter |               |          | Access<br>Granted? | Days Ou |
|-----------------|---------------|----------|--------------------|---------|
| Sent            | Signed<br>For | Returned |                    |         |

**Residential: Zone 1: Phase 1**

3301 Hwy 202

3738: 11-22-01-11-08-05.010

1148 > Tenant Current Resident  
 3301 Hwy 202  
 Anniston, AL 36201

06/08/01 06/12/01

38

415 S Colvin St

4632: 11-22-06-14-03-02.000

1107 > Owner  
 415 S Colvin St  
 Anniston, AL 36201

06/08/01 06/12/01

38

418 S Colvin St

7070: 11-22-06-14-04-17.000

1141 > Owner  
 420 S Colvin St  
 Anniston, AL 36201  
 1167 > Tenant Current Resident  
 418 S Colvin St  
 Anniston, AL 36201

06/08/01 06/12/01 06/22/01

NO

-

06/08/01 06/12/01

38

429 S Colvin St

7089: 11-22-06-14-03-02.000

1140 > Owner  
 415 S Colvin St  
 Anniston, AL 36201

06/08/01 06/12/01

38

430 S Colvin St

4772: 11-22-06-14-04-16.000

1120 > Owner  
 412 S Colvin St  
 Anniston, AL 36201

06/08/01 06/14/01

36

507 S Colvin St

4834: 11-22-06-14-03-09.000

1175 > Tenant  
 507 S Colvin St  
 Anniston, AL 36201-4919

06/08/01 06/12/01

36

**Exhibit D**

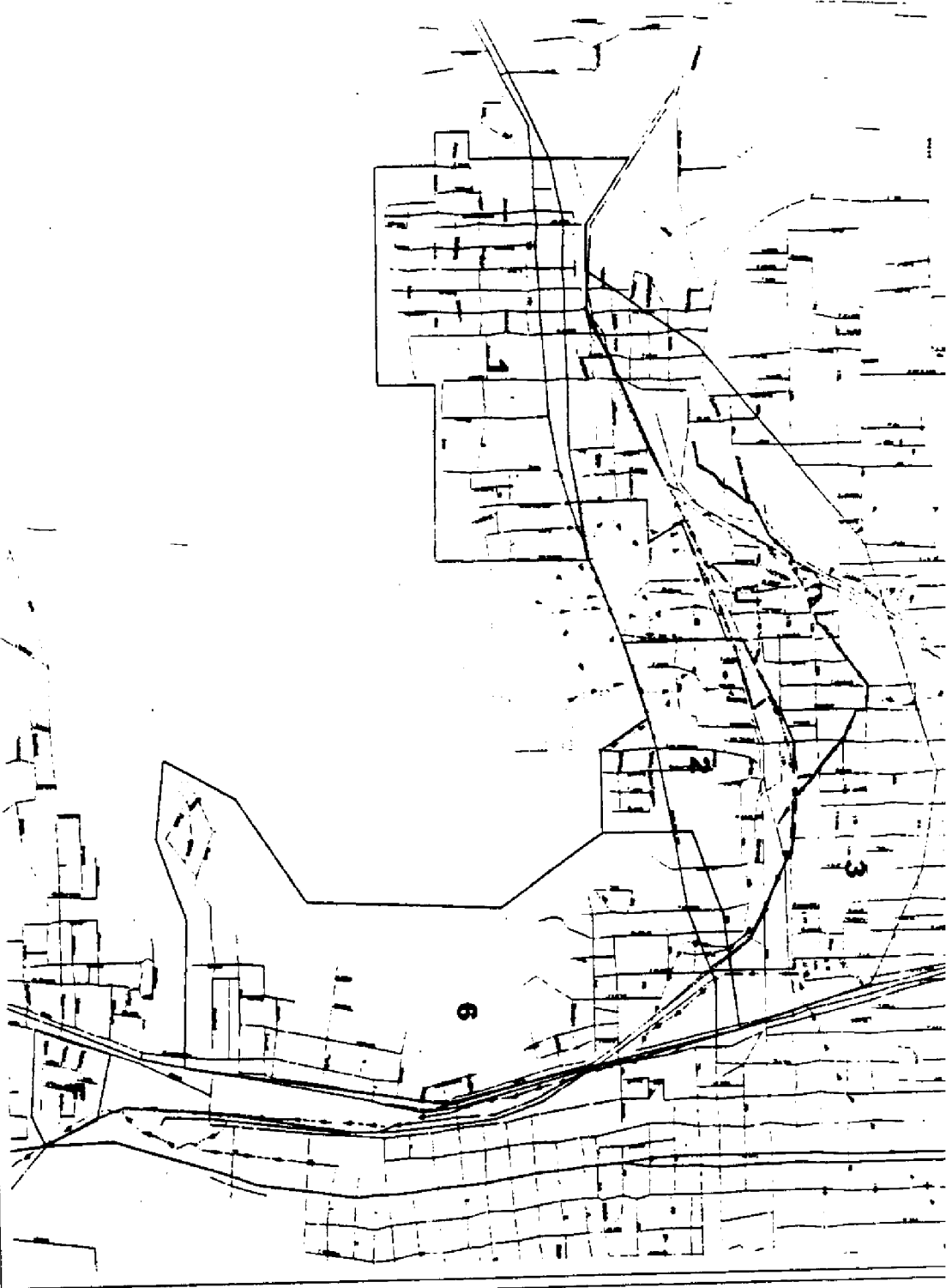
**PROPERTIES WITH PCB'S  $\geq 10$  PPM**

## Properties with PCB's $\geq 10$ PPM

1. 1230 West 12th Street
2. 2302 Calhoun Street
3. 912 Duncan Avenue
4. 920 McDaniel Avenue
5. 1215 West 11th Street
6. 1113 McDaniel Avenue
7. 1209 Crawford Avenue
8. 709 Mulberry Avenue
9. 701 Mulberry Avenue
10. 717 Zinn Parkway Drive
11. 200 Patrick Street, Oxford
12. 215 Patrick Street, Oxford
13. 216 Patrick Street, Oxford
14. 1212 West 12th Street
15. 111 Hall Street
16. 423 Chestnut Avenue
17. 1116 Brown Avenue
18. 1523 Cobb Avenue
19. 1407 Glen Addie Avenue

**Exhibit E**

**Figure 1**



**LEGEND:**

- Drainage (From Top)
- Drainage (From South)
- Drainage Area(s)
- For Characterization
- For Remediation
- SHORT-TERM Zone(s)
- Utility Lines
- Streets
- Railroad
- Streams
- Solulis Property Line
- Flood Zone

**NOTES:**  
 1. This map was prepared by STANT for the use of the Alabama Department of Environmental Conservation Agency. It is not to be used for any other purpose without the written consent of STANT.  
 2. The information shown on this map is based on the data provided to STANT by the Alabama Department of Environmental Conservation Agency. STANT does not warrant the accuracy or completeness of the information provided to STANT.  
 3. The information shown on this map is not to be used for any other purpose without the written consent of STANT.

**SCALE**

Alabama Department of Environmental Conservation Agency - Region IV  
 Anniston PCBs  
 Anniston, Calhoun County, Alabama  
 TDD NO. 41-90-99-006

**AOC: FIGURE 1  
 -FINAL-**

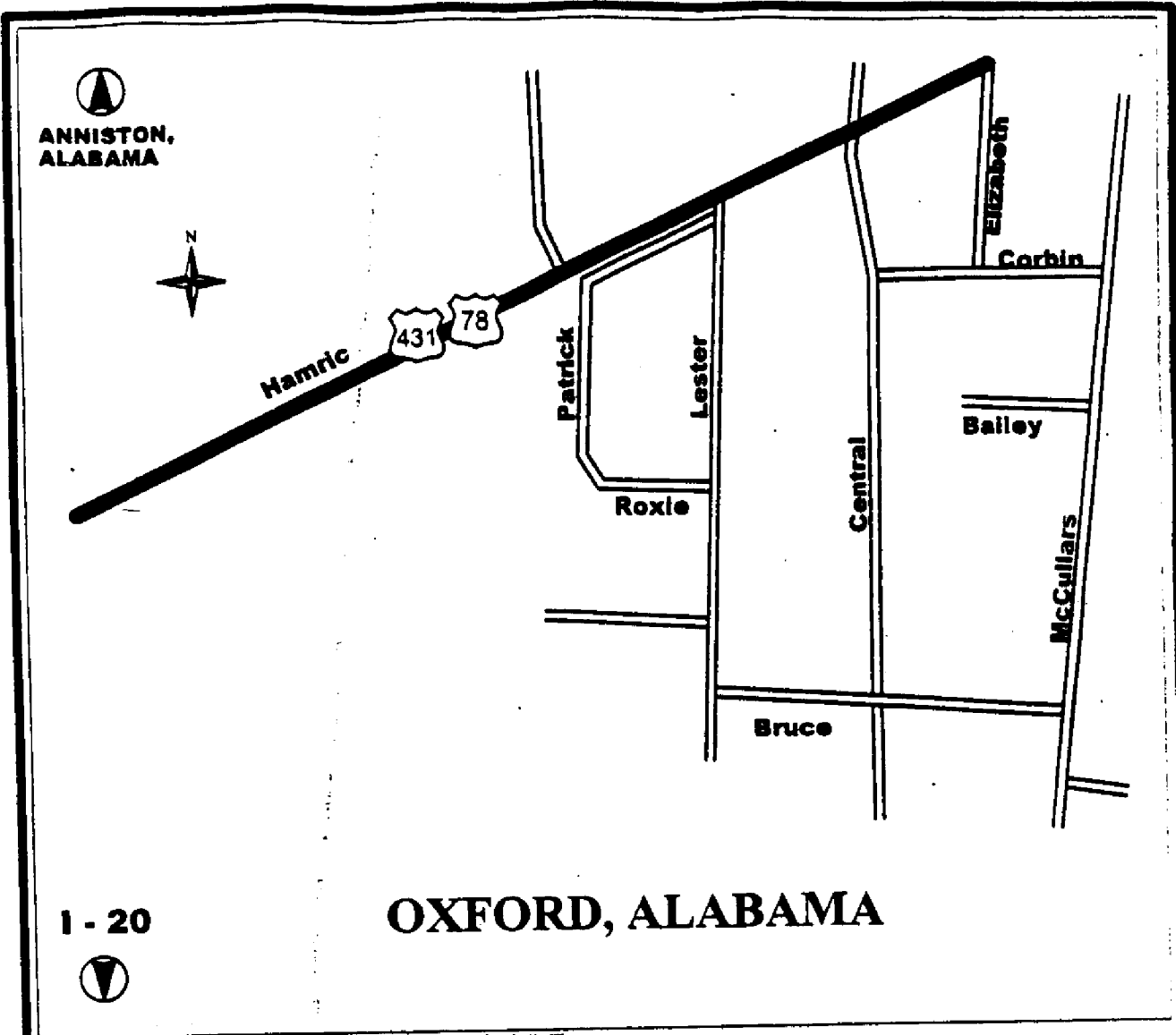
Short Term: Zones and Drainage Area  
 for Characterization and for Remediation

STANT  
 Terra Tech EMI Inc. STANT  
 10000  
 2000

**Exhibit F**

**Figure 2**





ANNISTON,  
ALABAMA



Hamric

431 78

Patrick

Lester

Roxie

Central

Bailey

Bruce

Elizabeth

Corbin

McCullars

1 - 20

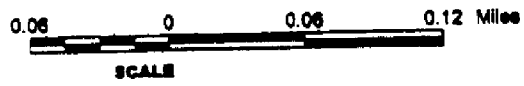
OXFORD, ALABAMA



SOURCE: MODIFIED FROM USGS 7.5 MINUTE QUADRANGLE, ANNISTON QUADRANGLE, ALABAMA, 1984

**LEGEND:**

-  Railroads
-  Streams



**NOTE:**  
AOC = "Administrative Order Consent"

US-Environmental Protection Agency - Region IV  
Anniston PCB Site  
Anniston, Calhoun County, Alabama  
TDO NO. 4T-00-09-005

**AOC\* FIGURE 2**  
**FINAL**  
**Oxford Lake**  
**Neighborhood Area**

Tetra Tech EMI Inc. START

Revised: 02/16/2001 09:29:03

**Exhibit G**

**Figure 3**

# Site Location Map

Solutia Inc.  
Oxford, Alabama

## NOTES

Oxford Lakes image provided by BBL, Inc.

## SCALE

1:3600 (1" = 300')

Created by: MCG Checked by: SJM

| FILE                              | DATE        | FIGURE |
|-----------------------------------|-------------|--------|
| 01_10032.dwg<br>yctm10032_2001005 | 25-Apr-2001 | 3      |



Quintard Avenue



Snow Creek

Recreation Drive

Field B

Field C

Field A

Field D

Oxford Lake Softball Complex

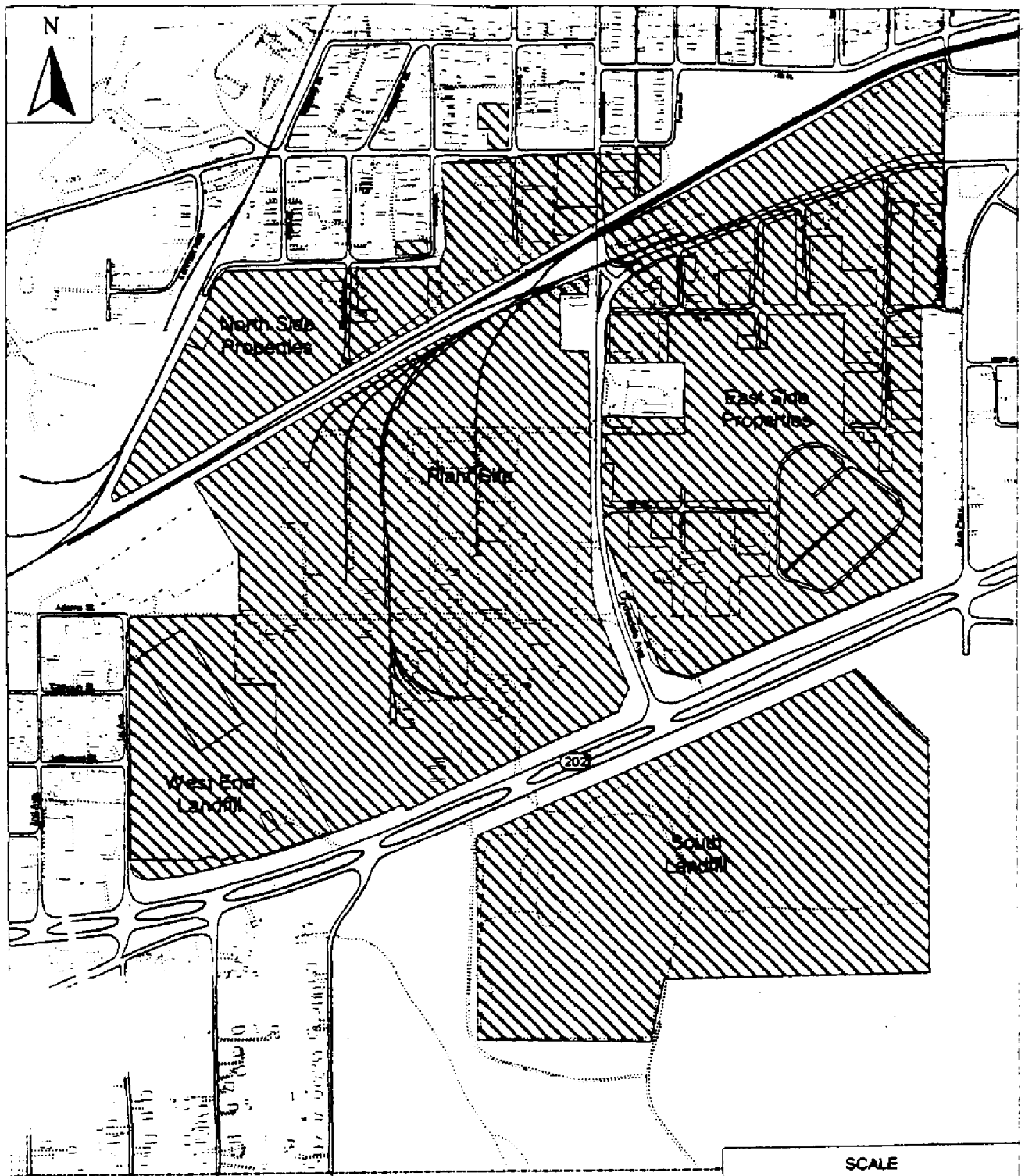




300 0 300 Feet

**Exhibit D**

**to the PARTIAL CONSENT DECREE**

**Figure 1**



|   |                     |   |              |                             |          |
|---|---------------------|---|--------------|-----------------------------|----------|
|  |                     |  |              | Title: Defendant's Property |          |
| Project/File No:<br>943-3880_049<br>Q1_V0107.apr                                    | Produced By:<br>JES | Checked By:   | Reviewed By: | Date:<br>11-Mar-2002        | Figure 1 |

---

**Exhibit E**

**to the PARTIAL CONSENT DECREE**

**Community Advisory Groups (CAGs)**

## Community Advisory Groups (CAGs)

**What is a  
CAG?**

**Where are  
CAGs?**

**Resources**



A Superfund Community Advisory Group (CAG) is made up of members of the community and is designed to serve as the focal point for the exchange of information among the local community and EPA, the State regulatory agency, and other pertinent Federal agencies involved in cleanup of the Superfund site.

[EPA Home](#) | [Search EPA](#) | [OSWER Home](#) | [Superfund Home](#)

[ [Search Superfund](#) | [What's New](#) | [Contact Us](#) ]

URL: [http://www.epa.gov/superfund/cags/cag\\_index.htm](http://www.epa.gov/superfund/cags/cag_index.htm)

This page was last updated on December 22, 1999.

Site maintained by: Office of Emergency and Remedial Response  
[Articles & Data base](#)

**Community Advisory Groups (CAGs)****What is a CAG?****What is a CAG?**

[Does my Community Need a CAG?](#) | [How do we Create a CAG?](#) | [CAG Membership](#) | [Operating a CAG](#) | [How Can I Get More Information?](#)

**Where are CAGs?****Resources**

A Community Advisory Group (CAG) is made up of representatives of diverse community interests. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process. A CAG can assist EPA in making better decisions on how to clean up a site. It offers EPA a unique opportunity to hear—and seriously consider—community preferences for site cleanup and remediation. However, the existence of a CAG does not eliminate the need for the Agency to keep the community informed about plans and decisions throughout the Superfund process.

**Does My Community Need a CAG?**

CAGs may not be appropriate for every site. CAGs may be beneficial at removal sites, particularly non-time critical removal sites, as well as sites involved in long-term cleanups. They can be formed at any point in the cleanup process. The earlier a CAG is formed, however, the more its members can participate in and impact site activities and cleanup decisions. EPA may assist communities in determining the need for a CAG by helping them evaluate the level of community interest in and concern about site activities. EPA may also examine if there is an existing broad-based group that might function as a CAG.

**How Do We Create a CAG?**

A CAG information meeting can be used to introduce the CAG concept to the community. In advance of this meeting, EPA, in conjunction with appropriate State, Tribal, or local governments, would inform and educate the community about the purposes of a CAG and the opportunities for participating in it. This is especially important at sites where there has been relatively limited community participation in the Superfund process.

In many cases, news releases, fact sheets, and public notices in the local news media may be useful for disseminating information about CAGs. Other outreach options—such as flyers, announcements in churches, and personal contacts with community groups or individual citizens—also may be used.



EPA encourages CAGs to be in full operation within six months after the CAG information meeting in order to maximize their effectiveness in the Superfund decision-making process. In the interim, the Agency can assist the community in determining the appropriate size and composition of the CAG, soliciting nominees, and selecting CAG members.

## **CAG Membership**

### **How Many People Should Be In Our CAG?**

The size of a CAG will depend on the needs of the affected community. While it often is difficult to ensure that everyone has an opportunity to participate and to achieve closure in large groups, the CAG should include enough members to adequately reflect the diversity of community interests regarding site cleanup and reuse. Typically CAGs have 15-20 members.

### **Who Should Be In Our CAG?**

To the extent possible, membership in the CAG should reflect the composition of the community near the site and the diversity of racial, ethnic, and economic interests in the community. At least half of the CAG members should be members of the local community. CAG members should be drawn from among residents and owners of residential property near the site; others who may be directly affected by site releases; Native American tribes and communities; minority and low-income groups; local environmental or public interest groups; local government units; local labor representatives; and local businesses. Facility owners and other PRPs also may be included, but the community may choose to limit the number or designate them as *ex officio* members.

### **How Are CAG Members Selected?**

CAG members may be selected in a number of ways. In some cases, CAGs may be self-selecting. That is, individuals who believe they represent the diverse interests of their community could nominate themselves. An existing group in the community—such as a group with a history of involvement at the Superfund site—could be selected as the CAG for that community if it represents the diverse interests of the community. The local government could select, in a fair and open manner, members of the community to serve on the CAG. EPA, with the involved State/Tribal/local governments, could assist the community in organizing a Screening Panel to review nominations for CAG membership. EPA could review (not approve/disapprove) the Panel's list of nominees and offer advice, as needed, to ensure all community interests are represented. Or, EPA, with the appropriate State/Tribal/local governments, could select a core group that represents the diverse interests of the community. Members of this core group then could select

the remaining members of the CAG in a fair and open manner.

Because each community is unique, suitable selection methods will vary; a formal process may not be necessary in every case. The key is to ensure that the CAG will be fully representative of the community and will be able to function effectively as a group.

### **Do CAG Members Need Any Training?**

Many CAG members may require some initial training to enable them to perform their duties. EPA may work with State/Tribal agencies, local government(s), local universities, PRP(s), and others to provide training, prepare briefing materials, and conduct site tours for new CAG members.

### **What Responsibilities Do CAG Members Have?**

Generally, CAG members should be expected to participate in CAG meetings, provide data and information to EPA on site issues, and share information with their fellow community members. They must be prepared to fairly and honestly represent not only their own personal views but also those of the community members they represent.

CAG members may select a Chairperson from within their ranks and determine an appropriate term of office. The primary functions of the CAG Chairperson are to conduct CAG meetings in a manner that encourages open and constructive participation by all members; to ensure that all pertinent community concerns are raised for consideration and discussion; and to attempt, whenever possible, to achieve consensus among CAG members.

## **Operating a CAG**

### **What Should Our CAG Do First?**

Each CAG should develop a mission statement describing the CAG's specific purpose, scope, goals, and objectives. Each CAG also should develop a set of procedures to guide day-to-day operations. These procedures should address such topics as how to fill membership vacancies; how often to hold meetings; and the process for reviewing and commenting on documents and other materials.

### **What About CAG Meetings?**

CAG meetings should be open to the public. The meetings should be announced publicly (via display ads in newspapers, flyers, etc.) well enough in advance to encourage maximum participation of CAG and community members. CAG members should determine the frequency and location of CAG meetings based on the needs at their particular site.

The format for CAG meetings may vary depending on the needs of the CAG. A basic meeting format might include an update on site status by the project's technical staff; discussion of current issues; a question/answer session that includes audience participation; review of "action items," and discussion of the next meeting's agenda.

## What Other Support Can EPA Provide To Our CAG?

EPA, together with State/Tribal/local government(s), local universities, the PRP(s), and others, may assist the CAG with administrative support on issues relevant to the Superfund site cleanup and decision-making process. This may include support for arranging and documenting meetings, preparing and distributing meeting notices and agendas, duplicating site-related documents for CAG review, maintaining CAG mailing/distribution lists, and providing translation and meeting facilitation services when needed. If meeting facilitation is needed, it is preferable to use someone from the community with facilitation experience or a professional meeting facilitator. A neutral facilitator is particularly effective at sites where some controversy is anticipated.

## How Can I Get More Information?

Visit our [Resources](#) section or contact:

Community Involvement and Outreach Center  
Office of Emergency and Remedial Response  
Allen Maples or Leslie Leahy  
(703) 603-9929  
[maples.allen@epa.gov](mailto:maples.allen@epa.gov)  
[leahy.leslie@epa.gov](mailto:leahy.leslie@epa.gov)

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[ [Search Superfund](#) | [What's New](#) | [Contact Us](#) ]

URL: <http://www.epa.gov/oswer/remediation/020100a.htm>

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2000-12-21 02:33 PM

## Citizen Advisory Groups at National Priorities List (NPL) Sites in Alabama

### DoD Restoration Advisory Boards

#### U.S. Army

##### Anniston Army Depot Installation

Co-Chair: Ms. Leslie Ware  
Attn: SIOAN-RK-E  
7 Franksford Avenue  
Anniston, AL 36201-4199  
Phone: (205) 235-7899  
Fax: (205) 235-7726

##### Redstone Arsenal

Point of Contact: Mr. Whitt Walker  
U.S. Army Aviation & Missile Command  
Attn: AMSAM-RA-IR Bldg. 112  
Redstone Arsenal, AL 35898-5000  
Phone: (205) 955-6967  
Fax: (205) 876-0887

### All U.S. DoD Restoration Advisory Boards in Alabama [\(PDF\)](#)

**BACK**

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[ [Search Superfund](#) | [What's New](#) | [Contact Us](#) ]

URL: <http://www.epa.gov/superfund/tools/cag/ma/states/al.html>  
This page was last updated on: February 3, 2000  
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[leady.leslie@epa.gov](mailto:leady.leslie@epa.gov)

## Community Advisory Groups (CAGs)

### Resources

**What is a CAG?**

[About Adobe Acrobat \(PDF\) files](#)  
[Ordering Information](#)

**Where are CAGs?**

**EPA/DoD/DOE Citizen Advisory Groups at National Priorities List (NPL) Sites**

[View](#)

Citizen participation is an important ingredient in making cleanup decisions not only at EPA sites but also at Department of Defense and Department of Energy facilities. This map provides information on citizen advisory groups at sites currently on the National Priorities List (NPL) and links to information about such groups at other sites being remediated by each agency.

**Resources**

**Community Advisory Groups (CAGs) at Superfund Sites: Quick Reference Fact Sheet**

In English (EPA 540-K-96-001), August 1996  
In Spanish-Mexican (EPA 540-F-97-031), August 1996  
In Spanish-Puerto Rican (EPA 540-K-98-056), September 1998

[In English](#)

[In Spanish-Mexican](#)

[In Spanish-Puerto Rican](#)

EPA's *Guidance for Community Advisory Groups at Superfund Sites* (OSWER Directive 9230.0-28) was issued in December 1995 for Community Involvement Coordinators (CICs) and Site Managers to encourage the use of Community Advisory Groups (CAGs) at Superfund Sites and to promote a better understanding of CAGs at Superfund sites. This fact sheet summarizes the main points in the guidance.

**About the Community Advisory Group Toolkit: A Summary of the Tools**

In English (EPA 540-K-97-007), September 1998  
In Spanish (EPA 540-K-98-006), September 1998

[In English \(598K/15pp/PDF\)](#)

[In Spanish \(462K/16pp/PDF\)](#)

The U.S. Environmental Protection Agency (EPA) developed the Community Advisory Group Toolkit to help you organize and run your Group. The Toolkit contains outlines, forms, publications, and other "tools" you can use in establishing and operating your Group. This booklet briefly describes the information, tips, and tools in the Toolkit. It can help you understand what a Community Advisory Group is and decide if your community needs one. If you live in an area that already has a Community Advisory Group, this information can help you become more involved in it. Each Community Advisory Group and the Community Involvement staff in each EPA Regional Office has a Toolkit containing all the materials described.

**Superfund Today - Focus on the Community Advisory Group**  
(EPA 540-K-96-005), May 1996

[View](#)

This issue of Superfund Today contains information on how to get your community advisory group up and running and highlights a Community Advisory Group in action.

**Community Advisory Groups: Partners in Decisions at Hazardous Waste Sites. Case Studies**  
(EPA 540-R-96-043), Winter 1996

[View](#)

This document includes case studies of Community Advisory Groups at five hazardous waste sites. The case studies were developed based on interviews with community members involved in the Community Advisory Groups at these sites, EPA personnel, and State and local government personnel involved in the site cleanup efforts.

**A Review of Community Advisory Groups in Region 5: Lessons Learned**  
October 1998

[Download](#)  
(89K/13pp/PDF)

As part of its commitment to promoting community involvement at hazardous waste sites, EPA Region 5 conducted an informal review and evaluation of its support to Community Advisory Groups. This document summarizes lessons learned in the course of this review. Information was gathered via interviews with leaders of six selected Community Advisory Groups in order to learn more about how they are working and to determine what EPA can do to better support these groups. Interviewees were asked a series of questions that allowed them to share their insights and experiences forming and operating a Community Advisory Group and to suggest ways EPA can assist local groups in their efforts.

**Guidance for Community Advisory Groups at Superfund Sites**  
(EPA 540-K-96-001), December 1995

[View](#)  
[Download](#)  
(228K/36pp/PDF)

This guidance document is designed to assist EPA staff [primarily Community Involvement Coordinators (CICs) and Site Managers, such as Remedial Project Managers, On-Scene Coordinators, and Site Assessment Managers] in working with CAGs at Superfund sites (this includes remedial and appropriate removal sites).

**Technical Assistance Grants web site**

[View](#)

A Technical Assistance Grant (TAG) provides money for activities that help your community participate in decision making at eligible Superfund sites. An initial grant up to \$50,000 is available for any Superfund site that is on the EPA's National Priorities List (NPL), proposed for listing on the NPL and a response action has begun. EPA's NPL is a list of the most hazardous waste sites nationwide.

**Technical Outreach for Communities (TOSC) web site :**

[View](#) [EXIT EPA](#) 

Technical Outreach for Communities (TOSC) uses university educational and technical resources to help community groups understand the technical issues involving the hazardous waste sites in their midst. TOSC aims to empower communities to participate substantively in the decision-making process regarding their hazardous substance problems.

**Other Superfund Publications**

**Community Advisory Groups (CAGs)**

**What is a  
CAG?**

**Where are  
CAGs?**

**Resources**

**Community Advisory Groups:  
Partners in Decisions at Hazardous Waste Sites  
Case Studies**

EPA 540-R-96-043  
Winter 1996



*NOTE: Only the highlighted sections of this document are available online. The remaining sections are only available as part of the printed document. To order a copy of the complete document (#EPA 540-R-96-043), contact: National Center for Environmental Publications and Information*

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  - ATTACHMENT 2: CAG Remediation Goals
  - ATTACHMENT 3: Samples of CAG Meeting Minutes
- **Case Study: Carolawn, Inc., Chester County, South Carolina**
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- **Case Study: Colorado School of Mines Research Institute, Golden, Colorado**
- **Case Study: Oronogo-Duenweg Mining Belt Site, Jasper County, Missouri**
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**Introduction**

The United States Environmental Protection Agency (EPA) is committed to early, direct, and meaningful public involvement in the Superfund

process. One of the ways communities are participating in cleanup decisions at hazardous waste sites around the country is through Community Advisory Groups (CAGs). Community Advisory Groups are made up of representatives of diverse community interests and provide a public forum for community members to present and discuss their needs and concerns about the decision-making process at sites affecting them.

This document includes case studies of Community Advisory Groups at five hazardous waste sites: the Brio Refining, Inc., Superfund Site in Harris County, Texas; the Carolawn, Inc., Superfund Site in Chester County, South Carolina; the Colorado School of Mines Research Institute Site in Golden, Colorado; the Oronogo-Duenweg Mining Belt Site in Jasper County, Missouri; and the Southern Maryland Wood Treating Superfund Site in Hollywood, Maryland. The case studies were developed based on interviews with community members involved in the Community Advisory Groups at these sites, EPA personnel, and State and local government personnel involved in the site cleanup efforts.

Each case study summarizes the responses received to interview questions. No attempt has been made to include every answer by every interviewee. In some cases, interviewees did not have answers to all questions posed; in other cases, answers from more than one interviewee were alike. The effort here has been to provide an overall picture that may be helpful in broadening the use of the Community Advisory Group structure to other hazardous waste sites.

## **Lessons Learned**

The case studies highlight several important lessons for communities considering formation of a Community Advisory Group. References to individual case studies are made where applicable. The lessons learned are:

### **Community Advisory Groups (CAGs) Should Be Formed as Early as Possible**

All of the case studies demonstrated the importance of early community involvement in the hazardous waste cleanup process (see section on "CAG Formation and Support" in each case study). A Community Advisory Group is one of the most effective mechanisms for fostering community involvement.

Forming a Community Advisory Group early in the decision-making process offers significant benefits:

- The community can participate in and impact site activities and cleanup decisions.
- The community has an opportunity to investigate possible remedy selections and to respond to proposed remedies.
- Trust-building, a slow process, will get an early start.



- Operations and dynamics within a Community Advisory Group have time to develop and mature.

While there was unanimous agreement that it is preferable to form Community Advisory Groups as early as possible, Community Advisory Groups established even after major site decisions had been made—such as those for the Carolawn and Southern Maryland Wood Treatment sites—have proven effective and continue to serve useful purposes, such as monitoring site progress and pursuing ongoing issues.

### **The Community Must Take the Initiative in Community Advisory Group Formation and Operation**

It is critical that the community “owns” its Community Advisory Group and that the community itself initiates the formation of the Community Advisory Group. Self-selection of members lends legitimacy to the process and ensures that the Community Advisory Group is in the hands of stakeholders.

It is up to community residents to decide if and how they want to form a Community Advisory Group. Some communities, such as the one at the Carolawn site, use an existing framework upon which to build a Community Advisory Group, while others start their group from scratch. See the section on “CAG Formation and Support” in each case study.

EPA can provide support and guidance to Community Advisory Groups at each step: providing information about what a Community Advisory Group is, its benefits, and how to form one; offering advice on alternatives and resources available; and helping with administrative tasks, including advertising, meeting arrangements, and preparation of information summaries, minutes, and other support materials.

The level of EPA support varies depending on the resources available and the needs and desires expressed by the community. For example, EPA Region 4 provided substantial assistance in helping the community at the Carolawn site organize its Community Advisory Group and hold its first meetings. EPA Region 6 has a contractor in an on-site satellite office who provides ongoing administrative support for the Community Advisory Group at the Brio Refining site. On the other hand, EPA Region 3 had no role in the formation of the Community Advisory Group for the Southern Maryland Wood Treatment site and has provided no ongoing administrative support.

### **Community Advisory Groups Must Be Inclusive and Independent**

The credibility of a Community Advisory Group is a function of two characteristics: inclusiveness and independence. The Community Advisory Group must represent all stakeholder interests—both to maintain credibility within the community, and to assure EPA, the State, and the potentially responsible parties (PRPs) that the Community

Advisory Group is the voice for the entire community rather than for a few interested parties. More importantly, the Community Advisory Group must be able to act independently, free from the influence of others with an interest in the outcome of the situation.

This is especially important in selecting Community Advisory Group leadership. Community Advisory Group leaders should not have an interest in a particular outcome. For the Brio Refining Community Advisory Board, the community chose leaders who had opposing views to be co-chairs. One of the co-chairs reported that the move "forced us to work together and work out our differences."

The process by which the Community Advisory Group fulfills its mission must be both open and responsive to community needs and interests. The simplest way to achieve this is to ensure that all Community Advisory Group meetings are open to the public, well advertised, and cover all interests expressed by the local community. Ideally, Community Advisory Group meetings should be facilitated by a disinterested party to ensure that participants do not feel that they are being pushed in one direction or the other. See the section on "CAG Formation and Support" in each case study.

#### **Access to Good Technical Expertise Is Important**

Community Advisory Group members at all sites studied agreed that having sound, independent technical advice is a key element of Community Advisory Group success. See the section on "Technical Advisors" in each case study.

Community Advisory Groups for the Brio Refining, Colorado School of Mines Research Institute, and Oronogo-Duenweg Mining Belt sites hired their own technical advisors, using funding from Federal, State and local sources, to provide the technical advice regarding site remediation strategies and activities. The Community Advisory Groups for the Carolawn and Southern Maryland Wood Treatment sites did not require outside technical assistance, because some of their members had considerable technical expertise and were able to interpret information and advise the groups.

#### **The Community Advisory Group Must Recognize What Is Possible and Work Within Those Limits**

Community Advisory Group leaders and EPA must recognize that most ordinary citizens do not have a detailed understanding of the Superfund and other waste cleanup programs. They need clear explanations of the goals, purposes, policies, mechanisms, and limitations of the programs. This extends to a clear understanding of the role and responsibilities of the Community Advisory Group and individual citizens with an interest in the process. For example, the community at the Oronogo-Duenweg Mining Belt site wanted EPA to test for and remove lead paint in homes,

an area where EPA has no authority; the authority rests with the Department of Housing and Urban Development (HUD). Even in cases where EPA has no direct authority, however, the Agency can take an active role in helping communities find information, contacts, and other resources for addressing their needs. See the section on "CAG Effectiveness" in each case study.

### **Community Advisory Group Leaders Must Be "In It" for the Long Haul**

Community Advisory Group leadership should be consistent and prepared to invest whatever time commitment necessary to see the Community Advisory Group through to completion. Effective Community Advisory Groups tend to develop a "personality" that reflects the input of core players in the process. Without effective leadership, Community Advisory Groups may operate in a stop-start fashion, losing credibility as decisions are made haphazardly or wasting time bringing new members up to speed. The case studies on the Brio Refining, Carolawn, and Colorado School of Mines Research Institute sites reveal that stability and perseverance are important ingredients of Community Advisory Group success. See the section on "CAG Effectiveness" in each case study.

### **Community Advisory Groups Are More Effective Than Public Meetings**

It is often difficult to address all issues and concerns in detail at a public meeting. The Community Advisory Group process involves establishing an ongoing forum for discussing and resolving issues and concerns. Community Advisory Groups provide a place where community members with different viewpoints can resolve their differences and develop a unified voice. It also provides a place where the community, EPA, the State, PRPs, and technical experts can take the time to examine and discuss detailed information.

The frequency of Community Advisory Group meetings varied at each site—from as often as twice monthly to as seldom as quarterly. Meeting productivity and the ability to keep the momentum of the group over time are more important than how often meetings are held. A good compromise at the sites studied seemed to be scheduling regular monthly or bimonthly meetings, while retaining the flexibility to schedule special interim meetings as circumstances warrant. For example, the Community Advisory Group at the Brio Refining site meets monthly but has more frequent meetings that focus on specific issues when necessary. See the section on "Communications Tools" in each case study.

### **The Need for Additional Resources Is A Common Concern**

Community Advisory Group members and EPA officials interviewed for the case studies noted the need for additional funding to Community

Advisory Groups for administrative, logistical and technical support. EPA Regional staff often provides significant assistance with administrative functions, but often more assistance is needed. Some estimated that support for staffing for 10 to 12 hours per week might suffice. Other Community Advisory Group members said they would like to send out mailings or publish fact sheets or a newsletter to the community at large, but lacked the administrative capacity to do so. See the section on "Suggestions for Other CAGs" in each case study.

### **Community Advisory Groups Can Give the Community More Influence in Site- Related Decisions**

EPA staff and community members interviewed for the case studies agreed that forming a Community Advisory Group increased the community's influence on site-related decisions. For example, EPA Remedial Project Manager involved with the Community Advisory Board for the Brio Refining site said formation and operation of the group led to a level of mutual respect between EPA personnel and community activists who had been "butting heads" for years over site issues. As a result, most of the site-related issues the community had prior to formation of the Community Advisory Group have been resolved. Formation of the Community Advisory Group also enhanced the community's influence over site decisions at the Colorado School of Mines Research site. Specifically, EPA staff said the commitment shown by members of the Community Advisory Group encouraged EPA to rely on and trust their feedback. If the group said a particular remedial alternative would not receive community support, for example, EPA would move on and consider another plan. See the section on "Suggestions for Other CAGs" in each case study.

### **Community Advisory Groups Can Speed Up the Process**

In some cases, Community Advisory Groups may help speed the remedy selection and implementation process. With community input through the Community Advisory Group, EPA may be able to screen out remedial alternatives that the community will not accept prior to expending resources on feasibility analyses. In fact, early involvement by the Community Advisory Groups at the Carolawn and Colorado School of Mines Research Institute sites helped prevent delays that could have resulted from strong community opposition to initial remedy selection. In both cases, this opposition sparked formation of a Community Advisory Group.

Community Advisory Groups can provide an effective forum for careful consideration of remedy alternatives. Questions can be answered quickly and information provided early so that the Community Advisory Group—and the community at large—fully understands remedy alternatives. The Community Advisory Group also provides a mechanism for clearing up misconceptions about the cleanup process and for stopping rumors.

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**Exhibit F**

**to the PARTIAL CONSENT DECREE**

**Table 1 of the RI/FS Agreement**

**TABLE 1**  
**POTENTIAL CONSTITUENTS OF CONCERN**

Organophosphorous Pesticides

- Parathion
- Methyl parathion
- Tetraethylthiopyrophosphate (Sulfotepp)

Semivolatile Organic Compounds

- 1,2-Dichlorobenzene (o-Dichlorobenzene)
- 1,4-Dichlorobenzene (p-Dichlorobenzene)
- 2,4-Dichlorophenol
- Para-nitrophenol (4-Nitrophenol or PNP)
- Polychlorinated biphenyls (PCBs)
- Phenol
- Pentachlorophenol
- 2,4,5-Trichlorophenol
- 2,4,6-Trichlorophenol
- o,o,o-Triethylphosphorothioate

Volatile Organic Compounds

- Chlorobenzene
- Isopropyl benzene (Cumene)
- Methylene chloride
- 1,1,2,2-Tetrachloroethane

Metals

- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium
- Cobalt
- Lead
- Manganese
- Mercury
- Nickel
- Vanadium

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**Exhibit G**  
**to the PARTIAL CONSENT DECREE**  
**NTC Removal Agreement**

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 4

IN THE MATTER OF:  
Anniston PCB Site  
Anniston, Calhoun County, Alabama

PHARMACIA CORPORATION (p/k/a  
Monsanto Company) and SOLUTIA INC.,

Defendants

NON-TIME CRITICAL REMOVAL  
AGREEMENT

U.S. EPA Region 4

Proceeding Under Sections 104, 106(a), 107  
and 122 of the Comprehensive Environmental  
Response, Compensation, and Liability Act, as  
amended, 42 U.S.C. §§ 9604, 9606(a), 9607  
and 9622



## **I. JURISDICTION AND GENERAL PROVISIONS**

This Non-time Critical Removal Agreement (NTC Removal Agreement) is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc. ("Defendants"). This NTC Removal Agreement provides for the performance of a Non-Time Critical (NTC) Removal Action by Defendants and the reimbursement of Future Response Costs incurred by the United States in connection with contamination located in and around Anniston, Calhoun County, Alabama, the "Anniston PCB Site" or the "Site." This NTC Removal Agreement requires Defendants to do the following: 1) finance and perform an Engineering Evaluation / Cost Analysis ("EE/CA") to further characterize and identify the nature and extent of soil contamination on residential properties associated with the historical and ongoing operations of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors; 2) develop response alternatives, which meet the Streamlined Risk Evaluation (SRE) Action Level, to address soil contamination; 3) to reimburse EPA's Future Response Costs; and 4) if the NTC Removal Action Memorandum selects a NTC Residential Soil Action Level at or above 1 ppm in surface soils and at or above 10 ppm below a depth of 12 inches as the preferred response action, then Defendants agree to clean up all residential properties that are at or above such levels. If the response action selected in the NTC Removal Action Memorandum is something other than soil removal at or above 1 ppm in surface soils and at or above 10 ppm below a depth of 12 inches, then it is the present intention of the parties to enter into negotiations concerning a subsequent agreement to implement the response action selected in the NTC Removal Action Memorandum, subject to their mutual agreement on the terms and conditions. However, neither party shall be under an obligation to reach such an agreement. EPA has determined that, based on currently available information, use of CERCLA Non-Time Critical Removal Action authority to address the residential soil contamination at this Site is the most efficient mechanism to achieve the above stated objectives under the NCP while providing maximum public participation.

This NTC Removal Agreement requires Defendants to finance and conduct the EE/CA described herein to investigate residential contamination at the Site and identify and evaluate potential response actions to abate an imminent and substantial endangerment to the public health, welfare and the environment that may be presented by the actual or threatened release of hazardous substances on residential properties at or from the Site. Furthermore, if the NTC Removal Action Memorandum selects soil removal at or above 1 ppm at the surface and at or above 10 ppm below a depth of 12 inches, then this NTC Removal Agreement also requires Defendants to conduct a residential soil removal to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.

EPA and Solutia Inc. entered into an Administrative Order on Consent, docket no. 01-02-C, for a removal action regarding the Site which was effective on October 27, 2000. The October 27, 2000 AOC was withdrawn and replaced with the October 5, 2001 AOC. Solutia Inc. shall continue to fulfill its obligations pursuant to the October 5, 2001 AOC. However, EPA and Defendants agree to work

together to coordinate the response actions required by the October 5, 2001 AOC and this NTC Removal Agreement. Sampling requirements pursuant to the October 5, 2001 AOC may be modified pursuant to an approved EE/CA Work Plan.

Investigation and response activities related to the residential properties are the subject of this NTC Removal Agreement and the Removal Order. The Parties understand that the residential properties are a part of the Site, which is the subject of the RI/FS. EPA agrees to take into account all investigations and response actions done pursuant to this NTC Removal Agreement and the Removal Order when selecting the remedy in the proposed plan and the ROD. However, EPA and Defendants agree that the cleanup levels contained in this NTC Removal Agreement, the Removal Order, and the SRE shall have no precedential effect on the clean up numbers selected in the Proposed Plan and the ROD. EPA will select the final clean up numbers for the entire Site, including the residential properties, in the Proposed Plan and the ROD.

This NTC Removal Agreement is issued pursuant to the authority vested in the President of the United States by Sections 104, 106(a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607, and 9622, as amended ("CERCLA"), and delegated to the Administrator of EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the EPA Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-C and 14-14-D: Cost Recovery through the Director, Waste Management Division to the Chief, Emergency Response and Removal Branch by EPA Region IV Delegation No. 14-14-C.

EPA has notified the State of Alabama (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

Defendants' participation in this NTC Removal Agreement shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this NTC Removal Agreement (including, but not limited to, findings relating to endangerment to the public health, welfare, or the environment) except in a proceeding to enforce the terms of this NTC Removal Agreement. Defendants agree to comply with and be bound by the terms of this NTC Removal Agreement. Defendants further agree that it will not contest the basis or validity of this NTC Removal Agreement or its terms.

Defendants and EPA acknowledge that residential properties containing lead in excess of 400 ppm are also part of the Anniston Lead Site and that EPA is in the process of identifying potentially responsible parties (PRPs) under CERCLA in connection with the Anniston Lead Site. If Defendants remove soil from any property having lead in excess of 400 ppm from a residential property pursuant to this Agreement, EPA acknowledges that Defendants may seek contribution for the costs of such removal from the PRPs at the Anniston Lead Site and any other parties who may be liable.

## **II. PARTIES BOUND**

This NTC Removal Agreement applies to and is binding upon EPA, and upon Defendants and Defendants' heirs, successors, and assigns. Any change in ownership or corporate status of Defendants including, but not limited to, any transfer of assets or real or personal property shall not alter Defendants' responsibilities under this NTC Removal Agreement.

Defendants shall ensure that their contractors, subcontractors, and representatives receive a copy of this NTC Removal Agreement and comply with this NTC Removal Agreement. Defendants shall be responsible for any noncompliance with this NTC Removal Agreement.

### **III. DEFINITIONS**

Unless otherwise expressly provided herein, terms used in this NTC Removal Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this NTC Removal Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

"ADEM" shall mean the Alabama Department of Environmental Management and any successor departments or agencies of the State.

"Anniston Lead Site" shall mean for the purposes of the Consent Decree and this Agreement, the Anniston Lead Site, which consists of the area where lead and other commingled hazardous substances, including PCBs, associated with the historical and ongoing industrial operations in and around Anniston, Alabama have come to be located.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et seq.*

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this NTC Removal Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"Defendants" shall mean Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc.

"Effective Date" shall be the effective date of this NTC Removal Agreement as provided in Section XXI (Effective Date).

"EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"Future Response Costs" shall mean all costs, except ATSDR costs, that the United States incurs through the public participation period for the ROD with respect to the RI/FS Agreement, this NTC Removal Agreement, and/or the Consent Decree. Future Response Costs may include, but are not limited to, costs incurred by the U.S. Government in overseeing Defendants' implementation of the requirements of the RI/FS Agreement or this NTC Removal Agreement, verifying the RI/FS Work or NTC Removal Work, or otherwise implementing, overseeing, or enforcing the RI/FS Agreement or this NTC Removal Agreement, and/or the Consent Decree and any activities performed by the government as part of the RI/FS or NTC Removal including community relations and any costs incurred while obtaining access. Costs shall include all direct and indirect costs, including, but not limited to, time and travel costs of EPA personnel and associated indirect costs, contractor costs, cooperative agreement costs, compliance monitoring, including the collection and analysis of split samples, inspection of RI/FS or NTC Removal activities, site visits, discussions regarding disputes that may arise as a result of the RI/FS Agreement, this NTC Removal Agreement or the Consent Decree, review and approval or disapproval of reports, and costs of redoing any of Defendants' tasks. Future Response Costs shall also include all Interim Response Costs. Provided, however, removal AOC Oversight Costs are not Future Response Costs pursuant to this Consent Decree. Defendants shall reimburse EPA for removal AOC Oversight Costs as provided in the Removal Order. Future Response Costs do not include costs that the United States incurs at the Anniston Lead Site.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Non-Time Critical (NTC) Removal Action Memorandum" shall mean the Action Memorandum for the Site which will substantiate the need for a NTC Removal Action and explain the rationale for the NTC Removal Action selected.

"October 5, 2001 AOC" shall mean the Administrative Order on Consent between EPA and Defendants with docket no. CER-04-2002-3752.

"October 27, 2000 AOC" shall mean the Administrative Order on Consent between EPA and Solutia Inc. with docket no. 01-02-C.

"NTC Removal Agreement" shall mean this NTC Removal Agreement and all appendices attached hereto. In the event of conflict between this NTC Removal Agreement and any appendix, this NTC Removal Agreement shall control.

“Parties” shall mean the United States and the Defendants.

“RCRA” shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 et seq. (also known as the Resource Conservation and Recovery Act).

“Section” shall mean a portion of this NTC Removal Agreement identified by a roman numeral, unless the Section precedes a numeric provision of a statute or regulation of the United States.

“Site” shall mean for the purposes of this NTC Removal Agreement and the Consent Decree, the Anniston PCB Site, which consists of the area where hazardous substances, including PCBs associated with releases or discharges as a result of the operations, including waste disposal, of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.

“State” shall mean the State of Alabama.

“Streamlined Risk Evaluation (SRE)” shall mean the attached streamlined risk assessment for residential properties at the Anniston PCB Site.

“United States” shall mean the United States of America.

“Waste Material” shall mean (1) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33), 42 U.S.C. § 9601(33); and (3) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

#### **IV. EPA’s FINDINGS OF FACT**

EPA’s findings are set forth below. EPA’s findings are made solely for purposes of this NTC Removal Agreement and for no other purposes.

- A. The Anniston PCB Site (“Site”) shall mean, for the purposes of this NTC Removal Agreement, the Anniston PCB Site, which consists of the area where hazardous substances, including PCBs associated with releases or discharges as a result of the operations, including waste disposal, of the Anniston plant by Solutia Inc., Monsanto Company, and their predecessors have come to be located. The Site includes, but is not limited to, the area covered by the RCRA Permit.
- B. Pharmacia Corporation (p/k/a Monsanto Company) and Solutia Inc. are Defendants.
- C. Solutia Inc.’s Anniston plant encompasses approximately 70 acres of land and is located about 1 mile west of downtown Anniston, Alabama. The plant is bounded to the north

by the Norfolk Southern and Erie railroads, to the east by Clydesdale Avenue, to the west by First Avenue, and to the south by U.S. Highway 202.

- D. In 1917, the Southern Manganese Corporation (SMC) opened the plant, which began producing ferro-manganese, ferro-silicon, ferro-phosphorous compounds, and phosphoric acid. In the late 1920s, the plant also started producing biphenyls. SMC became Swann Chemical Company (SCC) in 1930, and in 1935, SCC was purchased by Monsanto Company. From 1935 to 1997, Monsanto Company operated the plant. Defendants represent that polychlorinated biphenyls were produced at the plant beginning in 1929 until Defendants ceased their Aroclor line of products at this plant in 1971. These products were commonly known as PCBs. In 1997, Monsanto Company formed Solutia Inc. and transferred ownership over certain of its chemical divisions. Solutia Inc. currently produces para-nitrophenol and polyphenyl compounds at the Anniston plant.
- E. During its operational history, the plant disposed of hazardous and nonhazardous waste at two landfills, the west end landfill and the south landfill, which are located adjacent to the plant. The west end landfill encompasses six acres of land, located on the southwestern side of the plant. The west end landfill is built on native clay soil and was used for disposal of the plant's wastes from the mid-1930s until approximately 1960. Defendants represent that in 1960, the west end landfill was transferred to the Alabama Power Company, and Monsanto Company began disposing of wastes at the south landfill. The south landfill is located on the southeast portion of the plant across U.S. Highway 202 and is situated on the lower northeastern slope of Coldwater Mountain. Defendants represent that the south landfill consists of 10 individual cells, of which two cells were used for the disposal of hazardous wastes, as defined under RCRA, from the plant. These two cells have been closed pursuant to RCRA regulations. Disposal of wastes at the south landfill ceased in approximately 1988. In 1993, Alabama Power Company transferred the west end landfill to Monsanto Company and leased a small parcel of land to the north of the west end landfill for its utility lines.
- F. During the time that the west end landfill and the south landfill were used to dispose of wastes, there was a potential for PCBs to be released from the landfills via soils and sediments being transported in surface water leaving the facility. Solutia Inc. has undertaken extensive "Interim Measures" in order to eliminate the potential for such releases. In addition, during the time that PCBs were manufactured by Monsanto Company at its Anniston plant, an aqueous stream flowing to a discharge point (currently identified as DSN0001) on Monsanto Company's Anniston plant site contained PCBs, and discharge from that discharge point flowed to a ditch, the waters of which flowed toward Snow Creek. Sampling by EPA, Solutia Inc., ADEM, and other parties has indicated that some sediments in drainage ditches leading away from the plant, Snow

Creek, and Choccolocco Creek, as well as some sedimentary material in the floodplains of these waterways, contain varying levels of PCBs.

- G. Solutia Inc. has a RCRA permit for the facility, which is regulated by ADEM. Pursuant to its RCRA permit, Solutia Inc. has performed extensive "Interim Measures" on the west end landfill, the south landfill, and areas east and north of the plant during the mid to late 1990s to eliminate the potential for release of PCBs associated with soils and sediments. EPA has provided oversight of the RCRA permit.
- H. EPA is performing its own investigation in Anniston under CERCLA to evaluate any threat to public health, welfare, or the environment posed by PCBs in Anniston.
- I. The Agency for Toxic Substances and Disease Registry (ATSDR) Health Consultation related to PCBs in Anniston was released for public comment on February 14, 2000. The ATSDR Health Consultation addresses, among other things, whether PCBs in soil are a threat to the public health in Anniston. The ATSDR Health Consultation was careful to note that the exposure estimates may overestimate or underestimate health risks in Anniston because there is an inadequate description of sampling and analytical methods for some of the data. Subject to the reservations noted above, the ATSDR Health Consultation concluded that PCBs in soil in parts of Anniston present a public health hazard of cancerous and non-cancerous health effects for persons with prolonged exposure, and PCBs in residential soil may present a public health hazard for thyroid and neurodevelopmental effects after exposure durations of less than 1 year. The ATSDR Health Consultation also concluded that further sampling and evaluation are needed to fully assess the scope of contamination and exposure and that further investigation should be done to allow ATSDR to make more specific recommendations for protecting public health. Solutia Inc. commented extensively on the Health Consultation. To date, ATSDR has not responded to public comment and has not issued a final version of the document.
- J. EPA has (and will continue) to share its sampling results with ATSDR to assist ATSDR with any future health studies which ATSDR may conduct in Anniston.
- K. EPA has sampled the soil at hundreds of properties through multiple sampling phases in Anniston for PCBs since June of 1999. The results indicate that many of the properties tested contain PCBs. For example, EPA sampled residents and businesses near the plant from June 28-30, 1999, for PCBs. The results from these samples indicated that some soils at residences and businesses in the vicinity of the plant contain PCBs. The level of PCBs detected during this June sampling event ranged from non-detect to 15.24 mg/kg. EPA also sampled residences, businesses, and creeks near the plant during February of 2000. The level of PCBs detected during this February sampling event ranged from non-detect to 317 mg/kg.

- L. Based on previous sampling activities conducted by EPA and other parties in Anniston, EPA has a reasonable basis to believe that the properties which will be sampled pursuant to this NTC Removal Agreement may contain PCBs.
- M. On August 31, 2000, EPA notified Defendants of their potential liability under CERCLA, demanded that Defendants reimburse EPA for its past and future costs at the Site, and requested that Defendants perform a removal action at the Site.
- N. EPA and Solutia Inc. entered into an Administrative Order on Consent, docket no. 01-02-C, for a removal action regarding the Site which was effective on October 27, 2000. The October 27, 2000 AOC was withdrawn and replaced with the October 5, 2001 AOC.

Defendants participation in this NTC Removal Agreement shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this NTC Removal Agreement (including, but not limited to, findings relating to endangerment to the public health, welfare, or the environment) except in a proceeding to enforce the terms of this NTC Removal Agreement. Defendants deny that they are a source of any hazardous substances at the Site other than PCBs discharged from its manufacturing operations or its plant waste disposal facilities.

#### **V. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS**

Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

1. The Anniston PCB Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
2. The contaminants found at the Site, as identified in the Findings of Fact above, include "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), including but not limited to PCBs.
3. Each Defendant is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
4. Each Defendant may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
  - a. Defendant Solutia Inc. is the "owner" and/or "operator" of the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).



- b. Defendant Solutia Inc. was the "owner" and/or "operator" of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).
  - c. Defendant Pharmacia Corporation (p/k/a Monsanto Company) was the "owner" and/or "operator" of the Site at the time of disposal of hazardous substances at the Site, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).
5. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the Site as defined by Sections 101(22) of CERCLA, 42 U.S.C. § 9601(22).
6. The conditions present at the Site constitute an imminent and substantial endangerment to public health, welfare, or the environment. Factors that shall be considered in determining the appropriateness of a removal action are set forth in Section 104(b) of CERCLA and Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300 ("NCP").
7. The actual or threatened release of hazardous substances at or from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
8. The removal action required by this NTC Removal Agreement is necessary to protect the public health, welfare, or the environment, and is not inconsistent with the NCP or CERCLA.

Defendants' participation in this NTC Removal Agreement shall not constitute or be construed as an admission of liability or of EPA's findings or determinations contained in this NTC Removal Agreement (including, but not limited to, findings relating to endangerment to the public health, welfare, or the environment) except in a proceeding to enforce the terms of this NTC Removal Agreement. Defendants deny that it is a source of any hazardous substances at the Site other than PCBs discharged from its manufacturing operations or its plant waste disposal facilities.

## **VI. ORDER**

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record for this Site, it is hereby ordered and agreed that Defendants shall comply with the following provisions, including but not limited to all attachments to this NTC Removal Agreement, and all documents incorporated by reference into this NTC Removal Agreement, and perform the following actions:

## 1. DESIGNATION OF CONTRACTOR AND PROJECT COORDINATORS

Defendants shall retain one or more contractors to perform the Work and shall notify EPA and the State of the names and qualifications of such contractors within 15 days of the Effective Date if they have not already been identified pursuant to the October 5, 2001 AOC or the Consent Decree. Defendants shall also notify EPA of the names and qualifications of any other contractors or subcontractors retained to perform the Work at least 10 working days prior to commencement of such Work. EPA retains the right, after consultation with the State, to disapprove of any or all of the contractors and/or subcontractors retained by Defendants. If EPA disapproves of a selected contractor, Defendants shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within fifteen (15) working days of EPA's disapproval. The proposed contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP") if it has not already been submitted to EPA pursuant to the October 5, 2001 AOC or the Consent Decree. The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002), or equivalent documentation as required by EPA.

The Project Coordinator previously designated by Defendants pursuant to the October 5, 2001 AOC shall be deemed designated under this NTC Removal Agreement. The Project Coordinator shall be responsible for administration of all actions by Defendants required by this NTC Removal Agreement. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right, after consultation with the State, to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Defendants shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within 10 working days following EPA's disapproval. Receipt by Defendants' Project Coordinator of any notice or communication from EPA relating to this NTC Removal Agreement shall constitute receipt by all Defendants.

EPA has designated Pam Scully of EPA Region 4 as EPA's Project Coordinator. Except as otherwise provided in this NTC Removal Agreement, Defendants shall direct all submissions required by this NTC Removal Agreement to the EPA's Project Coordinator at the following address:

Pam Scully  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

EPA and Defendants shall have the right, subject to the approval requirements noted above, to change their respective Project Coordinators. Defendants shall notify EPA 10 working days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

## 2.0 WORK TO BE PERFORMED

Defendants shall perform all actions necessary to implement an EE/CA pursuant to this NTC Removal Agreement. If the NTC Removal Action Memorandum selects soil removal at or above 1 ppm for surface soils and at or above 10 ppm for soils below a depth of 12 inches, then Defendants shall also perform all actions necessary to implement the NTC Removal Action Memorandum. The actions to be implemented generally include, but are not limited to, the following:

- a. Within sixty (60) days after the effective date of this NTC Removal Agreement, Defendants shall submit to EPA for review and approval an EE/CA Report. The EE/CA Report shall summarize available analytical data collected by EPA and Defendants pursuant to previous removal activities to evaluate the nature and extent of contaminants present, and to identify potential sources of such contaminants. The EE/CA Report shall identify and analyze Removal Action Alternatives as provided in EPA's 1993 Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA. Subsequent to a comparative analysis of identified Removal Action Alternatives, the EE/CA Report shall conclude with a refined conceptual description of the recommended Removal Action Alternative. At a minimum, the following Removal Action Alternatives shall be considered: 1) alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; 2) alternatives that involve containment with little or no treatment; 3) and soil removal. The recommended alternative shall, at a minimum, address residential properties that contain PCBs at or above 1 ppm in the surface soil. For such properties, it shall also address soils below a depth of 12 inches that contain PCBs at or above 10 ppm. The EE/CA Report shall also include a comprehensive project schedule for completion of each major activity required by this NTC Removal Agreement and the submission of each required deliverable.
- b. The EE/CA Report shall also include a Supplemental Sampling Plan which shall focus on residential Site characterization and present a comprehensive strategy to: 1) spatially evaluate the nature/extent of residential contamination present; and 2) to address the current/future risks posed to human health and the environment on residential properties. The Supplemental Sampling Plan shall include a sampling plan for the constituents of concern (COCs). Defendants and EPA agree that for purposes of this NTC Removal Agreement, the COCs initially include those constituents listed in Table 1 (Appendix F) associated with Defendants' current or prior manufacturing operations. EPA reserves the right to require that a subset of samples collected by Defendants be analyzed for constituents not identified in Table 1. EPA may add additional constituents to Table 1 based on results of future sampling and association with past or current operations of the Site by Defendants or their predecessors. Additionally, should EPA determine that constituents listed in Table 1 found in a subsection of the Site are not associated with Defendants' current or prior manufacturing operations, Defendants shall not be required to conduct further sampling for such COCs to the extent they are not associated with

Defendants' current or prior manufacturing operations. The Supplemental Sampling Plan shall present a comprehensive approach for soil sampling, propose sample locations and frequency, and delineate required sample equipment, sampling procedures, sample handling and decontamination procedures for sampling equipment. In an effort to eliminate duplicity and to streamline Site characterization efforts, the proposed sampling strategy shall utilize existing data collected by EPA and by Defendants pursuant to the previous removal orders where available.

- c. In addition to the general sampling described in the previous paragraph, the Supplemental Sampling Plan shall require Defendants to conduct composite PCB and lead<sup>1</sup> surface soil sampling as directed by EPA, at residential properties that have not previously had composite sampling. Composite sampling for PCBs and lead shall follow the guidelines outlined in Defendants Removal Action Sampling and Analysis Plan (SAP), Revision 2, which was submitted in accordance with the October 5, 2001 AOC and approved by EPA on December 21, 2001. Sampling efforts shall be prioritized in a manner such that initial efforts will focus on areas associated with drainage pathways. Should the sampling data indicate that PCB impacts in an area do not warrant further analysis, EPA's Project Coordinator will have the authority to direct sampling efforts in that area to be stopped. If EPA's Project Coordinator directs sampling to be stopped in any area, EPA's Project Coordinator will retain authority to require Defendants to re-initiate sampling in any such area if EPA's Project Coordinator determines that it is appropriate prior to issuance of the Certification of Completion pursuant to Section XIX.
- d. Defendants shall implement the EPA approved Supplemental Sampling Plan in accordance with the schedule contained therein. Within thirty (30) days of EPA approval of the Supplemental Sampling Plan, Defendants shall mobilize to the Site for sample collection activities.
- e. Prior to EPA's issuance of the NTC Action Memorandum, Defendants shall implement a response action pursuant to the Removal Order for any property (including properties that are not within the Zones covered by the Removal Order) identified pursuant to this NTC Removal Agreement which contains PCBs at or above 10 ppm in surface soil. However, if the NTC Action Memorandum selects a NTC Residential Soil Action Level at or above 1 ppm in surface soils (and at or above 10 ppm below a depth of 12 inches), then Defendants shall implement a response action as provided in Section 2.0(h) for all residential properties that contain PCBs at or above 1 ppm, and the residential sampling and removal requirements of the Removal Order shall be amended and superseded by

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<sup>1</sup> EPA is currently investigating the potential sources of lead at the Site. EPA has not yet determined whether the Defendants are a source of lead contamination at the Site. By agreeing to sample residential properties for lead pursuant to this NTC Removal Agreement, Defendants do not acknowledge or admit, and in fact denies, that Defendants are a source of lead at the Site.

this NTC Removal Agreement. However, Defendants shall continue to address the other requirements of the Removal Order, including but not limited to the 11<sup>th</sup> Street Ditch.

- f. EPA will compile all documents generated pursuant to this NTC Removal Agreement and other Site specific information in an Administrative Record for the Site. Upon EPA approval of the EE/CA Report submitted in accordance with 2.0(a), EPA will publish a public notice of availability of the Administrative Record. Pursuant to NCP requirements, a 30-day public comment period will be held on EPA's recommended Removal Action and other supporting documentation in the Administrative Record. EPA will respond to all significant comments received during the formal comment period and include a written response in the Administrative Record.
- g. After the comment period, EPA will prepare the NTC Removal Action Memorandum for the Site which will substantiate the need for a Removal Action and explain the rationale for the Removal Action selected.
- h. If the NTC Action Memorandum selects soil removal at properties at or above 1 ppm in surface soils (and at or above 10 ppm below a depth of 12 inches), then Defendants shall, within thirty (30) days after EPA signs the NTC Removal Action Memorandum, submit to EPA for review a draft Residential Soil Removal Work Plan. The Soil Removal Work Plan shall describe in detail how Defendants propose to clean up each property exceeding the NTC Residential Soil Action Level. The Soil Removal Work Plan shall also include a comprehensive project schedule for completion of soil removal activities. Defendants shall implement the EPA approved Residential Soil Removal Work Plan in accordance with the schedule contained therein. Within thirty (30) days of EPA approval of the Residential Soil Removal Work Plan, Defendants shall mobilize to the Site to begin removal activities. The Soil Removal Work Plan shall contain a provision which requires Defendants to do the following tasks.
  1. Defendants shall conduct a removal response at any property for which composite sampling results from this NTC Removal Agreement, the October 27, 2000 AOC, the October 5, 2000 AOC, or sampling by EPA indicate the presence of PCBs in surface soils at a concentration at or above 1 ppm in surface soils. Based on the composite sampling results, the frontyard, backyard, or both shall be subject to a removal action. a)
  2. Defendants shall submit for approval the proposed removal response for each property within the time frame specified in the Removal Work Plan. EPA shall make the final determination regarding the appropriate removal response for each property.

3. For those residential properties identified pursuant to this NTC Removal Agreement having composite sample PCB levels in surface soils at or above 1 ppm the removal action shall require the removal of the top twelve (12) inches of soil from the impacted area. Soils in these areas below a depth of twelve (12) inches shall be removed until the PCB concentration based on composite sampling is below 10 mg/kg, unless the PCB levels at depth are greater than the surface concentration. If the PCB levels at depth are greater than the surface concentration, then EPA and Defendants agree to discuss how to address such properties on a case by case basis. Any soil removed shall be replaced with clean soil.
4. For those residential properties identified pursuant to this NTC Removal Agreement requiring a removal action because they have both composite sample PCB levels in surface soils at or above 1 ppm and greater than 400 ppm lead, Defendants shall conduct depth sampling to determine the vertical extent of lead contamination. If there is lead contamination greater than 400 ppm below a depth of twelve (12) inches that will not be removed by the PCB removal action, then Defendants shall notify EPA and coordinate the PCB removal pursuant to this NTC Removal Agreement with any lead removal action EPA determines is necessary.
5. For those properties having composite sample PCB levels at or above 1 ppm in surface soils, Defendants shall make an exposure evaluation of the areas under any structures (i.e. crawl space, storage area, unfinished basement, etc.). The evaluation shall identify such areas and assess the potential exposure such areas pose to individuals who may use or live at each property. Defendants shall sample any such area if EPA determines that it poses a potential direct contact threat. A determination regarding the need for a removal response for these areas will be made by EPA on a case-by-case basis.
6. During the removal response action for a property, and if directed by EPA's Project Coordinator, Defendants shall offer temporary relocation for all residents living at the property and any residents living on property whose property line touches a property at which a removal response is being conducted. In addition, Defendants shall provide for temporary relocation of any other residents living in the vicinity of the property at which a removal response is being conducted if EPA determines it is necessary for health and safety reasons. Any temporary relocations conducted pursuant to this NTC Removal Agreement must, at a minimum, be consistent with the requirements of relocations conducted pursuant to the Uniform Relocation Act (URA), 42 U.S.C. § 4601 et. seq.

7. To ensure that properties subject to a removal response action pursuant to this NTC Removal Agreement are not recontaminated with PCBs at a level at or above 1 ppm in surface soils, Defendants shall conduct monitoring and sampling, as EPA determines necessary, of such properties until EPA determines that all source areas which may cause recontamination have been addressed sufficiently. Defendants shall conduct an additional removal response action at any area that is recontaminated at or above 1 ppm in surface soils pursuant to the terms and conditions set forth in this NTC Removal Agreement.
8. If the residents agree, Defendants shall conduct dust sampling in all homes with PCB levels at or above 1 ppm in surface soils at which a removal response action is undertaken pursuant to this NTC Removal Agreement. Sampling shall be completed prior to the residents re-entry into their residence if temporary relocation was required. Defendants shall clean up the inside of these homes if the dust sampling results are equal to or greater than 1 ppm. In addition, if the residents agree, Defendants shall have the option to clean up the inside of the home before receiving the dust sampling results. Should the sampling data indicate that PCB dust sampling in an area is not required, EPA's Project Coordinator will have the authority to direct dust sampling efforts in that area to be stopped.
  - i. EPA may determine that other tasks, including supplemental investigation work and/or engineering evaluation are necessary as part of the EE/CA process that are in addition to EPA-approved tasks and deliverables, including reports which may have been completed pursuant to this NTC Removal Agreement. Defendants shall implement any additional tasks which EPA determines are necessary to sufficiently complete the EE/CA and to select a response action that is adequately protective of human health and the environment. The additional tasks, if any, shall be completed in accordance with the standards, specifications and schedule determined or approved by EPA.
  - j. Within sixty (60) days following completion of field characterization efforts pursuant to the Supplemental Sampling Plan, Defendants shall submit the Supplemental EE/CA Report for EPA review and comment. Alternatively, EPA may determine at any time during this NTC Removal Agreement that Defendants have sufficient information regarding the nature and extent of residential soil contamination to prepare the Supplemental EE/CA Report by sending Defendants written notification that the Supplemental EE/CA Report shall be completed within 60 days. Such notification shall not terminate Defendants' obligation to continue sampling activities if EPA determines further sampling is necessary to fully delineate the nature and extent of residential soil contamination.
  - k. Ten copies of all documents to be submitted to EPA should be sent to:

Pam Scully  
EPA Project Coordinator  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street S.W.  
Atlanta, GA 30303-8960

### 2.1 Work Plan Implementation and Modification

As part of the Work Plans described in this NTC Removal Agreement, Defendants must submit a schedule for the above required activities which shall include specific initiation and completion dates. The Work Plans shall provide a description of, and an expeditious schedule for, the actions required by this NTC Removal Agreement.

EPA may approve, disapprove, require revisions to, or modify the Work Plans. If EPA requires revisions to any of the Work Plans, Defendants shall submit a revised Work Plan within (15) working days of receipt of EPA's notification of the required revisions. Defendants shall implement each Work Plan as finally approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, each Work Plan, schedule, and any subsequent modifications shall be fully enforceable under this NTC Removal Agreement. Defendants shall notify EPA at least 48 hours prior to performing any on-Site work pursuant to each EPA-approved Work Plan. Defendants shall not commence or undertake any removal activities on-Site without prior EPA approval.

Defendants shall attempt to obtain access to all properties for which access is needed to perform the response actions required by this NTC Removal Agreement according to the procedures set forth in Section VI(3), and within the timeframes noted in this NTC Removal Agreement or the Work Plans approved pursuant to this NTC Removal Agreement. If Defendants are denied access (after attempting to obtain access in the manner described in Section VI(3)) to any properties for which access is necessary pursuant to this NTC Removal Agreement, then all schedules in this NTC Removal Agreement and the Work Plans approved pursuant to this NTC Removal Agreement, which require access in order to comply with such schedules, shall be extended (with respect to the properties for which access is denied only) until ten (10) days after Defendants (or EPA on behalf of Defendants) obtain access to any such properties. However, any such schedule extension(s) shall not apply with respect to properties for which Defendants obtain access within the timeframes specified in this NTC Removal Agreement or the Work Plans approved pursuant to this NTC Removal Agreement.

### 2.2 Health and Safety Plan

With the submission of each Work Plan, Defendants shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of work under this NTC Removal Agreement. Each plan shall be prepared in accordance with EPA's current Standard Operating Safety Guide, dated November 1984, and currently updated July 1988. In addition, each plan shall comply with all current applicable Occupational Safety and Health Administration (OSHA) regulations



found at 29 CFR Part 1910. Defendants shall submit a health and safety plan with the submission of any additional Work Plans required by this NTC Removal Agreement. Defendants shall incorporate all changes to the plan(s) recommended by EPA, and implement the plan(s) during the pendency of the removal action.

### 2.3 Quality Assurance and Sampling

All sampling and analyses performed pursuant to this NTC Removal Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures. Defendants shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Defendants shall follow the following documents, as appropriate, as guidance for QA/QC and sampling: "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures," OSWER Directive Number 9360.4-01; dated January 1990; "Compendium of ERT Procedures," OSWER Directives Numbered 9360.4-04 through 9360.4-08.

In a effort to improve electronic management of site-specific data, EPA requires the submission of all data in the categories mentioned below in a standardized digital format. EPA has under development and will provide a Data Dictionary (DD), a List of Valid Values (LVV), and sample Electronic Data Deliverables (EDDs) to facilitate this data submission requirement. Digital data checker software will be provided by EPA for both laboratory and field data. These data checkers shall read the ASCII files generated by the specified EDD, check the file for completeness and compatibility with the LVV file and report the results of these checks. All data packages must pass the data checkers prior to their submission to the Agency. Types of data to be submitted in digital format include (but are not limited to) the following categories: Site Identification, Data Provider, Sample Location, Laboratory ID Information, Field and Laboratory Equipment and methods Used, Field Measurement Results, Laboratory Analytical Results, Geology and Monitoring Well Construction, Depth to Water in monitoring wells, Surface Water Levels, etc.

Upon request by EPA, Defendants shall have such a laboratory analyze samples submitted by EPA for quality-assurance monitoring. Defendants shall provide to EPA the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Defendants shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by Defendants while performing work under this NTC Removal Agreement. Defendants shall notify EPA not less than thirty (30) days in advance of any sample collection activity, unless EPA's Project Coordinator agrees in writing to a shorter time frame with regard to a specific sampling event. EPA shall have the right to take any additional samples that it deems necessary.

### 2.4 Post-Removal Site Control

In accordance with the Work Plan schedule, or as otherwise directed by EPA, Defendants shall submit a proposal for post-removal Site control consistent with Section 300.415(k) of the NCP and OSWER Directive 9360.2-02. Upon EPA approval, Defendants shall implement such controls and shall provide EPA with documentation of all post-removal Site control arrangements.

## 2.5 Reporting

Defendants shall submit to EPA written monthly progress reports which: (1) describe the actions which have been taken toward achieving compliance with this NTC Removal Agreement during the previous month; (2) include all results of sampling and tests and any other data received by Defendants during the course of the work; (3) include all plans and procedures completed under the Work Plan during the previous month; (4) describe all actions, data, and plans which are scheduled for the next month, and provide other information relating to the progress of the work as deemed necessary by EPA and (5) include information regarding percentage of completion, unresolved delays, encountered or anticipated, that may affect the future schedule for implementation of work, and a description of efforts made to mitigate those delays or anticipated delays. These progress reports are to be submitted to EPA by the tenth day of every month following the effective date of this NTC Removal Agreement. EPA and Defendants may agree that a single monthly progress report may be used for this NTC Removal Agreement, the RI/FS Agreement and the Removal Order.

If Defendants own any portion of the Site, at least thirty (30) days prior to the conveyance of any interest in real property at the Site, Defendants shall give written notice that the property is subject to this NTC Removal Agreement to the transferee and written notice to EPA of the proposed conveyance, including the name and address of the transferee. Defendants agree to require that its successor comply with the immediately preceding sentence and Section VI(3) - Access to Property and Information.

## 2.6 Final Report

Within ninety (90) days after completion of all removal response actions required under this NTC Removal Agreement, the Defendants shall submit for EPA review and approval a final report summarizing the actions taken to comply with this NTC Removal Agreement. The final report shall conform with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports" and OSWER Directive No. 9360.3-03 - "Removal Response Reporting." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with this NTC Removal Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). If EPA selects something other than soil removal at or above 1 ppm in surface soils and at or above 10 ppm below a depth of 12 inches, then Defendants shall not be required to perform the actions in Section VI(2.0h) and may submit their Final Report upon completion of all other removal response activities required by this NTC Removal

Agreement. The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

### 3. Access to Property and Information

Defendants shall attempt to obtain access to the Site and off-Site areas to which access is necessary to implement this NTC Removal Agreement, and shall provide access to all records and documentation related to the conditions at the Site and the actions conducted pursuant to this NTC Removal Agreement. Such access shall be provided to EPA employees, contractors, agents, consultants, designees, representatives, and ADEM representatives. Such access provided and/or obtained by Defendants shall permit these individuals to move freely in order to conduct actions which EPA determines to be necessary. Defendants shall submit to EPA, upon receipt, the results of all sampling or tests and all other data generated by Defendants or their contractor(s), or on the Defendants' behalf during implementation of this NTC Removal Agreement.

For all properties where a response action under this NTC Removal Agreement is to be performed in areas owned by or in possession of someone other than Defendants, Defendants shall send (within the timeframes specified in this NTC Removal Agreement, or the Work Plans approved pursuant to this NTC Removal Agreement) the applicable correspondence (as provided below) to all resident(s), owner(s), and/or non-resident owner(s) from whom access is needed to perform a response action pursuant to this NTC Removal Agreement. The correspondence and agreement attached to this NTC Removal Agreement as Exhibit A shall be sent to all resident(s), owner(s), and/or non-resident owner(s) whose property Defendants are required to sample (in order to determine if further action is necessary) pursuant to this NTC Removal Agreement. The correspondence and agreement attached to this NTC Removal Agreement as Exhibit B shall be sent to all resident(s), owner(s), and/or non-resident owner(s) whose property Defendants need access to in order to perform a removal response action pursuant to this NTC Removal Agreement. Defendants shall attempt to identify all resident(s), owner(s), and/or non-resident owner(s) from whom Defendants should obtain access in order to perform any actions required pursuant to this NTC Removal Agreement by using, at a minimum, the Calhoun County's official records.

Defendants shall send all of the correspondence requesting access pursuant to this NTC Removal Agreement via certified mail, return receipt requested. If Defendants do not receive the necessary access agreements within thirty (30) days from the date that the resident(s), owner(s), and/or non-resident owner(s) received it, or if the resident(s), owner(s), and/or non-resident owner(s) fail to sign for the certified correspondence within thirty (30) days from the date the correspondence was mailed by Defendants, then Defendants shall provide to EPA in the following monthly progress report, an "EPA

Notification of Noncompliance (Sampling)" which contains all of the information in the model "EPA Notification of Noncompliance (Sampling)" in Exhibit C. For any party from whom Defendants were unable to obtain access, Defendants shall maintain a copy of all correspondences, county records, and any other evidence or information Defendants have regarding the resident(s), owner(s), and/or non-resident owner(s) from whom Defendants were unable to obtain access, and provide it to EPA upon request. EPA may then assist Defendants in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Defendants shall reimburse EPA for all costs and attorneys' fees incurred by the United States in obtaining such access. EPA acknowledges that if Defendants have attempted to obtain access to properties subject to this NTC Removal Agreement in the manner described above, and is unable to do so, then Defendants will not be liable for stipulated penalties for failure to meet any schedules in this NTC Removal Agreement or the Work Plans approved pursuant to this NTC Removal Agreement with respect to properties for which access is denied. To the extent that any resident(s), owner(s), and/or non-resident owner(s) is adverse to Solutia Inc. in a legal proceeding and is represented by counsel, Defendants may send the appropriate correspondence and agreement discussed in Section VI(3) to any such person's counsel only.

#### 4. Record Retention, Documentation, Availability of Information

Defendants shall preserve all documents and information relating to work performed under this NTC Removal Agreement, or relating to the hazardous substances found on or released from the Site, for ten years following completion of the removal response actions required by this NTC Removal Agreement. At the end of this ten year-period and thirty (30) days before any document or information is destroyed, Defendants shall notify EPA that such documents and information are available to EPA for inspection, and upon request, shall provide the originals or copies of such documents and information to EPA. In addition, Defendants shall provide documents and information retained under this Section at any time before expiration of the ten year- period at the written request of EPA.

Defendants may assert a business confidentiality claim pursuant to 40 CFR § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this NTC Removal Agreement, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Analytical and other data specified in Section 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the Defendants. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of the procedures set forth at, 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Defendants.

Defendants shall maintain a running log of privileged documents on a document-by-document basis, containing the date, author(s), addressee(s), subject, the privilege or grounds claimed (*e.g.*, attorney work product, attorney-client), and the factual basis for assertion of the privilege. Defendants shall keep the "privilege log" on file and available for inspection. EPA may at any time challenge claims of privilege.

#### 5. Off-Site Shipments

All hazardous substances, pollutants, or contaminants removed off-Site pursuant to this NTC Removal Agreement for treatment, storage, or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by EPA, pursuant to Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and the off-site rule at 40 CFR 300.440. EPA will provide information on the acceptability of a facility under Section 121(d)(3) of CERCLA and 40 CFR 300.440.

It is understood that, pursuant to this provision and the statutes and regulations cited herein, material containing PCBs at levels less than 50 mg/kg may be disposed of at a facility permitted for the disposal of non-hazardous wastes under Subtitle D of RCRA or appropriate State law, provided that such material does not contain elevated levels of other hazardous substances that would prohibit it from being disposed of at a non-hazardous waste facility.

#### 6. Compliance With Other Laws

Defendants shall perform all actions required pursuant to this NTC Removal Agreement in accordance with all applicable local, state, and federal laws and regulations except as provided in CERCLA Section 121(e) and 40 CFR Section 300.415(i). In accordance with 40 CFR Section 300.415(i), all on-Site actions required pursuant to this NTC Removal Agreement shall, as determined by EPA, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. (See "The Superfund Removal Procedures: Guidance on the Consideration of ARARs During Removal Actions," OSWER Directive No. 9360.3-02, August 1991). Defendants shall identify ARARs in the Work Plan subject to EPA approval.

#### 7. Emergency Response and Notification of Releases

If any incident, or change in Site conditions, during the actions conducted pursuant to this NTC Removal Agreement causes or threatens to cause an additional release of hazardous substances from the Site or an endangerment to the public health, welfare, or the environment, Defendants shall immediately take all appropriate action. Defendants shall take these actions in accordance with all applicable provisions of this NTC Removal Agreement, including, but not limited to the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Defendants shall also immediately notify EPA's Project Coordinator at (404)562-8743 or, in the event of his/her unavailability, shall notify the EPA Hotline at (800)424-8802 of the incident or Site conditions. If Defendants fail to respond, EPA may respond to the release or endangerment and reserve the right to pursue cost recovery.

In addition, in the event of any release of a hazardous substance from the Site, Defendants shall immediately notify EPA's Project Coordinator and the National Response Center at telephone number (800) 424-8802. Defendants shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, not in lieu of, reporting under CERCLA Section

103(c) and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. §§ 11001 et seq.

## **VII. AUTHORITY OF THE EPA'S PROJECT COORDINATOR**

EPA's Project Coordinator shall be responsible for overseeing the Defendants' implementation of this NTC Removal Agreement. EPA's Project Coordinator shall have the authority vested in an On-Scene Coordinator ("OSC") and a Remedial Project Manager (RPM) by the NCP, including the authority to halt, conduct, or direct any work required by this NTC Removal Agreement, or to direct any other response action undertaken at the Site. Absence of EPA's Project Coordinator from the Site shall not be cause for stoppage of work unless specifically directed by EPA's Project Coordinator.

## **VIII. REIMBURSEMENT OF COSTS**

Estimates for Future Response Costs EPA and Defendants will meet on an annual basis to discuss estimates for Future Response Costs related to this NTC Removal Agreement for the upcoming year. EPA will provide estimates of EPA and EPA-contractor costs for Future Response Costs as defined in this agreement. These estimates are for informational purposes only and shall not affect the requirement to pay Future Response Costs, as provided in this Section and in the RI/FS Agreement.

Payments for Future Response Costs Defendants shall pay to EPA all Future Response Costs incurred in a manner not inconsistent with the National Contingency Plan. On a periodic basis the United States will send Defendants a bill requiring payment that includes a Region 4 cost summary and a DOJ cost summary. Defendants shall make all payments within 30 days of Defendants' receipt of each bill requiring payment, except as otherwise provided in this Paragraph. All payments to the United States under this Section shall be paid by 1) certified or cashier's check made payable to the "Anniston PCB Site Special Account," shall be mailed to U.S. EPA Region 4, Superfund Accounting, Attn: Collection Officer in Superfund, P.O. Box 100142, Atlanta, GA 30384, shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID #04S9, the DOJ Case Number 90-11-2-07135/1 and the name and address of the party making payment, or 2) if the amount is greater than \$10,000 payment may be made by FedWire Electronic Funds Transfer ("EFT") pursuant to the instructions provided by Paula V. Batchelor of Region 4 or her successor. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), or notification of electronic wire transfer of funds, shall be sent to Dustin F. Minor, U.S. EPA Region 4, Environmental Accountability Division, 61 Forsyth Street, S.W., Atlanta, GA 30303-8960, and to Paula V. Batchelor, U.S. EPA Region 4, 4WD-PSB/11th floor, 61 Forsyth Street, S.W., Atlanta, GA, 30303-8960, or their successors.

The total amount to be paid by Defendants pursuant to this Paragraph shall be deposited in the Anniston PCB Site Special Account within the EPA Hazardous Substance Superfund to be retained and used at EPA's unreviewable discretion to conduct or finance response actions at or in connection with the

Anniston PCB Site, or transferred by EPA to the EPA Hazardous Substance Superfund. If EPA spends any funds from the Anniston PCB Site Special Account for future response actions at or in connection with the Site, such costs shall be potentially recoverable from Defendants, or any other potentially responsible party, and Defendants shall not object to their recoverability because such funds were placed into the Anniston PCB Site Special Account as payments for Future Response Costs.

Defendants agree to limit any disputes concerning costs to accounting errors, the inclusion of costs outside the scope of this Agreement, and the inclusion of costs incurred in a manner inconsistent with the National Contingency Plan. Defendants shall identify any contested costs and the basis of their objection. If Defendants request additional cost documentation in writing within thirty (30) days of receipt of the bill, EPA shall provide all requested cost documentation related to the dispute which it would be required to produce under the Freedom of Information Act, 5 U.S.C. § 552, as amended. Such objection shall be made in writing within thirty (30) days of receipt of the bill. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. Defendants shall have an additional thirty (30) day period, after receipt of any additional cost documentation requested, to further identify the contested Future Response Costs and the basis for the objection. In the event of an objection (even if Defendants have requested additional cost documentation), the Defendants shall within the thirty (30) days of receipt of the original bill pay all undisputed costs in accordance with the schedule set forth above. Disputed costs shall be paid by Defendants into an interest bearing escrow account while the dispute is pending. Defendants bear the burden of establishing an EPA accounting error, the inclusion of costs outside the scope of this Agreement, or the inclusion of costs incurred in a manner inconsistent with the National Contingency Plan.

In the event that the payments are not made within 30 days of the Defendants' receipt of the bill, Defendants shall pay interest on the unpaid balance and be subject to Stipulated Penalties. The interest on Future Response Costs shall begin to accrue on the date of the bill. The interest shall accrue through the date of the Defendants' payment. Payments of interest made under this Paragraph shall be in addition to such other remedies or sanctions available to Plaintiffs by virtue of Defendants' failure to make timely payments under this Section including, but not limited to, payment of stipulated penalties.

A copy of the check, or notification of an EFT, should be sent simultaneously to the EPA Project Coordinator with all payments.

#### **IX. DISPUTE RESOLUTION**

The parties to this NTC Removal Agreement shall attempt to resolve, expeditiously and informally, any disagreements concerning this NTC Removal Agreement.

If the Defendants object to any EPA action taken pursuant to this NTC Removal Agreement, including billings for Future Response Costs, the Defendants shall notify EPA in writing of its objection(s) within thirty (30) days of receipt of notice of such action, unless the objection(s) has/have been informally resolved.

EPA and Defendants shall within thirty (30) days from EPA's receipt of the Defendants' written objections attempt to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended at the sole discretion of EPA. EPA's decision regarding an extension of the Negotiation Period shall not constitute an EPA action subject to dispute resolution or a final agency action giving rise to judicial review.

Any agreement reached by the parties pursuant to this Section shall be in writing, signed by both parties, and shall upon the signature by both parties be incorporated into and become an enforceable element of this NTC Removal Agreement. If the parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Director, Waste Management Division level or higher will issue a written decision on the dispute to the Defendants. The decision of EPA shall be incorporated into and become an enforceable element of this NTC Removal Agreement upon Defendants' receipt of the EPA decision regarding the dispute. Defendants' obligations under this NTC Removal Agreement shall not be tolled by submission of any objection for dispute resolution under this Section.

Following resolution of the dispute, as provided by this Section, Defendants' shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. No EPA decision made pursuant to this Section shall constitute a final agency action giving rise to judicial review prior to a judicial action brought by the United States to enforce the decision.

#### **X. FORCE MAJEURE**

Defendants agree to perform all requirements under this NTC Removal Agreement within the time limits established under this NTC Removal Agreement, unless the performance is delayed by a force majeure. For purposes of this NTC Removal Agreement, a force majeure is defined as any event arising from causes beyond the control of Defendants or of any entity controlled by Defendants, including but not limited to its contractors and subcontractors, that delays or prevents performance of any obligation under this NTC Removal Agreement despite Defendants' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance.

Defendants shall notify EPA orally within forty-eight (48) hours after the event, and in writing within seven (7) days after Defendants become or should have become aware of events, which constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Defendants shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the notice provision of this Section shall waive any claim of force majeure by the Defendants.

If EPA determines a delay in performance of a requirement under this NTC Removal Agreement is or was attributable to a force majeure, the time period for performance of that requirement shall be extended as deemed necessary by EPA. Such an extension shall not alter Defendants' obligation to



perform or complete other tasks required by this NTC Removal Agreement which are not directly affected by the force majeure.

## **XI. STIPULATED AND STATUTORY PENALTIES**

For each day, or portion thereof, that Defendants fail to perform, fully, any requirement of this NTC Removal Agreement in accordance with the schedule established pursuant to this NTC Removal Agreement and any plans approved pursuant to this NTC Removal Agreement. Defendants shall be liable as follows:

| Period of Failure to Comply | Penalty Per Violation Per Day |
|-----------------------------|-------------------------------|
| 1st through 7th day         | \$500.00                      |
| 8th through 15th day        | \$1,000.00                    |
| 16th day and beyond         | \$5,000.00                    |

Upon receipt of written demand by EPA, Defendants shall make payment to EPA within thirty (30) days. Interest shall accrue on late payments as of the date the payment is due which is the date of the violation or act of non-compliance triggering the stipulated penalties.

Even if violations are simultaneous, separate penalties shall accrue for separate violations of this NTC Removal Agreement. Penalties accrue and are assessed per violation per day. Penalties shall accrue regardless of whether EPA has notified Defendants of a violation or act of noncompliance. The payment of penalties shall not alter in any way Defendants' obligation to complete the performance of the work required under this NTC Removal Agreement.

Violation of any provision of this NTC Removal Agreement may subject Defendants to civil penalties of up to twenty-seven thousand five-hundred dollars (\$27,500) per violation per day, as provided in Section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1). Defendants may also be subject to punitive damages in an amount up to three times the amount of any cost incurred by the United States as a result of such violation, as provided in Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Should Defendants violate this NTC Removal Agreement or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this NTC Removal Agreement pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606.

## **XII. RESERVATION OF RIGHTS**

Except as specifically provided in this NTC Removal Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this

NTC Removal Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Defendants in the future to perform additional activities pursuant to CERCLA or any other applicable law. EPA reserves the right to bring an action against Defendants under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States related to this NTC Removal Agreement or the Site and not reimbursed by Defendants.

### **XIII. OTHER CLAIMS**

By issuance of this NTC Removal Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Defendants. Neither the United States nor EPA shall be deemed a party to any contract entered into by the Defendants or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this NTC Removal Agreement.

Except as expressly provided in Section XIV - Covenant Not To Sue, nothing in this NTC Removal Agreement constitutes a satisfaction of or release from any claim or cause of action against the Defendants or any person not a party to this NTC Removal Agreement, for any liability such person may have under CERCLA, other statutes, or the common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a).

This NTC Removal Agreement does not constitute a preauthorization of funds under Section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). The Defendants waive any claim to payment under Sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, and 9612, against the United States or the Hazardous Substance Superfund arising out of any action performed under this NTC Removal Agreement.

No action or decision by EPA pursuant to this NTC Removal Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

### **XIV. COVENANT NOT TO SUE**

Except as otherwise specifically provided in this NTC Removal Agreement, upon issuance of the EPA notice referred to in Section XIX - Notice of Completion, EPA covenants not to sue Defendants for judicial imposition of damages or civil penalties or to take administrative action against Defendants for any failure to perform removal actions agreed to in this NTC Removal Agreement except as otherwise reserved herein.

Except as otherwise specifically provided in this NTC Removal Agreement, in consideration and upon Defendants' payment of Future Response Costs specified in Section VIII of this NTC Removal Agreement, EPA covenants not to sue or to take administrative action against Defendants' under Section 107(a) of CERCLA for recovery of Future Response Costs incurred by the United States in connection

with this removal action or this NTC Removal Agreement. This covenant not to sue shall take effect upon the receipt by EPA of the payments required by Section VIII - Reimbursement of Costs.

These covenants not to sue are conditioned upon the complete and satisfactory performance by Defendants of their obligations under this NTC Removal Agreement. These covenants not to sue extend only to the Defendants and do not extend to any other person.

#### **XV. CONTRIBUTION PROTECTION**

With regard to claims for contribution against Defendants for matters addressed in this NTC Removal Agreement, the Parties hereto agree that the Defendants are entitled to protection from contribution actions or claims to the extent provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4).

Nothing in this NTC Removal Agreement precludes the United States or the Defendants from asserting any claims, causes of action or demands against any persons not parties to this NTC Removal Agreement for indemnification, contribution, or cost recovery.

#### **XVI. INDEMNIFICATION**

Defendants agree to indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action: (A) arising from, or on account of, acts or omissions of Defendants, Defendants' officers, heirs, directors, employees, agents, contractors, subcontractors, receivers, trustees, successors or assigns, in carrying out actions pursuant to this NTC Removal Agreement; and (B) for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Defendants, and (any one or more) persons for performance of work on or relating to the Site, including claims on account of construction delays. In addition, Defendants agree to pay the United States all costs incurred by the United States, including litigation costs arising from or on account of claims made against the United States based on any of the acts or omissions referred to in the preceding paragraph.

Defendants waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between (any one or more of) Defendants and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

#### **XVII. INSURANCE**

The proof of insurance previously submitted by Defendants to EPA pursuant to the October 27, 2000 AOC shall be deemed submitted under this NTC Removal Agreement. Defendants shall maintain for the duration of this NTC Removal Agreement, comprehensive general liability insurance and automobile insurance with limits of five (5) million dollars, combined single limit. Defendants shall provide EPA with certificates of such insurance and a copy of each insurance policy, if Defendants have not done so already. If Defendants demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Defendants need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

### **XVIII. MODIFICATIONS**

Requirements of this NTC Removal Agreement may be modified in writing by mutual agreement of the parties.

If Defendants seek permission to deviate from any approved Work Plan or schedule, Defendants' Project Coordinator shall submit a written request to EPA for approval outlining the proposed Work Plan modification and its basis.

No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Defendants shall relieve Defendants of their obligation to obtain such formal approval as may be required by this NTC Removal Agreement, and to comply with all requirements of this NTC Removal Agreement unless it is formally modified.

### **XIX. NOTICE OF COMPLETION**

When EPA determines, after EPA's review of the Final Report, that all removal actions have been fully performed in accordance with this NTC Removal Agreement, with the exception of any continuing obligations required by this NTC Removal Agreement, EPA will provide notice to the Defendants. If EPA determines that any removal actions have not been completed in accordance with this NTC Removal Agreement, EPA will notify Defendants, provide a list of the deficiencies, and require that Defendants modify the Work Plan if appropriate in order to correct such deficiencies. Defendants shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Defendants to implement the approved modified Work Plan shall be a violation of this NTC Removal Agreement.

### **XX. SEVERABILITY**

If a court issues an order that invalidates any provision of this NTC Removal Agreement or finds that Defendants have sufficient cause not to comply with one or more provisions of this NTC Removal Agreement, Defendants shall remain bound to comply with all provisions of this NTC Removal Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.


**XXI. EFFECTIVE DATE**

The Effective Date of this NTC Removal Agreement, shall be the date the Consent Decree is entered by the Court.

The undersigned representative of Defendants certifies that they are fully authorized to enter into the terms and conditions of this NTC Removal Agreement and to bind the party they represent to this document.

Agreed this 16th day of October, 2002.

Solutia Inc.

By:   
Karl R. Barnickol (Typed Name)

Its: Senior Vice President,  
General Counsel and Secretary

The undersigned representative of Defendants certifies that they are fully authorized to enter into the terms and conditions of this NTC Removal Agreement and to bind the party they represent to this document.

Agreed this 16th day of October, 2002.

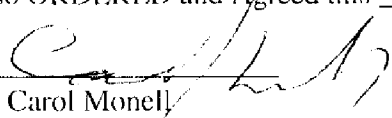
Pharmacia Corporation

By: [Signature]

[Typed Name] (Typed Name)

Its: Senior Vice President & General Counsel

It is so ORDERED and Agreed this 11 day of Oct, 2001.

BY:   
Carol Monell  
Chief, South Site Management Branch  
Waste Management Division  
Region 4  
U.S. Environmental Protection Agency

DATE: 10/11/02



**Exhibit A**  
**SAMPLING CORRESPONDENCE**  
**AND**  
**LICENSE AGREEMENT**

Exhibit A

**SAMPLING CORRESPONDENCE**

{Name}  
{Address}

Re: Property Located at {address}

Dear \_\_\_\_\_:

Solutia Inc. and the United States Environmental Protection Agency (EPA) have entered into an administrative agreement requiring Solutia to perform certain tasks in and around the Anniston area with EPA oversight. At EPA's request and pursuant to the administrative agreement, Solutia has agreed to investigate residential properties in certain areas in and around Anniston for the presence of polychlorinated biphenyls ("PCBs") and lead. The above referenced property is within one of the areas in which Solutia agreed to investigate.

So that Solutia can perform its investigation, Solutia requests that you grant permission for Solutia, EPA, the Alabama Department of Environmental Management (ADEM), and their contractors and representatives to enter your property by signing the enclosed License Agreement and returning it to me in the enclosed, self-addressed, stamped envelope within thirty days from the day you receive this letter.

Solutia will need to obtain soil samples from your front and back yards. Those samples will then be analyzed at an EPA-approved laboratory for the presence of PCBs and lead. Under the administrative agreement, Solutia has agreed to remove or otherwise address soils where the initial sampling reveals the presence of PCBs at levels equal to or greater than 10 parts per million. After your soil is analyzed, Solutia will provide you with copies of the sampling results. If the results indicate a presence of PCBs at levels equal to or greater than 10 parts per million, Solutia will request access to undertake additional response activities to address PCB impacted areas on your property. The initial sampling and any additional work performed on your property will not cost you any money and will be designed to minimize any inconvenience to you.

If you have any questions regarding the attached License Agreement, please do not hesitate to give me a call. I can be reached at \_\_\_\_\_. Alternatively, you may call Steve Spurlin, EPA's on-scene coordinator responsible for overseeing Solutia's activities under the administrative agreement. Mr. Spurlin can be reached at EPA's Community Relations Center in Anniston at (256)236-2599.

We thank you for your cooperation and appreciate your prompt attention to this matter.

Sincerely,

Solutia Inc.

Exhibit A

**SAMPLING LICENSE AGREEMENT**

This License Agreement is made between \_\_\_\_\_  
\_\_\_\_\_, a landowner (or tenant) in Calhoun County, Alabama, owning (or leasing)  
property located at \_\_\_\_\_  
("Owner") (or "Tenant), and Solutia Inc., 702 Clydesdale Avenue, Anniston, Alabama, 36201-5390.

1. Owner (or Tenant) hereby grants to Solutia, EPA, ADEM, and their contractors and representatives a revocable license to enter upon real property owned by Owner (or leased by Tenant) located at \_\_\_\_\_ (the "Property"), for the following purpose: Taking soil samples from the Property and analyzing such samples for the presence of polychlorinated biphenyls ("PCBs") and lead. This access shall permit the collection of soil samples from the unimproved portions of the Property and any soils beneath any structures on the Property, including crawl space areas or unfinished basements.
2. Solutia agrees, upon completion of the sampling and testing to be performed, that all material and equipment shall be removed from the Property, except for improvements agreed to by Owner (if Tenant is signing this license, put Owners name here). The Property will be restored as nearly as possible to its original state and condition.
3. Solutia assumes responsibility for, and agrees to indemnify Owner (or Tenant) for, any liability for losses, expenses, damages, demands, and claims in connection with or arising out of any injury to persons or damage to property sustained in connection with or arising out of performance of the work hereunder.
4. Solutia assumes responsibility and liability for violations of Federal, State, or local law incurred in connection with or arising out of performance of the work hereunder.
5. Owner (or Tenant) shall advise Solutia of any utility lines or other hazardous or potentially hazardous conditions that Owner (or Tenant) is aware of that might reasonably be expected to be affected by the work to be performed.
6. This Agreement contains the entire agreement among the parties, and no other agreements, whether oral or written, between the parties with respect to the subject matter of this Agreement shall be binding or valid, except as provided above.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2000.

By:

\_\_\_\_\_

Print/Typed Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**SOLUTIA INC.**

By:

\_\_\_\_\_

Title: \_\_\_\_\_

---

**Exhibit B**  
**SOIL REMOVAL CORRESPONDENCE**  
**AND**  
**LICENSE AGREEMENT**

Exhibit B

**SOIL REMOVAL CORRESPONDENCE**

{Name}  
{Address}

Re: Property Located at {address}

Dear \_\_\_\_\_:

Solutia Inc. and the United States Environmental Protection Agency (EPA) have entered into an administrative agreement requiring Solutia to perform certain tasks in and around the Anniston area with EPA oversight. As you are aware, EPA and/or Solutia previously sampled your property for the presence of PCBs and found a level of PCBs in a composite sample equal to or greater than 10 parts per million in your (front/back/or whole) yard. At EPA's request and pursuant to the administrative agreement, Solutia has agreed to perform a removal action on your property to address the presence of PCBs in your (front/back/or whole) yard. In addition, Solutia has agreed pursuant to the administrative agreement to sample dust in in your home for the presence of PCBs, and if the dust samples indicate PCB concentrations equal to or greater than 2 parts per million, Solutia has agreed to clean the inside of your home.

So that Solutia can perform the removal action, Solutia requests that you grant permission for Solutia, EPA, the Alabama Department of Environmental Management (ADEM), and their contractors and representatives to enter your property for the following purposes: 1) to address PCB impacted soils on your property; and 2) to sample the dust inside of your home for PCBs, and if necessary to clean it up. You may grant permission for the above described activities by signing the enclosed License Agreement and returning it to me in the enclosed, self-addressed, stamped envelope within thirty days from the day you receive this letter.

Before Solutia performs any removal action on your property, the action will be explained to you in writing. Depending on the scope of the removal action necessary on your property, it may be necessary to temporarily relocate all of the residents living in the home during the removal action. Any temporary relocation offered pursuant to the administrative agreement between EPA and Solutia Inc. will be in accordance with applicable Federal and State law. The work performed on your property, including any temporary relocation during the removal action, will not cost you any money and will be designed to minimize any inconvenience to you.

If you have any questions regarding the attached License Agreement, please do not hesitate to give me a call. I can be reached at \_\_\_\_\_. Alternatively, you may call Steve Spurlin, EPA's on-scene coordinator responsible for overseeing Solutia's activities under the administrative agreement. Mr. Spurlin can be reached at EPA's Community Relations Center in Anniston at (256)236-2599.





**Exhibit B**

**SOIL-REMOVAL LICENSE AGREEMENT**

This License Agreement is made between \_\_\_\_\_  
\_\_\_\_\_, a landowner (or tenant) in Calhoun County, Alabama, owning property located  
at \_\_\_\_\_ ("Owner") (or  
"Tenant"), and Solutia Inc., 702 Clydesdale Avenue, Anniston, Alabama, 36201-5390.

1. Owner (or Tenant) hereby grants to Solutia, EPA, ADEM, and their contractors and representatives a revocable license to enter upon real property owned by Owner (or leased by Tenant) located at \_\_\_\_\_ (the "Property"), for one or more of the following purposes:

1.1 Removing soils from the Property, disposing of soils from the Property, performing engineered controls (including, but not limited to, drainage modification and grading) at the Property, and restoring the Property as nearly as possible to its original state and condition in accordance with a work plan to be provided to Owner (or Tenant) prior to the initiation of any work on the Property.

1.2 Sampling soils on the Property for the presence of PCBs and/or lead in order to determine the scope and extent of the cleanup.

1.3 Sampling dust in the interior of improvements on the Property, analyzing such samples for the presence of PCBs, and if the dust samples indicate PCB concentrations equal to or greater than 2 parts per million, cleaning to remove PCBs from the interior of the improvements.

2. Solutia agrees, upon completion of the sampling, testing, and any soil removal response action and/or restoration to be performed, that all material and equipment shall be removed from the Property, except for improvements agreed to by Owner (if Tenant is signing this license, put Owners name here). The Property will be restored as nearly as possible to its original state and condition.

3. Solutia assumes responsibility for, and agrees to indemnify Owner (or Tenant) for, any liability for losses, expenses, damages, demands, and claims in connection with or arising out of any injury to persons or damage to property sustained in connection with or arising out of performance of the work hereunder.

4. Solutia assumes responsibility and liability for violations of Federal, State, or local law incurred in connection with or arising out of performance of the work hereunder.

5. Owner (or Tenant) shall advise Solutia of any utility lines or other hazardous or potentially hazardous conditions that Owner (or Tenant) is aware of that might reasonably be expected to be affected by the work to be performed.

6. This Agreement contains the entire agreement among the parties, and no other agreements, whether oral or written, between the parties with respect to the subject matter of this Agreement shall be binding or valid, except as provided above.

Executed this \_\_\_\_ day of \_\_\_\_\_, 2000.

By:

\_\_\_\_\_

Print/Typed Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**SOLUTIA INC.**

By:

Title: \_\_\_\_\_  
\_\_\_\_\_

**Exhibit C**

**"EPA NOTIFICATION OF NONCOMPLIANCE (SAMPLING)"**

**EPA NOTIFICATION OF NONCOMPLIANCE (SAMPLING)**

Anniston PCB Site  
Administrative Order On Consent

| Sampling Letter |            |          |                 |        |
|-----------------|------------|----------|-----------------|--------|
| Sent            | Signed For | Returned | Access Granted? | Days O |

**Residential: Zone 1: Phase 1**

|                             |                         |          |          |    |
|-----------------------------|-------------------------|----------|----------|----|
| <b>3301 Hwy 202</b>         |                         |          |          |    |
| 3738: 11-22-01-11-08-08.010 |                         |          |          |    |
| 1148 > Tenant               | Current Resident        | 06/08/01 | 06/12/01 | 38 |
|                             | 3301 Hwy 202            |          |          |    |
|                             | Anniston, AL 36201      |          |          |    |
| <b>415 S Colvin St</b>      |                         |          |          |    |
| 4832: 11-22-08-14-03-02.000 |                         |          |          |    |
| 1107 > Owner                |                         | 06/08/01 | 06/12/01 | 38 |
|                             | 415 S Colvin St         |          |          |    |
|                             | Anniston, AL 36201      |          |          |    |
| <b>418 S Colvin St</b>      |                         |          |          |    |
| 7070: 11-22-08-14-04-17.000 |                         |          |          |    |
| 1141 > Owner                |                         | 06/08/01 | 06/12/01 | 38 |
|                             | 420 S Colvin St         |          | 06/22/01 | NO |
|                             | Anniston, AL 36201      |          |          |    |
| 1167 > Tenant               | Current Resident        | 06/08/01 | 06/12/01 | 38 |
|                             | 418 S Colvin St         |          |          |    |
|                             | Anniston, AL 36201      |          |          |    |
| <b>429 S Colvin St</b>      |                         |          |          |    |
| 7088: 11-22-08-14-03-02.000 |                         |          |          |    |
| 1140 > Owner                |                         | 06/08/01 | 06/12/01 | 38 |
|                             | 415 S Colvin St         |          |          |    |
|                             | Anniston, AL 36201      |          |          |    |
| <b>430 S Colvin St</b>      |                         |          |          |    |
| 4772: 11-22-08-14-04-18.000 |                         |          |          |    |
| 1120 > Owner                |                         | 06/08/01 | 06/14/01 | 38 |
|                             | 412 S Colvin St         |          |          |    |
|                             | Anniston, AL 36201      |          |          |    |
| <b>507 S Colvin St</b>      |                         |          |          |    |
| 4834: 11-22-08-14-03-08.000 |                         |          |          |    |
| 1175 > Tenant               |                         | 06/08/01 | 06/12/01 | 31 |
|                             | 507 S Colvin St         |          |          |    |
|                             | Anniston, AL 36201-4819 |          |          |    |

**Exhibit H**

**to the PARTIAL CONSENT DECREE**

**Streamlined Risk Evaluation for Residential Areas**

**Streamlined Risk Evaluation for Residential Areas  
Anniston PCB Site**

**October 2002**

**Office of Technical Services  
Waste Management Division  
USEPA, Region 4  
Atlanta, Georgia**

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## Introduction

A streamlined risk evaluation (SRE) is the risk assessment component of an Engineering Analysis/Cost Analysis (EE/CA) conducted in support of a site-specific Superfund non-time-critical removal action (EPA 1993). It is not equivalent to a Baseline Risk Assessment conducted as a component of a Remedial Investigation for national-priorities-list (NPL) sites or Superfund alternative sites in that the focus is limited. It focuses on a single or limited number of major site contaminants and evaluates only the primary direct pathways of exposure. Within these limitations, the SRE provides an assessment of the threats to human health prior to any response action being taken in the area being evaluated. The objective of this SRE is to determine the need for performing a response action in a contaminated residential area and to determine protective levels for the contaminant of concern in environmental media. The population being evaluated in this SRE is the residents of west Anniston, Alabama who are at risk from exposure to PCBs from contaminated soils within their residence. This community is comprised of about 8,000 people who live in or near the flood plain of streams and ditches that drain the rainwater and discharge waters from the industrial area of west Anniston. Many of the low-lying properties experience flooding for short periods of time during heavy rain events.

The SRE is comprised of five components: (1) evaluating available site data; (2) identifying applicable human populations and exposure routes; (3) reviewing toxicity data; (4) characterizing risk; and (5) developing risk-based cleanup guidance. Each of these components is presented below relative to residential contamination with PCBs and the risk posed to residents of west Anniston.

## Background

The polychlorinated biphenyl (PCB) manufacturing facility that operated in Anniston for many years is a recognized source of PCBs in the environment of west Anniston. In 1917, Southern Manganese Corporation (SMC) opened an industrial plant in Anniston which produced various metals compounds and phosphoric acid. SMC became Swann Chemical Company (SCC) in 1930, and in 1935, Monsanto Company purchased SCC. From 1935 to 1997, Monsanto Company operated the plant. Polychlorinated biphenyls were produced at the plant from 1929 until 1971 under the trade name Aroclor. EPA banned PCB production in 1979. In 1997, Monsanto Company formed Solutia Inc. and transferred ownership over certain of its chemical divisions. Solutia Inc. currently produces para-nitrophenol and polyphenyl compounds at the Anniston plant.

Solutia's Anniston plant is located about one mile west of downtown Anniston, Alabama. During the facility's PCB production period, the plant disposed of hazardous and non-hazardous waste at two landfills, the west-end landfill (WEL) and south landfill (SEL), which are located adjacent to the plant. The WEL encompasses six acres of land and is located on the southwestern side of the plant. The WEL is unlined and was used for disposal of the plant's wastes from the mid-1930s until 1961. The SEL is located southeast of the plant across U.S. Highway 202 and is situated on the lower northeastern slope of Coldwater Mountain. The SEL consists of 10 individual, unlined cells, of which two cells were used for the disposal of hazardous wastes from the plant. Disposal of wastes at the SEL ceased in 1988. In addition, PCBs were released from the Aroclor manufacturing process into surface soil and water that made their way to ditches and runoff paths which flowed into Snow Creek and downstream waterways. More recently, it has become clear through

sampling that PCBs are present in the environmental media of residential, commercial, and agricultural portions of Anniston and environs. A large body of analytical data from past and current residents of west Anniston has shown a high occurrence of elevated blood PCB levels (ATSDR 2002).

## Data Source and Evaluation

PCB contamination of soil is the focus of the Streamlined Risk Evaluation for this proposed non-time critical removal action. Data used in this risk evaluation were obtained from investigations conducted by Solutia in 2001 and 2002 and by EPA in 2000, with followup work in May 2001 and May 2002. The results of the sample analyses now exist in reports and electronic files maintained by EPA and Solutia soon to be placed in one searchable database. Quality control and quality assurance aspects of the data have been managed and/or evaluated by EPA Region 4's Science and Ecosystem Support Division. This evaluation indicated that data quality objectives were met with the exception of congener data as discussed below in the Risk Characterization section.

A total of more than 800 residential-area properties located inside and outside the area (zones) identified in an Administrative Order on Consent (10/27/00) have been sampled during this investigation. Additional sampling is ongoing. Early EPA samples were comprised of one to five grab samples per property (more than 400 properties). The more recent sampling protocol typically resulted in the collection of two five-point composite samples from each property. A total of 423 properties were characterized by five-point composite samples. Some properties originally characterized by grab samples were subsequently resampled and characterized by composite sample analysis. All of Solutia's data collected under the Administrative Order were from the analysis of composite samples. Solutia collected soil samples from locations designated as front, back, and side yards, as well as crawl spaces and miscellaneous locations. Surface soil samples were collected at each location from a depth of 0-3 inches. Additional samples were taken at a few locations from soil depths of 3-12 inches and 12-24 inches.

Data evaluated in this assessment were limited to surface soils collected in residential areas, i.e. the soil layer shown to be most contaminated and available for direct contact. Thus, for the Solutia data set, only the sample interval of 0-3 inches was used, while the entire EPA data set was used since all samples were collected as surface soil samples. Currently, the ongoing composite sampling has found total PCBs at levels greater than 1.0 mg/kg on 192 properties. In both the EPA and Solutia data sets, PCBs were routinely found above 0.22 mg/kg, the preliminary remedial goal (PRG) concentration developed by Region 9. This PRG corresponds to an upper bound excess cancer risk level of  $1 \times 10^{-6}$  using default exposure assumptions (EPA 2000a). Exceeding a PRG is one of the criteria that EPA Region 4 uses to determine chemicals of potential concern (COPCs). Since the analyses were limited to PCBs, total PCBs are the only COPC for this evaluation.

## Exposure Assessment

An exposure assessment identifies potentially exposed human populations, exposure pathways, and typical exposure durations. Analytical results are then used to estimate COPC concentrations at exposure points and the potential intake of contaminants. The conceptual site model is shown in Figure 1.

This SRE is limited to the assessment of residents living on property in west Anniston that has been sampled for the presence of PCBs in soil. The affected population considered in the evaluation is individuals of any age that routinely come in contact with soil in a typical residential setting. Potentially complete exposure pathways to residents considered in this evaluation are:

- inadvertent ingestion of soil,
- dermal contact with soil, and
- inhalation of dust released from soil.

The surface soil results defined the reasonable maximum exposure (RME) point concentration for PCBs for each parcel. To focus the assessment, human intake levels were calculated assuming only residential land use assumptions. As a measure of conservatism and to avoid redundancy, only the most sensitive residential receptor was used to calculate non-cancer hazards and excess cancer risk levels. In the case of non-carcinogens, a child resident is the most sensitive residential receptor, owing to its lower body mass relative to the amount of chemical intake. For carcinogens, a child through adult resident is the most sensitive receptor because the excess cancer risk for the child (exposure duration of 6 years) is assumed to be additive to that of an adult (exposure duration of 24 years). For these reasons, no calculations of excess cancer risk are included for child residents and no calculations of non-cancer hazards are included for child through adult residents. Exposure assumptions are shown in Tables 1 and 2.

The inhalation exposure route was evaluated using a modeling approach to obtain the PCB air concentration. The modeled approach developed by Cowherd (1985) to provide a rapid assessment procedure applicable to a typical hazardous waste site was employed to evaluate exposure to PCBs via inhalation. Cowherd developed a relationship termed the particulate emission factor (PEF) that relates the contaminant concentration in soil with the concentration of respirable particles ( $PM_{10}$ ) in the air due to fugitive dust emissions. The particulate emissions are due to wind erosion and, therefore, depend on the erodibility of the surface material. It should be noted that actual ambient air data have been collected by Solutia periodically since 1998 from five locations around its facility. In addition, EPA collected air samples from similar locations in 1999 and 2000. However, since the air sampling stations were not in residential locations, the data were determined to be less useful than modeled data for deriving airborne PCB exposure levels for this risk evaluation.

## Toxicity Assessment

The family of chemicals termed polychlorinated biphenyls are believed by EPA to have systemic toxicity and carcinogenic properties. For this SRE, the quantitative toxicity assessment of PCBs used the reference dose value (RfD) for Aroclor 1254 for the non-cancer toxicity assessment and the cancer slope factor (CSF) for PCBs found in EPA's Integrated Risk Information System (IRIS). This on-line reference is the Agency's consensus toxicity database and is the primary source of toxicity values for Superfund assessments (EPA 2002a). Of the three predominant PCB mixtures found at the site, i.e. Aroclor 1254, 1260 and 1268, Aroclor 1254 is the only one with an RfD in the IRIS database. It was selected as a surrogate for the three Aroclors since their chlorine content is similar. Based on evidence from animal toxicity studies, the critical non-cancer toxic effects from exposure to Aroclor 1254 were associated with reduced ability to fight infections and eye toxicity. PCBs as a chemical class are classified by EPA as a probable human carcinogen based on the evaluation of human epidemiological evidence and animal studies. The IRIS file provides risk and

persistence criteria for selecting a CSF. The CSF for PCB mixtures (high risk and persistence) was used in this evaluation. Tables 3 and 4 present the non-carcinogenic toxicity values for PCBs. Tables 5 and 6 present the carcinogenic toxicity values for PCBs.

In addition to the *quantitative* risk levels derived from Aroclor 1254 values, a *qualitative* assessment was made of "excess" toxicity resulting from dioxin-like PCB congeners. Twelve of the 209 PCB congeners have been shown to have a toxicity mode of action like dioxin. Dioxin has been associated with reproductive, immune and thyroid toxic effects and neurotoxicity. Dioxin-equivalent potency values (WHO<sub>98</sub> TEQs) have been adopted by EPA to assess this toxicity (EPA 2000b and 2002b). It is recognized that the toxicity values of Aroclors included in the IRIS database reflect the contribution from the 12 dioxin-like congeners as well as any of the other 197 congeners that may be present in the test mixture. In order to determine the concentration of dioxin-like congeners in commercial Aroclors, EPA supported a state-of-the-art analysis of nine Aroclors for their content of dioxin-like congeners (Rushneck et al. 2002). Data in Exhibit 1 are excerpted from that analysis. Aroclor and congener data from surface soil from off-facility locations at this site were evaluated against the commercial Aroclor baseline for determining the presence of excess toxicity. Exhibits 2 and 3 show the procedure used for calculating these values

Only a few surface soil samples of the hundreds collected at the site received congener analysis. EPA analyzed 33 samples collected in April and July, 2000 for 29 congeners including seven of the 12 dioxin-like congeners and eight Aroclors. These samples were analyzed by Gas Chromatography/Electron Capture Detection (GC/ECD) method 8082. The data for most of the congener values were qualified by the analyst as "presumptive evidence of presence." This "N" qualifier is used by EPA analysts as a conservative quality assurance judgment. In this case, the qualifier is added to indicate lack of assurance that the peak for a given congener is not interfered with by another congener. This is most relevant to this risk evaluation regarding congener 126, the most potent dioxin-like congener with a TEQ of 0.1. Only one of the 33 samples having a reported value for congener 126 was unqualified. April sample number PC-058-B contained 28 µg/kg of congener 126 giving the sample an excess TEQ value of 2.8 µg/kg. This value alone exceeds the EPA remedial goal for dioxin TEQ levels in residential surface soil, i.e. 1.0 µg/kg. The results of the analysis for the presence of excess dioxin-like toxicity in these samples are shown in Table 7. The relevance of these findings for this risk evaluation is discussed in the Risk Characterization section below.

## Risk Characterization

Characterization of the risks posed by PCBs in residential soils is done by integrating the PCB toxicity data with exposure parameters for local residents. Quantitative risk estimates are made separately for cancer risk and risk of systemic toxic effects from three pathways of direct exposure, i.e. ingestion, inhalation and dermal absorption of PCBs in soil. The toxicity data and exposure assumptions have been presented above. For carcinogens, a risk value for developing cancer in one's lifetime from a given exposure is determined. This risk is referred to as incremental or excess individual lifetime cancer risk and is expressed as a probability. A calculated cancer risk of no greater than  $1 \times 10^{-6}$  from a given environmental exposure is generally interpreted as essentially zero risk. This means as a plausible upper-bound risk, an individual has a one-in-one-million chance of developing cancer as a result of site-related exposure to PCBs in a 70-year lifetime under the specific exposure conditions assumed.

The risk of non-cancer toxic effects to target organs and systems is expressed differently. The assumed daily dose of the chemical received from environmental exposure is compared to an exposure level shown to have no adverse effects with margins of safety added, i.e. the reference dose (RfD). The ratio of these two values represents a Hazard Index (HI). Hazard Index values greater than 1.0 indicate exposure greater than the RfD with the risk of harm increasing as the value goes higher. The HI is not a probability value as with a cancer risk value but rather a relative comparison of the assumed intake dose to a dose causing no observed adverse effects in research studies with uncertainty adjustments added. The probability of an observable adverse health effect cannot be predicted from the HI.

**Table 8** provides upper bound risk estimates for residents in currently occupied properties that have PCB levels in surface soil between 3.0 and 8.2 mg/kg. Twenty-five properties with PCB levels at or above 10 mg/kg were excluded from this evaluation since they have been identified for time-critical removal action and are currently being cleaned up. (This number may increase as sampling continues). This table shows the parcel number, party that conducted the sampling, results of total PCB analysis, cancer risk, and HI. Cancer risk is based on a child/adult receptor; non-cancer hazard is based on a child receptor. For all properties, the calculated cancer risks are greater than the desired protective level of  $10^{-6}$  risk but all are within the regulatory protective risk range of  $10^{-4}$  to  $10^{-6}$ . However, the non-cancer protective level, i.e. HI greater than 1.0, is exceeded at all 34 properties. These risk determinants that show the existence of unacceptable PCB risks represent calculations using the current Agency-approved toxicity values. It should be noted that human studies are appearing in the scientific literature that indicate increasing concern with developmental effects in the fetus and young children exposed to low levels of total PCBs (Rice 2001). An in-depth evaluation of non-cancer toxic effects of PCBs is now underway by EPA's Office of Research and Development through the IRIS process. An assessment of the protectiveness of the current RfD for Aroclor 1254 will be included in this evaluation.

In the Toxicity Assessment section, the qualitative assessment of excess dioxin-like toxicity was discussed. The result of this assessment is presented in Table 7. The table reflects an assessment of excess levels of seven of the 12 PCB congeners. No consideration is given to the five dioxin-like congeners that were not analyzed for. None have high TEQ values so this limitation may not significantly affect the results of this assessment. Also, no concentration value was included in this assessment for any of the seven congeners analyzed for but not detected in a given sample. The data show a wide range of excess toxicity findings from non-detect to 571  $\mu\text{g}/\text{kg}$  dioxin TEQ. The uncertainty in congener identification ("N" qualifier) severely limits the use of the data set in developing quantitative risk values or making definitive risk conclusions. This uncertainty is more likely to cause an overestimation of risk. Other than the one unqualified analytical result that showed a 2.8  $\mu\text{g}/\text{kg}$  dioxin equivalent level, the data set does not meet strict quality assurance standards. Nonetheless, the data is highly suggestive that excess dioxin toxicity may exist in the contaminated area as a result of environmental transformation of the original Aroclor composition. It should be noted that actual dioxin congener analyses have been conducted on only 18 samples collected (Feb. 2000) from off-facility locations. Adjacent soil samples were analyzed for Aroclors. The highest dioxin TEQ of 89J ng/kg (ppt) was detected in a location that had the highest Aroclor concentration in the adjacent soil sample at 11.2 mg/kg (ppm). The typical remediation goal for dioxin TEQ in residential soils has been 1.0  $\mu\text{g}/\text{kg}$  (ppb) which represents an upper bound risk level of  $10^{-4}$ .

## Cleanup Goal for PCB In Residential Soil

The objective of the PCB cleanup goal in the residential area of west Anniston is to provide a high degree of confidence that the most sensitive individuals conducting any activity considered normal and routine on these properties will not be exposed to levels that will put them at risk of adverse health effects. There are no regulatory applicable, relevant, or appropriate requirements (ARARs) for soil that would specify a PCB numerical cleanup "standard" for this Superfund non-time-critical removal action. However, the spill policy of the Toxic Substances Control Act (TSCA) has historically provided guidance to the Superfund program for PCB cleanup levels (EPA 1990). Therefore, a cleanup level was determined: (1) by combining the intake levels of PCBs from ingestion and dermal contact with soil, and inhalation of particulates and rearranging the risk equations to solve for the concentration term and (2) by the consideration of additional toxicity and exposure factors not directly quantifiable in the risk equations. Remedial goal options (RGOs) were calculated separately for cancer and non-cancer effects, correspond to incremental cancer risk levels of  $10^{-4}$ ,  $10^{-5}$ , and  $10^{-6}$  and an HI of 1.0.

Tables 9 and 10 present the RGOs for soil based on calculated risk levels using specific risk-based toxicity and exposure values. For carcinogens, RGOs are based on child/adult resident exposure assumptions; for non-carcinogens, the RGO is based on child resident exposure assumptions. A protective upper bound cancer risk of  $10^{-6}$  provides the lowest RGO at 0.3 mg/kg. The protective level for non-cancer effects yielded a calculated RGO of 2 mg/kg.

Additional factors for consideration in deriving a protective soil level are discussed below.

**Limited Exposure Pathway Considerations.** In order to satisfy the "protective" requirement of Superfund actions, the risk to each contaminant from a site by all pathways and routes of exposure must be considered. The exposure routes examined in this SRE (ingestion and dermal contact with soil, and inhalation of particulates) may not be inclusive of all pathways of exposure to PCBs originating from the manufacturing facility. An assessment of indirect exposure pathways such as the consumption of locally grown animals and plants produced in contaminated areas or the consumption of locally caught fish were beyond the scope of this evaluation. In addition, recreational activities conducted away from the residential area, e.g. swimming in affected streams, could contribute to the total PCB body burden. A lowering of the exposure level from residential soils could be a reasonable remedial option to compensate for other likely pathways not as easily characterized and controlled.

**Multiple Contaminant Effects.** This SRE evaluated PCBs only; possible additive adverse effects of other chemicals were not considered. For example if other developmental toxicants such as lead and/or mercury were present at significant concentrations, their interaction with PCBs in the body may be more toxic than any one contaminant alone. These interactions may mean that lower levels of a single contaminant, when combined with low levels of other contaminants, may have a different impact than previously recognized. Since only PCBs were examined in this SRE, a cleanup goal based on PCBs alone should be conservative to account for possible additive effects of chemicals not considered to date.

**Underestimation of Soil Ingestion.** The routine yet unintentional ingestion of 200 mg of soil each day was assumed in the exposure assessment for children at play. This is a standard default value for the Superfund program and is used unless site-specific data indicate otherwise (EPA 1991a). A

recent publication suggests that this level may be high as a general assumption even though earlier findings indicated it was a value within the high average range. The 200 mg value may be low for children in Anniston. This area has a history of *geophagia*. Community members discussed with federal investigators the local practice of intentionally ingesting baked clay and other soil items in large amounts. This practice may include children. However, even if this practice does not include children, the generally relaxed view toward soil ingestion as being undesirable may have resulted in a higher level of unintended soil ingestion.

**Excess Toxicity from Dioxin-like Congeners.** The limited and qualified data for PCB congeners suggest that excess dioxin-like toxicity could be present in the soil of residential areas of Anniston due to environmental effects on the congener present in commercial Aroclor mixtures. Any excess toxicity, determined as described above, would not have been included in the cleanup levels derived using only Aroclor 1254 toxicity values. The uncertainty that excess toxicity may exist in the residential soil argues for a cleanup level from the lower range of RGOs values.

## Conclusions

In consideration of the calculated RGOs, the qualitative risk factors discussed above, and the fact that this population has a documented elevated PCB body burden, this Streamlined Risk Evaluation supports the selection of a surface soil residential cleanup of 1.0 mg/kg (ppm) total PCBs as a reasonable maximum level that would be protective for unrestricted land use. A level of 1 mg/kg is biased toward the more protective end of EPA's target range for excess cancer risk and non-cancer hazards at Superfund sites. The Agency feels that such a bias is warranted because there remains uncertainty in the absolute protectiveness of this value due to incomplete toxicity and exposure information. However, the conservatism built into the risk assessment process and the historical selection of this cleanup value by regulatory programs gives the Agency a reasonable level of confidence that protection from adverse health effects of PCBs will be achieved with the implementation of this action.

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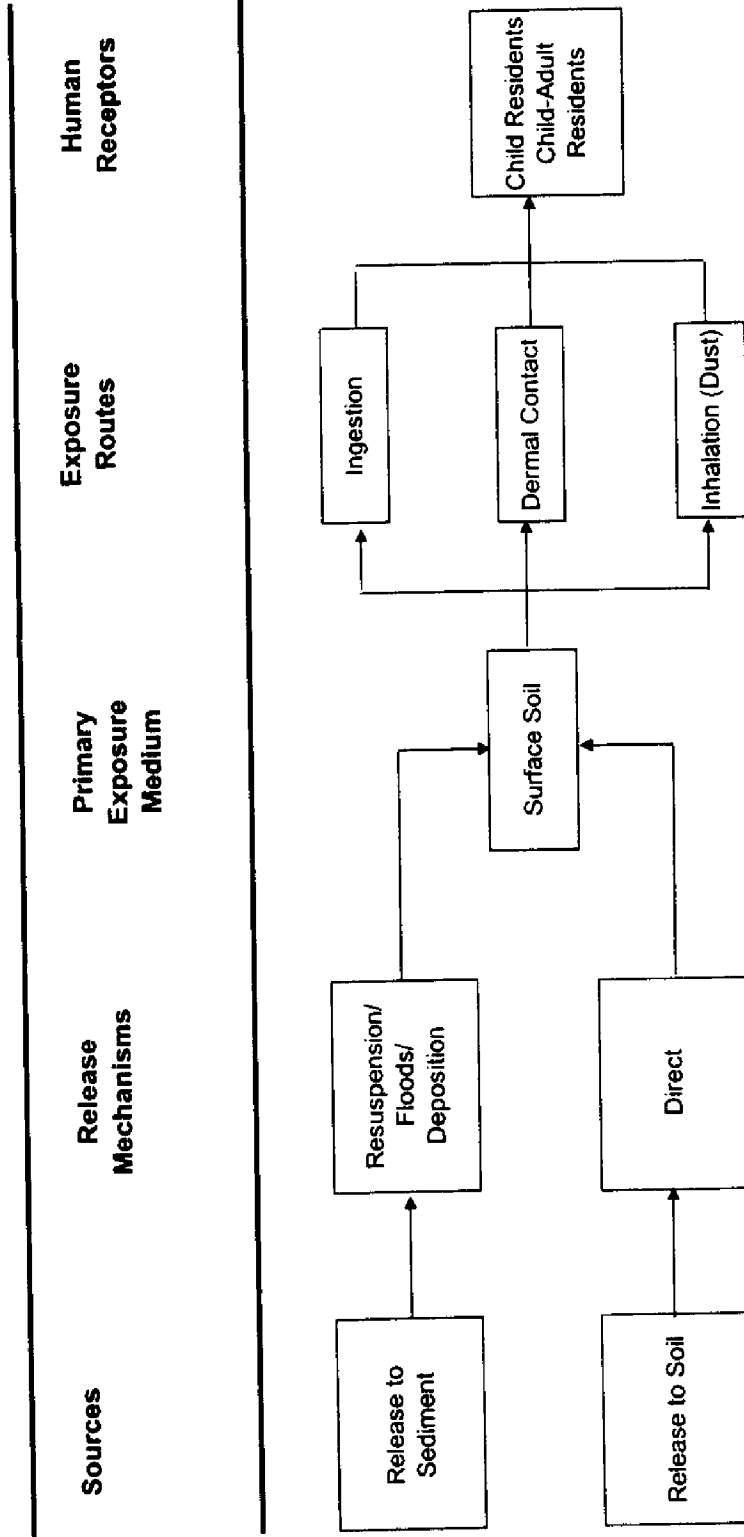
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**Figure 1**  
**Conceptual Site Model for West Anniston Residential Areas**  
**Anniston PCB Site**



Scenario Timeframe: Current / Future  
Medium: Soil  
Exposure Medium: Soil

Table 1  
Values Used for Daily Intake Calculations for Child Receptor  
Anniston PCB Site

| Exposure Route | Receptor Population         | Receptor Age | Exposure Point     | Parameter Code  | Parameter Definition           | Value       | Units               | Rationale/Reference | Intake Equation/Model Name  |                                |             |                 |  |  |
|----------------|-----------------------------|--------------|--------------------|-----------------|--------------------------------|-------------|---------------------|---------------------|---|--------------------------------|-------------|-----------------|--|--|
| Ingestion      | Resident                    | Child        | Site               | CS              | chemical concentration in soil | See Table 8 | mg/kg               | See Text            | $Chronic\ daily\ intake = CS \times IR_0 \times CF \times FI \times EF \times ED \times 1/BW \times 1/AT$ |                                |             |                 |  |  |
|                |                             |              |                    | IR <sub>0</sub> | ingestion rate (oral)          | 200         | mg/day              | EPA 1991a           |   |                                |             |                 |  |  |
|                |                             |              |                    | CF              | conversion factor              | 0.000001    | kg/mg               | —                   |   |                                |             |                 |  |  |
|                |                             |              |                    | FI              | fraction ingested from source  | 1           | unitless            | Judgment            |   |                                |             |                 |  |  |
|                |                             |              |                    | EF              | exposure frequency             | 350         | days/year           | EPA 1991a           |   |                                |             |                 |  |  |
|                |                             |              |                    | ED              | exposure duration              | 6           | years               | EPA 1991a           |   |                                |             |                 |  |  |
|                |                             |              |                    | BW              | body weight                    | 15          | kg                  | EPA 1995            |   |                                |             |                 |  |  |
|                |                             |              |                    | AT              | averaging time (non-cancer)    | 2,190       | days                | EPA 1989            |   |                                |             |                 |  |  |
|                |                             |              |                    | Dermal          | Resident                       | Child       | Site                | CS                  |   | chemical concentration in soil | See Table 8 | mg/kg           | See Text   | $Chronic\ daily\ intake = CS \times CF \times SA \times AF \times ABS \times EF \times ED \times 1/BW \times 1/AT$ |
|                |                             |              |                    |                 |                                |             |                     | SA                  |   | surface area                   | 2,800       | cm <sup>2</sup> | EPA 2001   |  |
| AF             | adherence factor            | 0.2          | mg/cm <sup>2</sup> |                 |                                |             |                     | EPA 2001            |   |                                |             |                 |  |  |
| ABS            | absorption factor           | Chem. Spec.  | unitless           |                 |                                |             |                     | EPA 1995            |   |                                |             |                 |  |  |
| EF             | exposure frequency          | 350          | days/year          |                 |                                |             |                     | EPA 1991a           |   |                                |             |                 |  |  |
| ED             | exposure duration           | 6            | years              |                 |                                |             |                     | EPA 1991a           |   |                                |             |                 |  |  |
| CF             | conversion factor           | 0.000001     | kg/mg              |                 |                                |             |                     | —                   |   |                                |             |                 |  |  |
| BW             | body weight                 | 15           | kg                 |                 |                                |             |                     | EPA 1995            |   |                                |             |                 |  |  |
| AT             | averaging time (non-cancer) | 2,190        | days               |                 |                                |             |                     | EPA 1989            |   |                                |             |                 |  |  |
| Inhalation     | Resident                    | Child        | Site               |                 |                                |             |                     | CS                  | chemical concentration in soil  | See Table 8                    | mg/kg       | See Text        | $Chronic\ daily\ intake = CS \times IR_0 \times ED \times EF \times (1/PEF) \times 1/BW \times 1/AT$ |  |
|                |                             |              |                    | IR <sub>0</sub> | inhalation rate                | 10          | m <sup>3</sup> /day | EPA 1997            |   |                                |             |                 |  |  |
|                |                             |              |                    | PEF             | particulate emissions factor   | 1.32E+09    | m <sup>3</sup> /kg  | EPA 1991b           |   |                                |             |                 |  |  |
|                |                             |              |                    | EF              | exposure frequency             | 350         | days/year           | EPA 1991a           |   |                                |             |                 |  |  |
|                |                             |              |                    | ED              | exposure duration              | 6           | years               | EPA 1991a           |   |                                |             |                 |  |  |
|                |                             |              |                    | BW              | body weight                    | 15          | kg                  | EPA 1995            |   |                                |             |                 |  |  |
|                |                             |              |                    | AT              | averaging time (non-cancer)    | 2,190       | days                | EPA 1989            |   |                                |             |                 |  |  |

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**Table 2**  
**Values Used for Daily Intake Calculations for Child to Adult Receptor**  
**Anniston PCB Site**  
**Scenario Timeframe: Current / Future**  
**Medium: Soil**  
**Exposure Medium: Soil**

| Exposure Route   | Receptor Population      | Receptor Age   | Exposure Point             | Parameter Code   | Parameter Definition           | Value          | Units                     | Rationale/Reference | Intake Equation/Model Name   |
|------------------|--------------------------|----------------|----------------------------|------------------|--------------------------------|----------------|---------------------------|---------------------|--|
| Ingestion        | Resident                 | Child to Adult | Site                       | CS               | chemical concentration in soil | See Table 8    | mg/kg                     | See Text            | $IF_c = (ED_c \times IR_c / BW_c) \times (ED_{sw} \times ED_c) \times (IR_c / BW_c)$<br><br>Chronic daily intake = CS x IF x CF x FI x EF x 1/AT |
|                  |                          |                |                            | IF <sub>c</sub>  | ingestion factor (soil)        | 114            | mg-yr/kg-day              | EPA 1991b           |  |
|                  |                          |                |                            | BW <sub>c</sub>  | body weight, child             | 15             | kg                        | EPA 1995            |  |
|                  |                          |                |                            | BW <sub>a</sub>  | body weight, adult             | 70             | kg                        | EPA 1995            |  |
|                  |                          |                |                            | IR <sub>c</sub>  | ingestion rate, child          | 200            | mg/day                    | EPA 1991a           |  |
|                  |                          |                |                            | IR <sub>a</sub>  | ingestion rate, adult          | 100            | mg/day                    | EPA 1991a           |  |
|                  |                          |                |                            | ED <sub>c</sub>  | exposure duration, child       | 6              | years                     | EPA 1991a           |  |
|                  |                          |                |                            | ED <sub>sw</sub> | exposure duration, total       | 30             | years                     | EPA 1991a           |  |
|                  |                          |                |                            | CF               | conversion factor              | 0.000001       | kg/mg                     | -                   |  |
|                  |                          |                |                            | FI               | fraction ingested from source  | 1              | unitless                  | Judgment            |  |
|                  |                          |                |                            | EF               | exposure frequency             | 350            | days/year                 | EPA 1991a           |  |
|                  |                          |                |                            | AT-C             | averaging time (cancer)        | 25,550         | days                      | EPA 1989            |  |
|                  |                          |                |                            | Dermal           | Resident                       | Child to Adult | Site                      | CS                  |  |
| DF               | dermal factor            | 361            | cm <sup>2</sup> -yr/kg-day |                  |                                |                |                           | EPA 2001            |  |
| BW <sub>c</sub>  | body weight, child       | 15             | kg                         |                  |                                |                |                           | EPA 1995            |  |
| BW <sub>a</sub>  | body weight, adult       | 70             | kg                         |                  |                                |                |                           | EPA 1995            |  |
| SA <sub>c</sub>  | surface area, child      | 2,800          | cm <sup>2</sup> /day       |                  |                                |                |                           | EPA 2001            |  |
| SA <sub>a</sub>  | surface area, adult      | 5,700          | cm <sup>2</sup> /day       |                  |                                |                |                           | EPA 2001            |  |
| ED <sub>c</sub>  | exposure duration, child | 6              | years                      |                  |                                |                |                           | EPA 1991a           |  |
| ED <sub>sw</sub> | exposure duration, total | 30             | years                      |                  |                                |                |                           | EPA 1991a           |  |
| AF               | adherence factor         | 0.07           | mg/cm <sup>2</sup>         |                  |                                |                |                           | EPA 2001            |  |
| EF               | exposure frequency       | 350            | days/year                  |                  |                                |                |                           | EPA 1991a           |  |
| ABS              | absorption factor        | Chem. Spec     | unitless                   |                  |                                |                |                           | EPA 1995            |  |
| CF               | conversion factor        | 0.000001       | kg/mg                      |                  |                                |                |                           | -                   |  |
| AT-C             | averaging time (cancer)  | 25,550         | days                       |                  |                                |                |                           | EPA 1989            |  |
| Inhalation       | Resident                 | Child to Adult | Site                       | CS               | chemical concentration in soil | See Table 8    | mg/kg                     | See Text            | $IF_a = (ED_c \times IR_c / BW_c) \times (ED_{sw} \times ED_c) \times (IR_c / BW_c)$<br><br>Chronic daily intake = CS x IF x EF x (1/PEF) x 1/AT |
|                  |                          |                |                            | IF <sub>a</sub>  | inhalation factor (air)        | 10.9           | m <sup>3</sup> -yr/kg-day | EPA 1991b           |  |
|                  |                          |                |                            | BW <sub>c</sub>  | body weight, child             | 15             | kg                        | EPA 1995            |  |
|                  |                          |                |                            | BW <sub>a</sub>  | body weight, adult             | 70             | kg                        | EPA 1995            |  |
|                  |                          |                |                            | IR <sub>c</sub>  | inhalation rate, child         | 10             | m <sup>3</sup> /day       | EPA 1997            |  |
|                  |                          |                |                            | IR <sub>a</sub>  | inhalation rate, adult         | 20             | m <sup>3</sup> /day       | EPA 1997            |  |
|                  |                          |                |                            | ED <sub>c</sub>  | exposure duration, child       | 6              | years                     | EPA 1991a           |  |
|                  |                          |                |                            | ED <sub>sw</sub> | exposure duration, total       | 30             | years                     | EPA 1991a           |  |
|                  |                          |                |                            | PEF              | particulate emissions factor   | 1.32E+08       | m <sup>3</sup> /kg        | EPA 1991b           |  |
|                  |                          |                |                            | EF               | exposure frequency             | 350            | days/year                 | EPA 1991a           |  |
|                  |                          |                |                            | AT-C             | averaging time (cancer)        | 25,550         | days                      | EPA 1989            |  |

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**Table 3**  
**Non-Cancer Toxicity Data – Oral/Dermal**  
**Anniston PCB Site**

| Chemical of Potential Concern | Chronic/<br>Subchronic | Oral RfD |           | Absorption Efficiency (for Dermal) | Dermal RfD <sup>2,3</sup> |           | Primary Target Organ(s)  | Combined Uncertainty/<br>Modifying Factors | RfD: Target Organ(s) |           |
|-------------------------------|------------------------|----------|-----------|------------------------------------|---------------------------|-----------|--|--|----------------------|-----------|
|                               |                        | Value    | Units     |                                    | Value                     | Units     |  |  | Source(s)            | Date(s)   |
| Total PCBs <sup>1</sup>       | Chronic                | 2E-05    | mg/kg/day | 100%                               | 2E-05                     | mg/kg/day | Ocular exudate, inflamed and prominent Meibomian glands, distorted growth of finger and toe nails, decreased antibody (IgG and IgM) response to sheep erythrocytes (Rhesus monkey study) | 300  | IRIS                 | 11/1/1996 |

1. Based on Aroclor 1254

2. EPA 1989. Risk Assessment Guidance for Superfund. Human Health Evaluation Manual (Part A) December. Appendix A.

3. Equation used for derivation: RfD x oral to dermal adjustment factor

RfD - Reference dose

IRIS - Integrated Risk Information System

**Table 4**  
**Non-Cancer Toxicity Data -- Inhalation**  
**Anniston PCB Site**

| Chemical of Potential Concern | Chronic/<br>Subchronic | Inhalation RfC |       | Adjusted RfD <sup>1</sup> |           | Primary Target Organ | Combined Uncertainty/<br>Modifying Factors | RfC: Target Organ(s) |         |
|-------------------------------|------------------------|----------------|-------|---------------------------|-----------|----------------------|--|----------------------|---------|
|                               |                        | Values         | Units | Values                    | Units     |                      |  | Source(s)            | Date(s) |
| Total PCBs <sup>1</sup>       | -                      | -              | -     | 2E-05                     | mg/kg/day | -                    | -  | Region 9             | 2000    |

1. Inhalation RfD based on route-to-route extrapolation as listed in EPA Region 9 Preliminary Remediation Goal Table, 2000 Update.

RfD - Reference dose

RfC - Reference concentration

**Table 5**  
**Cancer Toxicity Data -- Oral/Dermal**  
**Anniston PCB Site**

| Chemical of Potential Concern | Oral Cancer Slope Factor <sup>1</sup> |                           | Absorption Efficiency (for Dermal) | Adjusted Cancer Slope Factor (for Dermal) <sup>2,3</sup> |                           | Cancer Guideline Description <sup>4</sup> | Oral CSF: Absorption Efficiency |          |
|-------------------------------|---------------------------------------|---------------------------|------------------------------------|--|---------------------------|---|---------------------------------|----------|
|                               | Value                                 | Units                     |                                    | Value  | Units                     |   | Source(s)                       | Date(s)  |
| Total PCBs                    | 2.0E+00                               | (mg/kg/day) <sup>-1</sup> | 100%                               | 2.0E+00  | (mg/kg/day) <sup>-1</sup> | B2  | IRIS                            | 6/1/1997 |

1. Slope factor based on "high risk and persistence"
2. EPA 1989. Risk Assessment Guidance for Superfund: Human Health Evaluation Manual (Part A) December. Appendix A.
3. Equation used for derivation: CSF divided by oral to dermal adjustment factor
4. B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

**Table 6**  
**Cancer Toxicity Data -- Inhalation**  
**Anniston PCB Site**

| Chemical of Potential Concern | Unit Risk |       | Adjustment | Inhalation Cancer Slope Factor <sup>1</sup> |                           | Cancer Guideline Description <sup>2</sup> | Source(s) | Date(s)  |
|-------------------------------|-----------|-------|------------|---|---------------------------|---|-----------|----------|
|                               | Value     | Units |            | Value                                       | Units                     |   |           |          |
| Total PCBs                    | -         | -     | -          | 2E+00                                       | (mg/kg/day) <sup>-1</sup> | B2  | IRIS      | 6/1/1997 |

1. Slope factor for "high risk and persistence" used to evaluate inhalation of airborne particles and dust contaminated with PCBs

2. B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

IRIS - Integrated Risk Information System

**Table 7**  
**Occurrence of Excess Dioxin-TEQ in Surface Soil Samples**  
**Analyzed for Dioxin-Like PCB Congeners**  
**Anniston PCB Site**

| Sample ID | Observed TEQ<br>(ug/kg) | Expected TEQ<br>(ug/kg) | Excess TEQ<br>(ug/kg) |
|-----------|-------------------------|-------------------------|-----------------------|
| PC-005-B  | ND <sup>a</sup>         | None <sup>b</sup>       | None <sup>b</sup>     |
| PC-013-B  | ND <sup>a</sup>         | None <sup>b</sup>       | None <sup>b</sup>     |
| PC-026-B  | ND <sup>a</sup>         | None <sup>b</sup>       | None <sup>b</sup>     |
| PC-043-A  | 0.01 <sup>c</sup>       | None <sup>b</sup>       | None <sup>b</sup>     |
| PC-047-B  | ND <sup>a</sup>         | None <sup>b</sup>       | None <sup>b</sup>     |
| PC-049-B  | 0.08 <sup>c</sup>       | 0.002                   | 0.006                 |
| PC-058-B  | 2.80                    | 0.003                   | 2.80                  |
| PC-063-B  | 0.72 <sup>c</sup>       | 0.003                   | 0.72 <sup>c</sup>     |
| PC-063-B5 | 0.84 <sup>c</sup>       | 0.007                   | 0.84 <sup>c</sup>     |
| PC-069-A  | ND <sup>a</sup>         | None <sup>b</sup>       | None <sup>b</sup>     |
| PC-070-A  | 0.01 <sup>c</sup>       | None <sup>b</sup>       | 0.01 <sup>c</sup>     |
| PC-083-B  | ND <sup>a</sup>         | None <sup>b</sup>       | None <sup>b</sup>     |
| PCCON-003 | 6.60 <sup>c</sup>       | 0.03                    | 6.60 <sup>c</sup>     |
| PCCON-004 | 9.50 <sup>c</sup>       | 0.04                    | 9.50 <sup>c</sup>     |
| PECON-001 | 0.90 <sup>c</sup>       | 0.074                   | 0.83 <sup>c</sup>     |
| PECON-002 | 0.013 <sup>c</sup>      | 0.019                   | None <sup>b</sup>     |
| PECON-004 | 0.176 <sup>c</sup>      | 0.178                   | None <sup>b</sup>     |
| PECON-005 | 0.043 <sup>c</sup>      | 0.005                   | 0.038 <sup>c</sup>    |
| PECON-006 | 8.39 <sup>c</sup>       | 0.38                    | 8.01 <sup>c</sup>     |
| PECON-007 | 90.54 <sup>c</sup>      | 1.89                    | 88.65 <sup>c</sup>    |
| PECON-008 | 18.35 <sup>c</sup>      | 0.08                    | 18.27 <sup>c</sup>    |
| PECON-009 | 109.76 <sup>c</sup>     | 9.01                    | 100.75 <sup>c</sup>   |
| PECON-010 | 6.14 <sup>c</sup>       | 1.39                    | 4.75 <sup>c</sup>     |
| PECON-011 | 1.18 <sup>c</sup>       | 0.08                    | 1.10 <sup>c</sup>     |
| PECON-012 | 4.56 <sup>c</sup>       | 0.14                    | 4.42 <sup>c</sup>     |
| PECON-013 | 9.84 <sup>c</sup>       | 0.38                    | 9.46 <sup>c</sup>     |
| PECON-014 | 580.00 <sup>c</sup>     | 9.32                    | 570.68 <sup>c</sup>   |
| PECON-015 | 2.10 <sup>c</sup>       | 0.003                   | 2.10 <sup>c</sup>     |
| PECON-016 | 0.007 <sup>c</sup>      | 0.002                   | 0.005 <sup>c</sup>    |
| PECON-017 | 1.92 <sup>c</sup>       | 0.019                   | 19.01 <sup>c</sup>    |
| PECON-018 | 9.23 <sup>c</sup>       | 0.32                    | 8.91 <sup>c</sup>     |
| PECON-019 | 10.19 <sup>c</sup>      | 0.036                   | 10.15 <sup>c</sup>    |
| PECON-020 | 0.014 <sup>c</sup>      | 0.015                   | None <sup>b</sup>     |

<sup>a</sup> ND = not detected

<sup>b</sup> None = below 0.001 ug/kg

<sup>c</sup> = Some or all of the congener data used in deriving this value is "N" qualified by the chemical analyst, i.e. presumptive evidence that the analyte is present (see text)



**Table 8**  
**Summary Data of Occupied Residential Properties Where Surface Soil**  
**PCB Levels Exceed Risk Protective Levels**  
**Anniston PCB Site**

| Parcel ID             | Sampled By | Sample Type | Result (mg/kg) | Cancer Risk <sup>1</sup> | Hazard Index <sup>2</sup> |
|-----------------------|------------|-------------|----------------|--------------------------|---------------------------|
| 22-01-01-04-03-34     | Solutia    | Composite   | 3.0            | 1E-05                    | 2                         |
| 22112301007           | EPA        | Composite   | 3.0            | 1E-05                    | 2                         |
| 22112301043           | EPA        | Grab        | 3.1            | 1E-05                    | 2                         |
| 22112301005           | EPA        | Grab        | 3.1            | 1E-05                    | 2                         |
| 21419401003           | EPA        | Grab        | 3.1            | 1E-05                    | 2                         |
| 22-01-12-3-002-018    | Solutia    | Composite   | 3.2            | 1E-05                    | 2                         |
| TBD                   | Solutia    | Composite   | 3.2            | 1E-05                    | 2                         |
| 21-03-07-1-002-078    | Solutia    | Composite   | 3.2            | 1E-05                    | 2                         |
| 21-04-18-1-001-049    | Solutia    | Composite   | 3.2            | 1E-05                    | 2                         |
| 21-03-07-2-002-036    | EPA        | Grab        | 3.3            | 1E-05                    | 2                         |
| 22-01-01-04-05-62.017 | Solutia    | Composite   | 3.3            | 1E-05                    | 2                         |
| 22112102021           | EPA        | Composite   | 3.4            | 1E-05                    | 2                         |
| 22101404043           | EPA        | Grab        | 3.4            | 1E-05                    | 2                         |
| 22-01-12-3-002-008    | EPA        | Grab        | 3.5            | 1E-05                    | 2                         |
| 22-01-12-3-002-081    | Solutia    | Composite   | 3.5            | 1E-05                    | 2                         |
| 22-01-01-04-05-62.010 | Solutia    | Composite   | 3.5            | 1E-05                    | 2                         |
| 22-01-01-04-05-62.015 | Solutia    | Composite   | 3.6            | 1E-05                    | 2                         |
| 22-01-12-3-002-005    | Solutia    | Composite   | 3.8            | 1E-05                    | 2                         |
| 22112301080           | EPA        | Grab        | 3.8            | 1E-05                    | 3                         |
| 21306307065           | EPA        | Grab        | 3.9            | 1E-05                    | 3                         |
| 21-03-07-2-002-024    | EPA        | Grab        | 3.9            | 1E-05                    | 3                         |
| 21306307060.01        | EPA        | Composite   | 3.9            | 1E-05                    | 3                         |
| 21-03-07-2-002-027    | EPA        | Composite   | 4.0            | 1E-05                    | 3                         |
| TBD                   | EPA        | Grab        | 4.1            | 1E-05                    | 3                         |
| 22112203013           | EPA        | Grab        | 4.1            | 1E-05                    | 3                         |
| 21306307064           | EPA        | Grab        | 4.1            | 1E-05                    | 3                         |
| 22112101036           | EPA        | Grab        | 4.2            | 1E-05                    | 3                         |
| 21-03-07-04-01-19     | Solutia    | Composite   | 4.2            | 1E-05                    | 3                         |
| 22112102024           | EPA        | Composite   | 4.4            | 1E-05                    | 3                         |
| 21-03-07-2-002-048    | Solutia    | Composite   | 4.7            | 2E-05                    | 3                         |
| 22-01-12-3-002-065    | Solutia    | Composite   | 6.8            | 2E-05                    | 4                         |
| 21-04-18-4-003-009    | EPA        | Grab        | 8.0            | 3E-05                    | 5                         |
| TBD                   | Solutia    | Composite   | 8.1            | 3E-05                    | 5                         |
| 21306307057           | EPA        | Composite   | 8.2            | 3E-05                    | 5                         |

<sup>1</sup> Based on child through adult resident exposure assumptions

<sup>2</sup> Based on child resident exposure assumptions

All residential properties with PCB levels at or greater than 10 mg/kg in composite samples of surface soil were previously designated for time-critical removal action and are not included in this table.

TBD = to be determined; currently unavailable

**Table 9**  
**Risk-Based Remedial Goal Options for Surface Soil Based on Carcinogenic Risk**  
**Child / Adult Resident Land Use Assumptions**  
**Anniston PCB Site**

| Equation Definition:<br>$C = [TR \times AT \times 365 \text{ days/yr}] / [EF \times ((CSFo \times IF_{soil} \times CF) + (CSFi \times IF_{air} \times 1/PEF) + (CSFd \times CF \times DF \times ABS))]$ |  |          | Chemical of Potential Concern | Cancer Risk Level<br>mg/kg |      |      |
|---|--|----------|-------------------------------|----------------------------|------|------|
| Parameter   | Definition   | Value    |                               | 1E-6                       | 1E-5 | 1E-4 |
|   |  |          | Total PCBs                    | 0.3                        | 3    | 31   |
| C   | chemical concentration in soil (mg/kg)                   |          |                               |                            |      |      |
| TR  | target risk  | 1E-06    |                               |                            |      |      |
| AT  | averaging time (yrs)                                     | 70       |                               |                            |      |      |
| EF  | exposure frequency (d/yr)                                | 350      |                               |                            |      |      |
| CSFo  | cancer slope factor (oral) (mg/kg-d) <sup>-1</sup>       | 2.0E+00  |                               |                            |      |      |
| IF <sub>soil</sub>  | ingestion factor (mg-yr/kg-d)                            | 114      |                               |                            |      |      |
| CF  | conversion factor (kg/mg)                                | 0.000001 |                               |                            |      |      |
| CSFi  | cancer slope factor (inhalation) (mg/kg-d) <sup>-1</sup> | 2.0E+00  |                               |                            |      |      |
| IF <sub>air</sub>   | inhalation factor (m <sup>3</sup> -yr/kg-d)              | 10.9     |                               |                            |      |      |
| PEF   | particulate emissions factor (m <sup>3</sup> /kg)        | 1.32E+09 |                               |                            |      |      |
| CSFd  | cancer slope factor (dermal) (mg/kg-d) <sup>-1</sup>     | 2.0E+00  |                               |                            |      |      |
| DF  | dermal factor (mg-yr/kg-d)                               | 361      |                               |                            |      |      |
| ABS   | dermal absorption factor                                 | 0.01     |                               |                            |      |      |

Remediation goals based on oral, inhalation and dermal contact exposure

**Table 10**  
**Risk-Based Remedial Goal Option for Surface Soil Based on Non-Cancer Hazards**  
**Child Resident Land Use Assumptions**  
**Anniston PCB Site**

| Equation Definition:<br>$C = [THI \times BW \times AT \times 365 \text{ d/yr}] / [EF \times ED \times [(1/RfDo \times IRo \times CF \times FI) + (1/RfDi \times IRi \times 1/PEF) + (1/RfDd \times CF \times SA \times AF \times ABS)]]$ |   |          | Chemical of Potential Concern | Hazard Quotient Level (mg/kg)<br>HQ=1 |
|--|---|----------|-------------------------------|---------------------------------------|
| Parameter  | Definition  | Value    | Total PCBs                    | 2                                     |
| C  | chemical concentration in soil (mg/kg)            |          |                               |                                       |
| THI  | target hazard index                               | 1        |                               |                                       |
| BW   | body weight (kg)                                  | 15       |                               |                                       |
| AT   | averaging time (yrs)                              | 6        |                               |                                       |
| EF   | exposure frequency (d/yr)                         | 350      |                               |                                       |
| ED   | exposure duration (yrs)                           | 6        |                               |                                       |
| RfDo   | reference dose (oral)                             | 2E-05    |                               |                                       |
| IRo  | ingestion rate (mg/d)                             | 200      |                               |                                       |
| CF   | conversion factor (kg/mg)                         | 1E-06    |                               |                                       |
| FI   | fraction ingested from source (unitless)          | 1        |                               |                                       |
| RfDi   | reference dose (inhalation)                       | 2E-05    |                               |                                       |
| IRi  | inhalation rate (m <sup>3</sup> /d)               | 10       |                               |                                       |
| PEF  | particulate emissions factor (m <sup>3</sup> /kg) | 1.32E+09 |                               |                                       |
| RfDd   | reference dose (dermal)                           | 2E-05    |                               |                                       |
| SA   | surface area per event (cm <sup>2</sup> /d)       | 2,800    |                               |                                       |
| AF   | adherence factor (mg/cm <sup>2</sup> )            | 0.2      |                               |                                       |
| ABS  | dermal absorption factor                          | 0.01     |                               |                                       |

Remediation goals based on oral, inhalation and dermal contact exposure

**Exhibit 1**  
**Dioxin-Like PCB Congener Concentrations and Aroclor TEQ (mg/kg)**

| Compound                | Congener | TEF WHO | Aroclor | TEQ <sup>a</sup> |
|-------------------------|----------|---------|---------|------------------|
| 3,3',4,4' - TeCB        | 77       | 0.0001  | 1242    | 5.2              |
| 3,4,4',5 - TeCB         | 81       | 0.0001  | 1248    | 15               |
| 2,3,3',4,4' - PeCB      | 105      | 0.0001  | 1254    | 21               |
| 2,3,4,4',5 - PeCB       | 114      | 0.0005  | 1260    | 3.5              |
| 2,3',4,4',5 - PeCB      | 118      | 0.0001  | 1268    | 0.21             |
| 2',3,4,4',5 - PeCB      | 123      | 0.0001  |         |                  |
| 3,3',4,4',5 - PeCB      | 126      | 0.1     |         |                  |
| 2,3,3',4,4',5 - HxCB    | 156      | 0.0005  |         |                  |
| 2,3,3',4,4',5' - HxCB   | 157      | 0.0005  |         |                  |
| 2,3',4,4',5,5' - HxCB   | 167      | 0.00001 |         |                  |
| 3,3',4,4',5,5' - HxCB   | 169      | 0.01    |         |                  |
| 2,3,3',4,4',5,5' - HpCB | 189      | 0.0001  |         |                  |

<sup>a</sup> Excerpted from: Rushneck, D.R., et al. 2002. Concentrations of Dioxin-Like PCB Congeners in Unweathered Aroclors Using EPA Method 1668A, and Applications for Risk Assessment, submitted for publication in *Environmental Science and Technology*, 2002.

TEQ = Toxic Equivalency  
 TEF = Toxicity Equivalency Factors  
 WHO = World Health Organization