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EPA REGION VIII  
HEARING CLERK

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

IN THE MATTER OF:  
Rocky Flats Industrial Park Site  
Jefferson County, Colorado,

Columbine Strategies LLC,

Respondent.

ADMINISTRATIVE AGREEMENT  
AND ORDER ON CONSENT FOR POST  
REMOVAL SITE CONTROL  
ACTIVITIES BY BONA FIDE  
PROSPECTIVE PURCHASER

U.S. EPA Region 8  
CERCLA Docket No. **CERCLA-08-2015-0009**

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. INTRODUCTION**

1. This Administrative Agreement and Order on Consent for Post Removal Site Control Activities by Bona Fide Prospective Purchaser (Agreement) is voluntarily entered into by and among the United States on behalf of the U.S. Environmental Protection Agency (EPA), the Colorado Department of Public Health and Environment (CDPHE) and Columbine Strategics LLC (Purchaser) (collectively, "Parties") under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9601 *et seq.* Under this Agreement, Purchaser agrees to perform post removal site control activities at the AERRCo Property located in Jefferson County, Colorado. The AERRCo Property (Appendix B) is included within the Rocky Flats Industrial Park Superfund Site (Site).

## **II. JURISDICTION AND GENERAL PROVISIONS**

2. This Agreement is issued pursuant to the authority vested in the President of the United States by sections 104, 106, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9606, 9607 and 9622, and delegated to the Administrator of EPA by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated by EPA delegation 14-14-C to the undersigned Regional officials.

3. The Parties agree that the United States District Court for the District of Colorado will have jurisdiction pursuant to section 113(b) of CERCLA, 42 U.S.C. § 9613(b), for any enforcement action brought with respect to this Agreement.

4. The Purchaser represents that it is a bona fide prospective purchaser (BFPP) as defined by section 101(40) of CERCLA, 42 U.S.C. § 9601(40), that it has and will continue to comply with section 101(40) during its ownership of the AERRCo Property, and thus qualifies for the protection from liability under CERCLA set forth in section 107(r)(1) of CERCLA, 42 U.S.C. § 9607(r)(1), with respect to the AERRCo Property. In view, however, of the Work to be performed in connection with the post removal site control activities at the AERRCo Property, and the risk of claims under CERCLA being asserted against Purchaser notwithstanding section 107(r)(1) as a consequence of Purchaser's activities at the Site pursuant to this Agreement, one of the purposes of this Agreement is to resolve, subject to the reservations and limitations contained in Section XVI (Reservation of Rights by United States), any potential liability of Purchaser for the Existing Contamination as defined by Paragraph 9 below.

5. The resolution of this potential liability, in exchange for Purchaser's performance of the Work, is in the public interest.

6. EPA and Purchaser recognize that this Agreement has been negotiated in good faith. Purchaser agrees to comply with and be bound by the terms of this Agreement and further agrees that it will not contest the basis or validity of this Agreement or its terms.

### **III. PARTIES BOUND**

7. This Agreement applies to and is binding upon EPA and upon Purchaser and Purchaser's successors and assigns. Any change in ownership or corporate status of Purchaser including, but not limited to, any transfer of assets or real or personal property, shall not alter Purchaser's responsibilities under this Agreement.

8. Purchaser shall ensure that its contractors, subcontractors, and representatives comply with this Agreement and, where appropriate, receive a copy of this Agreement. Purchaser shall be responsible for any noncompliance with this Agreement.

### **IV. DEFINITIONS**

9. 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, including any amendments thereto.

"Action Memorandum" shall mean the Action Memorandum relating to the Site signed on September 25, 2000, by the Regional Administrator, EPA Region 8, or his delegate, and all attachments thereto. The Action Memorandum is attached hereto as Appendix A.

"Agreement" shall mean this Agreement and Order on Consent for Post Removal Site Control by Bona Fide Prospective Purchaser and all appendices attached hereto (listed in Section XXIV). In the event of conflict between this Agreement and any appendix, this Agreement shall control.

"BFPP" shall mean a bona fide prospective purchaser as described in section 101(40) of CERCLA, 42 U.S.C. § 9601(40).

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 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 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.

"Effective Date" shall be the effective date of this Agreement as provided in Section XXVI.

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

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

“Existing Contamination” shall mean:

- a. Any Hazardous Substances, pollutants or contaminants present or existing on or under the Property as of the Effective Date;
- b. Any Hazardous Substances, pollutants or contaminants that migrated from the Property prior to the Effective Date; and
- c. Any Hazardous Substances, pollutants or contaminants presently at the Site that migrate onto or under or from the Property after the Effective Date.

“Hazardous Substance” 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) of CERCLA, 42 U.S.C. § 9601(33); (3) any “solid waste” under section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (4) any “hazardous material” under CRS § 25-7-101 *et seq.*

“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.

“OSC” shall mean EPA’s On-Scene Coordinator as defined in 40 C.F.R. § 300.5.

“Oversight Costs” shall mean direct and indirect costs incurred after the Effective Date by EPA or the United States in monitoring or supervising Purchaser’s performance of the Work to determine whether such performance is consistent with the requirements of this Agreement, including costs incurred in reviewing plans, reports and other documents submitted pursuant to this Agreement, as well as any costs incurred in overseeing implementation of the Work.

“Paragraph” shall mean a portion of this Agreement identified by an Arabic numeral or a lower case letter.

“Parties” shall mean EPA and Purchaser.

“Property” or “AERRCo Property” shall mean the approximately 5.1 acres in Tract 5 of the Rocky Flats Industrial District Filing One, known as the AERRCo Property, also known as 17190 West State Highway 72, Arvada, in unincorporated Jefferson County, Colorado, 80003, and which is described more fully in the environmental covenant attached hereto as Appendix C.

“Purchaser” shall mean Columbine Strategics LLC, a Colorado limited liability company with its principle offices at 703 Ash Street, Denver, CO 80220, and whose Manager is Mr. J. Kemper Will.

“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 Agreement identified by a Roman numeral.

“Site” shall mean the Rocky Flats Industrial Park Site, EPA Site Spill/ID Number SSID #08-10, encompassing approximately 18 acres, located in unincorporated Jefferson County, Colorado and depicted generally on the map attached hereto as Appendix B.

“State” shall mean the State of Colorado and any successor departments or agencies of the State of Colorado.

“Supervising Contractor” shall mean the principal contractor retained by Purchaser to supervise and direct the implementation of the Work agreed to in this Agreement and to sign and approve the Final Report submitted concerning such Work.

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

“Work” shall mean all removal and related activities Purchaser is required to perform under this Agreement.

## **V. FINDINGS OF FACT**

10. The AERRCo Property is part of the Rocky Flats Industrial Park Site, in unincorporated Jefferson County, Colorado. The Site is located along the 17,000 block of West Colorado Highway 72, approximately two miles east of the intersection of Colorado Highways 93 and 72, in section 23, T2N, R70W. The Site consists of a number of individual parcels of land. Three parcels have been the subject of investigations and actions under CERCLA and are commonly referred to as the AERRCo, Thoro, and GWI facilities. Highway 72 Properties, Inc. (Hwy 72), is the current owner of record of the AERRCo Property.

11. The Wasatch Chemical Company owned and operated a chemical processing operation at the Property from 1970 to 1975. In September 1971, Wasatch Chemical Company merged with Entrada Industries, Inc., and operated the facility as a ferric chloride production facility prior to the purchase by AERRCo (formerly the American Ecological Recycle Research Corporation) in 1975. AERRCo owned and operated the Property from 1975 until late 1980. AERRCo bought, stored, recycled, and sold industrial and commercial waste chemical products, including such compounds as alcohol, acetone, acid, methylethylketone ("MEK"), solvents, toluene, xylene, cyanide waste, metals and PCB-contaminated oil. AERRCo ceased formal operations in 1980, but continued to accept waste until approximately 1985 when the State told them to stop. AERRCo filed for bankruptcy in 1986. The AERRCo Parcel was the subject of an earlier removal action pursuant to CERCLA in 1988 that addressed surface contamination.

12. EPA and CDPHE conducted investigations at the Property after a fire on October 17, 1979. Samples collected showed soil contamination by solvents, heavy metals (mercury, lead and cadmium), chlorinated hydrocarbons, and cyanide.
13. In June, 1982, EPA conducted a RCRA inspection of the Property, and found more than 100 drums and tanks in poor condition or leaking. The drums and tanks contained an assortment of Hazardous Substances.
14. In March, 1988, the Federal Bureau of Investigation found a release of Hazardous Substances in samples obtained from Barbara Gulch and an unnamed tributary to Barbara Gulch, which contained arsenic, chloroform, 1,1-dichloroethane, 1,4-dioxane, methylene chloride, toluene, trichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and vinyl chloride.
15. Sampling conducted in 1998 and 1999 as part of EPA's Engineering Evaluation/Cost Analysis ("EE/CA") for the Site identified volatile organic compounds in the groundwater, including maximum concentrations of: 1,1,1-Trichloroethane - 12,000 ug/l; 1,1-Dichloroethene-13,000 ug/l; 1,2-Dichloroethane-2,100,000 ug/l; 1,2-Dichloroethene - 23,000 ug/l; cis-1,2-Dichloroethene - 130,000 ug/l; Tetrachloroethene - 5300 ug/l; Trichloroethylene - 25,000 ug/l; Vinyl Chloride - 3300 ug/l; Carbon Tetrachloride -10,000 ug/l and Chloroform - 10,000 ug/l.
16. EPA entered into an administrative order on consent for removal action with thirteen potentially responsible parties on September 29, 2000, EPA Docket No. CERCLA-8-2000-26 ("PRP Group AOC"). Pursuant to the PRP Group AOC, the PRP group performed a CERCLA Removal Action identified in EPA's September 25, 2000 Action Memorandum for the AERRCo and Thoro facilities at the Site ("Removal Action"). Under the terms of the PRP Group AOC, EPA secured access to the Site to allow the PRP group to perform the Removal Action. The Removal Action is nearly complete, but still requires that institutional controls be placed on the Property and that the property be secured by fencing.
17. On December 12, 1996, Jefferson County assigned the certificate of sale of the tax lien on the Property to Hwy 72 for the sum of \$176.97. On May 28, 1997, Hwy 72 received the Treasurer's Deed for the AERRCo Property from Jefferson County. This deed was recorded on May 30, 1997. The total amount of back-taxes paid for the Property by Hwy 72 was \$176.97.
18. On November 20, 2000, under the authority of section 107(l) of the Superfund Amendments and Reauthorization Act, amending the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601, *et seq.*, the United States filed a lien on the Property to secure payment of CERCLA response costs.
19. As of the Effective Date, Hwy 72 has failed to pay taxes owed on the Property.
20. In tax year 2013, the Jefferson County, Colorado, Assessor's Office assessed the value of the Property at \$31,378.
21. On June 11, 2013, Purchaser paid the Jefferson County, Colorado Treasurer the sum of \$9,978.57 and received tax certificates for the Property.

22. On August 29, 2013, Purchaser paid the Jefferson County, Colorado Treasurer the sum of \$2,976.47 and received a tax certificate for the Property.
23. On September 2, 2014, Purchaser paid the Jefferson County, Colorado Treasurer the sum of \$2,111.50 and received a tax certificate for the Property.
24. On August 19, 2015, Purchaser paid the Jefferson County, Colorado Treasurer the sum of \$2,106.34 and received a tax certificate for the Property.
25. Upon execution of this Agreement, Purchaser intends to apply for a Treasurer's Deed for the Property.

## **VI. CONCLUSIONS OF LAW AND DETERMINATIONS**

26. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:
  - a. The Property is a "facility" as defined by section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
  - b. Contamination found at the Property, as identified in the Findings of Fact above, includes "Hazardous Substances" as defined herein and as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
  - c. Purchaser is a "person" as defined by section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
  - d. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a Hazardous Substance from the facility as defined by section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
  - e. The Work is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Agreement, will be considered consistent with the NCP, as provided in section 300.700(c)(3)(ii) of the NCP.

## **VII. AGREEMENT**

27. In consideration of and in exchange for the United States' Covenant Not to Sue in Section XV, Purchaser agrees to comply with all provisions of this Agreement, including, but not limited to, all appendices to this Agreement and all documents incorporated by reference into this Agreement.

## **VIII. WORK TO BE PERFORMED**

28. Purchaser shall perform post-removal site control activities (“Work”) for the Property pursuant to a Work Plan to be submitted to EPA for approval. The Work to be performed by Purchaser, including the requirement that Purchaser file a State-approved environmental covenant pursuant to Section X of this Agreement, is, among other things, intended to satisfy EPA’s obligations under EPA Docket No. CERCLA-8-2000-20, In the Matter of Rocky Flats Industrial Park Site, Administrative Order on Consent for Removal Action, dated September 29, 2000.

29. Purchaser shall perform all Work consistent with section 300.415(l) of the NCP and considering OSWER Directive No. 9360.2-02. The Work to be performed includes:

a. The Purchaser shall apply for a Treasurer’s Deed for the Property within six months of the Effective Date of this Agreement.

b. If the Purchaser obtains a Treasurer’s Deed for the Property, or otherwise obtains title to the Property, the Purchaser shall construct and maintain a permanent (i.e. not temporary) fence around the entire perimeter of the Property that is adequate to restrict access by persons, livestock or wildlife;

c. If the Purchaser obtains a Treasurer’s Deed for the Property, or otherwise obtains title to the Property, the Purchaser shall remove any debris or other material found on the Property, other than Existing Contamination, that may pose a physical, chemical, or toxicity safety hazard to humans; and

d. If the Purchaser obtains a Treasurer’s Deed for the Property, or otherwise obtains title to the Property, the Purchaser shall provide access to the EPA, its contractors and representatives, for the purpose of performing response actions under CERCLA as set forth in the EPA’s September 25, 2000 Action Memorandum and any related documents concerning the Site.

30. Purchaser shall perform all actions required by this Agreement in accordance with all applicable local, state, and federal laws and regulations, including in section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws.

31. If Purchaser has not obtained a Treasurers Deed or otherwise obtained title to the Property within one year of the Effective Date of this Agreement, this Agreement shall be null and void.



32. Reporting.

a. Purchaser shall submit a written quarterly progress report to EPA concerning actions undertaken pursuant to this Agreement, with the first quarter beginning on the date of receipt of EPA's approval of the Work Plan until completion of those aspects of the Work that are not continuing obligations under the environmental covenant, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, 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.

b. Purchaser shall submit 2 copies of all plans, reports or other submissions required by this Agreement, or any approved Work Plan. Upon request by EPA, Purchaser shall submit such documents in electronic form to be specified by EPA.

33. Final Report. Within thirty (30) days after completion of all Work required by this Agreement, Purchaser shall submit for EPA review and approval in accordance with Section XXV (Notice of Completion) a final report summarizing the actions taken to comply with this Agreement. The final report shall conform, at minimum, with the applicable requirements set forth in section 300.165 of the NCP entitled "OSC Reports." The final report shall include a statement of actual costs incurred in complying with the Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, if any, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) 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 (e.g. manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by the Supervising Contractor who supervised or directed the preparation of said 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 this 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."

**IX. AUTHORITY OF THE ON-SCENE COORDINATOR**

34. EPA's On-Scene Coordinator (OSC) shall be responsible for overseeing Purchaser's implementation of this Agreement. 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 Agreement, 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.

## **X. ACCESS/NOTICE TO SUCCESSORS/INSTITUTIONAL CONTROLS**

35. Purchaser agrees to provide EPA, its authorized officers, employees, representatives, and all other persons performing response actions under EPA oversight, an irrevocable right of access at all reasonable times to the Property. EPA agrees to provide reasonable notice to Purchaser of the timing of response actions to be undertaken at the Property and other areas owned or controlled by Purchaser. Notwithstanding any provision of this Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and other authorities.

36. Institutional Controls.

a. If the Purchaser successfully obtains a Treasurer's Deed for the Property, the Purchaser shall, within sixty (60) days after obtaining the Treasurer's Deed, execute the environmental covenant attached hereto as Appendix C and provide the executed covenant to the Colorado Department of Public Health and Environment for approval at the address appearing below in Section XXIX (Notices and Submissions). Upon State approval of the covenant, the covenant shall be recorded by the State in the Office of the Jefferson County, Colorado, Clerk and Recorder, under section 25-15-321, Colorado Revised Statutes. The environmental covenant shall impose use restrictions and institutional controls on the Property in the same form as that attached hereto as Appendix C;

b. Purchaser shall implement and comply with any land use restrictions and institutional controls on the Property in connection with a response action.

37. For so long as Purchaser is an owner or operator of the Property, Purchaser shall require that assignees, successors in interest, and any lessees, sublessees and other parties with rights to use the Property shall provide access and cooperation to EPA, its authorized officers, employees, representatives, and all other persons performing response actions under EPA oversight. Purchaser shall require that assignees, successors in interest, and any lessees, sublessees, and other parties with rights to use the Property implement and comply with any land use restrictions and institutional controls on the Property in connection with a response action, and not contest EPA's authority to enforce any land use restrictions and institutional controls on the Property.

38. Until the Purchaser files the State approved environmental covenant (Appendix C), Purchaser shall require that each grantee, transferee, or other holder of an interest in the Property or any part thereof shall provide access and cooperation to EPA, its authorized officers, employees, representatives and other person performing response actions under EPA oversight. In addition, until the Purchaser files the State approved environmental covenant (Appendix C), Purchaser shall require that any grantee, transferee or other holder of an interest in the Property or any part thereof to implement and comply with the land use restrictions and institutional controls set forth in the environmental covenant (Appendix C) in connection with a response action and not contest EPA's authority to enforce any land use restrictions and institutional controls, or the terms of this Agreement.

39. Purchaser shall provide a copy of this Agreement to any lessee, sublessee, and other party with rights to use the Property as of the Effective Date as well as a copy of the recorded environmental covenant.

#### **XI. RECORD RETENTION, DOCUMENTATION, AND AVAILABILITY OF INFORMATION**

40. Purchaser shall preserve all documents and information relating to the Work, or relating to the Hazardous Substances, pollutants or contaminants found on or released from the Site in Purchaser's possession, and shall submit them to EPA upon completion of the Work required by this Agreement, or earlier if requested by EPA.

41. Purchaser may assert a business confidentiality claim pursuant to 40 C.F.R. § 2.203(b) with respect to part or all of any information submitted to EPA pursuant to this 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 Purchaser. EPA shall disclose information covered by a business confidentiality claim only to the extent permitted by, and by means of procedures set forth at, 40 C.F.R. 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 Purchaser.

#### **XII. DISPUTE RESOLUTION**

42. Unless otherwise expressly provided for in this Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Agreement. EPA and Purchaser shall attempt to resolve any disagreements concerning this Agreement expeditiously and informally. If EPA contends that Purchaser is in violation of this Agreement, EPA shall notify Purchaser in writing, setting forth the basis for its position. Purchaser may dispute EPA's position pursuant to this Paragraph.

43. If Purchaser disputes EPA's position with respect to Purchaser's compliance with this Agreement or objects to any EPA action taken pursuant to this Agreement, Purchaser shall notify EPA in writing of its position unless the dispute has been resolved informally. EPA may reply, in writing, to Purchaser's position within thirty (30) days of receipt of Purchaser's notice. EPA and Purchaser shall have sixty (60) days from EPA's receipt of Purchaser's written statement of position to resolve the dispute through formal negotiations (Negotiation Period). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted orally but must be confirmed in writing by EPA.

44. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by both Parties, be incorporated into and become an enforceable part of this Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the supervisory level or higher will review the dispute on the basis of the parties' written statements of position and issue a written decision to Purchaser. EPA's decision shall be incorporated into and become an enforceable part of this Agreement. Purchaser's obligations under this 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, Purchaser shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

### **XIII. FORCE MAJEURE**

45. Purchaser agrees to perform all requirements of this Agreement within the time limits established under this Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Agreement, a *force majeure* is defined as any event arising from causes beyond the control of the Purchaser, or any entity controlled by Purchaser, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Agreement despite Purchaser's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the work or increased cost of performance or a failure to attain performance standards/action levels set forth in the Action Memorandum.

46. 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, Purchaser shall notify EPA orally within 24 hours of when Purchaser first knew that the event might cause a delay. Within seven (7) days thereafter, Purchaser shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize 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 prevent or mitigate the delay or the effect of the delay; Purchaser's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of the Purchaser, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Purchaser from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

47. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Purchaser in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Purchaser in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

48. If Purchaser elects to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution), Purchaser shall do so no later than fifteen (15) days after receipt of EPA's notice. In any such proceeding, Purchaser 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 or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Purchaser complied with the requirements of Paragraphs 45 and 46,

above. If Purchaser carries this burden, the delay at issue shall be deemed not to be a violation by Purchaser of the affected obligation of this Agreement.

#### **XIV. CERTIFICATION**

49. By entering into this Agreement, Purchaser certifies that to the best of its knowledge and belief it has fully and accurately disclosed to EPA all information known to Purchaser and all information in the possession or control of its officers, directors, employees, contractors and agents which relates in any way to any Existing Contamination or any past or potential future release of Hazardous Substances, pollutants or contaminants at or from the Site and to its qualification for this Agreement. Purchaser also certifies that to the best of its knowledge and belief it has not caused or contributed to a release or threat of release of Hazardous Substances or pollutants or contaminants at the Site. If the United States determines that information provided by Purchaser is not materially accurate and complete, the Agreement, within the sole discretion of EPA, shall be null and void and EPA reserves all rights it may have.

#### **XV. COVENANT NOT TO SUE BY UNITED STATES**

50. In consideration of the actions that will be performed by Purchaser under the terms of this Agreement, and except as otherwise specifically provided in this Agreement, the United States covenants not to sue or to take administrative action against Purchaser pursuant to section 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a) for Existing Contamination. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Purchaser of all obligations under this Agreement. This covenant not to sue extends only to Purchaser and does not extend to any other person.

#### **XVI. RESERVATION OF RIGHTS BY UNITED STATES**

51. Except as specifically provided in this 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 or the United States from seeking legal or equitable relief to enforce the terms of this Agreement, from taking other legal or equitable action as it deems appropriate and necessary.

52. The covenant not to sue set forth in Section XV, above, does not pertain to any matters other than those expressly identified therein. The United States reserves, and this Agreement is without prejudice to, all rights against Purchaser with respect to all other matters, including, but not limited to:

- a. liability for failure by Purchaser to meet a requirement of this Agreement;
- b. criminal liability;
- c. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

d. liability for violations of federal, state, or local law or regulations during or after implementation of the Work other than as provided in the Work Plan, the Work, or otherwise ordered by EPA;

e. liability resulting from the release or threat of release of Hazardous Substances, pollutants or contaminants at or in connection with the Site after the Effective Date, not within the definition of Existing Contamination;

f. liability resulting from exacerbation of Existing Contamination by Purchaser, its successors, assigns, lessees, or sublessees; and

g. liability arising from the disposal, release or threat of release of Hazardous Substances outside of the Site, not within the definition of Existing Contamination.

53. With respect to any claim or cause of action asserted by the United States, Purchaser shall bear the burden of proving that it has complied with all of the requirements of 42 U.S.C. 9601(40).

54. **Work Takeover.** In the event EPA determines that Purchaser has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Prior to taking over the Work, EPA will issue written notice to Purchaser specifying the grounds upon which such notice was issued and providing Purchaser with seven (7) days within which to remedy the circumstances giving rise to EPA's issuance of the notice. Purchaser may invoke the procedures set forth in Section XII (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Notwithstanding any other provision of this Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

## **XVII. COVENANT NOT TO SUE BY PURCHASER**

55. Purchaser covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to Existing Contamination, the Work, Oversight Costs, or this Agreement, including, but not limited to:

a. Any direct or indirect claim for reimbursement from the 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 claim arising out of response actions, including any claim under the United States 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; or

c. Any claim against the United States pursuant to sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613.

56. Purchaser reserves, and this Agreement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, 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, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her 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, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Purchaser's plans, reports, other deliverables, or activities.

57. 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).

### **XVIII. PAYMENT OF OVERSIGHT COSTS**

58. Payment of Oversight Costs Upon Receipt of Periodic Bills.

a. Purchaser shall pay EPA Oversight Costs not inconsistent with the NCP. On a periodic basis, EPA will send Purchaser a bill requiring payment that includes a cost summary, which includes direct and indirect costs incurred by EPA and its contractors. Purchaser shall make all payments required by this Paragraph to EPA by Fedwire Electronic Funds ("EFT") Transfer to:

Federal Reserve Bank of New York

ABA = 021030004

Account = 68010727

SWIFT address = FRNYUS33

33 Liberty Street

New York NY 10045

Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency" and shall reference Site/Spill ID Number A898 and the EPA docket number for this action.

b. In the event that a payment for Oversight Costs is not made within sixty (60) days of Purchaser's receipt of a bill, Purchaser shall pay Interest on the unpaid balance. Interest shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment.

c. The total amount to be paid by Purchaser under this Section shall be deposited by EPA in the Rocky Flats Industrial Park Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

d. At the time of each payment, Purchaser shall send notice that such payment has been made to Enforcement Specialist, Rocky Flats Industrial Park Site (8ENF-RC), EPA Region 8, 1595 Wynkoop St. Denver, CO 80202, and to the EPA Cincinnati Finance Office by email at [acctsreceivable.cinwd@epa.gov](mailto:acctsreceivable.cinwd@epa.gov), or by mail to:

EPA Cincinnati Finance Office  
26 West Martin Luther King Drive  
Cincinnati, Ohio 45268

Such notice shall reference EPA ID Number EPA ID 110009270804 and the EPA docket number for this action.

e. Pursuant to Section XII (Dispute Resolution), Purchaser may dispute all or part of a bill for Oversight Costs if Purchaser determines that EPA has made a mathematical error or included a cost item that is outside the definition of Oversight Costs, or if Purchaser believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. 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, Purchaser shall pay the full amount of the uncontested costs to EPA as specified in this Section on or before the due date. Within the same time period, Purchaser shall pay the full amount of the contested costs into an interest-bearing escrow account in a duly chartered bank or trust company that is insured by the Federal Deposit Insurance Corporation ("FDIC"). Purchaser shall simultaneously transmit a copy of any checks to the persons listed in Paragraph 57.d, above. Purchaser shall ensure that the prevailing party in the dispute receives the amount upon which it prevailed from the escrow funds plus any interest accrued within 20 calendar days after the dispute is resolved.

## **XIX. CONTRIBUTION**

59. Nothing in this Agreement precludes the United States or Purchaser from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any person not a party to this Agreement, including any claim Purchaser may have pursuant to section 107(a)(4)(B). Nothing herein diminishes the right of the United States, pursuant to sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2) and (3), to pursue any such persons to obtain additional response costs or response actions and to enter into settlements that give rise to contribution protection pursuant to section 113(f)(2).

60. In the event of a suit or claim for contribution brought against Purchaser, notwithstanding the provisions of section 107(r)(1) of CERCLA, 42 U.S.C. § 9607(r)(1), with respect to Existing Contamination (including any claim based on the contention that Purchaser is not a BFPP, or has lost its status as a BFPP as a result of response actions taken in compliance with this Agreement or at the direction of the OSC), the Parties agree that this Agreement shall then constitute an administrative settlement for purposes of sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Purchaser would be entitled, as of the Effective Date, 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), or as may be otherwise



provided by law, for “matters addressed” in this Agreement. The “matters addressed” in this Agreement are all response actions taken or to be taken and all Oversight Costs incurred or to be incurred by the United States or by any other person with respect to Existing Contamination.

61. In the event Purchaser were found, in connection with any action or claim it may assert to recover costs incurred or to be incurred with respect to Existing Contamination, not to be a BFPP, or to have lost its status as a BFPP as a result of response actions taken in compliance with this Agreement or at the direction of the OSC, the Parties agree that this Agreement shall then constitute an administrative settlement within the meaning of section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Purchaser has resolved its liability for all response actions taken or to be taken and all response costs incurred or to be incurred by the United States or by any other person with respect to Existing Contamination.

62. Purchaser agrees that with respect to any suit or claim brought by it for matters related to this Agreement it will notify the United States in writing no later than sixty (60) days prior to the initiation of such suit or claim.

63. Purchaser also agrees that with respect to any suit or claim for contribution brought against it for matters related to this Agreement it will notify the United States in writing within 10 days of service of the complaint on it. In addition, Purchaser agrees that it will 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, for matters related to this Agreement.

## **XX. RELEASE AND WAIVER OF LIEN(S)**

64. Subject to the Reservation of Rights in Section XVI of this Agreement, upon satisfactory completion of the Work specified in Paragraph 28.a of Section VIII (Work to be Performed), Paragraph 35.a of Section X (Access/Notice to Successors/Institutional Controls), payment of any Oversight Costs due under Section XVIII, Purchaser obtaining a Treasurer’s Deed for the Property and the filing of the environmental covenant (Appendix C), EPA agrees to release and waive the attached lien (Appendix D, hereto) on the Property now and in the future under section 107(r) of CERCLA, 42 U.S.C. § 9607(r), filed on the Property to secure payment of costs incurred or to be incurred by EPA in responding to the release or threat of release of Existing Contamination. At its non-reviewable discretion, EPA may release the subject lien earlier. If Purchaser provides written notice to EPA that it has been unable to obtain a Treasurer’s Deed for the Property, this Agreement shall thereby become null and void.

## **XXI. INDEMNIFICATION**

65. Purchaser shall 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 arising from, or on account of, negligent or other wrongful acts or omissions of Purchaser, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Agreement. In addition, Purchaser agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys’ fees and other expenses of

litigation, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Purchaser, Purchaser's officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Purchaser's behalf or under Purchaser's control, in carrying out activities pursuant to this Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Purchaser in carrying out activities pursuant to this Agreement. Neither Purchaser nor any such contractor shall be considered an agent of the United States.

66. The United States shall give Purchaser notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Purchaser prior to settling such claim and consider any input Purchaser provides with respect to such settlement.

67. Purchaser 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 Purchaser and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Purchaser shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Purchaser and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

## **XXII. MODIFICATION**

68. The OSC may make minor modifications to any plan, or schedule in writing or by oral direction. Any such oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Agreement may be modified in writing by mutual agreement of the Parties.

69. If Purchaser seeks permission to deviate from any approved plan or schedule, Purchaser shall submit a written request to EPA for approval outlining the proposed modification and its basis. Purchaser may not proceed with the requested deviation until receiving oral or written approval from the OSC.

70. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Purchaser shall relieve Purchaser of its obligation to obtain any formal approval required by this Agreement, or to comply with all requirements of this Agreement, unless it is formally modified.

## **XXIII. PUBLIC COMMENT**

71. This Agreement shall be subject to a thirty-day public comment period, after which 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.

#### **XXIV. APPENDICES**

72. The following appendices are attached to and incorporated into this Agreement.

- A. 2000 Action Memorandum
- B. Map of RFIP Site
- C. Environmental Covenant
- D. U.S.'s November 20, 2000 Lien

#### **XXV. NOTICE OF COMPLETION**

73. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Agreement, with the exception of any continuing obligations required by this Agreement, including continued compliance with CERCLA section 101(40) with respect to the Property in accordance with Paragraph 5 of this Agreement, post-removal site controls, record retention, and compliance with institutional controls, EPA will provide written notice to Purchaser. If EPA determines that any such Work has not been completed in accordance with this Agreement, EPA will notify Purchaser, provide a list of the deficiencies, and require that Purchaser modify the Work Plan if appropriate in order to correct such deficiencies. Purchaser shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Purchaser to implement the approved modified Work Plan shall be a violation of this Agreement.

#### **XXVI. EFFECTIVE DATE**

74. The effective date of this Agreement shall be the date upon which EPA issues written notice to Purchaser that EPA has fully executed the Agreement after review of and response to any public comments received.

#### **XXVII. DISCLAIMER**

75. This Agreement in no way constitutes a finding by EPA as to the risks to human health and the environment which may be posed by contamination at the AERRCo Property or the Site nor constitutes any representation by EPA that the AERRCo Property or the Site is fit for any particular purpose.

#### **XXVIII. PAYMENT OF COSTS**

76. If Purchaser fails to comply with the terms of this Agreement, it shall be liable for all litigation and other enforcement costs incurred by the United States to enforce this Agreement or otherwise obtain compliance.

#### **XXIX. NOTICES AND SUBMISSIONS**

77. Any notices, documents, information, reports, plans, approvals, disapprovals, or other correspondence required to be submitted from one party to another under this Agreement, shall

be deemed submitted either when hand-delivered or as of the date of receipt by certified mail/return receipt requested, express mail, or email.

Submissions to Purchaser shall be addressed to:

Columbine Strategies LLC  
J. Kemper Will, Manager  
703 Ash Street  
Denver, CO 80220

Submissions to EPA shall be addressed to:

Kerri Fiedler (or current OSC, RFIP Site)  
1595 Wynkoop Street  
Superfund Remediation Program, Mail Code 8EPR-SR  
U.S. Environmental Protection Agency  
Denver, CO 80202-1129  
fiedler.kerri@epa.gov

Copies of Submissions shall be addressed to:

Rocky Flats Industrial Park  
Superfund Project Manager  
Remediation Program  
Hazardous Materials and Waste Management Division Colorado Department of  
Public Health and the Environment 4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

The undersigned representative of Purchaser certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to bind the Purchaser to this Agreement.

IT IS SO AGREED:

COLUMBINE STRATEGICS, LLC

BY:

J. Kemper Will, Manager      July 29, 2015  
J. Kemper Will, Manager (Purchaser)      Date

IT IS SO AGREED:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BY:

---

Andrea Madigan  
CERCLA Supervisory Attorney  
CERCLA Response and Recovery Unit  
U.S. EPA Region 8

Date

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Kelcey Land, Director  
CERCLA and RCRA Technical Enforcement Program  
U.S. EPA Region 8

Date

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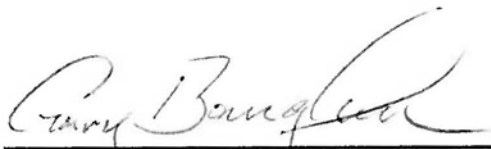
David Ostrander, Director  
Emergency Response and Preparedness Program  
U.S. EPA Region 8

Date

IT IS SO AGREED:

STATE OF COLORADO

BY:



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Gary Baughman, Director  
Hazardous Materials and Waste Management Division  
Colorado Department of Health and Environment

8/24/15  
Date

IT IS SO AGREED:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BY:

Andrea Madigan 9/16/15  
Date  
Andrea Madigan  
CERCLA Supervisory Attorney  
CERCLA Response and Recovery Unit  
U.S. EPA Region 8

Kelcey Land 9/10/15  
Date  
Kelcey Land, Director  
CERCLA and RCRA Technical Enforcement Program  
U.S. EPA Region 8

David Ostrander Sept 1, 2015  
Date  
David Ostrander, Director  
Emergency Response and Preparedness Program  
U.S. EPA Region 8

IT IS SO AGREED:

STATE OF COLORADO

BY:

Gary Baughman 8/4/15  
Date  
Gary Baughman, Director  
Hazardous Materials and Waste Management Division  
Colorado Department of Health and Environment

**Appendix A**

EPA Action Memorandum, September 25, 2000





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII  
999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

479201

Ref: 8EPR-SR

ACTION MEMORANDUM - ENFORCEMENT    RFIP AERRCO/THORO

DATE:            September 25, 2000

SUBJECT:    Request for Removal (Response) Action at the Rocky Flats Industrial Park Site, Jefferson County, Colorado: ACTION MEMORANDUM for a PRP Lead, Non-Time Critical Removal Action at the American Ecological Recycling and Research Company (AERRCO) facilities and the Thoro Products Company (Thoro) facility.

FROM:        Paula M. Schmittiel *Paula Schmittiel*  
Remedial Project Manager

THROUGH :    Barry Levene, Group A Leader *Barry Levene*  
Superfund Remedial Response Program

Dale Vodehnal, Director *Dale Vodehnal*  
Superfund Remedial Response Program

Steve Hawthorn, Supervisor *Steve Hawthorn*  
Emergency Response Unit

TO:            Max H. Dodson  
Assistant Regional Administrator  
Office of Ecosystems Protection and Remediation

Final NPL Site - NOT LISTED  
  
CERCLIS ID # COD980807374  
  
Category of Removal: Non-Time Critical

**I. Purpose**

This Action Memorandum documents the United States Environmental Protection Agency's (EPA's) selection of the Non-Time Critical Removal Actions described herein for addressing VOC contamination in the soil vapor and groundwater and surface water for the Rocky Flats Industrial Park (RFIP) Site. RFIP is located in a semi-rural area in northern Jefferson County, Colorado, along the south side of

State Highway 72 (Exhibit 1, Figure 1-1). RFIP is composed of several commercial or industrial properties, including:

- Great Western Inorganics, Inc. (GWI), a specialty chemical manufacturer and also the former site of Precision Chemical Company (PCC);
- AERRCO - (currently owned by Hwy. 72 Properties, Inc. [Hwy. 72]), and used as a storage lot for used mobile homes and the former site of American Ecological Recycling and Research Company (AERRCO) and a former Wasatch Chemical facility; and
- Thoro Products Company (Thoro), currently leased to Mesa Oil for used oil collection and recycling;

This Action Memorandum addresses the AERRCO and the Thoro facilities. The GWI facility is being addressed in a separate Action Memorandum.

The evaluation of removal action alternatives considered by EPA for this site is presented in the *"Engineering Evaluation and Cost Analysis for the Rocky Flats Industrial Park Site"* (EE/CA), August 2, 2000. The selected Removal Action at the AERRCO/Thoro facilities at the RFIP site is Alternative No. 4 (as identified in the EE/CA) - source removal of VOCs through a combination of air sparging and soil vapor extraction (AS/SVE). The purpose of the AS/SVE system is to remove as much of the VOCs from the suspected source areas as can be achieved in a manner that balances technical feasibility with cost-effectiveness.

The total cost of addressing the releases and threatened releases at the AERRCO & Thoro facilities is estimated to be \$3,715,000. The Removal Action will take more than 12 months to complete. The response actions are being performed under the Removal Program because of the need to:

1. Reduce the potential for exposure to workers at both facilities on-site due to inhalation of indoor air VOCs in a future land use scenario through an appropriate combination of engineering and institutional controls.
2. Minimize the potential for continuing migration of VOCs in soil vapor and VOCs in groundwater off-site, and

The nature and extent of the contamination and the risks at the site are described in two reports entitled *"Baseline Risk Assessment for the Rocky Flats Industrial Park, Final,"* February 2000 and *"Site Data, Characterization & Interpretative Report for the Engineering Evaluation/Cost Analysis for the Rocky Flats Industrial Park,"* July 16, 1999.



## II. SITE CONDITIONS AND BACKGROUND (AERRCO/Thoro facilities)

### A. SITE DESCRIPTION:

#### 1. Removal Site Evaluation.

The AERRCO property covers approximately 5.1 acres in the north-central part of RFIP. The property is currently owned and used by Hwy. 72 Properties to store old mobile homes. No permanent structures are present on this property.

Wasatch Chemical (a predecessor in interest to Entrada Industries, Inc.) originally developed the southeastern quarter of the Highway 72 properties in about 1970. Wasatch manufactured ferric chloride at the facility until 1975. The processing area included several buildings and a brick-lined impoundment.

AERRCO purchased this property and began operations in about 1975. AERRCO used the existing buildings and facilities for recycling various liquid chemicals including alcohols, solvents, cyanides wastes, metals, acids and Polychlorinated Biphenyls (PCB)-contaminated oil. The recycled materials were reportedly used to formulate waxes, resins, solvents, paints, and lacquer finishes. The rest of the site was used to store drummed liquid wastes. Reportedly, up to 12,000 55-gallon drums were present at the site at one time. In addition, a number of tanks of various sizes and types were also present in the south-central and southwestern parts of the property. The facility continued to operate until 1983. The State issued a RCRA compliance order in 1986, and AERRCO participated in closure activities through 1988, when the corporation filed for Chapter 11 bankruptcy.

Removal actions were completed at the AERRCO facility by a group of potentially responsible parties (PRPs) between 1986 and 1990. (See Paragraph B "Other Actions to Date").

Several contaminant investigations have been completed at the AERRCO property. Investigations began in 1979 after a fire at the AERRCO facility and continued until 1990. Investigations in the early and mid-1990s further evaluated the nature and extent of groundwater contamination associated with the AERRCO and other RFIP facilities. The EE/CA field investigation in 1998-99 included a soil gas survey, surface and subsurface soil samples, and groundwater sampling.

The Thoro property is 9.72 acres, and extends along the southern end



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of the RFIP Site. The east portion of the Thoro property is currently leased by Mesa Oil and is used to store and process waste oil. The facility includes a large warehouse building, a bermed area that encloses four 50,000-gallon aboveground storage tanks and numerous smaller tanks, several smaller buildings, and a set of liquid loading and offloading racks on a rail spur north of the facility buildings.

The property was originally developed by Thoro in 1974. Before it was developed, the central portion of the property was leveled by filling most of the upper reaches of the Unnamed gulch in 1969 and 1970. Thoro ran a solvent recycling and chemical processing operation from 1974 until the late 1980s. Mesa Oil began leasing the property after Thoro ceased operations.

A removal action conducted in August and September 1988 included a soil gas survey, installation of a monitoring well network, and construction of a collection trench and air-stripper treatment system in the drainage and seep area south of the GWI facility on the Thoro property (E&E 1988a). This action was principally associated with the GWI facility.

## **2. Physical Location & Site characteristics**

Although the RFIP site is currently in a semi-rural setting, additional urban development is likely in this area. The proposed corridor for the last section of the C-470 beltway around the Denver Metro area may be located in the vicinity of the site. Long-term plans for the PSM Properties area across State Highway 72 and north of RFIP, currently used for ranching, call for industrial, commercial, and residential development. A water storage reservoir (Fortune Reservoir) is being constructed by Consolidated Mutual Water Co. 3/4 mile east of RFIP. The property to the west of the reservoir is being planned for development of residential parcels including both single family and multiple family housing.

Several small businesses are currently operating to the east of the Site. The land immediately adjacent to AERRCO is owned by James Weis and is used for storage and conversion of vans to Weis Craft recreational vehicles. Adjacent to Weis Craft on the east side, is the Apollo self-storage complex. Next to Apollo on the east is Proto-Tel a company that manufactures injection-molded telephone components. A small industrial park is located to the west of the Site.



### 3. Release or Threatened Release into Environment

**Soil vapor:** Samples were obtained from approximately 84 soil borings at the RFIP Site as part of the EE/CA field investigation. Exhibit 2, Figure 2-3 shows the shallow (about 7 feet) soil borings where VOC concentrations greater than 100 ug/l (in air) were detected. This threshold (100 ug/l) for VOCs was defined in the EE/CA report as the area where SVE would be implemented. Twenty-one soil borings on the AERRCO property and two on the Thoro property are so identified. Exhibit 3, Figure 2-4 shows the deep (greater than 8 feet) soil borings where VOC concentrations greater than 100 ug/l (in air) were detected. In general, maximum VOC concentrations in soil vapor are thousands of micrograms per liter (ug/l) on the AERRCO property, and in the hundreds of ug/l on the Thoro property.

**Subsurface Soils (VOCs):** In general, VOC detections in subsurface soil samples correspond to VOC detections in soil vapor samples. VOC concentrations often were greatest in subsurface soil samples collected from the uppermost weathered portions of the Laramie Formation bedrock. Overall however, the soil vapor sampling results represent a more comprehensive evaluation of subsurface soil contamination and potential contaminant source area at the RFIP site.

**Groundwater:** Samples were obtained from 61 groundwater monitoring wells or temporary piezometers as part of the EE/CA field investigations. Overall, contaminant concentrations in groundwater detected in samples collected during the EE/CA field investigations are similar to historical groundwater sampling results (URS 1996; Ecology & Environment, 1988 and 1989; and Weston, 1994). Exhibit 4 - Figure 2-5 summarizes groundwater sampling results for VOCs from the EE/CA field investigation. Locations shown in bold indicate locations where one or more VOCs were detected at concentrations of 1,000 ug/l (1 mg/l) or more during the EE/CA groundwater sampling events.

Areas of high VOC concentrations in groundwater shown in Exhibit 4, Figure 2-5, generally correspond to areas of high VOC concentrations in soil vapor in Exhibits 2 and 3, Figures 2-3 and 2-4. Overall, the areas of highest VOC concentrations in groundwater occur near the east-central portion and southeast corner of the AERRCO property. The predominant VOCs detected in groundwater samples collected throughout the eastern half of the AERRCO property are 1,2-DCA, 1,1,1-trichloroethane, PCE & TCE. The predominant VOCs detected in the groundwater samples collected near the Thoro RCRA container storage pad include 1,1,1-trichloroethane, 1,1-DCE and 1,2-DCA.

**4. National Priorities List - Status**

The RFIP Site has not been proposed for addition to the NPL.

**5. Exhibits**

Exhibits 1 thru 5 are listed at the end of this Action Memorandum and attached to the document.

**B. OTHER ACTIONS TO DATE:**

A Removal Action conducted in August and September 1988 included a soil gas survey, installation of a monitoring well network, and construction of a collection trench and air-stripper treatment system in the drainage and seep area south of the GWI facility on the Thoro property.

Several response actions were completed at the AERRCO facility by a group of potentially responsible parties (PRPs) between 1986 and 1990. The initial action included voluntary removal of drummed wastes by the PRPs as part of the facility's RCRA closure program. The PRPs also completed a subsequent CERCLA emergency Removal Action beginning in 1988. Activities completed during both projects included the following:

1. Removal of 383,500 pounds of hazardous waste for incineration, 38,900 gallons of liquids for recycling or incineration, and 1,590,000 pounds of soil and debris for land disposal.
2. Decommissioning and backfilling the brick-lined impoundment in the southeastern corner of the AERRCO property.
3. Demolition and removal of two buildings and associated asbestos-containing materials.
4. Collection of numerous surface and subsurface soil samples and installation and sampling of groundwater monitoring wells.
5. Regrading the site to promote drainage, covering excavated areas with 1 foot of imported topsoil, and revegetating the property.

**C. STATE AND LOCAL AUTHORITIES' ROLES:**

The State of Colorado is an authorized state for implementation of RCRA



and therefore has authority at this site for regulation of hazardous wastes. However, the State has been unable to gain full compliance with all RCRA provisions against the owner/operator at Thoro. The State has deferred to EPA for this removal action under CERCLA authority at the AERRCO and Thoro facilities, but reserves its delegated RCRA authority to pursue additional corrective action if necessary.

**III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES:**

1. The VOC contamination in the subsurface presents a potential future risk to humans on-site through the inhalation of indoor air. VOCs in the subsurface volatilize and migrate into the building through the foundation and accumulate indoors. Currently, there aren't any enclosed buildings at the AERRCO facility. At Thoro, worker exposure to VOC contamination may occur through occupational exposure due to the reprocessing of used oil. Should building occur at either of these properties for human occupation (commercial or industrial uses), then the risk for exposure would be significant.
2. Sampling has shown that contamination has migrated off-site in the groundwater. The VOCs in the subsurface present a potential threat to off-site groundwater quality through the continued migration of VOCs in soil vapor and VOCs in groundwater.

**IV. ENDANGERMENT DETERMINATION:**

EPA has determined that the actual or threatened releases of VOCs from this site do not present an imminent and substantial endangerment to public health, or welfare, or the environment. However, EPA believes that the contamination at the Site and its continued migration off-site present a potential long term threat to public health, welfare and the environment and should be removed to the maximum extent practicable.

**V. PROPOSED ACTIONS AND ESTIMATED COSTS:**

**A. PROPOSED ACTIONS:**

**1. Proposed action description**

The propose Removal Action includes 3 components - VOC removal, institutional controls and long-term groundwater monitoring.

**VOC Removal (soil and groundwater):** The recommended removal action for VOC contamination in the subsurface is source removal through a combination of soil vapor extraction (SVE) and air sparging



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(AS). This action would consist of injection of air through subsurface points into areas with the highest levels of VOCs in the saturated zone to remove VOCs present as free-phase or residual Dense Non-aqueous Phase Liquids (DNAPLs), dissolved in groundwater or sorbed to or trapped in soil. Through injection of air, the VOCs will transfer to the vapor phase. These vapors will be driven from the saturated zone to the overlying unsaturated zone where they will be removed by the SVE portion of the system. The injected air along with the vacuum applied by the SVE system will also remove VOCs contained in the unsaturated zone, the capillary fringe and the uppermost portion of the saturated zone. The VOCs extracted will be treated to remove the VOCs prior to releasing the air to the atmosphere.

The selection of this alternative is based on a variety of factors including the effectiveness of the action, the ease of implementation and cost effectiveness. The effectiveness of this alternative is based in part on the results of the AS/SVE treatability studies which were conducted during the EE/CA.

Although the actual layout will be developed as part of the design phase, the AS/SVE would be installed in potential source areas where VOC concentrations in groundwater are 1,000 ug/l or greater and soil vapors are greater than 100 ug/l. In areas where the soil vapors exceed the threshold but the groundwater is less than the threshold, only SVE will be installed.

AS/SVE systems would be installed in three areas at the AERRCO site and one area at the Thoro site. The estimated total area to be subjected to AS/SVE would be 31,000 ft<sup>2</sup> at the AERRCO site and 11,000 ft<sup>2</sup> at the Thoro site. There are also several areas on the AERRCO and Thoro properties where SVE-only systems would be installed. It is assumed that SVE-only extraction wells would be located in areas where concentrations of individual VOCs measured during soil gas sampling were greater than 100 ug/l (in air).

With respect to the AS/SVE system, it may be necessary or appropriate to implement AS/SVE in a phased or sequential manner at the Site, wherein VOC removal is only implemented in a portion of the Site at any given time. Also, because of the concentrations of VOCs measured in the blower off-gas during the AS/SVE treatability studies, it is assumed that off-gas emissions control would be required at least for the initial period of operation.

Consistent with the goals of this Removal Action, the purpose of the AS/SVE system is source removal, not groundwater restoration to



ARARs. It is probably technically impracticable to completely restore groundwater at sites containing DNAPLs and at sites with highly heterogeneous subsurface conditions such as those present at the RFIP site. Therefore, the AS/SVE system will be operated to remove as much of the VOC mass as can effectively be removed in a manner that balances technological feasibility and cost effectiveness. It is expected that over time, the AS/SVE system will reach a point where little if any VOCs are being removed. Exhibit 6, Figure 4-7 shows the approximate extent of the AS/SVE systems.

The AS/SVE will be shut down based on consideration of the following 6 factors. (These are discussed further in Attachment A to the Statement of Work attached to the Administrative Order on Consent to be issued following approval of this Action Memo).

- The mass of VOCs removed during a specified period of time compared to the mass of VOCs removed during the baseline period of system operation.
- The rate of VOC removal during a specified period of time compared to the rate of VOC removal achieved during a baseline period of system operation.
- Evaluate the rate of change in the VOC removal rate and the magnitude of the VOC removal rate when asymptotic conditions have been reached.
- The unit cost (\$/lb) incurred for VOC removal.
- Rebound Evaluation
- Compare the amount of mass removed during a specified period of time to the cumulative mass removed.

**Institutional controls** in the form of deed restrictions would be implemented to control land use, restrict groundwater use beneath the site, limit excavations and require foundation venting or vapor barrier systems as part of any new, occupied structures that may be constructed at the Site. Because the selected engineering controls (AS/SVE) are not expected to remove all of the VOC contamination and therefore will continue to pose a risk to indoor air, such institutional controls are necessary to protect human health.

**Long-term Groundwater Monitoring** will be implemented to monitor off-site areas to further characterize downgradient groundwater contamination and to identify any changes in groundwater quality over



time. VOCs have already migrated off-site in the groundwater and it is expected that VOCs will continue to migrate for sometime, although the rate of migration may slow down if the AS/SVE is effective in reducing the mass in the source areas.

2. Description of Alternative Technologies:

Screening of technologies and the development of the alternatives that were considered is fully described in the EE/CA report. Other alternatives besides land disposal that were considered ranged from bioremediation to containment/treatment walls. One of the goals of the removal action was to remove as much mass as possible in addressing the criteria of effectiveness. None of the other alternatives addressed this goal in as timely a manner or as cost-effectively as AS/SVE. Other technologies, such as iron filings walls were screened out early for the implementability criteria since they would not work on the primary contaminant of concern -1,2-DCA at AERRCO nor would bioremediation work in subsurface environments with such high concentrations. Other technologies were not deemed cost-effective for the site. AS/SVE is an effective and commonly used technology for removing VOC contamination in the subsurface.

3. EE/CA: The *Engineering Evaluation/Cost Analysis Report for the Rocky Flats Industrial Park*, was finalized in August, 2000.

4. Applicable, Relevant and Appropriate Requirements:

Section 3.2 of the EE/CA report addresses the ARARs identified for the Site. The selected Applicable, Relevant and Appropriate Requirements (ARARs) are to be implemented to the extent practicable considering the exigencies of the situation for removal actions. Based on the levels of contamination at the Site, the likely presence of DNAPLs, and past experience on cleanup of groundwater at other hazardous waste sites, EPA has determined that it is not practicable to achieve the Colorado Basic Standards for Groundwater, Colorado Basic Standards & Methodologies for Surface Water and the Classifications and Numeric Standards for the South Platte River Basin. The ARARs to be implemented for this removal action are provided in Table 1 attached to this action memorandum. More detailed information on the ARARs is provided in the EE/CA Report.

5. Project Schedule:

The time frame for implementation of the Removal Action is estimated at approximately 18 months which allows for pilot-scale testing during design and phased implementation. The length of time for operating



the AS/SVE will be driven by the limitations of the site conditions and the cost-effectiveness of operating the system. Removal actions which would be performed at the Thoro property and the AERRCO property, under this Action Memorandum are scheduled to be performed concurrently with the removal action at the GWI property.

**B. ESTIMATED COST:**

The Total Capital, Operating and Maintenance Costs for the Removal Action at the AERRCO and Thoro facilities is estimated at \$3,715,000. This includes \$1,890,000 for installation of the AS/SVE equipment. \$1,567,000 for the operating and maintenance costs for the AS/SVE operation, \$64,000 for planning, surveying and installation of groundwater monitoring wells and \$194,000 for the operating and maintenance cost involved groundwater monitoring and institutional controls.

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN:**

If this Removal Action is delayed or not taken, potential future exposure to VOCs in indoor air would remain and the migration of VOC contamination in the subsurface to off-site properties would continue at the same rate. Future urban development in the immediate area is impending and an increase in human activity in the vicinity of these facilities is likely - which could increase the likelihood of exposure to the site contaminants.

**VII. OUTSTANDING POLICY ISSUES:**

There are no outstanding policy issues identified for this Action Memorandum.

**VIII. ENFORCEMENT:**

Enforcement information for this Action Memorandum is provided in a separate addendum that is Enforcement Confidential.



**IX. RECOMMENDATION:**

This decision document represents the selected Removal Action for the AERRCO and Thoro facilities at Rocky Flats Industrial Park, in Jefferson County, Colorado. The Removal Action was developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the AERRCO and Thoro properties meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend approval of the Removal Action.

APPROVAL



Max H. Dodson  
Assistant Regional Administrator  
Office of Ecosystems Protection  
and Remediation

DISAPPROVAL

---

Max H. Dodson  
Assistant Regional Administrator  
Office of Ecosystems Protection  
and Remediation



**Table 1: Summary of Applicable or Relevant and Appropriate Requirements Deemed Practicable -  
AERRCO & Thoro Removal Action, Sept. 2000**

Requirement	Reference	Description	Applicability or Relevance & Appropriateness	Circumstances for which the requirement is considered applicable or relevant
RCRA Standards for Identification and Listing of Hazardous Waste	40 CFR 261 Subparts A and C	Standards for identification of characteristic hazardous wastes	Relevant and appropriate	Relevant and appropriate to treatment residuals or byproducts
RCRA Generator Standards	40 CFR 262	Standards applicable to generation and short-term storage of hazardous waste	Relevant and appropriate	Relevant and appropriate to off-site treatment or disposal of treatment plant residuals or byproducts
RCRA TSD Standards	40 CFR 264 Subparts B, C & D	Standards for treatment, storage or disposal of hazardous wastes	Applicable or relevant and appropriate	Applicable to on-site treatment, storage or disposal of hazardous wastes
RCRA Closure and Post-Closure Care Standards	40 CFR 264 Subpart G	Standards for closure of permitted facilities	Applicable or relevant and appropriate	Potentially applicable or relevant and appropriate to closure and post-closure care of the Thoro RCRA pad. Applicable to any TSD facilities that may be constructed as part of the removal actions.

**Table 1: Summary of Applicable or Relevant and Appropriate Requirements Deemed Practicable -  
AERRCO & Thoro Removal Action, September, 2000 (cont.)**

<u>Requirement</u>	<u>Reference</u>	<u>Description</u>	<u>Applicability or Relevance &amp; Appropriateness</u>	<u>Circumstances for which the requirement is considered applicable or relevant</u>
RCRA Land Disposal Restrictions	40 CFR 268	Restrictions on land disposal of hazardous wastes	Applicable	Potentially applicable (depending upon TCLP test results) to <ul style="list-style-type: none"> <li>• VOC-contaminated soil excavated as part of any removal action</li> <li>• Offsite disposal of treatment residuals</li> </ul>
RCRA Universal Treatment Standards	40 CFR 268 Subpart D	Universal treatment standards for land disposal of RCRA hazardous wastes	Applicable	Potentially applicable (depending upon TCLP test results) to <ul style="list-style-type: none"> <li>• VOC-contaminated soil excavated as part of any removal action</li> <li>• Offsite disposal of treatment residuals</li> </ul>
NESHAPs	40 CFR 61	Limits on benzene and vinyl chloride emissions from stationary sources	Applicable	Applicable to emissions from the air stripper or other water treatment system or to emissions from an SVE or AS/SVE system
NSPS	40 CFR 60	Emissions from treatment for VOCs	Relevant & Appropriate	Relevant & appropriate to emissions from the SVE or AS/SVE systems.

**Table 1: Summary of Applicable or Relevant and Appropriate Requirements Deemed Practicable -  
AERRCO & Thoro Removal Action, September, 2000 (cont.)**

Requirement	Reference	Description	Applicability or Relevance & Appropriateness	Circumstances for which the requirement is considered applicable or relevant
Colorado Air Quality Regulation No. 2	5 CCR 1001-4	Standards for odor emissions	Applicable	Applicable to emissions from SVE or AS/SVE systems
Colorado Air Quality Regulation No. 3	5 CCR 1001-5	Air pollution emission notice	Applicable	Applicable to emissions from SVE or AS/SVE systems
Colorado Air Quality Regulation No. 7	5 CCR 1001-9	Standards for VOC emissions	Applicable	Applicable to emissions from SVE or AS/SVE systems
Colorado Noise Abatement Statute	CRS 25- 12-103	Maximum permissible noise levels	Applicable	Applicable to all noise producing activities associated with the removal actions

\*\* A discussion of all of the ARARs considered is provided in the EE/CA report.

**TABLE of EXHIBITS**  
**RFIP - AERRCO/Thoro ACTION MEMORANDUM - SEPTEMBER 2000**

<b>EXHIBIT</b>	<b>DESCRIPTION</b>
EXHIBIT 1, Figure 1-1	Site Location Map
EXHIBIT 2, Figure 2-3	Shallow ( 7' Approx.) Soil Gas Sampling Locations with Elevated Levels of VOCs
EXHIBIT 3, Figure 2-4	Deep Soil Gas Sampling Locations with Elevated Levels of VOCs
EXHIBIT 4, Figure 2-5	Groundwater Sampling Locations with Elevated Levels of VOCs
EXHIBIT 5, Figure 4-7	Approximate Extent of AS/SVE Systems

Note: The figures are taken from the *"Final Engineering Evaluation and Cost Analysis for the Rocky Flats Industrial Park Site,"* dated August 2, 2000.



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DATE: 12/06/00  
DNF DN

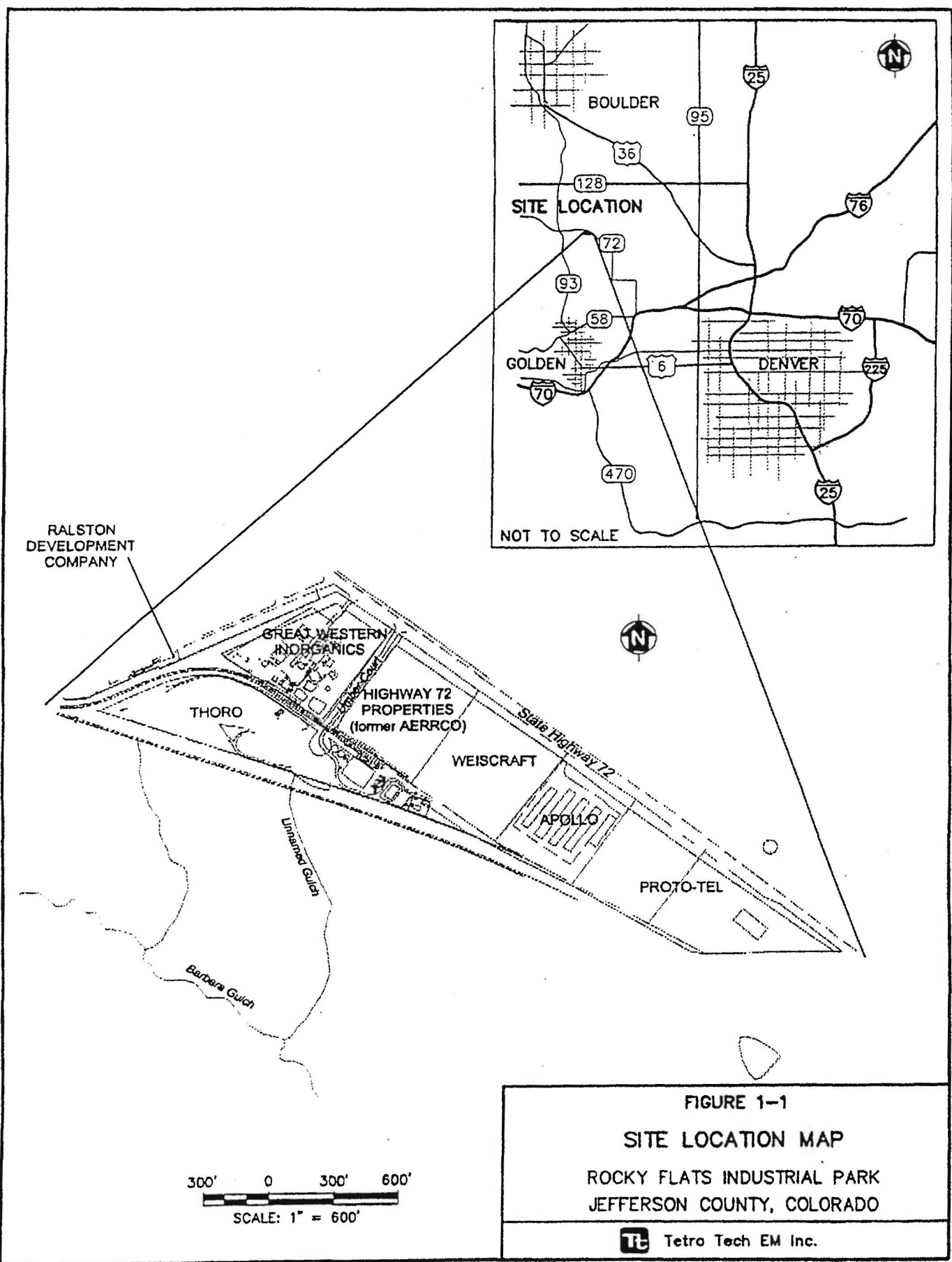
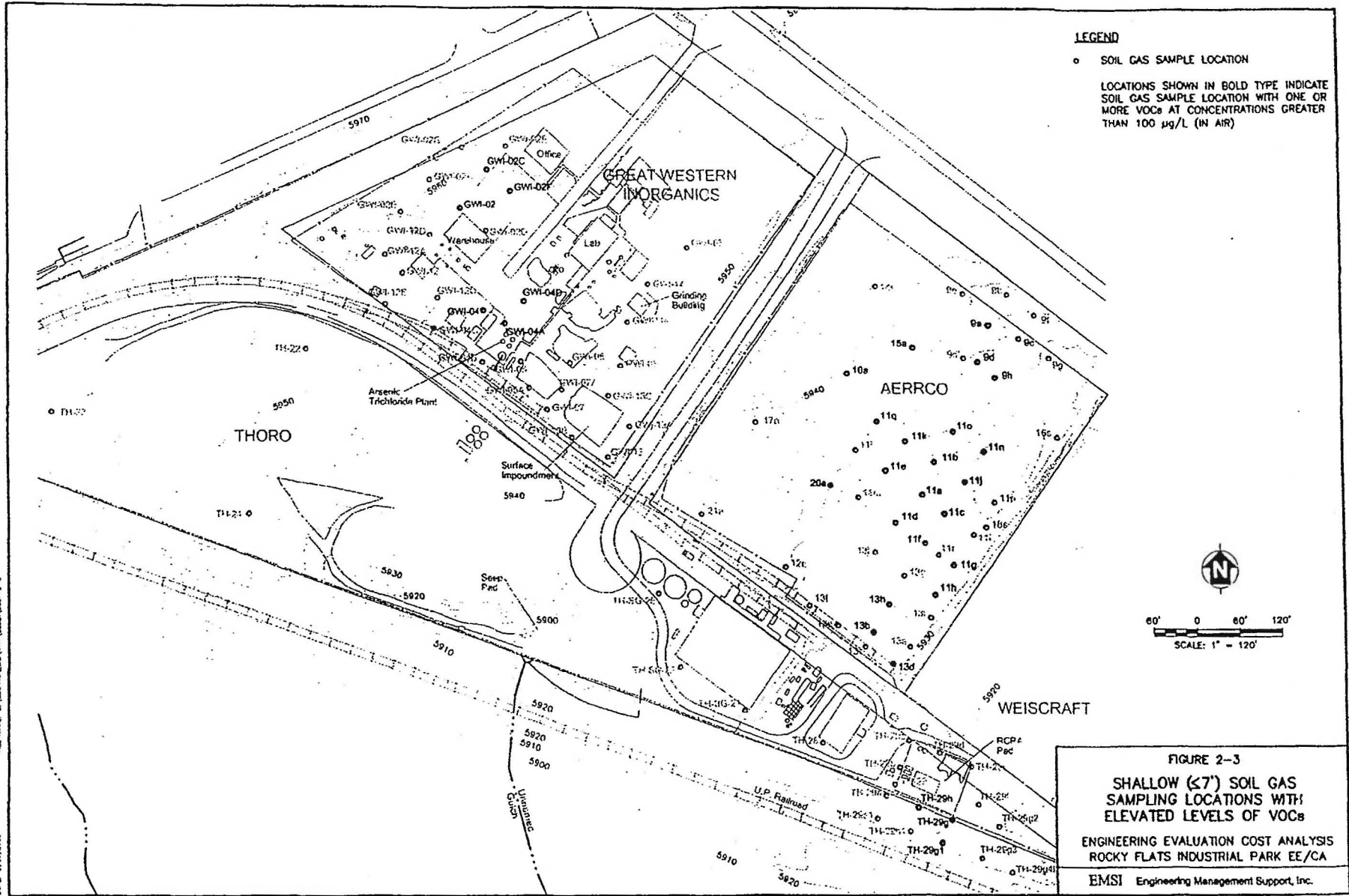


EXHIBIT 1. RFP - AERRCO/THORO ACTION MEMORANDUM

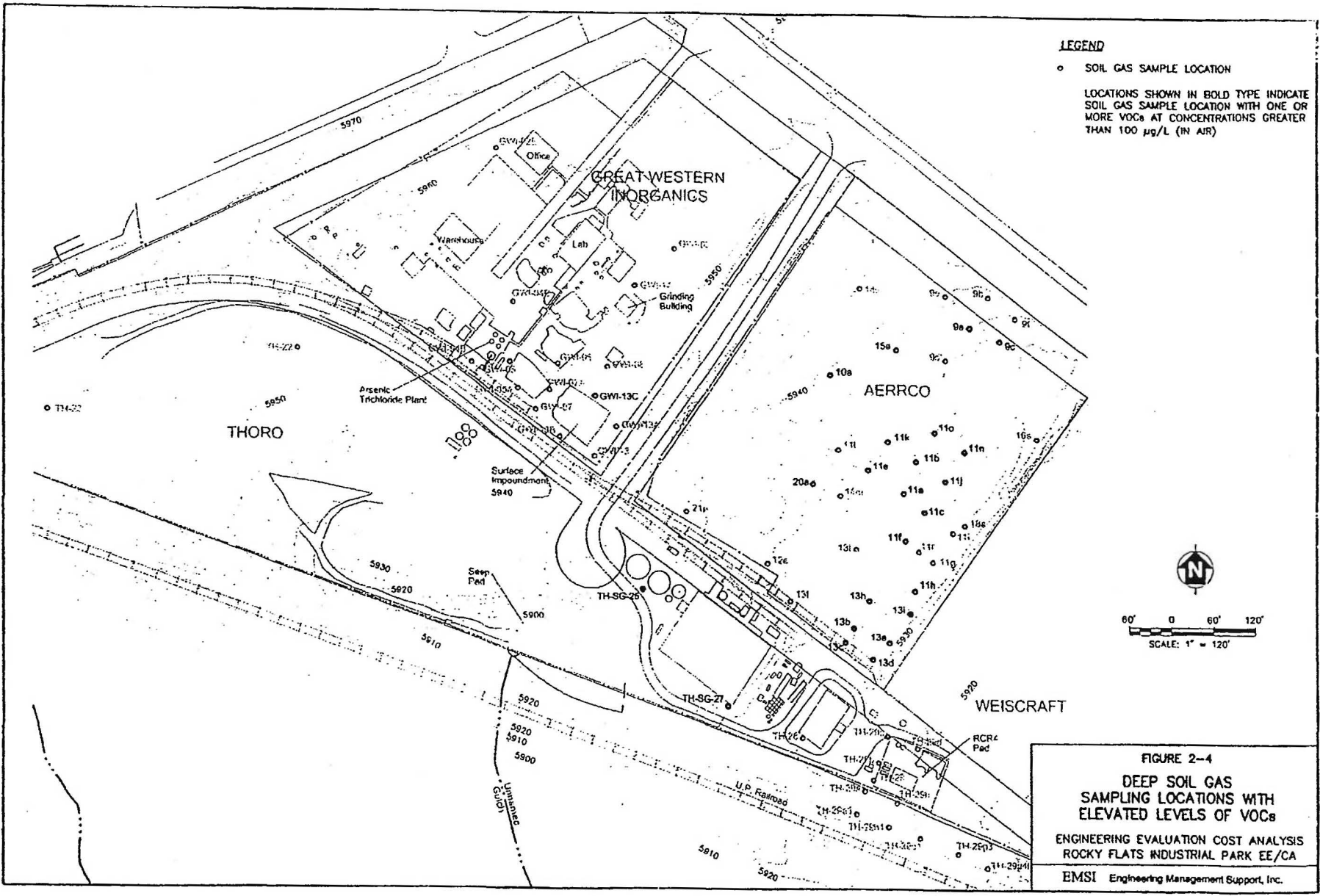


**EXHIBIT 2. RFIP - AERRCO/THORO ACTION MEMORANDUM**

**LEGEND**

○ SOIL GAS SAMPLE LOCATION

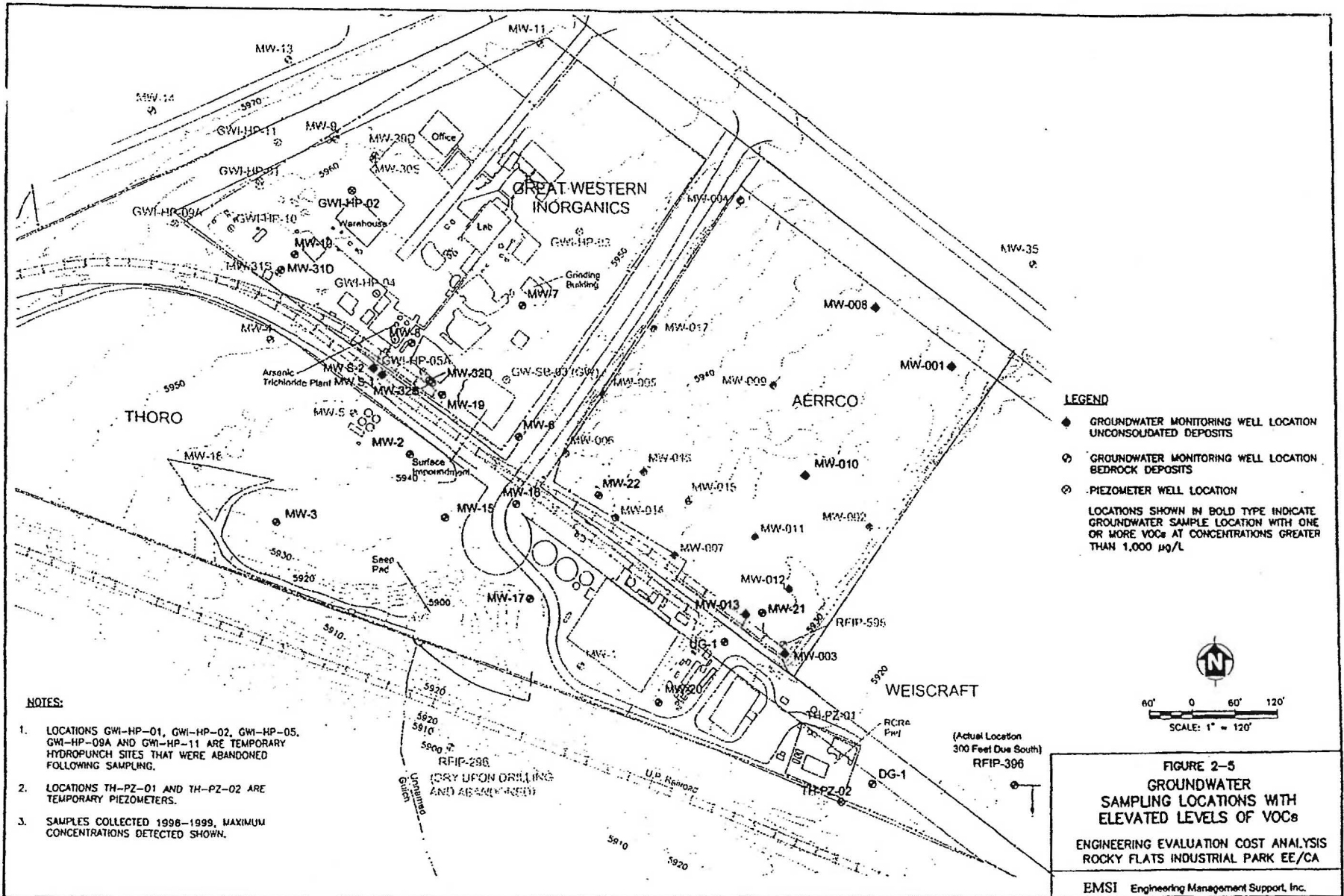
LOCATIONS SHOWN IN BOLD TYPE INDICATE SOIL GAS SAMPLE LOCATION WITH ONE OR MORE VOCs AT CONCENTRATIONS GREATER THAN 100 µg/L (IN AIR)



DATE: 1/27/2000

**EXHIBIT 3. RFIP - AERRCO/THORO ACTION MEMORANDUM**

FILE NAME: D:\PROJECTS\GWP\RFIP\Map\Map02-5-3  
DATE: 5/24/2006



**NOTES:**

1. LOCATIONS GWI-HP-01, GWI-HP-02, GWI-HP-05, GWI-HP-09A AND GWI-HP-11 ARE TEMPORARY HYDRO-PUNCH SITES THAT WERE ABANDONED FOLLOWING SAMPLING.
2. LOCATIONS TH-PZ-01 AND TH-PZ-02 ARE TEMPORARY PIEZOMETERS.
3. SAMPLES COLLECTED 1998-1999, MAXIMUM CONCENTRATIONS DETECTED SHOWN.

**LEGEND**

- ◆ GROUNDWATER MONITORING WELL LOCATION UNCONSOLIDATED DEPOSITS
- ⊙ GROUNDWATER MONITORING WELL LOCATION BEDROCK DEPOSITS
- ⊗ PIEZOMETER WELL LOCATION

LOCATIONS SHOWN IN BOLD TYPE INDICATE GROUNDWATER SAMPLE LOCATION WITH ONE OR MORE VOCs AT CONCENTRATIONS GREATER THAN 1,000 µg/L

**FIGURE 2-5**  
**GROUNDWATER SAMPLING LOCATIONS WITH ELEVATED LEVELS OF VOCs**  
 ENGINEERING EVALUATION COST ANALYSIS  
 ROCKY FLATS INDUSTRIAL PARK EE/CA  
 EMSI Engineering Management Support, Inc.

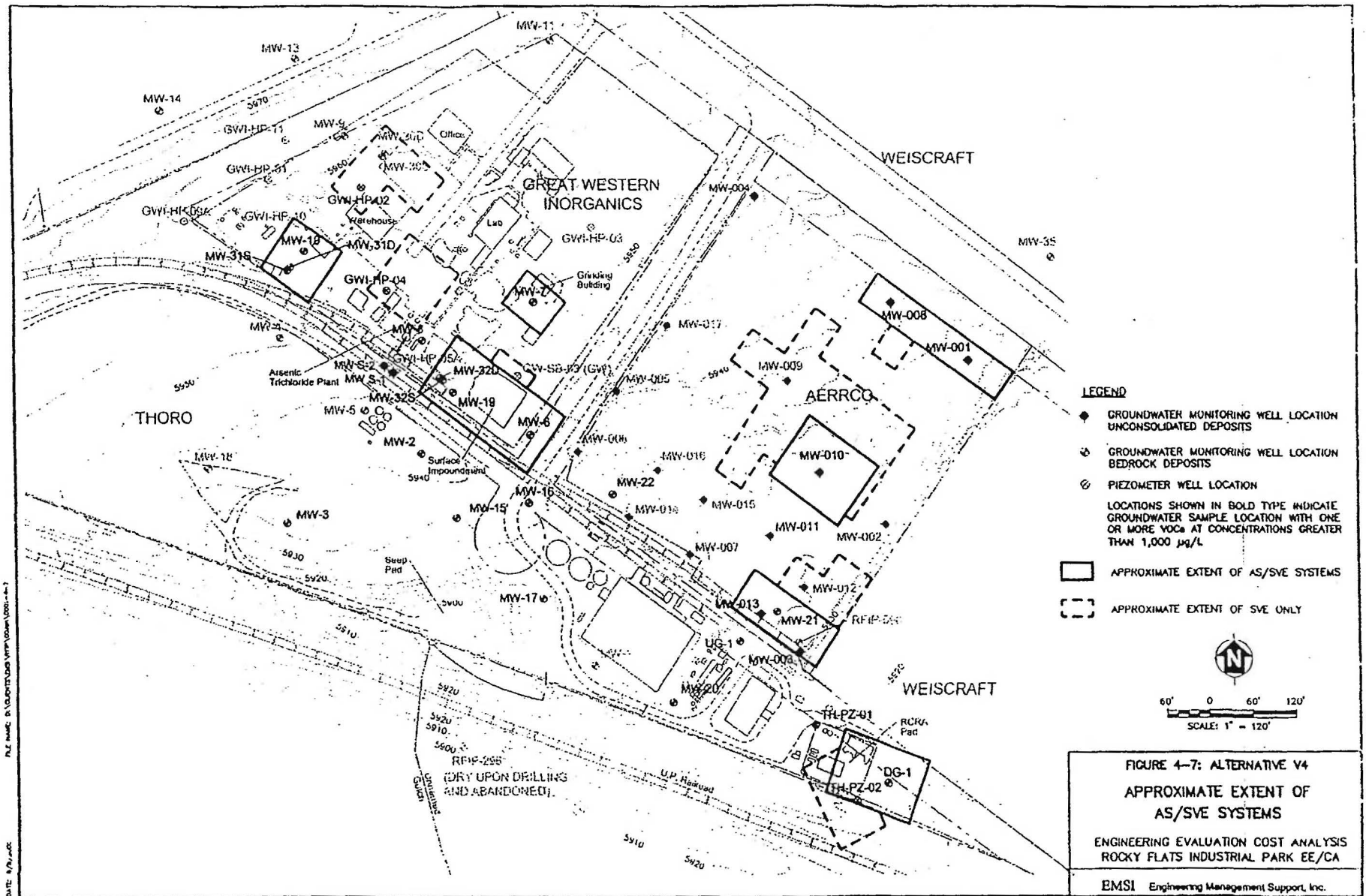
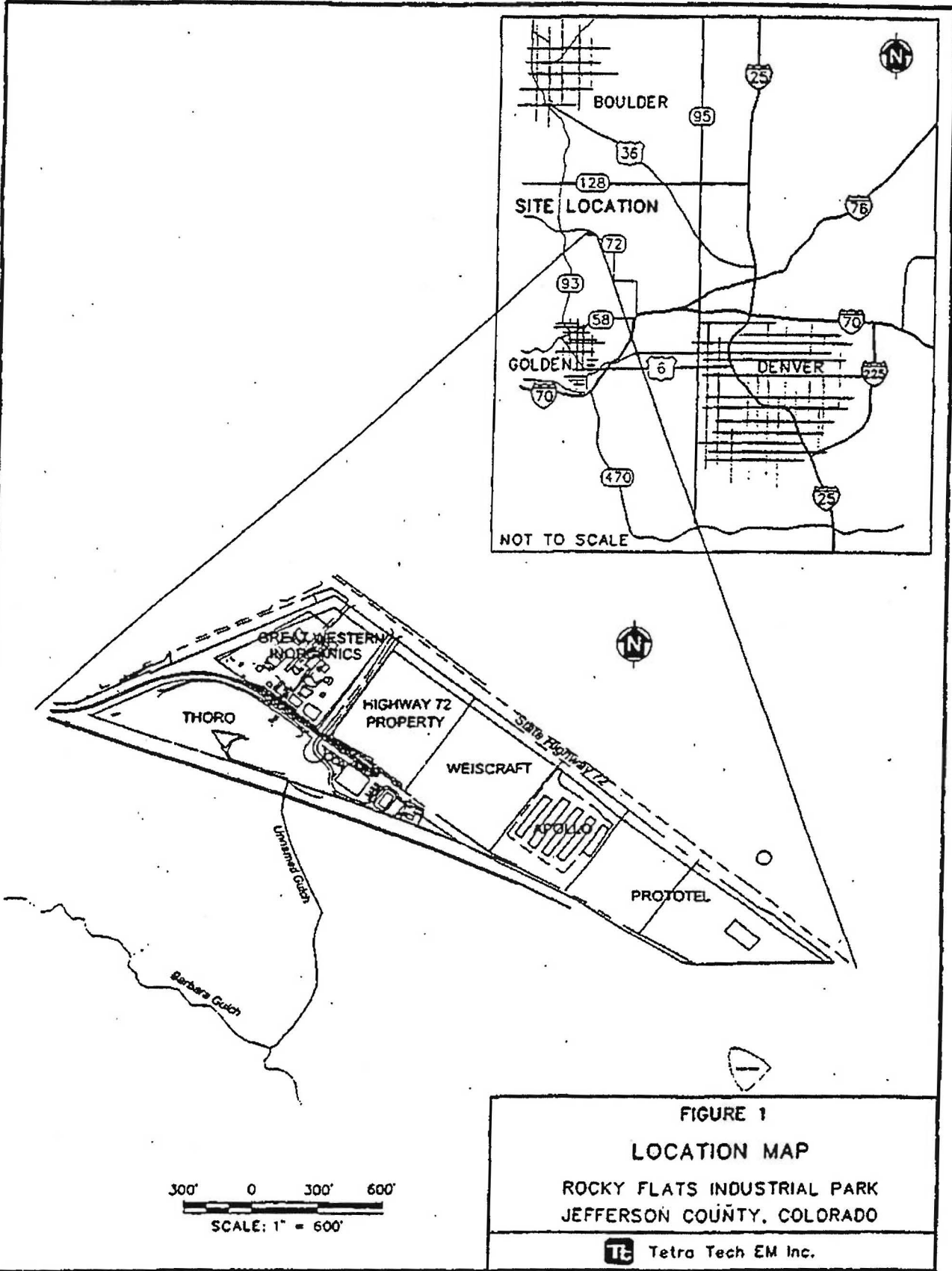


EXHIBIT 5. RFP - AERRCO/THORO ACTION MEMORANDUM

**Appendix B**

Rocky Flats Industrial Park Site with AERRCo (“Highway 72”) Property

R:\EPA\RockyFlats\9006HY\002101\4c-map.dwg 10/19/2001 09:58:46 AM



**Appendix C**

Environmental Covenant



**This property is subject to an Environmental Covenant held by  
the Colorado Department of Public Health and Environment  
pursuant to section 25-15-321, C.R.S.**

**ENVIRONMENTAL COVENANT**

Columbine Strategies LLC grants an Environmental Covenant ("Covenant") this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ to the Hazardous Materials and Waste Management Division of the Colorado Department of Public Health and Environment ("the Department") pursuant to §25-15-321 of the Colorado Hazardous Waste Act, § 25-15-101, *et seq.* The Department's address is 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530.

WHEREAS, as of \_\_\_\_\_ 2015, Columbine Strategies LLC is the owner of certain property commonly referred to as the former AERRCO property, located at 17100 Highway 72, Arvada Colorado 80403, more particularly described in Attachment A, attached hereto and incorporated herein by reference as though fully set forth (hereinafter referred to as "the Property"); and

WHEREAS, pursuant to the September 25, 2000 Action Memoranda for the AERRCO and Thoro facilities and for the Great Western Inorganics, Inc. facility at the Rocky Flats Industrial Park Site, the Engineering Evaluation/Cost Analysis for the Removal Actions dated June 12, 2000, the Administrative Order on Consent for Removal Action dated September 29, 2000, the Final Basis of Design Report dated April 12, 2004, and any amendments thereto, the Property is the subject of enforcement and remedial action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § § 9601, *et seq.*; and

WHEREAS, the purpose of this Environmental Covenant is to protect human health and the environment by reducing or minimizing the potential risk to human health and the environment on or in the vicinity of the Property from the release of hazardous materials or substances from the Property, specifically by providing an effective and enforceable means of ensuring certain conduct of any required maintenance, monitoring, or operation, and of restricting future uses of the land for as long as any residual contamination remains that results in allowing less than unrestricted use of the Property; and

WHEREAS, Columbine Strategies LLC desires to subject the Property to certain covenants and restrictions as provided in Article 15 of Title 25, Colorado Revised Statutes, which covenants and restrictions shall burden the Property and bind Columbine Strategies LLC and all parties now or subsequently having any right, title or interest in the Property, or any part thereof, and any persons using the land, as described herein, for the benefit of the Department and OWNER and the United States Environmental Protection Agency ("the EPA").

NOW, THEREFORE, Columbine Strategies LLC hereby grants this Environmental Covenant to the Department, with the EPA as a third party beneficiary, and declares that the Property as described in Attachment A shall hereinafter be bound by, held, sold, and conveyed subject to the following requirements set forth in paragraphs 1 through 10, below, which shall run

with the Property in perpetuity and be binding on Columbine Strategies LLC and all parties now or subsequently having any right, title or interest in the Property, or any part thereof, and any persons using the land, as described herein. As used in this Environmental Covenant, the term OWNER means the then current record owner of the Property and, if any, any other person or entity otherwise legally authorized to make decisions regarding the transfer of the Property or placement of encumbrances on the Property, other than by the exercise of eminent domain.

1) Use restrictions

1. **Restriction of Residential and Certain Public Uses.** No residential use of the Property shall be permitted except in compliance with this Paragraph 1. No structures intended for human occupancy (including single family or multi-family residential dwelling or living units, whether permanent or temporary, offices, or other workplaces, etc.) may be built on the Property without a properly designed and constructed vapor intrusion mitigation system. Non-occupied structures such as storage sheds may be constructed without vapor intrusion mitigation systems. OWNER shall not permit the construction of any new structures intended for human occupancy on the Property without installation of a foundation venting system acceptable to the Department that is designed to limit or preclude the presence of airborne contaminants within the structure, building or enclosed space in excess of the applicable residential risk levels shown in the Department's Hazardous Materials and Waste Management Division ("HMWMD") Air Screen Concentration Table Values in effect at the time of the construction. Once constructed, all such mitigation systems must be operated and maintained as needed to prevent intrusion of all different volatile organic compounds above residential risk levels. Notwithstanding the above, no playgrounds, parks, schools, daycare centers (whether independent or ancillary to a permitted use), recreational facilities of any type, community centers, hospitals, or adult care centers shall be permitted or allowed at the Property.

2. **Prohibition on Agricultural Use.** No agricultural use of the Property shall be allowed or permitted, including but not limited to, the cultivation or storage of any crop or the grazing, feeding or keeping of any animal for agricultural or commercial purposes.

3. **Maintenance of Fence.** Within 180 days of the Effective Date of this Environmental Covenant, OWNER shall install a closed fence or similar structure around the perimeter of the Property that impedes or restricts the free access of persons, livestock, and wildlife onto the Property. Any fence shall, at a minimum, comply with fencing requirements set forth in the Jefferson County Zoning Resolution at Section 27.F as it may be amended. After construction of the fence, OWNER shall maintain the fence in proper working order to allow its continued function in accordance with the requirements set forth in the Jefferson County Zoning Resolution at Section 27.F as it may be amended.

4. **Restriction on Excavation.** No excavation, drilling, grading, digging, tilling or any other soil-disturbing activity is permitted on the Property unless conducted in accordance with all applicable federal, state, and local law and regulation, and that has been approved by the Department, manifested in an approved Materials Management Plan and any amendments thereto. A Materials Management Plan and any amendments thereto will be on file at the Department's HMWMD Records Center.

5. **Prohibition on Use of or Exposure to Water**. No groundwater or surface water may be withdrawn or used for any purpose, except as authorized in a remedial decision document approved by the Department or an environmental sampling plan. Nothing in the preceding shall prohibit the installation or use of monitoring or remedial wells, as authorized in a remedial decision document or environmental sampling plan approved by the Department. Actions that may cause contaminated groundwater to be exposed to the surface are prohibited.

6. **Prohibition of Construction or Maintenance of Ponds**. Construction or maintenance of any standing body of water on the Property, including any pond or storm water retention basin, is prohibited, except as approved by the Department.

- 2) **Modifications** This Covenant runs with the land and is perpetual, unless modified or terminated pursuant to this paragraph. OWNER may request that the Department approve a modification or termination of the Covenant. The request shall contain information showing that the proposed modification or termination shall, if implemented, ensure protection of human health and the environment. The Department shall review any submitted information, and may request additional information. If the Department determines that the proposal to modify or terminate the Covenant will ensure protection of human health and the environment, it shall approve the proposal. No modification or termination of this Covenant shall be effective unless the Department has approved such modification or termination in writing. Information to support a request for modification or termination may include one or more of the following:
- a) a proposal to perform additional remedial work;
  - b) new information regarding the risks posed by the residual contamination;
  - c) information demonstrating that residual contamination has diminished;
  - d) information demonstrating that an engineered feature or structure is no longer necessary;
  - e) information demonstrating that the proposed modification would not adversely impact the remedy and is protective of human health and the environment; and
  - f) other appropriate supporting information.
- 3) **Conveyances** OWNER shall notify the Department at least fifteen (15) days in advance of the closing on any proposed sale or other conveyance of any interest in any or all of the Property.
- 4) **Notice to Lessees** OWNER agrees to incorporate either in full or by reference the restrictions of this Covenant in any leases, licenses, or other instruments granting a right to use the Property.
- 5) **Notification for proposed construction and land use** OWNER shall notify the Department simultaneously when submitting any application to a local government for a building permit or change in land use.
- 6) **Inspections** The Department shall have the right of entry to the Property at reasonable times with prior notice for the purpose of determining compliance with the terms of this Covenant.

- 7) Third Party Beneficiary The OWNER of the Property is a third party beneficiary with the right to enforce the provisions of this Covenant as provided in § 25-15-322, C.R.S.
- 8) No Liability The Department does not acquire any liability under State law by virtue of accepting this Covenant, nor does any other named beneficiary of this Covenant acquire any liability under State law by virtue of being such a beneficiary.
- 9) Enforcement The Department may enforce the terms of this Covenant pursuant to §25-15-322. C.R.S. Columbine Strategics LLC, and any named beneficiaries of this Covenant, may file suit in district court to enjoin actual or threatened violations of this Covenant.
- 10) OWNER's Compliance Certification OWNER shall execute and return a certification form provided by the Department, on an annual basis, detailing OWNER's compliance, and any lack of compliance, with the terms of this Covenant.
- 11) Notices Any document or communication required under this Covenant shall be sent or directed to:

Rocky Flats Industrial Park  
Superfund Project Manager  
Remediation Program  
Hazardous Materials and Waste Management Division  
Colorado Department of Public Health and the  
Environment 4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

and to EPA, as a third party beneficiary:

Remedial Project Manager (8EPR-SR), Rocky Flats Industrial Park Site  
U.S. Environmental Protection Agency  
1595 Wynkoop Street  
Denver, CO 80202-1129





**Appendix D**

Notice of Federal Lien – November 20, 2000

480783

RECEPTION NO. F1146679  
11/20/2000 11:27:54 PG: 001-003  
PAGE FEE: 15.00 DOC.FEE: 0.00  
RECORDED IN JEFFERSON COUNTY, COLORADO

**RECORDING REQUESTED BY:**

THE UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY, REGION VIII

**AND WHEN RECORDED, PLEASE MAIL TO:**

U.S. ENVIRONMENTAL PROTECTION AGENCY  
TECHNICAL ENFORCEMENT PROGRAM  
999 18TH STREET, SUITE 300  
DENVER, COLORADO 80202-2466

ADMINISTRATIVE  
RECORD

15.00  
pyj

**NOTICE OF FEDERAL LIEN**

1-3

**NOTICE IS HEREBY GIVEN** by the United States of America that it holds a lien on the lands and premises described below situated in the State of Colorado, as provided by section 107(l) of the Superfund Amendments and Reauthorization Act of 1986 (SARA), Public Law No. 99-499, amending the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, as amended), 42 U.S.C. §§ 9601, et seq., to secure the payment to the United States of all costs and damages covered by that section for which Hwy. 72 Properties, Inc. is liable to the United States under section 9607(a) of CERCLA, as amended. The lien for which this instrument gives notice exists in favor of the United States upon all real properties and rights to such properties which belong to said person and are, have been, or will be subject to, or affected by, removal and remedial actions as defined by federal law, at the Rocky Flats Industrial Park Site in Jefferson County, State of Colorado, including the following described lands:

Tract 5, Rocky Flats Industrial District Filing One, County of Jefferson, Colorado.  
(Also known as 17,190 West Highway 72, Jefferson County, Colorado.)

**RECEIVED**

JAN 11 2001

Office of Enforcement  
Compliance & Environmental  
Justice



This statutory lien exists and continues until the liability for such costs and damages (or for any decree or judgement against such persons arising out of such liability) is satisfied or becomes unenforceable through the operation of the statute of limitations as provided by section 113 of Public Law 99-499.

IN WITNESS THEREOF, the United States has caused this instrument to be executed through the United States Environmental Protection Agency, and its Assistant Regional Administrator for the Office of Enforcement, Compliance, and Environmental Justice, acting in her official capacity for the United States Environmental Protection Agency, Region VIII. The Assistant Regional Administrator has further delegated this authority to the Directors of the Technical and Legal Enforcement Programs. 2

Dated at Denver, Colorado, this 3<sup>rd</sup> day of November, 2000.

UNITED STATES OF AMERICA

and

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

United States of America )  
State of Colorado )ss  
City and County of Denver )

By: Sharon L. Kercher  
Sharon L. Kercher, Director  
Technical Enforcement Program  
Office of Enforcement, Compliance,  
and Environmental Justice  
U.S. EPA, Region VIII

By: Michael T. Risner  
Michael T. Risner, Director  
Legal Enforcement Program  
Office of Enforcement, Compliance,  
and Environmental Justice  
U.S. EPA, Region VIII

On this 3<sup>rd</sup> day of November, 2000, there appeared personally before me Sharon L. Kercher and Michael T. Risner, known to me to be the Directors of the Technical Enforcement Program and Legal Enforcement Program, respectively, for the Office of Enforcement, Compliance, and Environmental Justice of the United States Environmental Protection Agency, Region VIII, and they acknowledged that they signed the foregoing NOTICE OF FEDERAL LIEN in a representative capacity as the free and voluntary act and deed of the United States and its said Agency for the uses and purposes therein mentioned.

3

GIVEN under my hand and official seal the day and year first stated above.

*Adriana Martinez*  
in and for the State of Colorado.  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466

NOTARY PUBLIC



My commission expires 02/05/02.

### CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT A COPY OF THIS NOTICE OF FEDERAL LIEN IS SIMULTANEOUSLY BEING SENT BY CERTIFIED MAIL, RETURN RECEIPT REQUESTED, TO THE OWNER OF THE REAL PROPERTY DESCRIBED ABOVE AT THE FOLLOWING ADDRESS:

Russ Scohy, President  
Hwy. 72 Properties, Inc.  
P.O. Box 17354  
Boulder, CO 80308

A courtesy copy of this Notice of Federal Lien is being sent via regular mail to:

Forrest Morgan, Esq.  
Morgan & Morgan  
7535 East Hampden Avenue, Suite 425  
Denver, CO 80231

*James G. Sedgwick*  
Signature

Date Mailed 11/17/2000

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