UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IX

In the matter of:	)	Docket No.: RCRA-09-2008-0011
	)	
	)	
Robert M. Brown, doing business as Lost Lake Resort	)	CONSENT AGREEMENT AND FINAL ORDER PURSUANT TO 40 C.F.R. §§ 22.13 and 22.18
	)	
	)	
EPA Identification No. CRIT-041	)	
	)	
Respondent.	)	
	)	

COMPLAINT AND CONSENT AGREEMENT

A. PRELIMINARY STATEMENT

1. This is a civil administrative enforcement action instituted pursuant to Section 9006(a)(1) of the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. § 6991e(a)(1), and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits, 40 C.F.R. Part 22. Complainant is the United States Environmental Protection Agency, Region IX ("EPA"). Respondent is Robert M. Brown, doing business as Lost Lake Resort ("Lost Lake" or "Respondent").

2. Respondent owns and operates an underground storage tank ("UST") facility on Colorado River Indian Tribes' ("CRIT") Trust Land located approximately 31 miles north of Blythe, California on Highway 95 on the west shore of the Colorado River, latitude 34.012625, longitude -114.474742 (the "Facility"). The Facility has

been assigned an EPA Region IX Identification Number of CRIT-041, and includes three USTs which store fuel for retail sale to the public.

3. The Facility also contains one abandoned UST system onsite.

4. This Consent Agreement and Final Order ("CAFO"), which is entered pursuant to 40 C.F.R. §§ 22.13 and 22.18, and contains the elements of a complaint required by 40 C.F.R. §§ 22.14(a)(1)-(8), simultaneously commences and concludes this proceeding, wherein EPA alleges that Lost Lake: (1) failed to provide any cathodic protection to metal piping in violation of 40 C.F.R. § 280.20(b)(2); (2) failed to install a properly designed cathodic protection system in violation 40 C.F.R. § 280.20(a)(2); (3) failed to report a suspected release to the implementing agency within 24 hours in violation of 40 C.F.R. § 280.50(a) and (b); (4) failed to equip pressurized piping with automatic line leak detectors as required by 40 C.F.R. § 280.41(b)(1)(i); (5) failed to perform monthly monitoring on pressurized piping in accordance with 40 C.F.R. § 280.41(b)(1)(ii); (6) failed to maintain every record of release detection monitoring as required by § 280.45; and (7) failed to maintain copies of the financial assurance mechanism used to comply with the financial responsibility requirements as mandated by § 280.111(a). These are each in violation of Section 9001 *et seq.* of RCRA, 42 U.S.C. § 6991 *et seq.* and the federal regulations adopted pursuant thereto.

B. JURISDICTION

5. Respondent is a "person," as defined in Section 9001 of RCRA, 42 U.S.C. § 6991, and 40 C.F.R. § 280.12.

6. Respondent is an "operator" of an "underground storage tank" as these terms are defined in Section 9001 of RCRA, 42 U.S.C. § 6991, and 40 C.F.R. § 280.12.

7. Respondent is an "owner" of an "underground storage tank" as these terms are defined in Section 9001 of RCRA, 42 U.S.C. § 6991, and 40 C.F.R. § 280.12.

8. EPA administers the Federal UST program in Indian country, including the Colorado River Indian Tribes' Trust Land.

9. The UST system at the Facility was installed in approximately April 1999 and has been and is used to store petroleum, which is a "regulated substance," as that term is defined in Section 9001 of RCRA, 42 U.S.C. § 6991, and 40 C.F.R. § 280.12.

10. On or about September 18, 2000, March 29, 2002, January 29, 2004, April 27, 2006 and March 1, 2007, EPA performed inspections at the Facility. During these inspections, EPA was generally accompanied by a representative of the CRIT Environmental Protection Office ("EPO").

11. During each of these inspections, the EPA inspector found that Respondent had failed to comply with some aspect of the Federal UST regulations, and notified Respondent of these failures in writing in the form of a Notice of Inspection.

12. On or about April 27, 2006, EPA performed an inspection at the Facility ("April 27, 2006 inspection"). During this inspection, the EPA inspector found that Respondent had failed to provide any cathodic protection to metal piping, failed to report within 24 hours a suspected release to the implementing agency, failed to perform monthly monitoring on pressurized piping, failed to maintain every record of release detection monitoring, and failed to maintain copies of the financial assurance mechanism used to comply with the financial responsibility requirements, as was required by the Federal UST regulations. On or about March 1, 2007, EPA performed an inspection at the Facility ("March 1, 2007 inspection"). During this inspection, the EPA inspector found that Respondent had failed to correct the above-cited violations noted during the April 27, 2006 inspection, and Respondent also had failed to install a properly designed cathodic protection system, and failed to report within 24 hours two separate suspected releases to the implementing agency, as was required by the Federal UST regulations. The violations detected during the April 27, 2006 and March 1, 2007 inspections form the bases for this action.

13. Based upon the findings EPA made during these inspections, and additional information obtained subsequent to the inspections, EPA determined that Respondent had violated Section 9003 of RCRA, 42

U.S.C. § 6991b, and the regulations adopted pursuant thereto, including those at 40 C.F.R. Part 280.

14. Respondent, in violating the requirements of 40 C.F.R. Part 280, violated Subtitle I of RCRA, and, therefore, is subject to the powers vested in the EPA Administrator by Section 9006 of RCRA, 42 U.S.C. § 6991e.

15. Section 9006(a) of RCRA, 42 U.S.C. § 6991e(a), authorizes the EPA Administrator to issue orders requiring compliance immediately or within a specified time for violation of any requirement of Subtitle I, Section 9001 *et seq.* of RCRA, 42 U.S.C. § 6991 *et seq.*

16. The Administrator has delegated the authority under Section 9006 of RCRA to the EPA Regional Administrator for Region IX, who has redelegated this authority to the Director of the Waste Management Division.

C. ALLEGED VIOLATIONS

COUNT 1

Failure to Provide Any Cathodic Protection to Metal Piping

17. Paragraphs 1 through 16 above are incorporated herein by this reference as if they were set forth here in their entirety.

18. 40 C.F. R. § 280.20(b)(2) requires that piping which routinely contains regulated substances and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory; specifically, 40 C.F. R. § 280.20(b)(2) requires that piping constructed of steel be protected by a properly designed cathodic protection system.

19. Lost Lake's UST system at the Facility contains steel piping which routinely contains petroleum products, which are regulated substances.

20. During the April 27, 2006 and March 1, 2007 inspections, Respondent could not demonstrate that the steel piping in the Facility's UST

system had any cathodic protection system, as required by 40 C.F.R. § 280.20(b)(2).

21. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.20(b)(2).

COUNT 2

Failure to Install a Properly Designed Cathodic Protection System

22. Paragraphs 1 through 21 above are incorporated herein by this reference as if they were set forth here in their entirety.

23. 40 C.F. R. § 280.20(a)(2) requires that each UST constructed of steel must be properly designed and constructed, and any portion underground that routinely contains product must be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory; specifically 40 C.F. R. § 280.20(a)(2) requires that USTs made of steel are protected by an appropriately designed cathodic protection system.

24. The Facility's UST system contains three USTs which routinely contain petroleum product, which are regulated substances.

25. During the March 1, 2007 inspection, Respondent could not demonstrate that the steel USTs in the Facility's UST system had any cathodic protection system, as required by 40 C.F.R. § 280.20(a)(2).

26. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.20(a)(2).

COUNTS 3a, 3b and 3c

Failures to Report Suspected Releases to the Implementing Agency Within 24 Hours

27. Paragraphs 1 through 26 above are incorporated herein by this reference as if they were set forth here in their entirety.

28. 40 C.F.R. § 280.50(a) and (b) state that owners and operators of UST systems must report to the EPA within 24 hours, or another reasonable

time period specified by EPA, discovery of released regulated substances at the UST site or in the surrounding area, and unusual operating conditions observed at the site; owners and operators must also then follow the procedures in § 280.52 for the investigation and confirmation of suspected releases.

29. Lost Lake operates petroleum UST systems at the Facility.

30. During the April 27, 2006 inspection, regulated substances were observed at the bottom of the sumps for two tanks at the Facility. The sump is part of the Facility's UST system, and accumulation of regulated substances in the sump is an unusual operating condition. Respondent did not report this incident to the EPA prior to its discovery by EPA during the April 27, 2006 inspection and Respondent did not follow the procedures in § 280.52 for the investigation and confirmation of suspected releases, as required by 40 C.F.R. § 280.50.

31. On or about November 7, 2006, the Automatic Tank Gauge recorded a Leak Alarm in Tank 1. This is an unusual operating condition. Respondent did not report this incident to the EPA and Respondent did not follow the procedures in § 280.52 for the investigation and confirmation of suspected releases, as required by 40 C.F.R. § 280.50.

32. During the March 1, 2007 inspection, regulated substances were observed at the bottom of one of the sumps for a UST at the Facility. The sump is part of the Facility's UST system, and accumulation of regulated substances in the sump is an unusual operating condition. Respondent did not report this incident to the EPA prior to its discovery by EPA during the March 1, 2007 inspection and Respondent did not follow the procedures in § 280.52 for the investigation and confirmation of suspected releases, as required by 40 C.F.R. § 280.50.

33. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.50.

COUNT 4

Failure to Equip Pressurized Piping with Automatic Line Leak Detectors

34. Paragraphs 1 through 33 above are incorporated herein by this reference as if they were set forth here in their entirety.

35. 40 C.F.R. § 280.41(b)(1)(i) states that owners and operators of petroleum UST systems must provide release detection for tanks and piping, and specifically that underground piping which routinely contains regulated substances and conveys regulated substances under pressure must be equipped with an automatic line leak detector.

36. Lost Lake operates petroleum UST systems at the Facility, and utilizes pressurized underground piping associated with those systems.

37. During the March 1, 2007 inspection, Respondent could not demonstrate that any of the Facility's three USTs were equipped with an automatic line leak detector, as required by 40 C.F.R. § 280.41(b)(1)(i).

38. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.41.

COUNT 5

Failure to Perform Monthly Monitoring on Pressurized Piping

39. Paragraphs 1 through 38 above are incorporated herein by this reference as if they were set forth here in their entirety.

40. 40 C.F.R. § 280.41(b)(1)(ii) states that owners and operators of petroleum UST systems must provide release detection for tanks and piping, and specifically that underground piping which routinely contains regulated substances and conveys regulated substances under pressure must have an annual line tightness test or be monitored monthly.

41. Lost Lake operates petroleum UST systems at the Facility, and utilizes pressurized underground piping associated with those systems.

42. During the April 27, 2006 and March 1, 2007 inspections, Respondent could not demonstrate that annual line tightness tests of pressurized piping were conducted, and could not demonstrate that monthly monitoring was conducted, as required by 40 C.F.R. § 280.41(b)(1)(ii).

43. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.41.

COUNT 6

Failure to Maintain Every Record of Release Detection Monitoring

44. Paragraphs 1 through 43 above are incorporated herein by this reference as if they were set forth here in their entirety.

45. 40 C.F.R. § 280.45 requires that all UST system owners and operators must maintain records demonstrating compliance with all applicable requirements of that Subsection, including: retaining for 5 years all written performance claims pertaining to any release detection system used; retaining for 1 year the results of any sampling, testing, or monitoring; retaining for 1 year written documentation of all calibration, maintenance, and repair of release detection equipment; and retaining for 5 years any schedules of required calibration and maintenance provided by the release detection equipment manufacturer.

46. During the April 27, 2006 inspection, Respondent could not demonstrate that release detection monitoring records for all three tanks at the Facility were maintained as required by 40 C.F.R. § 280.45.

47. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.45.

COUNT 7

Failure to Maintain Copies of Financial Responsibility Mechanism

48. Paragraphs 1 through 47 above are incorporated herein by this reference as if they were set forth here in their entirety.

49. 40 C.F.R. § 280.111(a) requires that owners or operators of petroleum USTs must maintain at the UST site or the owner's or operator's place of work evidence of all financial assurance mechanisms used to demonstrate financial responsibility for a UST (until released from this obligation by the federal regulations), and that records maintained off-site must be made available upon request of the implementing agency.

50. Respondent is an owner and operator of petroleum USTs at the Facility. Therefore, Respondent is required to maintain at the Facility or Robert M. Brown's place of work evidence of all financial assurance mechanisms used to demonstrate financial responsibility for the Facility's USTs, and to make this evidence available upon request by EPA.

51. During the April 27, 2006 and March 1, 2007 inspections, EPA requested evidence of all financial assurance mechanisms used to demonstrate financial responsibility for the Facility's USTs. Respondent could not produce evidence of any financial assurance mechanisms used to demonstrate financial responsibility for the Facility's USTs, and did not make available any records or evidence of financial assurance mechanisms despite EPA's request.

52. Therefore, EPA alleges that the Respondent violated RCRA and its implementing regulations at 40 C.F.R. § 280.111.

D. CIVIL PENALTY

53. Section 9006(d)(2) of RCRA, 42 U.S.C. § 6991e(d)(2), provides in relevant part, that any owner or operator of an underground storage tank who fails to comply with any requirement promulgated under Section 9003 of RCRA, 42 U.S.C. § 6991b, or any requirement or standard of a State program authorized pursuant to Section 9004 of RCRA, 42 U.S.C. § 6991c, shall be liable for a civil penalty not to exceed $10,000 per violation, for each tank for each day of violation. Pursuant to the Debt Collection Improvement Act of 1996 ("DCIA") and the subsequent Civil Monetary Penalty Inflation Adjustment Rule, 69 Fed. Reg. 7121 (February 13, 2004), codified at 40 C.F.R. Part 19 ("Penalty Inflation Rule"), violations which occur subsequent to March 15, 2004 are subject to a statutory maximum penalty of ten

percent greater than the statutory maximum, or $11,000 per violation, for each tank for each day of violation.

54. Based upon the facts alleged in this Complaint and upon those factors which EPA must consider pursuant to Section 9006(c) of RCRA, 42 U.S.C. 6991e(c), and EPA's November 1990 Penalty Guidance for Violations of UST Regulations (OSWER Directive 9610.12 or the "UST Penalty Guidance"), including the seriousness of the violations, any good faith efforts by the Respondent to comply with applicable requirements, and any economic benefit accruing to the Respondent, as well as such other matters as justice may require, EPA proposes that the Respondent be assessed and the Respondent agrees to pay FIFTY FIVE THOUSAND AND SEVENTY SIX DOLLARS ($55,076.00) as the civil penalty for the violations alleged herein. The proposed penalty was calculated in accordance with the UST Penalty Guidance, as adjusted by the DCIA. Under the UST Penalty Guidance, EPA uses a penalty assessment matrix to determine a gravity-based penalty. The penalty amount is then adjusted to take into account multi-day violations, the environmental sensitivity of the location of the USTs, case-specific circumstances, and any economic benefit gained from non-compliance.

E. WORK TO BE PERFORMED

55. Respondent shall perform all of the activities and make submittals and certifications (collectively, the "Work") as set forth below within the time schedules specified. All days specified below are consecutive calendar days. Due dates falling on a Saturday, Sunday, or federal holiday will be automatically extended to the next business day.

56. Respondent performed an initial site characterization at Lost Lake and the results confirmed the presence of regulated substances in the soil and groundwater.

57. Respondent shall determine the complete extent of lateral and vertical soil, surface water, and groundwater contamination resulting from the release(s) of regulated substances from Respondent's USTs and UST systems at Lost Lake and remove the abandoned UST system through a Phase II Site Assessment ("Phase II"). Respondent has submitted to EPA for EPA's review and approval the Phase II Work Plan, which

describes all of the Work to be performed during the Phase II. EPA reviewed, provided comments, and provided final approval for the Phase II Work Plan on or about December 7, 2007. Pursuant to the Phase II Work Plan and correspondence emails regarding the Phase II Work Plan, annexed hereto as Attachment A and incorporated herein by reference, Respondent shall use the November 2007 screening levels for soil and groundwater established by the San Francisco Bay Regional Water Quality Control Board ("Screening Levels"). Respondent shall begin and carry out Phase II Work in accordance with the schedule established in the Phase II Work Plan. Any non-compliance with the approved Phase II Work Plan and any of the schedules set forth therein shall be considered a violation of this CAFO.

58. To facilitate EPA's and the CRIT EPO's ability to be present to observe field activities, EPA and the CRIT EPO shall be given at least fifteen (15) calendar days notice prior to the date of commencement for each activity to be undertaken pursuant to the approved Phase II Work Plan. However, for the purposes of calculating penalties for violation of this CAFO, any delays resulting from Respondent's failure to give proper notice under this Subsection shall not affect the Respondent's obligation to have commenced performance on the dates approved in the Phase II Work Plan.

59. Within thirty-one (31) calendar days of the approval of the Phase II Work Plan, Respondent shall commence performance of the approved Phase II Work Plan. All field Work shall be completed within forty-five (45) days after the commencement of performance of the approved Phase II Work Plan. Any non-compliance with the approved Work in the Phase II Work Plan and any of the schedules set forth in this CAFO shall be considered a violation of this CAFO.

60. No later than sixty (60) calendar days after the commencement of performance of the approved Phase II Work Plan, Respondent shall submit all sampling results to EPA and CRIT EPO.

61. Within seven (7) calendar days of Respondent's submission of laboratory sampling analysis reports to EPA and CRIT EPO, as agreed upon in the Phase II Work Plan, Respondent shall submit a Phase II Report to EPA for its review and approval. The Phase II

Report shall describe specific activities performed in connection with the Phase II Work Plan, including the methods used, results, and conclusions of the Phase II Work. If EPA does not approve the Phase II Report, EPA will provide written comments to the Respondent and may require Respondent to perform additional Site Assessment Work to determine the full lateral and vertical extent of contamination. Respondent shall revise and resubmit the Phase II Report in accordance with EPA's comments within a time frame to be established by EPA at the time its written comments are provided to the Respondent. If a revised Phase II Report is not approved by EPA, EPA may require additional revisions of the Phase II Report or may itself modify the Phase II Report. Respondent's obligations under this Section E shall continue until EPA approves the Phase II Report.

62. Within twenty-eight (28) calendar days after the approval of the Phase II Report, Respondent shall develop and submit, for EPA approval, a Work Plan for a site-specific exposure assessment ("Exposure Assessment Work Plan"). The Exposure Assessment Work Plan shall include exposure pathway specific data, identify affected receptors, document proposed methods, and propose a schedule for completion.

63. Within twenty-one (21) calendar days after the approval of the Exposure Assessment Work Plan, Respondent shall commence performance of the approved Exposure Assessment Work Plan.

64. No later than twenty-eight (28) calendar days after the commencement of performance of the EPA approved Exposure Assessment Work Plan, Respondent shall submit an Exposure Assessment Report to EPA for its review and approval. The Exposure Assessment Report shall describe specific activities performed in connection with the Exposure Assessment including methods used, results, and conclusions.

65. Within twenty-eight (28) calendar days of EPA's approval of Respondent's Exposure Assessment Report, Respondent shall submit a draft Corrective Action Plan ("CAP") to EPA for its consideration, and hold a conference call with EPA to discuss the draft CAP.

66. Within seven (7) calendar days of Respondent and EPA's conference call to discuss the draft CAP, Respondent shall submit the final

proposed CAP to EPA for its review and approval. If EPA does not approve the CAP, EPA will provide written comments to the Respondent. Respondent shall revise and resubmit the CAP in accordance with EPA's comments within a time frame to be established by EPA at the time its written comments are provided to the Respondent. If a revised CAP is not approved by EPA, EPA may require additional revisions of the CAP or may itself modify the CAP. Respondent's obligations under this Section E shall continue until EPA approves the CAP.

67. The CAP shall incorporate clean-up standards for soil and groundwater which are protective of human health and the environment, and which may be based on a risk assessment ("Cleanup Standards").

68. Respondent shall initiate and carry out corrective action, reporting, and all other activities in the CAP consistent with the timeframes established in the final CAP approved by EPA. Any non-compliance with the approved Work in the CAP and any of the schedules set forth in the CAP shall be considered a violation of this CAFO.

69. Respondent shall continue corrective action in accordance with the CAP and the schedule in the CAP until the Clean-up Standards have been achieved and all other applicable requirements of 40 C.F.R. Part 280, Subparts E and F, have been met.

F. PUBLIC COMMENT AND PARTICIPATION

70. In accordance with 40 C.F.R. § 280.67, EPA shall make the CAP and any CAP amendment available to the public for review and comment for thirty (30) days prior to approval of these documents by EPA, and may hold a public meeting to consider comments on the proposed CAP.

71. If the corrective action recommended in the CAP or in any CAP amendment is not the corrective action approved by EPA after consideration of the public comments, EPA shall inform Respondent in writing of the reasons for such decision, and, pursuant to 40 C.F.R. § 280.66(a), Respondent shall modify the CAP and/or CAP

amendment accordingly within thirty (30) days of receipt of EPA's decision

G. APPROVALS/DISAPPROVALS

72. After review of any deliverable, plan, report, or other item which is required to be submitted for review and approval pursuant to this CAFO, EPA may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondent to resubmit the document after incorporating EPA's comments; or (d) disapprove the submission, perform all or any part of the response action itself, and be reimbursed by Respondent for the costs of such actions. As used in this CAFO, the terms "approval by EPA," "EPA approval" or a similar term means the actions described in clauses (a) or (b) of the paragraph.

73. In the event of approval or approval with modifications by EPA, Respondent shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA.

74. Upon receipt of a notice of disapproval or a request for a modification, Respondent shall, within fifteen (15) calendar days or such longer time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies and resubmit the plan, report, or other item for approval. Notwithstanding the notice of disapproval or approval with modifications, Respondent shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.

75. In the event that a resubmitted plan, report or other item, or portion thereof, is disapproved by EPA, EPA may again require Respondent to correct deficiencies in accordance with the preceding paragraphs. EPA also retains the right to develop the plan, report or other item. Respondent shall implement any such plan, report or item as amended or developed by EPA.

76. If any submission is not approved by EPA after resubmission in accordance with the immediately preceding paragraph, Respondent shall be deemed in violation of the provision of this CAFO requiring

Respondent to submit such plan, report or item.

77. Any deliverables plans, reports or other item required to be submitted for EPA review and approval by this CAFO are, upon approval of EPA, incorporated into this CAFO and enforceable hereunder.

H. NOTICES AND SUBMISSIONS

78. Whenever, under the terms of this CAFO, written notice is required to be given or a report or other document is required to be submitted by one party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. All notices and submissions shall be sent by either certified mail, return receipt requested, or overnight mail and shall be effective upon receipt, unless otherwise provided herein.

As to EPA:

Eric Magnan, Project Manager
Underground Storage Tanks Program Office (WST-8)
Waste Management Division
U.S. Environmental Protection Agency – Region IX
75 Hawthorne Street
San Francisco, CA 94105
phone: (415) 947-4179
fax: (415) 947-3530

with a copy to

Thomas Butler, Assistant Regional Counsel
Office of Regional Counsel (ORC-3)
U.S. Environmental Protection Agency – Region IX
75 Hawthorne Street
San Francisco, CA 94105
phone: (415) 972-3869
fax: (415) 947-3570

and

Steven Linder, UST Program Manager
Underground Storage Tanks Program Office (WST-8)
Waste Management Division
U.S. Environmental Protection Agency – Region IX
75 Hawthorne Street
San Francisco, CA 94105
phone: (415) 972-3369
fax: (415) 947-3530

As to CRIT EPO:

Cheyenne Garcia, Director
Environmental Protection Office
Colorado River Indian Tribes
23625 Mohave Rd
Poston, Arizona 85371
phone: (928) 662-4336
fax: (928) 662-4337

As to Respondent Lost Lake Resort:

Mr. Robert M. Brown
Lost Lake Resort
42500 North Highway 95
P.O. Box 6046
Blythe, California 92225
phone: (435) 229-4561

79. Respondent shall make each of the submittals, including all documents related to the Phase II, the Exposure Assessment, and the CAP required under Section E of this CAFO within the time period specified therein to EPA and CRIT EPO as provided above.

I. FAILURE TO ATTAIN CLEAN-UP STANDARDS

80. In the event EPA determines that additional response activities are necessary, in light of all relevant circumstances, to meet applicable Cleanup Standards, EPA may notify Respondent, that additional response activities are necessary.

81. Unless otherwise stated by EPA, within thirty (30) days of receipt of notice from EPA that additional response activities are necessary to meet applicable Clean-up Standards, Respondent shall submit for EPA approval a Work plan for the additional response activities. The Work plan shall conform to the applicable requirements of this CAFO. Upon EPA's approval of the Work plan, Respondent shall implement the Work plan for additional response activities in accordance with the provisions and schedule contained therein.

J. ACCESS TO FACILITY AND PROPERTY OWNED OR LEASED BY RESPONDENT AND DATA/DOCUMENT AVAILABILITY

82. Respondent shall allow EPA and its authorized representatives and contractors to enter and freely move about Lost Lake Resort and the Facility at all reasonable times for the purposes of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Facility or Respondent and its representatives or contractors pursuant to this CAFO; reviewing the progress of the Respondent in carrying out the terms of this CAFO; conducting tests as EPA or its authorized representatives or contractors deem necessary; using a camera, sound recording device, or other documentary type equipment; verifying the data submitted to EPA by Respondent; and copying all records, files, photographs, documents, sampling and monitoring data, and other writings related to Work undertaken in carrying out this CAFO. Nothing herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under Federal law.

83. Respondent may assert a business confidentiality claim covering all or part of the information submitted to EPA pursuant to the terms of this CAFO in the manner prescribed by 40 C.F.R. §2.203(b) to the extent such claim is not inconsistent with any other provisions of law. Any assertion of confidentiality shall be adequately substantiated by the Respondent when the assertion is made, in accordance with 40 C.F.R. §2.204(e). Information subject to a confidentiality claim shall be disclosed only to the extent and by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such confidentiality claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to the Respondent. Respondent shall not assert any business confidentiality

claim with regard to Facility conditions or any physical, sampling, monitoring or analytical data.

84. Respondent shall maintain for the period during which this CAFO is in effect an index of documents that said Respondent claims contains confidential business information. The index shall contain, for each document, the date, author, addressee, and subject of the document. Upon written request from EPA, Respondent shall submit a copy of the index to EPA.

K. ACCESS TO FACILITY AND PROPERTY NOT OWNED BY RESPONDENT

85. To the extent the Facility, any off-site area that is to be used for access, any property where documents required to be prepared or maintained by this CAFO are located, or other property subject to or affected by the clean-up, is owned or leased in whole or in part by parties other than those bound by this CAFO, Respondent will obtain, or use its best efforts to obtain, site access agreements from the present owner(s) and/or lessees, as the case may be, within sixty (60) days of the Effective Date of this CAFO if the need for site access is known as of the Effective Date of the CAFO, or, if not known as of the Effective Date of this CAFO, within sixty (60) days of EPA approval of any Work plan, report, or document pursuant to this CAFO which requires Work on such property. "Best efforts" as used in this paragraph shall include, at a minimum, but shall not be limited to: (a) a certified letter from Respondent to the present owner(s) and/or lessee(s) of the property requesting access agreements to permit Respondent, EPA, and their authorized representatives access to such property, and (b) the payment of reasonable compensation in consideration for such access. "Reasonable compensation" means the fair market value of the right of the access necessary to implement the requirements of this CAFO.

86. All site access agreements entered into pursuant to this Section shall provide access for EPA, its contractors and oversight officials, CRIT and its contractors and authorized representatives, and Respondent and Respondent's authorized representatives and contractors. Such agreements shall specify that Respondent is not EPA's representative with respect to liability associated with activities related to the

Facility. Respondent shall save and hold harmless the United States and its officials, agents, employees, contractors, subcontractors, or representatives for or from any and all claims or causes of action or other costs incurred by the United States including but not limited to attorneys fees and other expenses of litigation and settlement arising from or on account of acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this CAFO, including any claims arising from any designation of Respondent as EPA's authorized representative(s) under Section 9005 of RCRA, 42 U.S.C. §6991d. Copies of such agreements shall be provided to EPA prior to Respondent's initiation of field activities.

87. If access agreements are not obtained within the time set forth above, Respondent shall immediately notify EPA, in writing, of the failure to obtain access, specifying the efforts taken to obtain access. Subject to the EPA's non-reviewable discretion, EPA may use its legal authorities to obtain access for Respondent, may perform those response actions with EPA contractors at the property in question, or may terminate the CAFO if Respondent cannot obtain access agreements. If EPA performs those tasks or activities with contractors and does not terminate the CAFO, Respondent shall perform all other activities not requiring access to that property, and shall reimburse EPA to the full extent allowed by law for all response costs incurred in performing such activities. Respondent shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables.

L. ENDANGERMENT AND EMERGENCY RESPONSE

88. In the event Respondent identifies a current or immediate threat to human health or the environment, Respondent shall immediately notify EPA Project Manager listed in Section H by telephone. If this person is not available, Respondent shall immediately notify first, the Program Manager, Underground Storage Tanks Program Office, and, if the UST Program Office's Program Manager is not available, the EPA Region IX Emergency Response Section. Simultaneous notification shall be made to the CRIT EPO. In addition to the telephone notice, written notification shall be made to EPA within twenty-four (24) hours of first obtaining knowledge of the threat,

summarizing the immediacy and magnitude of the current or immediate threat to human health or the environment. Respondent shall take immediate action to prevent, abate, or minimize the threat in consultation with EPA's Project Manager and in accordance with all applicable provisions of this CAFO and the requirements under 40 C.F.R. Part 280. As soon as possible after the detection of the threat, but in no case later than five (5) calendar days after identification of the threat, Respondent shall submit to EPA for approval the plan to mitigate the threat. EPA will approve or modify the plan, and Respondent shall implement the plan as approved or modified by EPA. In the event that Respondent fails to take appropriate response action as required by this Section, and EPA takes that action instead, Respondent shall reimburse EPA for all costs of the response action to the full extent allowed by law.

89. If EPA determines that any action or occurrence during the performance of the Work causes or threatens to cause a release or disposal of hazardous substances, pollutants or contaminants, regulated substances or hazardous or solid wastes which may present an imminent and substantial endangerment to the public health or welfare or the environment, EPA may direct Respondent to undertake any action EPA determines is necessary to abate such disposal or release or threatened release and/or direct Respondent to cease activities Respondent is then undertaking pursuant to this CAFO for such time as may be needed to abate any such disposal or release or threatened release.

90. Nothing in this Section shall be deemed to limit any authority of the United States to take, direct or order all appropriate action to protect human health and the environment or to prevent, abate or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, regulated substances or hazardous or solid wastes at or from the Facility.

M. RECORD PRESERVATION

91. Respondent shall provide to EPA upon request copies of all records, documents, and information within its possession and/or control or that of its contractors, employees or agents relating to activities at the site or to the implementation of this CAFO, including but not limited

to sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

92. Until ten (10) years after termination of this CAFO, Respondent shall preserve and retain all records, documents, and information of whatever kind, nature or description that are in Respondent's possession or control, including those in the possession or control of Respondent's contractors, employees, or agents, which relate in any manner to the site. These records, documents, and information include, but are not limited to, records, documents, or other information relating to the performance of the Work and to Respondent's potential liability with regard to the site. At the conclusion of this document retention period, Respondent shall notify EPA at least ninety (90) calendar days prior to the destruction of any such records, documents, or information, and upon request by the EPA, shall deliver any and all such records, documents, and information to EPA.

N. QUALITY ASSURANCE, SAMPLING, DATA ANALYSIS AND PRIOR NOTICE OF FIELD ACTIVITIES

93. Respondent shall comply with the quality assurance and quality control requirements described in the "Guidance for Quality Assurance Project Plans," (QA/G-5, December 2002) and "Uniform Federal Policy for Quality Assurance Project Plans," (UFP-QAPP) Manual (505-B-04-900A) documents. Respondent shall plan for the collection of environmental samples and conduct all sample collection and analysis activities required under this CAFO consistent with the "Guidance on Systematic Planning using the Data Quality Objectives Process" (QA/G-4, February 2006), and "Test Methods for Evaluating Solid Waste" (SW-846, February 2007), and any amendments to these documents. In addition, Respondent shall conduct laboratory reporting and data validation consistent with "Laboratory Documentation Required for Data Evaluation," (R9/QA 004.2, August 2001) and "Superfund CLP, National Functional Guidelines for Data

Review," respectively. To provide quality assurance and maintain quality control, Respondent shall:

a. Use only laboratories that have a documented Quality Assurance Program that meets the quality assurance and quality control requirements required by EPA.

b. Ensure that the laboratory used by Respondent for analyses performs according to a method or methods deemed satisfactory to EPA and submits all protocols to be used for analyses to EPA as part of the sampling and analysis plan described in Subsection d., below. If methods other than those in SW-846 are proposed for use, Respondent shall submit all proposed protocols accompanied by an appropriate justification and a demonstration of the effectiveness and applicability of the proposed alternative to EPA for approval at least thirty (30) days prior to the commencement of analysis and shall obtain EPA approval prior to the use of such protocols.

c. Ensure that EPA personnel and EPA's authorized representatives are allowed access to the laboratory and personnel utilized by Respondent for analyses.

d. Respondent shall prepare and submit a sampling and analysis plan for collection of data at the site, based on the guidance listed above, no less than thirty (30) days prior to commencing field sampling activities, or in the case of field activities to be performed in connection with any Site Assessment Work Plan, at the time of the submission of such Site Assessment Work Plan to EPA for review and approval.

94. Respondent shall notify EPA and the CRIT EPO in writing at least fifteen (15) days before engaging in any field activities, such as UST system removal, well drilling, installation of equipment, or sampling pursuant to this CAFO. At the request of EPA, Respondent shall provide or allow EPA or its authorized representatives to draw split or duplicate samples of all samples collected by Respondent with regard to this site or pursuant to this CAFO. Nothing in this CAFO shall limit or otherwise affect EPA's authority to draw samples pursuant to applicable law, including but not limited to, RCRA and the

Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. § 9601 *et seq.*

95. Respondent shall submit to EPA and the CRIT EPO the results of all sampling and/or tests and other data generated by, or on behalf of, Respondent, in accordance with the requirements of this CAFO, the Attachments appended hereto and made a part hereof and the documents, including Work plans, approved under this CAFO.

O. ADMISSIONS AND WAIVERS OF RIGHTS

96. Respondent Lost Lake admits and agrees that the EPA Administrator and Region IX Administrator have jurisdiction and authority over the subject matter of the action commenced in this CAFO and over Lost Lake pursuant to Section 9006 of RCRA, 42 U.S.C. § 6991e, and 40 C.F.R. §§ 22.4 and 22.37. Further, for the purposes of this proceeding, Lost Lake admits to the jurisdictional allegations of facts and law set forth in Section B of this CAFO. Lost Lake consents to and agrees not to contest EPA's jurisdiction and authority to enter into and issue this CAFO, and to enforce its terms. Further, Lost Lake will not contest EPA's jurisdiction and authority to compel compliance with this CAFO in any enforcement proceedings, either administrative or judicial, or to impose sanctions for violations of this CAFO.

97. Respondent Lost Lake neither admits nor denies any allegations of fact or law set forth in Section C of this CAFO. Lost Lake hereby waives any rights it may have to contest the allegations set forth in this CAFO, waives any rights it may have to a hearing on any issue relating to the factual allegations or legal conclusions set forth in this CAFO, including, without limitation, a hearing pursuant to Section 9006(b) of RCRA, 42 U.S.C. § 6991e(b), and hereby consents to the issuance of this CAFO without adjudication. In addition, Respondent Lost Lake hereby waives any rights it may have to appeal the Final Order attached to this Consent Agreement and made part of this CAFO.

P. PARTIES BOUND

98. This CAFO shall apply to and be binding upon Respondent Lost Lake and its agents, successors and assigns and upon all persons acting

under or for Respondent Lost Lake, until such time as the civil penalty required under Sections D and Q has been paid in accordance with Section Q, the Work required under Section E has been completed to EPA's satisfaction, any delays in performance and/or stipulated penalties have been resolved, and all other requirements of this CAFO have been met. At such time as those matters are concluded, and as set forth in Section V Paragraph 124 of this CAFO, this CAFO shall terminate and constitute full settlement of the violations alleged herein.

99. No change in ownership or any other legal status relating to the facility will in any way alter Lost Lake's obligations and responsibilities under this CAFO.

100. Respondent Lost Lake shall give prior notice of this CAFO to any successor in interest prior to transfer of ownership or operation of the facility and shall notify EPA within seven (7) calendar days prior to such transfer until the termination of this CAFO.

101. The undersigned representative of Lost Lake hereby certifies he is fully authorized to enter into this CAFO, to execute and to legally bind Respondent Lost Lake to it.

Q. PAYMENT OF CIVIL PENALTY

102. Respondent Lost Lake consents to the assessment of, and agrees to pay, a civil penalty of FIFTY FIVE THOUSAND AND SEVENTY SIX DOLLARS ($55,076.00) in full settlement of the federal civil penalty claims set forth in this CAFO.

103. Respondent shall submit payment of the FIFTY FIVE THOUSAND AND SEVENTY SIX DOLLARS ($55,076.00) civil penalty within thirty (30) calendar days of the Effective Date of this CAFO. The Effective Date of this CAFO is the date the Final Order, signed by the Regional Judicial Officer, is filed with the Regional Hearing Clerk. Payment shall be made and transmitted to the appropriate address as indicated below:

CHECK PAYMENTS:

If payment is made by check, the payment must be made by certified or cashier's check payable to the "**Treasurer, United States of America**" and sent to:

US Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
PO Box 979077
St. Louis, MO 63197-9000

WIRE TRANSFERS:

Wire transfers should be directed to the **Federal Reserve Bank of New York**

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 "

OVERNIGHT MAIL:

U.S. Bank
1005 Convention Plaza
Mail Station SL-MO-C2GL
St. Louis, MO 63101

Contact: Natalie Pearson, 314-418-4087

ACH (also known as REX, or Remittance Express):

Automated Clearinghouse (ACH) for receiving US currency
PNC Bank

808 17th Street, NW
Washington, DC 20074
Contact – Jesse White 301-887-6548
ABA = 051036706
Transaction Code 22 - checking
Environmental Protection Agency
Account 310006
CTX Format

ON LINE PAYMENT:

There is now an On Line Payment Option, available through the Dept. of Treasury. This payment option can be accessed from the information below:

WWW.PAY.GOV
Enter sfo 1.1 in the search field

Open form and complete required fields.

PROOF OF PAYMENT:

At the time payment is so made, a copy of the check or other proof of payment shall be sent to each of the following Region IX addresses:

Danielle Carr
Regional Hearing Clerk (ORC-1)
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105

And

Eric Magnan (WST-8)
Waste Management Division
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105

104. If payment instructions change, EPA will provide Respondent Lost

Lake written notice of the change.

105. All payments shall indicate the name of the Facility, EPA identification number of the Facility, the Respondent's name and address, and the EPA docket number of this action.

106. In accordance with the Debt Collection Act of 1982 and U.S. Treasury directive (TFRM 6-8000), the payment must be received within thirty (30) calendar days of the Effective Date of this CA/FO to avoid additional charges. If payment is not received within thirty (30) calendar days, interest will accrue from the Effective Date of this CA/FO at the current rate published by the United States Treasury as described at 40 C.F.R. § 13.11. A late penalty charge of $15.00 will be imposed after thirty (30) calendar days with an additional $15.00 charge for each subsequent thirty (30) day period. A 6% per annum penalty will further apply on any principal amount not paid within ninety (90) calendar days of the due date. Respondent will be liable for stipulated penalties as set forth below for any payment not received by its due date.

R. DELAY IN PERFORMANCE/STIPULATED PENALTIES

107. In the event Respondent Lost Lake fails to meet any requirement set forth in this CAFO, Respondent shall pay stipulated penalties as set forth below. Compliance by Respondent shall include completion of any activity under this CAFO in a manner acceptable to EPA and within the specified time schedules in and approved under this CAFO.

a. In the event Respondent Lost Lake fails to submit a payment to EPA by the time required in this CAFO, Respondent shall pay stipulated penalties up to ONE HUNDRED DOLLARS ($100.00) per day for the first to fifteenth day of delay, up to FIVE HUNDRED DOLLARS ($500.00) per day for the sixteenth to thirtieth day of delay, and up to ONE THOUSAND DOLLARS ($1,000.00) per day for each day of delay thereafter.

b. In the event Respondent Lost Lake fails to submit to EPA a deliverable or fails to perform Work in a timely manner, including any failure to meet any of the deadlines required in this CAFO, Respondent shall pay stipulated penalties up to FIVE HUNDRED

DOLLARS ($500.00) per day for the first to fifteenth day of delay, up to ONE THOUSAND DOLLARS ($1,000.00) per day for the sixteenth to thirtieth day of delay, and up to FIFTEEN HUNDRED DOLLARS ($1,500.00) per day for each day of delay thereafter.

108. All penalties shall begin to accrue on the date that performance is due or a violation occurs, and shall continue to accrue through the final day of correction of the noncompliance or completion of the activity. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations.

109. All penalties owed to EPA under this Section shall be due within thirty (30) calendar days of receipt of a written demand by EPA for such penalties. Such demand shall describe the noncompliance and shall indicate the amount of penalties due. Interest at the current rate published by the United States Treasury, as described at 40 C.F.R. § 13.11, shall begin to accrue on the unpaid balance at the end of the thirty (30) day period. Payment shall be made to the appropriate address as indicated below:

CHECK PAYMENTS:

If payment is made by check, the payment must be made by certified or cashier's check payable to the "**Treasurer, United States of America**" and sent to:

US Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
PO Box 979077
St. Louis, MO 63197-9000

WIRE TRANSFERS:

Wire transfers should be directed to the **Federal Reserve Bank of New York**

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 "

OVERNIGHT MAIL:

U.S. Bank
1005 Convention Plaza
Mail Station SL-MO-C2GL
St. Louis, MO 63101

Contact: Natalie Pearson, 314-418-4087

ACH (also known as REX, or Remittance Express):

Automated Clearinghouse (ACH) for receiving US currency
PNC Bank
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Washington, DC 20074
Contact – Jesse White 301-887-6548
ABA = 051036706
Transaction Code 22 - checking
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Account 310006
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Open form and complete required fields.

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At the time payment is so made, a copy of the check or other proof of payment shall be sent to each of the following Region IX addresses:

Danielle Carr
Regional Hearing Clerk (ORC-1)
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105

And

Eric Magnan (WST-8)
Waste Management Division
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105

110. If payment instructions change, EPA will provide Respondent Lost Lake written notice of the change.

111. All payments shall indicate the name of the Facility, EPA identification number of the Facility, Respondent Lost Lake's name and address, and the EPA docket number of this action.

112. The payment of stipulated penalties shall not alter in any way Respondent Lost Lake's obligation to complete the performance required hereunder.

113. The stipulated penalties set forth in this Section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent Lost Lake's failure to comply with any of the requirements of this CAFO.

S. RESERVATION OF RIGHTS

114. EPA expressly reserves all rights and defenses that it may have.

115. EPA hereby reserves all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, including the right to require that Respondent Lost Lake perform tasks in addition to those required by this CAFO. EPA further reserves all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, which may pertain to Respondent Lost Lake's failure to comply with any of the requirements of this CAFO, including without limitation, the assessment of penalties under Section 9006(a)(3) of RCRA, 42 U.S.C. § 6991(e)(a)(3). This CAFO shall not be construed as a covenant not to sue, release, waiver or limitation of any rights, remedies, powers or authorities, civil or criminal, which EPA has under RCRA, the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA"), or any other statutory, regulatory or common law enforcement authority of the United States.

116. Compliance by Respondent Lost Lake with the terms of this CAFO shall not relieve Lost Lake of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.

117. The entry of this CAFO and Respondent Lost Lake's consent to comply shall not limit or otherwise preclude EPA from taking additional enforcement actions should EPA determine that such actions are warranted except as it relates to Respondent Lost Lake's liability for federal civil penalties for the specific alleged violations and facts as set forth in Section C of this CAFO.

118. This CAFO is not intended to be nor shall it be construed as a permit. This CAFO does not relieve Respondent Lost Lake of any obligation to obtain and comply with any local, State or federal permits.

T. OTHER CLAIMS

119. Nothing in this CAFO shall constitute or be construed as a release from any other claim, cause of action or demand in law or equity by or against any person, firm, partnership, entity or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances,

hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the facility.

U. MISCELLANEOUS

120. By signing this CAFO, Respondent Lost Lake, without admitting or denying them, certifies that all of the alleged violations set forth in Section C of this CAFO, which are or were capable of correction, have been corrected. Respondent Lost Lake's certification does not alter in any way its obligation to complete the performance of the Work required in this CAFO, or any other obligation required by this CAFO.

121. This CAFO may be amended or modified only by written agreement executed by both EPA and Respondent. No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules and any other writing submitted by Respondent will be construed as an amendment or modification of this CAFO. Notwithstanding the foregoing, the deadlines set forth in this CAFO may be extended by written letter from the EPA to Respondent in accordance with Section H of this CAFO.

122. The headings in this CAFO are for convenience of reference only and shall not affect interpretation of this CAFO.

123. The Effective Date of this CAFO is the date the CAFO is filed with the Regional Hearing Clerk.

V. TERMINATION OF CAFO, COMPLETION OF WORK

124. At such time as the Work required under Section E of this CAFO has been completed to EPA's satisfaction, and assuming that the civil penalty required under Sections D and Q of this CAFO has been paid in accordance with Section Q of this CAFO, any delays in performance and/or stipulated penalties have been resolved, and all other requirements of this CAFO have been met, EPA shall issue a letter to Respondent stating that Respondent has completed the Work and that the CAFO is terminated.

IT IS SO AGREED.

2-28-08
Date

Robert M Brown
Robert M. Brown, doing business as
Lost Lake Resort

4/24/08
Date

Nancy Lindsay, Acting Director
Waste Management Division
U.S. Environmental Protection Agency,
Region IX

FINAL ORDER

IT IS HEREBY ORDERED that this Consent Agreement and Final Order Pursuant to 40 C.F.R. §§ 22.13 and 22.18 ("CAFO") (U.S. EPA Docket No. RCRA-09-2008-0011) be entered and that Respondent Robert M. Brown, doing business as Lost Lake Resort, ("Respondent") comply with the terms of this Consent Agreement and pay and send a civil penalty of FIFTY FIVE THOUSAND AND SEVENTY SIX DOLLARS ($55,076.00) in accordance with Section Q of this CAFO, within thirty (30) calendar days after the Effective Date of this CAFO. A copy of the proof of payment shall be sent to the EPA Region IX addresses specified in Section Q of this CAFO within such thirty (30) day period.

This Final Order shall be effective immediately.

05/02/08
Date

Steven Jawgiel
Regional Judicial Officer
United States Environmental Protection Agency,
Region IX

CERTIFICATE OF SERVICE

I hereby certify that on the date below, the original copy of the foregoing Consent Agreement and Final Order was filed with the Regional Hearing Clerk, Region 9, and that a copy was sent by certified mail, return receipt requested, to:

Mr. Robert Brown
Lost Lake Resort
42500 North Highway 95
P.O. Box 6046
Blythe, California 92225

May 7, 2008
Date

Danielle E. Carr
Danielle Carr
Regional Hearing Clerk
Office of Regional Counsel, Region 9

Attachment A

to

Consent Agreement and Final Order

By and Between

The United States
Environmental Protection Agency

And

Lost Lake Resort
(EPA Identification No. CRIT-041)

Wagner Martin Associates Inc.

November 29, 2007

Mr. Eric Magnan
Underground Storage Tank Program Office
U.S. EPA Region 9
75 Hawthorne St (WST-8)
San Francisco, CA 94105

Re: Revised Phase II Investigation Workplan - Amended
Lost Lake Resort
Colorado River Indian Tribes Reservation
42500 North Highway 95, Blythe, CA.

Dear Mr. Magnan:

Wagner Martin Associates Inc. (WMA) herein submits this "Revised Phase II Investigation Workplan" with the proposed scope of work to be conducted at the Lost Lake Resort, located on the Colorado River Indian Tribes (CRIT) Reservation north of Blythe, California. WMA has prepared the revised workplan with several modifications discussed on a conference call on November 8, 2007, with representatives of the U.S. EPA Region 9, and at the request of Mr. Robert Brown, current lessee of the facility.

Phase I Investigation and Results

Two soil borings were drilled in the immediate vicinity of the current UST basin. Boring LL-1 was drilled to a total depth of 25 feet below the ground surface (bgs) with soil samples being collected at the interval of 15 feet to 16.5 feet bgs (LL-1/16.5) and 18 feet to 19.5 feet bgs (LL-1/19.5). Ground water was encountered at a depth of approximately 19 feet bgs. Boring LL-2 was drilled on the eastern edge of the current UST system, to a total depth of 25 feet bgs. Soil samples were collected at the interval of 5 feet to 6.5 feet bgs (LL-2/6.5) for assessment of the former product line, and from 15 feet to 16.5 feet bgs (LL-2/16.5) for assessment of the current UST system. Ground water was encountered at approximately 18 to 19 feet bgs. Ground water samples (LL1-W and LL2-W, respectively) were collected from each of the borings prior to abandonment.

Two additional soil borings, LL-3 and LL-4, were drilled for assessment of soil and ground water conditions related to both the current and former UST systems. Boring LL-3 was drilled approximately 45 feet south-southeast of boring LL-2, to a total depth of 25 feet bgs, with a soil sample being collected at the interval of 15 feet to 16.5 feet bgs (LL-3/16.5). Boring LL-4 was drilled approximately 40 feet east of boring LL-2, also to a depth of 25 feet bgs. Soil samples were collected at the intervals of 10 feet to 11.5 feet bgs (LL-4/11.5) and from 15 feet to 16.5 feet bgs (LL-4/16.5). Ground water was encountered in both these borings between 18 to 19 feet bgs. Ground

- If the extent of the soil contamination is not defined during the UST closure activities, drill three soil borings around the former UST basin to define the lateral extent of soil contamination within the vadose zone. Soil borings will be drilled approximately 15 to 20 feet laterally from the UST basin (boring LL-4) to a total depth of 15 feet bgs. Soil samples will be collected on five foot depth intervals starting at 10 feet bgs. All soil samples and/or cuttings will be screened in the field using a photo-ionization detector (PID). The soil boring drilled to the east of the UST basin will be deepened and converted into a monitoring well as described below, if feasible.

- Submit all samples to a mobile laboratory and fixed base laboratory for analysis by EPA Method 8015 Modified for TPH content (gasoline, diesel, oil and grease), Method 8260 for VOCs, Method 6010B for total Pb and Cd, Method 8310 for PAHs, and Method 8082 for PCBs.

- Drill and install one 4.0" ID ground water monitoring well at the location of boring LL-4. The well will be completed to a total depth of approximately 30 feet bgs, and screened from a depth of approximately 10 to 30 feet bgs. The proposed monitoring well construction specifications is presented on the well diagram in Attachment E.

- Drill and install up to four additional 2.0" ID ground water monitoring wells around the initial well to define the lateral extent of ground water contamination. All proposed wells will be completed to a total depth of approximately 30 feet bgs, and screened from a depth of approximately 10 to 30 feet bgs. The proposed monitoring well construction specifications are presented on the well diagram in Attachment E.

- Hand dig and install two water sampling stations along the river bank. Water sampling stations will be constructed out of 2.0" ID pre-packed well screen. Every effort will be made to place the well screen as deep as possible below the water table surface. A minimum depth of 6" below the water table surface is proposed to be considered valid for sampling.

- Develop all newly completed wells and water sampling stations until discharge water becomes relatively clear (or no improvement of clarity is observed) and water parameters of pH, temperature and conductivity readings vary by less than 10 %. The development water will be temporarily contained in a 55-gallon container, and then passed through activated carbon to remove potential contamination.

- Survey the collar elevations of the newly installed monitoring wells and water sampling stations utilizing mean sea level as the reference datum, and conduct a ground water elevation survey of all monitoring wells upon stabilization of the water table.

This work plan has been prepared by WMA Inc. The recommendations contained in this work plan represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This Work Plan was prepared by:
WMA Inc.

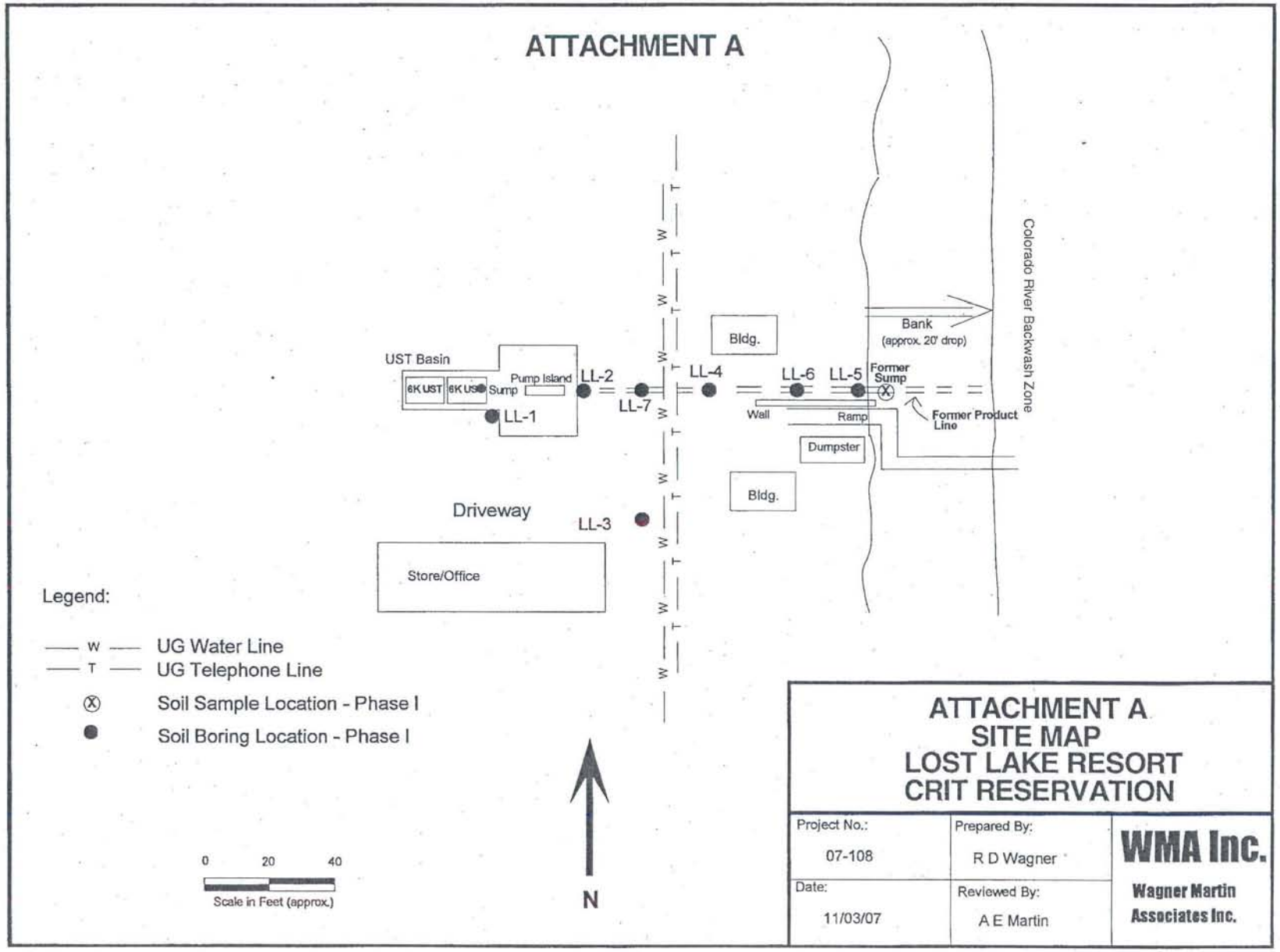
Robert D. Wagner Date 11/29/07

Robert D. Wagner
Senior Consultant

Attachments:
A. Site Map
B. Soil Boring Lithologic Logs
C. Summary of Soil Sample Analysis - Table1 and Table 2
D. Summary of Ground Water Analysis - Table3 and Table 4
E. Monitoring Well Construction Diagram
F. Proposed Soil Boring and Monitor Well Location Map
G. Methods and Procedures
H. Phase II Work Schedule

cc: Ramona Duran, CRIT EPO
Robert Brown, Lost Lake Resort
Rick Barker, Lost Lake Resort
Lucy Jenkins, Jones Waldo
Anna Martin, WMA Inc.

ATTACHMENT A



ATTACHMENT A
SITE MAP
LOST LAKE RESORT
CRIT RESERVATION

Project No.:	Prepared By:	WMA Inc.
07-108	R D Wagner	
Date:	Reviewed By:	Wagner Martin Associates Inc.
11/03/07	A E Martin	

WMA Inc.

BORING NO.
LL-1

SOIL BORING LOG

Page 1 of 1

PROJECT NO./NAME	LOCATION	DATE:
Lost Lake Resort/07-107	42500 N. Highway 95	08/30/07
DRILLING CONTRACTOR	Blythe, Ca	START TIME:
GeoMechanics Southwest		7:50
DRILLER	LAND OWNER	COMPLETED:
Mike	Colorado River Indian Tribe	9:50
DRILLING METHOD		SURFACE ELEVATION
HSA		100
DRILLING RIG	REVIEWED BY	LOGGED BY
CME 95	AEM	RDW

DEPTH (ft.)	SAMPLE NO.	BLOW COUNTS	SAMPLE RECOVERY	DESCRIPTION OF MATERIALS AND CONDITIONS	PID VALUES (ppm)	WELL CONSTRN	DEPTH (ft.)
1				**Light brown silty sand, sand fine to very** fine grained, moderate moisture . No odor. (SP-SM)			1
5				Same as above No Odor	0.0		5
10				Same as above No Odor	0.0		10
15	LL-1/16.5	4/4/6	17"	Same as above, increase in mosture No Odor	0.0		15
	LL-1/19.5	5/8/11	18"	Same as above-saturated. Did not collect sample for lab.			
20				Ground water @ approx. 19 feet bgs			20
25				Drilled to 25' bgs. Set 2" PVC pipe w/ well screen sock from 15' to 25' bgs. Used bailer inside 2" PVC for GW Sample			25
30							30
35							35

WMA Inc.

BORING NO.
LL-3

SOIL BORING LOG

Page 1 of 1

PROJECT NO./NAME Lost Lake Resort/07-107	LOCATION 42500 N. Highway 95 Blythe, Ca	DATE: 08/30/07
DRILLING CONTRACTOR GeoMechanics Southwest		START TIME: 11:20
DRILLER Mike	LAND OWNER Colorado River Indian Tribe	COMPLETED: 12:10
DRILLING METHOD HSA		SURFACE ELEVATION 100
DRILLING RIG CME 95	REVIEWED BY AEM	LOGGED BY RDW

DEPTH (ft.)	SAMPLE NO.	BLOW COUNTS	SAMPLE RECOVERY	DESCRIPTION OF MATERIALS AND CONDITIONS	PID VALUES (ppm)	WELL CONSTRN	DEPTH (ft.)
1				**Light brown silty sand, sand fine to very** fine grained, moderate moisture . No odor. (SP-SM)			1
5				Same as above No Odor	0.0		5
10				Same as above No Odor	0.0		10
15	LL-3/16.5	08/15/15	17"	Same as above, increase in mosture No Odor	0.0		15
20				Ground water @ approx. 18.5 feet bgs			20
25				Drilled to 25' bgs. Set 2" PVC pipe w/ well screen sock from 15' to 25' bgs. Used bailer inside 2" PVC for GW Sample			25
30							30
35							35

WMA Inc.

BORING NO.
LL-5

SOIL BORING LOG

Page 1 of 1

PROJECT NO./NAME	LOCATION	DATE:
Lost Lake Resort/07-107	42500 N. Highway 95	08/30/07
DRILLING CONTRACTOR	Blythe, Ca	START TIME:
GeoMechanics Southwest		13:50
DRILLER	LAND OWNER	COMPLETED:
Mike	Colorado River Indian Tribe	14:05
DRILLING METHOD		SURFACE ELEVATION
HSA		100
DRILLING RIG	REVIEWED BY	LOGGED BY
CME 95	AEM	RDW

DEPTH (ft.)	SAMPLE NO.	BLOW COUNTS	SAMPLE RECOVERY	DESCRIPTION OF MATERIALS AND CONDITIONS	PID VALUES (ppm)	WELL CONSTRN	DEPTH (ft.)
1							1
5	LL-5/6.5	9/16/18	18"	**Light brown silty sand, sand fine to very** fine grained, moderate moisture . No odor. (SP-SM) Total Boring Depth - 5 feet bgs	0.0		5
10							10
15							15
20							20
25							25
30							30
35							35

WMA Inc.

BORING NO.
LL-7

SOIL BORING LOG

PROJECT NO./NAME Lost Lake Resort/07-107	LOCATION 42500 N. Highway 95 Blythe, Ca	DATE: 08/30/07
DRILLING CONTRACTOR GeoMechanics Southwest		START TIME: 14:20
DRILLER Mike	LAND OWNER Colorado River Indian Tribe	COMPLETED: 14:35
DRILLING METHOD HSA		SURFACE ELEVATION 100
DRILLING RIG CME 95	REVIEWED BY AEM	LOGGED BY RDW

DEPTH (ft.)	SAMPLE NO.	BLOW COUNTS	SAMPLE RECOVERY	DESCRIPTION OF MATERIALS AND CONDITIONS	PID VALUES (ppm)	WELL CONSTRN	DEPTH (ft.)
1							1
5	LL-7/6.5	1/1/1	18"	**Light brown silty sand, sand fine to very** fine grained, moderate moisture . No odor. (SP-SM) Total Boring Depth - 5 feet bgs	0.0		5
10							10
15							15
20							20
25							25
30							30
35							35

ATTACHMENT C

TABLE 1

SUMMARY OF SOIL SAMPLE ANALYSES
LOST LAKE RESORT
CRIT RESERVATION

SAMPLE #/DEPTH	BENZENE	TOLUENE	E-BENZENE	XYLENES	MTBE	TPH (GRO)	Pb
LL-1/16.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	<5.0
LL-2/6.5	<0.05	<0.10	<0.10	<0.15	<0.25	<10	<5.0
LL-2/16.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	<5.0
LL-3/16.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	<5.0
LL-4/11.5'	<0.05	<0.10	<0.10	**15.9**	<0.25	**360,000**	**410**
LL-4/16.5'	<0.05	<0.10	<0.10	<0.15	<0.25	**65**	**8.6**
LL-5/6.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	**5.4**
LL-6/6.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	<5.0
LL-7/6.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	<5.0
SUMP/2.5'	<0.05	<0.10	<0.10	<0.15	<0.25	<10	**5.5**

All concentrations are in mg/kg (ppm)
BTEX/MTBE analyzed by EPA Method 8260. TPH analyzed by EPA Method 8015. Pb (lead) analyzed by EPA Method 6010b.

ATTACHMENT D

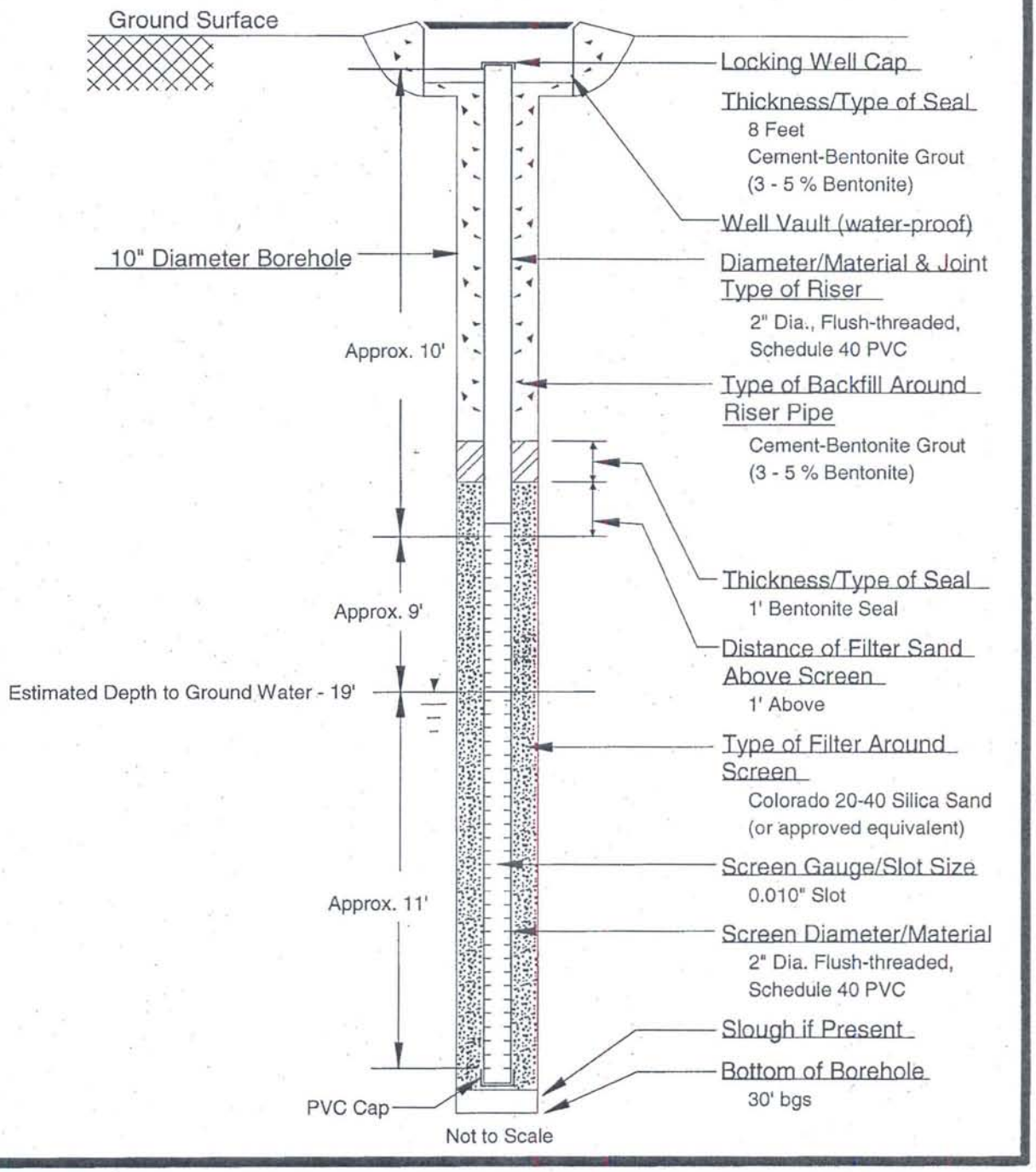
TABLE 3

SUMMARY OF GROUND WATER ANALYSES
LOST LAKE RESORT
CRIT RESERVATION

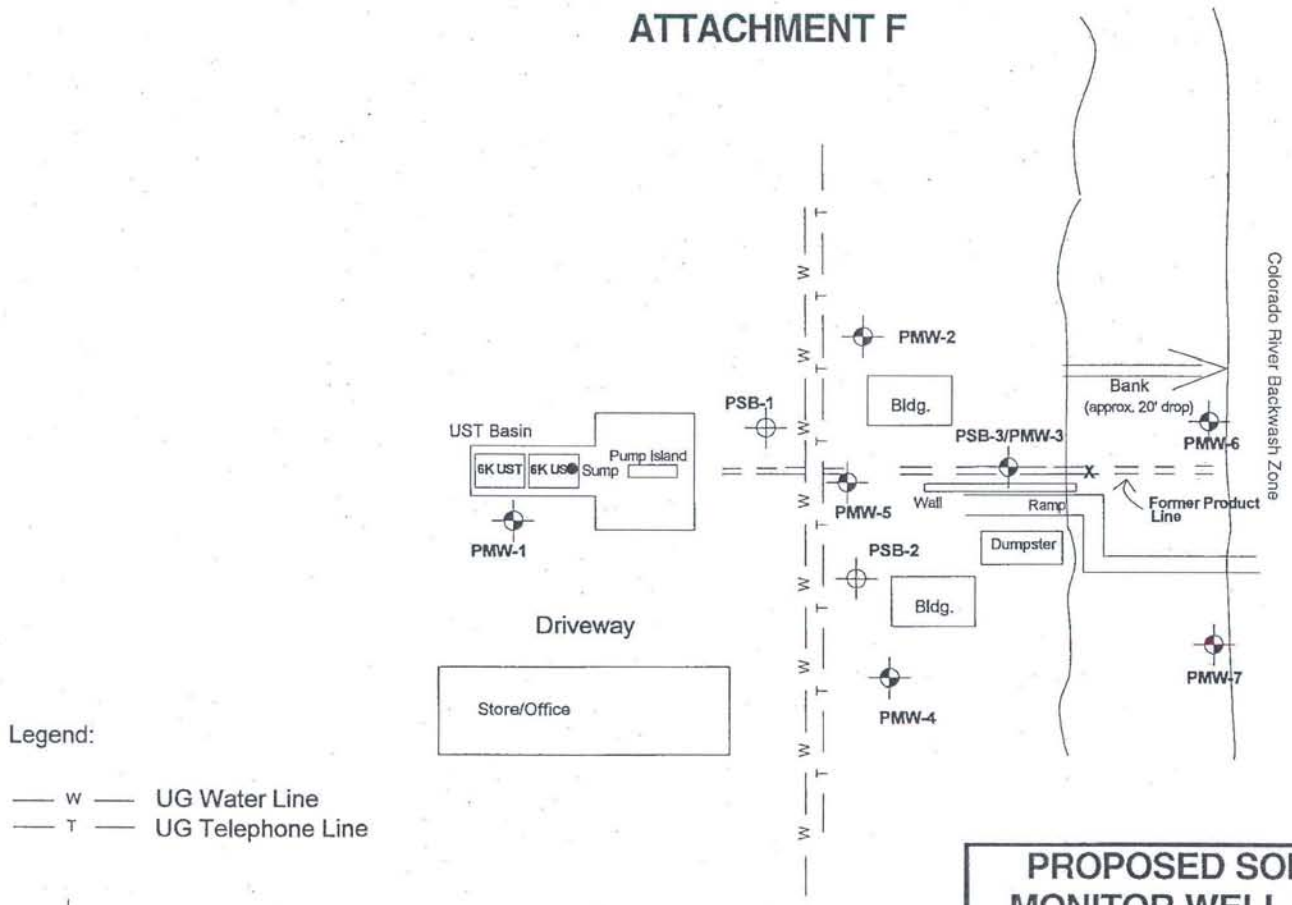
SAMPLE #/DEPTH	BENZENE	TOLUENE	E-BENZENE	XYLENES	MTBE	TPH (GRO)	Pb
LL1-W	<0.50	<3.0	<2.0	16	25	930	0.080
LL2-W	5,300	3,900	1,400	7,500	92	61,000	0.33
LL3-W	<0.50	<3.0	<2.0	5.4	<2.0	<200	0.48
LL4-W	2,100	34,000	5,500	32,000	<100	150,000	0.14

All concentrations are in µg/l (ppb), except Pb (lead) which is reported in mg/l (ppm)
BTEX/MTBE analyzed by EPA Method 8260. TPH analyzed by EPA Method 8015. Pb (lead) analyzed by EPA Method 6010b.

WMA Wagner Martin Associates Inc.	PROPOSED 2" ID MONITOR WELL CONSTRUCTION DETAILS LOST LAKE RESORT CRIT RESERVATION	Monitor Well No. N/A Project No. 07-108 Prep/Rev By: RDW/AEM



ATTACHMENT F



Legend:

W — UG Water Line

T — UG Telephone Line

PSB-2 — Proposed Soil Boring Location - Phase II

PMW-4 — Proposed Monitor Well Location - Phase II

0 20 40

Scale in Feet (approx.)

PROPOSED SOIL BORING AND MONITOR WELL LOCATION MAP LOST LAKE RESORT CRIT RESERVATION

Project No.:	Prepared By:	WMA Inc.
07-108	R D Wagner	Wagner Martin Associates Inc.
Date: 11/11/07	Reviewed By: A E Martin	

APPENDIX G

METHODS AND PROCEDURES

Soil Sampling

Soil samples will be collected at various intervals during drilling activities. Soil sampling will be conducted in accordance with ASTM:D 1587-94 and/or ASTM:D 1586-84 . According to these procedures, a teflon tube lined, thin wall push sampling rod is driven into the soil by a pneumatic percussion hammer, or, a brass-tube lined, two-inch O.D. barrel sampler or a two-inch I.D. California-type sampler is driven into the soil by a 140-pound weight falling 30 inches. After an initial set of six inches, the number of blows required to drive the sampler an additional 12 inches is recorded as the penetration resistance, or the "N" value. The N value is used as an empirical measure of the relative density of cohesionless soils and the consistency of cohesive soils. (No blow counts will be recorded from any direct push holes).

Upon recovery, a portion of the sample will be used for classification and description. The soil sample collected in the lowermost brass tube within the split barrel sampler will be sealed with teflon tape, capped, and immediately submitted to a mobile laboratory, or stored on ice for delivery to a stationary laboratory for analysis.

All soil borings will be abandoned in accordance with local, state, and federal guidelines or in accordance with ASTM:D 5299-92.

Soil Classification

As samples are obtained in the field, they will be classified by the geologist in accordance with ASTM:D 2488-93. Logs of the borings indicating the depth and identification of the various strata, water level information, and pertinent information regarding the method of maintaining and advancing the borehole will be made.

Soil Containment/Ground Water Treatment

All potentially contaminated soil cuttings from soil boring and/or wells will be temporarily stored in 55-gallon DOT approved metal drums or stockpiled on and covered with visqueen in a secured location. All wastes will be sampled in accordance with ASTM Standards D 4547-91 and D 4687-87. Drummed soil will be sent to an appropriate facility for disposal following analysis of composite soil samples for profiling. Development and purge water will be passed through a carbon treatment unit and discharged onsite.

Decontamination Procedures - Soil Borings and Sampling

Decontamination procedures for all field equipment will be conducted in accordance with ASTM:D 4750-87. To reduce the chance of cross contamination between samples, the sampling equipment will be washed in an Alconox or tri-sodium phosphate (TSP) detergent solution and double rinsed between each sampling event. Also, to prevent cross contamination of boreholes, the down-hole drilling equipment will be steam cleaned before advancement of additional borings. Disposable ground water sampling equipment will be used when appropriate.

Ground Water Elevation Surveys

Groundwater measurements will be conducted in accordance with ASTM:D 4750-87. According to these procedures, the ground water level measurements will be obtained by using an electronic device which indicates when a probe is in contact with the ground water in the well. Measurements are obtained by lowering the device into the well until it indicates that the ground water surface has been encountered and by measuring the distance from the top of the inside riser pipe to the probe. The measurements will be recorded to the nearest 0.01'; however, the manufacturer's reported accuracy for the instrument is 0.04'.

Free Phase Petroleum Measurements

If present, free product measurements will be conducted in accordance with ASTM:D 4750-87. The thickness of the product layer will be measured utilizing an oil/water interface probe. Measurements are obtained by lowering the device into the well until it indicates that the product layer has been encountered and by recording the distance from the top of the inside riser pipe to the probe. Then, the device is lowered further until it indicates the water surface has been encountered and again recording the distance from the top of the inside riser pipe to the probe. The measurements will be recorded to the nearest 0.01', however, the manufacturer's reported accuracy for the instrument is 0.04'.

Quality Assurance Plan

This section discusses the field and analytical quality assurance/control procedures to be followed throughout the investigation.

General Sample Collection and Handling Procedures

Each sample will be collected in a suitable container, preserved correctly for the intended analyses, and stored prior to analyses for no longer than the maximum allowable holding time. Sample containers and preservation is discussed above.

Sample Identification and Chain-of -Custody Procedures

Each sample container submitted for analysis will labeled to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to the description of the sample, field measurements made, sampling methodolgy, and any other pertinent feld observations will be recorded on the borehole log or in the field records. The samples will be analyzed by a State of Arizona or State of California certified laboratory.

A chain-of-custody form will be used to record possession of each sample from time of collection to its arrival at the laboratory.

Analytical Quality Assurance

In addition to routine calibration of the instruments with standards and blanks, the laboratory will also run surrogates, matrix spikes, and matrix spike duplicates.

Field Quality Control Sampling

Field quality control sampling will be incorporated as part of this "Phase II Investigation" to ensure that contamination is not introduced into samples by poor decontamination procedures, and that proper and consistent handling protocol is implemented.

One equipment blank will be collected for both soil and ground water during the UST closure activities, as well as drilling activities. Equipment blanks for soil sampling will be prepared using a decontaminated split spoon barrel sampler with decontaminated brass sleeves. De-ionized, distilled water will be pored through the split barrel and collected into VOA vials. Equipment blanks for ground water will be collected using a decontaminated Hydro-Punch sampler, 2" submersible pump, or other ground water sampling equipment along with de-ionized, distilled water collected in the same manner the ground water samples are collected. The equipment blanks will be analyzed for the same parameters as the soil and ground water samples.

One trip blank will be prepared during the UST closure activities, as well as drilling activities. The trip blanks will be analyzed for the same parameters as the soil and ground water samples.

Duplicate samples will be collected per ten regular samples for both soil and ground water. A minimum of one duplicate sample will be collected during any sampling activities, should the total number of samples be less than ten during any sampling event. Duplicate samples will be collected in the identical manner as regular samples; and the sample location, depth, and other sampling information will be noted in the field. For soil samples, duplicate samples will be collected using the middle brass sleeve contained within the split barrel sampler. Duplicate samples will be analyzed for the same parameters as the regular soil and ground water samples.

ATTACHMENT H
PROPOSED PHASE II INVESTIGATION SCHEDULE
LOST LAKE RESORT

(Note: Actual start date is dependent upon EPA Region IX approval. The timely completion of the schedule is based on the Lost Lake Resort's proposed scope of work, only, and assumes no delays caused by conflicts of schedules with the CRIT EPO, EPA Region IX, and/or their respective representatives)

Final EPA Approval of Phase II Work Plan	**STARTING POINT**
UST Excavation and Removal	Week 1-3
Soil Borings & Monitoring Well Installation	Week 2-4
Monitoring Well Sampling	Week 5
Receipt of Laboratory Reports	Week 7
Completion & Transmittal of Phase II Report	Week 8
Completion of CAP	Week 12

Lost Lake Resort and its representatives will give EPA Region IX and the CRIT EPO as much notice as possible (minimum of 72 hours) prior to initiating any field activities. However, due to the limited time constraints to complete the activities, field activities can not be delayed due to a conflict of schedule with the EPA Region IX, CRIT EPO and or it's representatives, without extending the above schedule.

"WMAINC"
<wmainc@cox.net>
12/20/2007 06:16 PM

To Eric Magnan/R9/USEPA/US@EPA

cc Tess Salire/R9/USEPA/US@EPA, "Mona Duran" <Mona.Duran@critepo.com>, "Robert Brown" <bobb@infowest.com>, "Rick Barker"

bcc

Subject Revised Schedule for Lost Lake

History: This message has been forwarded.

Eric: Below is the revised schedule for the Lost Lake activities.

01/07/08 UST removal/Soil Excavation
01/08/08 Soil Borings and sampling at UST basin. Soil borings and hydropunch samples @ proposed well locations/Mobile lab screen
01/09/08 thru 01/12/07 Install/develop monitor wells
01/17/08 Monitor well sampling.

Will confirm on or before 01/04/07.

Bob W

Table A. Environmental Screening Levels (ESLs)
Shallow Soils (≤3m bgs)
Groundwater IS Current or Potential Source of Drinking Water

Chemical	[1]Shallow Soil		[3]Groundwater (ug/L)
	[2]Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
Acenaphthene	1.6E+01	1.6E+01	2.0E+01
Acenaphthylene	8.9E+01	8.9E+01	2.1E+02
Acetone	2.1E+00	2.1E+00	6.3E+03
Aldrin	3.2E-02	1.3E-01	2.0E-03
Anthracene	4.0E+01	4.0E+01	2.2E+01
Antimony	6.1E+00	4.0E+01	6.0E+00
Arsenic	3.8E-01	1.5E+00	5.0E+01
Barium	7.5E+02	1.5E+03	1.0E+03
Benzene	4.4E-02	4.4E-02	1.0E+00
Benzo(a)anthracene	3.8E-01	1.3E+00	2.9E-02
Benzo(b)fluoranthene	3.8E-01	1.3E+00	2.9E-02
Benzo(k)fluoranthene	3.8E-01	1.3E+00	2.9E-02
Benzo(g,h,i)perylene	3.5E+01	3.5E+01	1.3E-01
Benzo(a)pyrene	3.8E-02	1.3E-01	2.0E-01
Beryllium	4.0E+00	8.0E+00	4.0E+00
1,1-Biphenyl	6.5E-01	6.5E-01	5.0E-01
Bis(2-chloroethyl) ether	4.0E-04	4.0E-04	3.2E-02
Bis(2-chloroisopropyl) ether	1.5E-04	1.5E-04	1.4E-02
Bis(2-ethylhexyl) phthalate	3.5E+01	1.2E+02	4.0E+00
Boron	1.6E+00	2.0E+00	1.0E+03
Bromodichloromethane	5.6E-01	1.2E+00	1.0E+02
Bromoform (Tribromomethane)	2.2E+00	2.2E+00	1.0E+02
Bromomethane	3.9E-01	3.9E-01	9.8E+00
Cadmium	1.7E+00	7.4E+00	5.0E+00
Carbon tetrachloride	2.0E-02	4.4E-02	5.0E-01
Chlordane	4.4E-01	1.7E+00	1.0E-01
p-Chloroaniline	3.0E-01	3.0E-01	2.8E+01
Chlorobenzene	3.0E+00	3.0E+00	5.0E+01
Chloroethane	8.5E-01	8.5E-01	1.2E+01
Chloroform	6.7E-01	1.4E+00	7.0E+01
Chloromethane	6.4E+00	6.4E+00	4.1E+01
2-Chlorophenol	1.2E-02	1.2E-02	1.8E-01
Chromium (total)			5.0E+01
Chromium III	7.5E+02	7.5E+02	5.0E+04
Chromium VI	8.0E+00	8.0E+00	2.1E+01
Chrysene	4.0E+01	4.0E+01	8.0E-01
Cobalt	4.0E+01	8.0E+01	1.4E+02
Copper	2.3E+02	2.3E+02	1.0E+03
Cyanide	5.4E-01	5.4E-01	1.5E+02
Dibenz(a,h)anthracene	6.2E-02	2.1E-01	4.8E-03
Dibromochloromethane	5.8E+00	8.3E+00	1.0E+02
1,2-dibromo-3-chloropropane	4.5E-03	4.5E-03	2.0E-01
1,2-Dibromoethane	3.3E-04	3.3E-04	5.0E-02
1,2-Dichlorobenzene	1.1E+00	1.1E+00	1.0E+01

Table A. Environmental Screening Levels (ESLs)
Shallow Soils (≤3m bgs)
Groundwater IS Current or Potential Source of Drinking Water

Chemical	[1]Shallow Soil		[3]Groundwater (ug/L)
	[2]Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
1,3-Dichlorobenzene	2.4E+01	2.4E+01	2.1E+02
1,4-Dichlorobenzene	5.9E-01	5.9E-01	5.0E+00
3,3-Dichlorobenzidine	7.7E-03	7.7E-03	2.9E-02
Dichlorodiphenyldichloroethane (DDD)	2.3E+00	9.0E+00	1.5E-01
Dichlorodiphenyldichloroethene (DDE)	1.6E+00	4.0E+00	1.0E-01
Dichlorodiphenyltrichloroethane (DDT)	1.6E+00	4.0E+00	1.0E-01
1,1-Dichloroethane	2.0E-01	2.0E-01	5.0E+00
1,2-Dichloroethane	4.5E-03	4.5E-03	5.0E-01
1,1-Dichloroethene	4.1E-02	8.8E-02	6.0E+00
cis-1,2-Dichloroethene	1.9E-01	1.9E-01	6.0E+00
trans-1,2-Dichloroethene	6.7E-01	6.7E-01	1.0E+01
2,4-Dichlorophenol	3.0E-01	3.0E-01	3.0E-01
1,2-Dichloropropane	1.2E-01	1.2E-01	5.0E+00
1,3-Dichloropropene	5.9E-02	5.9E-02	5.0E-01
Dieldrin	2.7E-03	2.7E-03	2.2E-03
Diethyl phthalate	1.3E+02	1.3E+02	5.6E+03
Dimethyl phthalate	5.0E+02	1.0E+03	5.0E+04
2,4-Dimethylphenol	6.7E-01	6.7E-01	1.0E+02
2,4-Dinitrophenol	4.0E-01	4.0E-01	1.4E+02
2,4-Dinitrotoluene	3.9E-04	3.9E-04	5.1E-02
1,4-Dioxane	1.8E-03	1.8E-03	3.0E+00
Dioxin (2,3,7,8-TCDD)	4.6E-06	1.9E-05	3.0E-05
Endosulfan	2.2E+01	2.2E+01	4.2E+01
Endrin	6.0E-02	6.0E-02	2.0E+00
Ethylbenzene	3.3E+00	3.3E+00	3.0E+01
Fluoranthene	4.0E+01	4.0E+01	1.3E+02
Fluorene	4.1E+02	6.4E+02	2.8E+02
Heptachlor	3.7E-02	3.7E-02	1.0E-02
Heptachlor epoxide	3.8E-02	3.8E-02	1.0E-02
Hexachlorobenzene	3.0E-01	1.1E+00	1.0E+00
Hexachlorobutadiene	2.2E+00	2.2E+00	4.5E-01
γ-Hexachlorocyclohexane (Lindane)	1.2E-01	1.2E-01	2.0E-01
Hexachloroethane	3.0E+00	3.0E+00	9.0E-01
Indeno(1,2,3-c,d)pyrene	6.2E-01	2.1E+00	4.8E-02
Lead	2.0E+02	7.5E+02	1.5E+01
Mercury (elemental)	1.0E+00	1.0E+01	2.0E+00
Methoxychlor	2.6E+02	2.6E+02	2.0E+01
Methylene chloride	7.7E-02	7.7E-02	5.0E+00
Methyl ethyl ketone	3.9E+00	3.9E+00	4.2E+03
Methyl isobutyl ketone	2.8E+00	2.8E+00	1.2E+02
Methyl mercury	1.2E+00	1.2E+01	7.0E-01
2-Methylnaphthalene	1.2E+00	1.2E+00	1.0E+01
tert-Butyl methyl ether	2.3E-02	2.3E-02	5.0E+00
Molybdenum	4.0E+01	4.0E+01	3.5E+01

Table A. Environmental Screening Levels (ESLs)
Shallow Soils (≤3m bgs)
Groundwater IS Current or Potential Source of Drinking Water

Chemical	[1]Shallow Soil		[3]Groundwater (ug/L)
	[2]Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
Naphthalene	1.3E+00	2.8E+00	1.7E+01
Nickel	1.5E+02	1.5E+02	1.0E+02
Pentachlorophenol	3.0E+00	5.0E+00	1.0E+00
Perchlorate	1.1E+01	1.3E+02	6.0E+00
Phenanthrene	4.0E+01	4.0E+01	2.1E+02
Phenol	7.6E-02	7.6E-02	5.0E+00
Polychlorinated biphenyls (PCBs)	8.9E-02	3.0E-01	5.0E-01
Pyrene	5.0E+02	1.0E+03	6.8E+01
Selenium	1.0E+01	1.0E+01	5.0E+01
Silver	2.0E+01	4.0E+01	3.5E+01
Styrene	1.5E+00	1.5E+00	1.0E+01
tert-Butyl alcohol	1.0E-06		
1,1,1,2-Tetrachloroethane	2.4E-02	2.4E-02	1.3E+00
1,1,2,2-Tetrachloroethane	1.8E-02	1.8E-02	1.0E+00
Tetrachloroethene	3.4E-01	7.0E-01	5.0E+00
Thallium	1.2E+00	1.5E+01	2.0E+00
Toluene	2.9E+00	2.9E+00	4.0E+01
Toxaphene	4.6E-01	1.8E+00	3.0E+00
TPH (gasolines)	8.3E+01	8.3E+01	1.0E+02
TPH (middle distillates)	8.3E+01	8.3E+01	1.0E+02
TPH (residual fuels)	4.1E+02	2.5E+03	1.0E+02
1,2,4-Trichlorobenzene	1.5E+00	1.5E+00	5.0E+00
1,1,1-Trichloroethane	2.5E+01	2.5E+01	2.0E+02
1,1,2-Trichloroethane	7.0E-02	7.0E-02	5.0E+00
Trichloroethene	4.6E-01	4.6E-01	5.0E+00
2,4,5-Trichlorophenol	3.2E+00	3.2E+00	2.0E+02
2,4,6-Trichlorophenol	2.3E-01	2.3E-01	7.0E-01
Vanadium	1.5E+01	1.9E+02	1.5E+01
Vinyl chloride	2.1E-02	4.7E-02	5.0E-01
Xylenes	2.3E+00	2.3E+00	2.0E+01
Zinc	6.0E+02	6.0E+02	5.0E+03

Notes:

1. Shallow soils defined as soils less than or equal to 3 meters (approximately 10 feet) below ground surface.
2. Category "Residential Land Use" generally considered adequate for other sensitive uses (e.g., day-care centers, hospitals, etc.)
3. Assumes potential discharge of groundwater into a freshwater, marine or estuary surface water system.

Soil ESLs intended to address direct-exposure, groundwater protection, ecologic (urban areas) and nuisance concerns under noted land-use scenarios. **Soil gas data should be collected for additional evaluation of potential indoor-air impacts at sites with significant areas of VOC-contaminated soil.**

Groundwater ESLs intended to be address drinking water, surface water, indoor-air and nuisance concerns. **Use in conjunction with soil gas screening levels to more closely evaluate potential impacts to indoor-air if groundwater screening levels for this concern approached or exceeded.**

Aquatic habitat goals for bioaccumulation concerns not considered in selection of groundwater goals.

Soil and water ESLs for ethanol based on gross contamination concerns.

TPH -Total Petroleum Hydrocarbons. TPH ESLs must be used in conjunction with ESLs for related chemicals (e.g., BTEX, PAHs, oxidizers, etc.).

Table C. Environmental Screening Levels (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

Chemical	[1]Deep Soil		[3]Groundwater (ug/L)
	[2]Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
Acenaphthene	1.6E+01	1.6E+01	2.0E+01
Acenaphthylene	8.9E+01	8.9E+01	2.1E+02
Acetone	2.1E+00	2.1E+00	6.3E+03
Aldrin	1.5E+00	1.5E+00	2.0E-03
Anthracene	8.5E+01	8.5E+01	2.2E+01
Antimony	2.8E+02	2.8E+02	6.0E+00
Arsenic	1.4E+01	1.4E+01	5.0E+01
Barium	2.5E+03	2.6E+03	1.0E+03
Benzene	4.4E-02	4.4E-02	1.0E+00
Benzo(a)anthracene	1.2E+01	1.2E+01	2.9E-02
Benzo(b)fluoranthene	1.5E+01	1.5E+01	2.9E-02
Benzo(k)fluoranthene	2.7E+00	2.7E+00	2.9E-02
Benzo(g,h,i)perylene	3.5E+01	3.5E+01	1.3E-01
Benzo(a)pyrene	1.5E+00	1.5E+00	2.0E-01
Beryllium	9.8E+01	9.8E+01	4.0E+00
1,1-Biphenyl	6.5E-01	6.5E-01	5.0E-01
Bis(2-chloroethyl) ether	4.0E-04	4.0E-04	3.2E-02
Bis(2-chloroisopropyl) ether	1.5E-04	1.5E-04	1.4E-02
Bis(2-ethylhexyl) phthalate	7.8E+02	7.8E+02	4.0E+00
Boron	4.6E+04	4.6E+04	1.0E+03
Bromodichloromethane	1.9E+00	1.9E+00	1.0E+02
Bromoform (Tribromomethane)	2.2E+00	2.2E+00	1.0E+02
Bromomethane	3.9E-01	3.9E-01	9.8E+00
Cadmium	3.9E+01	3.9E+01	5.0E+00
Carbon tetrachloride	1.1E-01	1.1E-01	5.0E-01
Chlordane	1.5E+01	1.5E+01	1.0E-01
p-Chloroaniline	3.0E-01	3.0E-01	2.8E+01
Chlorobenzene	3.0E+00	3.0E+00	5.0E+01
Chloroethane	8.5E-01	8.5E-01	1.2E+01
Chloroform	2.1E+00	2.1E+00	7.0E+01
Chloromethane	6.4E+00	6.4E+00	4.1E+01
2-Chlorophenol	1.2E-02	1.2E-02	1.8E-01
Chromium (total)	2.5E+03	5.0E+03	5.0E+01
Chromium III	2.5E+03	5.0E+03	5.0E+04
Chromium VI	5.3E-01	5.3E-01	2.1E+01
Chrysene	5.3E+01	5.3E+01	8.0E-01
Cobalt	9.4E+01	9.4E+01	1.4E+02
Copper	2.5E+03	5.0E+03	1.0E+03
Cyanide	5.4E-01	5.4E-01	1.5E+02
Dibenz(a,h)anthracene	2.4E+00	2.4E+00	4.8E-03
Dibromochloromethane	8.3E+00	8.3E+00	1.0E+02
1,2-dibromo-3-chloropropane	4.5E-03	4.5E-03	2.0E-01
1,2-Dibromoethane	3.3E-04	3.3E-04	5.0E-02
1,2-Dichlorobenzene	1.1E+00	1.1E+00	1.0E+01

Table C. Environmental Screening Levels (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

	[1]Deep Soil		
Chemical	[2]Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	[3]Groundwater (ug/L)
1,3-Dichlorobenzene	2.4E+01	2.4E+01	2.1E+02
1,4-Dichlorobenzene	5.9E-01	5.9E-01	5.0E+00
3,3-Dichlorobenzidine	7.7E-03	7.7E-03	2.9E-02
Dichlorodiphenyldichloroethane (DDD)	1.1E+02	1.1E+02	1.5E-01
Dichlorodiphenyldichloroethene (DDE)	7.6E+01	7.6E+01	1.0E-01
Dichlorodiphenyltrichloroethane (DDT)	4.3E+00	4.3E+00	1.0E-01
1,1-Dichloroethane	2.0E-01	2.0E-01	5.0E+00
1,2-Dichloroethane	4.5E-03	4.5E-03	5.0E-01
1,1-Dichloroethene	1.0E+00	1.0E+00	6.0E+00
cis-1,2-Dichloroethene	1.9E-01	1.9E-01	6.0E+00
trans-1,2-Dichloroethene	6.7E-01	6.7E-01	1.0E+01
2,4-Dichlorophenol	3.0E-01	3.0E-01	3.0E-01
1,2-Dichloropropane	1.2E-01	1.2E-01	5.0E+00
1,3-Dichloropropene	5.9E-02	5.9E-02	5.0E-01
Dieldrin	2.7E-03	2.7E-03	2.2E-03
Diethyl phthalate	1.3E+02	1.3E+02	5.6E+03
Dimethyl phthalate	1.0E+03	1.2E+03	5.0E+04
2,4-Dimethylphenol	6.7E-01	6.7E-01	1.0E+02
2,4-Dinitrophenol	4.0E-01	4.0E-01	1.4E+02
2,4-Dinitrotoluene	3.9E-04	3.9E-04	5.1E-02
1,4-Dioxane	1.8E-03	1.8E-03	3.0E+00
Dioxin (2,3,7,8-TCDD)	2.4E-04	2.4E-04	3.0E-05
Endosulfan	2.2E+01	2.2E+01	4.2E+01
Endrin	5.6E-01	5.6E-01	2.0E+00
Ethylbenzene	3.3E+00	3.3E+00	3.0E+01
Fluoranthene	8.4E+02	8.4E+02	1.3E+02
Fluorene	6.4E+02	6.4E+02	2.8E+02
Heptachlor	3.7E-02	3.7E-02	1.0E-02
Heptachlor epoxide	3.8E-02	3.8E-02	1.0E-02
Hexachlorobenzene	1.2E+01	1.2E+01	1.0E+00
Hexachlorobutadiene	2.2E+00	2.2E+00	4.5E-01
γ-Hexachlorocyclohexane (Lindane)	1.2E-01	1.2E-01	2.0E-01
Hexachloroethane	3.0E+00	3.0E+00	9.0E-01
Indeno(1,2,3-c,d)pyrene	1.3E+01	1.3E+01	4.8E-02
Lead	7.5E+02	7.5E+02	1.5E+01
Mercury (elemental)	3.3E+01	3.3E+01	2.0E+00
Methoxychlor	2.6E+02	2.6E+02	2.0E+01
Methylene chloride	7.7E-02	7.7E-02	5.0E+00
Methyl ethyl ketone	3.9E+00	3.9E+00	4.2E+03
Methyl isobutyl ketone	2.8E+00	2.8E+00	1.2E+02
Methyl mercury	4.1E+01	4.1E+01	7.0E-01
2-Methylnaphthalene	1.2E+00	1.2E+00	1.0E+01
tert-Butyl methyl ether	2.3E-02	2.3E-02	5.0E+00
Molybdenum	2.5E+03	3.6E+03	3.5E+01

Table C. Environmental Screening Levels (ESLs)
Deep Soils (>3m bgs)
Groundwater IS a Current or Potential Source of Drinking Water

Chemical	[1]Deep Soil		[3]Groundwater (ug/L)
	[2]Residential Land Use (mg/kg)	Commercial/ Industrial Land Use Only (mg/kg)	
Naphthalene	3.4E+00	3.4E+00	1.7E+01
Nickel	2.6E+02	2.6E+02	1.0E+02
Pentachlorophenol	9.9E+01	9.9E+01	1.0E+00
Perchlorate	5.0E+02	5.0E+02	6.0E+00
Phenanthrene	4.9E+02	4.9E+02	2.1E+02
Phenol	7.6E-02	7.6E-02	5.0E+00
Polychlorinated biphenyls (PCBs)	3.4E+00	3.4E+00	5.0E-01
Pyrene	1.0E+03	1.2E+03	6.8E+01
Selenium	2.5E+03	3.6E+03	5.0E+01
Silver	2.5E+03	3.6E+03	3.5E+01
Styrene	1.5E+00	1.5E+00	1.0E+01
tert-Butyl alcohol			
1,1,1,2-Tetrachloroethane	2.4E-02	2.4E-02	1.3E+00
1,1,2,2-Tetrachloroethane	1.8E-02	1.8E-02	1.0E+00
Tetrachloroethene	7.0E-01	7.0E-01	5.0E+00
Thallium	5.7E+01	5.7E+01	2.0E+00
Toluene	2.9E+00	2.9E+00	4.0E+01
Toxaphene	6.4E+00	6.4E+00	3.0E+00
TPH (gasolines)	8.3E+01	8.3E+01	1.0E+02
TPH (middle distillates)	8.3E+01	8.3E+01	1.0E+02
TPH (residual fuels)	5.0E+03	5.0E+03	1.0E+02
1,2,4-Trichlorobenzene	1.5E+00	1.5E+00	5.0E+00
1,1,1-Trichloroethane	2.5E+01	2.5E+01	2.0E+02
1,1,2-Trichloroethane	7.0E-02	7.0E-02	5.0E+00
Trichloroethene	4.6E-01	4.6E-01	5.0E+00
2,4,5-Trichlorophenol	3.2E+00	3.2E+00	2.0E+02
2,4,6-Trichlorophenol	2.3E-01	2.3E-01	7.0E-01
Vanadium	7.1E+02	7.1E+02	1.5E+01
Vinyl chloride	8.5E-02	8.5E-02	5.0E-01
Xylenes	2.3E+00	2.3E+00	2.0E+01
Zinc	2.5E+03	5.0E+03	5.0E+03

Notes:

1. Deep soils defined as soils greater than 3 meters (approximately 10 feet) below ground surface.
2. Category "Residential Land Use" generally considered adequate for other sensitive uses (e.g., day-care centers, hospitals, etc.)
3. Assumes potential discharge of groundwater into a freshwater, marine or estuary surface water system.

Soil ESLs intended to address human health, groundwater protection and nuisance concerns under a construction/trench worker exposure scenario and noted land-use scenarios. **Soil gas data should be collected for additional evaluation of potential indoor-air impacts at sites with significant areas of VOC-contaminated soil.**

Groundwater ESLs intended to be address drinking water, surface water, indoor-air and nuisance concerns. **Use in conjunction with soil gas screening levels to more closely evaluate potential impacts to indoor-air if groundwater screening levels for this concern approached or exceeded.**

Aquatic habitat goals for bioaccumulation concerns not considered in selection of groundwater goals.

Soil and water ESLs for ethanol based on gross contamination concerns (see Appendix 1, Chapter 5 and related tables).

TPH -Total Petroleum Hydrocarbons. TPH ESLs must be used in conjunction with ESLs for related chemicals (e.g., BTEX, PAHs, oxidizers, etc.).