UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IX

In the matter of:	)	U.S. EPA Docket No.
	)	RCRA 09-2006-
SIEMENS WATER TECHNOLOGIES CORP.	)	
	)	**CONSENT AGREEMENT**
	)	**AND FINAL ORDER**
EPA I.D. No. AZD 982 441 263	)	**PURSUANT TO**
	)	**40 CFR SECTIONS**
Respondent.	)	**22.13 AND 22.18**
	)	
	)	

CONSENT AGREEMENT

A. PRELIMINARY STATEMENT

1. This is a civil administrative enforcement action instituted pursuant to Section 3008(a)(1) of the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. §6928(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 Siemens Water Technologies Corp., successor to Westates Carbon-Arizona, Inc. ("Westates").

2. Respondent owns and operates a facility located on the Colorado River Indian Reservation, near Parker, Arizona (the "Facility"). The Facility operations include treatment and reactivation of spent carbon that has been used to treat air emissions or contaminated groundwater. The Facility has applied for a RCRA permit and is operating under "interim status" under Section 3005(e) RCRA, 42 U.S.C. § 6925(e). The Facility's EPA Identification Number is AZD 982 441 263.

3. This Consent Agreement and Final Order pursuant to 40 C.F.R. Sections 22.13 and 22.18 ("CA/FO") simultaneously commences and concludes this proceeding, wherein EPA alleges that Respondent: (1) Failed to close containers of hazardous waste in violation of 40 C.F.R. § 265.173 (as referenced in § 262.34(c)(1)(I)); (2) Failed to include notations of observations and repairs in records of inspections of secondary containment in violation of 40 C.F.R. § 265.15; and (3) Failed to provide adequate secondary containment in violation of 265.193(e)(1)(I), (ii) and (iii). These alleged violations are all asserted by EPA to be in violation of Section 3001 et seq., of RCRA, 42 U.S.C. § 6921 et seq., and regulations adopted pursuant thereto.

B. JURISDICTION

4. Arizona is authorized to administer the hazardous waste management program in lieu of the federal program pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, and 40 C.F.R. Part 271. However, the Facility is located within the Colorado River Indian Reservation, and the federal regulations apply here because Arizona is not authorized to administer its hazardous waste management program in Indian country. *See*, e.g., 65 F.R. 64369, 64371 (Oct. 27, 2000).

5. Respondent is a "person" as defined in 40 C.F.R. § 260.10.

6. Respondent is the "operator" of a facility as defined in 40 C.F.R. § 260.10.

7. Respondent is an interim status treatment and storage facility as defined in Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).

8. Respondent is engaged in "storage" and "treatment" of hazardous waste as defined in 40 C.F.R. § 260.10.

9. At the Facility, Respondent stores and treats a number of hazardous wastes as defined by Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), 40 C.F.R. §§ 260.10 and 261.3. The principal waste stream accepted at the Facility is spent carbon, which is derived from various applications, including the treatment of air emissions and contaminated groundwater. The spent carbon may either be characteristically hazardous waste or listed hazardous waste.

10. On June 19-20, 2001, January 24, 2002, August 29, 2002, March 6-7, 2003, and February 12, 2004, EPA inspectors, accompanied by personnel from the Colorado River Indian Tribe Environmental Health Office, conducted RCRA compliance evaluation inspections ("CEIs") at the Facility.

11. Based upon the findings made during the CEIs, and additional information obtained subsequent to the CEIs, EPA alleges that Respondent has violated Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924, 6925, and therefore is subject to the powers vested in the EPA Administrator by Section 3008 of RCRA, 42 U.S.C. § 6928.

12. Section 3008 of RCRA, 42 U.S.C. § 6928, authorizes the EPA Administrator to issue orders requiring compliance immediately or within a specified time for violation of any requirement of Subtitle C of RCRA, Section 3001 of RCRA et seq., 42 U.S.C. § 6921, et seq.

13. The Administrator has delegated the authority under Section 3008 of RCRA, 42 U.S.C. § 6928, 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 I

Failure to Close Containers of Hazardous Waste

14. Paragraphs 1 through 13 above are incorporated herein by this reference as if they were set forth here in their entirety.

15. 40 C.F.R. § 265.173(a) provides that a container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

16. During the June 2001 CEI, EPA inspectors allege they observed that Respondent was storing discarded samples of hazardous waste in an open drum in an area identified as a satellite accumulation area. Respondent was not engaged in adding or removing hazardous waste from the drum at the time of the CEI.

17. Therefore, EPA alleges that Respondent failed to comply with 40 C.F.R. § 265.173(a).

Count II

Failure to Comply with Inspection Requirements

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

19. 40 C.F.R. § 265.15 provides that the owner or operator must record inspections for malfunctions and deterioration, operator errors, and discharges, in an inspection log or summary, and that at a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repair or other remedial actions. 40 C.F.R. § 265.15(c) requires further that the owner or operator remedy any deterioration which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard.

20. During the CEIs, EPA inspectors observed that many of the cracks in the secondary containment had not been noted in the inspection log and they allege that they had not been remedied.

21. Therefore, EPA alleges that Respondent failed to comply with 40 C.F.R. § 265.15.

Count III

Failure to Comply with Secondary Containment Requirements

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. §§265.193(e)(1)(I), (ii) and (iii) provide that external liner systems which function as secondary containment must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary, designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration, and must be free of cracks or gaps.

24. During the CEIs, EPA inspectors allege they observed that the secondary containment pad was not sufficient to contain the capacity of the largest tank within its boundary and the containment pad was not free of cracks or gaps. EPA also alleges that Respondent failed to demonstrate that the external liner system was designed or operated to prevent run-on or infiltration of precipitation as required.

25. Therefore, EPA alleges that Respondent failed to comply with 40 C.F.R. §§ 265.193(e)(1)(I), (ii) and (iii) .

D. COMPLIANCE TASKS

30. Secondary containment. Within one hundred eighty (180) days of the Effective Date of this CA/FO, Respondent shall install secondary containment for Tanks T-1, 2, 5 and 6 in accordance with the plans and calculations attached hereto as Exhibit 1 in order to meet the capacity requirements provided in Exhibit 1 and comply with the requirements of 40 CFR § 265.193. Respondent also shall, to the extent necessary, be authorized to provide for alternative secondary containment for Tanks T-1, 2, 5 and 6 on a temporary basis during construction and inspection of the new secondary containment.

31. Double-walled containment. Within one hundred eighty (180) days of the Effective Date of this CA/FO, Respondent shall replace H-18 with a double-walled tank that complies with the requirements of 40 CFR §§ 265.192 and 265.193. As the replacement of H-18 with the new tank would result in an increase in the design storage capacity of the facility, Respondent shall operate the new tank as a feed hopper to the reactivation furnace, and not as a storage tank, until such time as it either (I) submits a revised Part A permit application to EPA pursuant to 40 CFR § 270.72(a)(2), in which case EPA hereby acknowledges that the replacement of H-18 with the new tank, and the corresponding increase in the facility's design storage capacity, is necessary to comply with a Federal requirement as provided in 40 CFR § 270.72(a)(2)(ii), or (ii) obtains an EPA permit authorizing the use of the new tank for storage.

32. Inspection procedure. Within forty-five (45) days of the Effective Date of this CA/FO, Respondent shall submit a copy of a procedure which identifies with specificity the components of ancillary equipment to be inspected as provided in 40 C.F.R. §§ 265.193(f) and 265.15(b)(4). These components shall include the elements of the piping and other equipment involved in the movement of liquid from H-1 and H-2 to Tanks T1, 2, 5 and 6 and from Tanks T1, 2, 5 and 6 to H-18. The procedure will be part of the facility schedule for inspections as set forth in 40 CFR § 265.15(b), but will not be part of the inspection log as set forth in § 265.15(d) (i.e., the record of inspections will only identify that ancillary equipment outside of containment has been inspected, and will not identify the individual components of such equipment).

33. In the event that EPA disapproves of any actions taken by Respondent pursuant to Paragraphs 30, 31 or 32 above, EPA shall provide timely written comments to Respondent describing the reasons for such disapproval, and the regulatory basis therefor. Within thirty (30) calendar days of receipt of EPA's comments, or such other reasonable time frame as may be provided in EPA's comments, Respondent shall submit for EPA review and approval any revisions that may be necessary to comply with the applicable regulations in response to the comments received. If the resubmittal is not satisfactory to EPA on the basis that it does not comply with the applicable regulation and violates a requirement of this CA/FO, then Respondent will be deemed to be in violation of this CA/FO, provided, however, that any allegation of violation made by EPA which is not specifically set forth in this CA/FO shall not be deemed to be a violation of this CA/FO and any election by EPA to pursue a claim of violation for such new allegation shall not be subject to the provisions, admissions or waivers contained in this CA/FO. EPA in its sole discretion may allow Respondent more time to correct resubmitted information.

E. CIVIL PENALTY

34. Section 3008(g) of RCRA, 42 U.S.C. § 6928(g), as adjusted by the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 and the Debt Collection Improvement Act of 1996, 31 U.S.C. § 3701, (see 61 Fed. Reg. 69360 (Dec. 31, 1996)), authorizes a civil penalty of up to TWENTY-SEVEN THOUSAND, FIVE HUNDRED DOLLARS ($27,500) per day for violations of Subtitle C of RCRA, 42 U.S.C. § 6921 et seq. occurring on or after January 31, 1997 but before March 16, 2004, and a penalty of up to THIRTY-TWO THOUSAND, FIVE HUNDRED DOLLARS ($32,500) per day for violations of Subtitle C of RCRA, 42 U.S.C. § 6921 et seq., occurring after March 15, 2004. Based upon the facts alleged herein and upon those factors which the Complainant must consider pursuant to Section 3008(a)(3) of RCRA, 42 U.S.C. §6928(a)(3), and the June 2003 RCRA Civil Penalty Policy, and the EPA Supplemental Environmental Project Policy ("SEP Policy"), the Complainant proposes that the Respondent be assessed and Respondent agrees to pay **TWENTY-SEVEN THOUSAND FIFTY-NINE DOLLARS ($27,059)** as the civil penalty for the violations alleged herein. The proposed penalties were calculated in accordance with the June 2003 RCRA Civil Penalty Policy, as adjusted by the Debt Collection Improvement Act.

F. ADMISSIONS AND WAIVERS

35. Respondent neither admits nor denies any of the allegations, alleged violations, statements of fact or conclusions of law that are set forth in this CA/FO. Respondents's participation in this CA/FO is not and shall not be considered an admission of liability or a waiver of any defenses, and shall not be admissible in evidence against Respondent in any judicial or administrative proceeding other than a proceeding by EPA or the United States for the purpose of enforcing this CA/FO. Subject to the foregoing, Respondent admits and agrees for the sole purpose of entering into this CA/FO that the EPA Administrator and Region IX Administrator have jurisdiction and authority over the subject matter of the action commenced in this CA/FO and over Respondent pursuant to Section 3008 of RCRA, 42 U.S.C. §6928, and 40 C.F.R. §§22.4 and 22.37. Further, for the sole purposes of this proceeding, Respondent admits to the jurisdictional allegations of facts and law set forth in Section B of this CA/FO. Respondent consents to and agrees not to contest EPA's jurisdiction and authority to enter into and issue this CA/FO and to enforce its terms. Further, subject to the limitation set forth in Paragraph 33 above, Respondent will not contest EPA's jurisdiction and authority to compel compliance with this CA/FO in any enforcement proceedings, either administrative or judicial, or to impose sanctions for violations of this CA/FO.

36. Except for the limited purposes set forth in Paragraph 35 above, neither this CA/FO, nor Respondent's execution of this CA/FO, nor any actions taken by Respondent in accordance with this CA/FO constitute an admission or a denial of any alleged violations or allegations of fact or law set forth in this CA/FO. For the sole purpose of entering into this CA/FO to resolve the matters addressed herein, Respondent hereby agrees not to contest the allegations set forth in this CA/FO, waives any rights Respondent may have to a hearing on this CA/FO, including without limitation a hearing on this CA/FO pursuant to Section 3008(b) of RCRA, 42 U.S.C. §6928(b) and hereby consents to the issuance of this CA/FO without adjudication. In addition, Respondent hereby waives any rights Respondent may have to appeal the Final Order attached to this Consent Agreement and made part of this CA/FO.

G. PARTIES BOUND

37. This CA/FO shall apply to and be binding upon Respondent and its agents, successors and assigns and upon all persons acting under or for Respondent, until such time as the civil penalty required under Section E has been paid and the compliance tasks required under Section D have been fully completed. At such time as those matters are concluded, this CA/FO shall terminate and shall constitute full settlement of the violations alleged herein.

38. No change in ownership or corporate, partnership or legal status relating to the Facility will in any way alter Respondent's obligations and responsibilities under this CA/FO.

39. Respondent shall give notice of this CA/FO to any successor in interest prior to transfer of ownership or operation of the Facility, and shall notify EPA within seven (7) days prior to such transfer, until the termination of this CA/FO.

40. The undersigned representative of each party hereby certifies s/he is fully authorized by such party to enter into this CA/FO, to execute and to legally bind the party to it.

H. PAYMENT OF CIVIL PENALTY

41. Respondent consents to the assessment of and agrees to pay a civil penalty of **TWENTY-SEVEN THOUSAND FIFTY-NINE DOLLARS ($27,059)** in full settlement of the civil penalty claims made in the CA/FO.

42. Respondent shall submit payment of the **$27,059** civil penalty within thirty (30) calendar days of the Effective Date of this CA/FO. The Effective Date of this CA/FO is the date EPA files the Final Order with the Regional Hearing Clerk. EPA will provide prompt notice of the Effective Date to Respondent. 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. Payment shall be made by check payable to the U.S. Environmental Protection Agency and sent to

Mellon Bank
U.S. Environmental Protection Agency - Region IX
P.O. Box 360863M
Pittsburgh, PA 15251

At the time payment is so made, a copy of the check shall be sent to:

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

and

Kandice Bellamy (WST-3)
Waste Management Division
U.S. Environmental Protection Agency - Region IX
75 Hawthorne Street
San Francisco, CA 94105

43. 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 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 further will be liable for stipulated penalties as set forth below for any payment not received by its due date.

I. DELAY IN PERFORMANCE/STIPULATED PENALTIES

44. In the event Respondent fails to meet any requirement set forth in this CA/FO, Respondent shall pay stipulated penalties as set forth below. Compliance by Respondent shall include completion of each activity under this CA/FO in a manner reasonably acceptable to EPA and within the specified time schedules in and approved under this CA/FO.

45. For failure to submit a payment to EPA by the time required in this CA/FO: **FIVE HUNDRED DOLLARS ($500)** per day for first to thirtieth day of delay, and **FIFTEEN HUNDRED DOLLARS ($1,500)** per day for each day of delay thereafter.

46. For failure to submit a copy of the inspection procedure to EPA by the time required in this CA/FO: **FIVE HUNDRED DOLLARS ($500)** per day for first to thirtieth day of delay, and **FIFTEEN HUNDRED DOLLARS ($1,500)** per day for each day of delay thereafter.

47. For failure to implement the compliance tasks in accordance with the schedule in this CA/FO: **FIVE HUNDRED DOLLARS ($500)** per day for first to thirtieth day of delay, and **FIFTEEN HUNDRED DOLLARS ($1,500)** per day for each day of delay thereafter.

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

49. All stipulated penalties owed to EPA under this Section shall be due within thirty (30) days of receipt of a notification of noncompliance. Such notification 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-day period.

50. Payment shall be made by check payable to U.S. Environmental Protection Agency, as described above in Paragraph 42. At the time payment is made, a copy of the check shall be sent to Danielle Carr and Kandice Bellamy as described above in Paragraph 42.

51. 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.

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

53. 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's failure to comply with any of the requirements of this CA/FO.

J. RESERVATION OF RIGHTS

54. Other than Respondent's liability for civil penalties for the alleged violations of RCRA which are the subject matter of this CA/FO, which liability is resolved under this CA/FO, EPA hereby reserves (I) all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, including the right to require that Respondent perform tasks in addition to those required by this CA/FO, and (ii) all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this CA/FO, including without limitation, the assessment of penalties under Section 3008(c) of RCRA, 42 U.S.C. §6928(c). This CA/FO 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, except as to those alleged violations which are the subject matter of this CA/FO, 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.

55. Respondent reserves all rights that it may have against any other person under all federal, state and local laws.

56. Compliance by Respondent with the terms of this CA/FO shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, State or federal laws and regulations.

57. The entry of this CA/FO and Respondent'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's liability for federal civil penalties for the specific alleged violations and facts as set forth in this CA/FO.

58. This CA/FO is not intended to be nor shall it be construed as a permit. This CA/FO does not relieve Respondent of any obligation to obtain and comply with any local, State, Tribal or federal permits.

K. OTHER CLAIMS

59. Except as provided in Paragraph 54, nothing in this CA/FO 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.

L. MISCELLANEOUS

60. This CA/FO may be amended or modified only by written agreement executed by both EPA and Respondent.

61. The headings in this CA/FO are for convenience of reference only and shall not affect interpretation of this CA/FO.

62. The Effective Date of this CA/FO is the date the Final Order is filed with the EPA Regional Hearing Clerk.

IT IS SO AGREED.

SIEMENS WATER TECHNOLOGIES CORP.

By, _____

6/15/06
Date

(Name, title) DIRECTOR PLANT OPERATIONS

Date

Jeff Scott
Director
Waste Management Division
United States Environmental Protection Agency,
Region IX

FINAL ORDER

IT IS HEREBY ORDERED that this Consent Agreement and Final Order ("CA/FO") (U.S. EPA Docket No. RCRA-09-2006-) be entered and that Respondent complete all tasks required under this CA/FO (including, if applicable, the payment of the additional civil penalty which may become due under Section I of this CA/FO), and pay a civil penalty of **TWENTY-SEVEN THOUSAND FIFTY-NINE DOLLARS ($27,059)** by check made out to U.S. Environmental Protection Agency, and sent to Mellon Bank, P.O. Box 360863M, Pittsburgh, PA, 15251, within thirty (30) days after the Effective Date of this Consent Agreement and Final Order. A copy of the check shall be sent to the EPA Region IX address specified in Section H of this Consent Agreement and Final Order within such 30-day period.

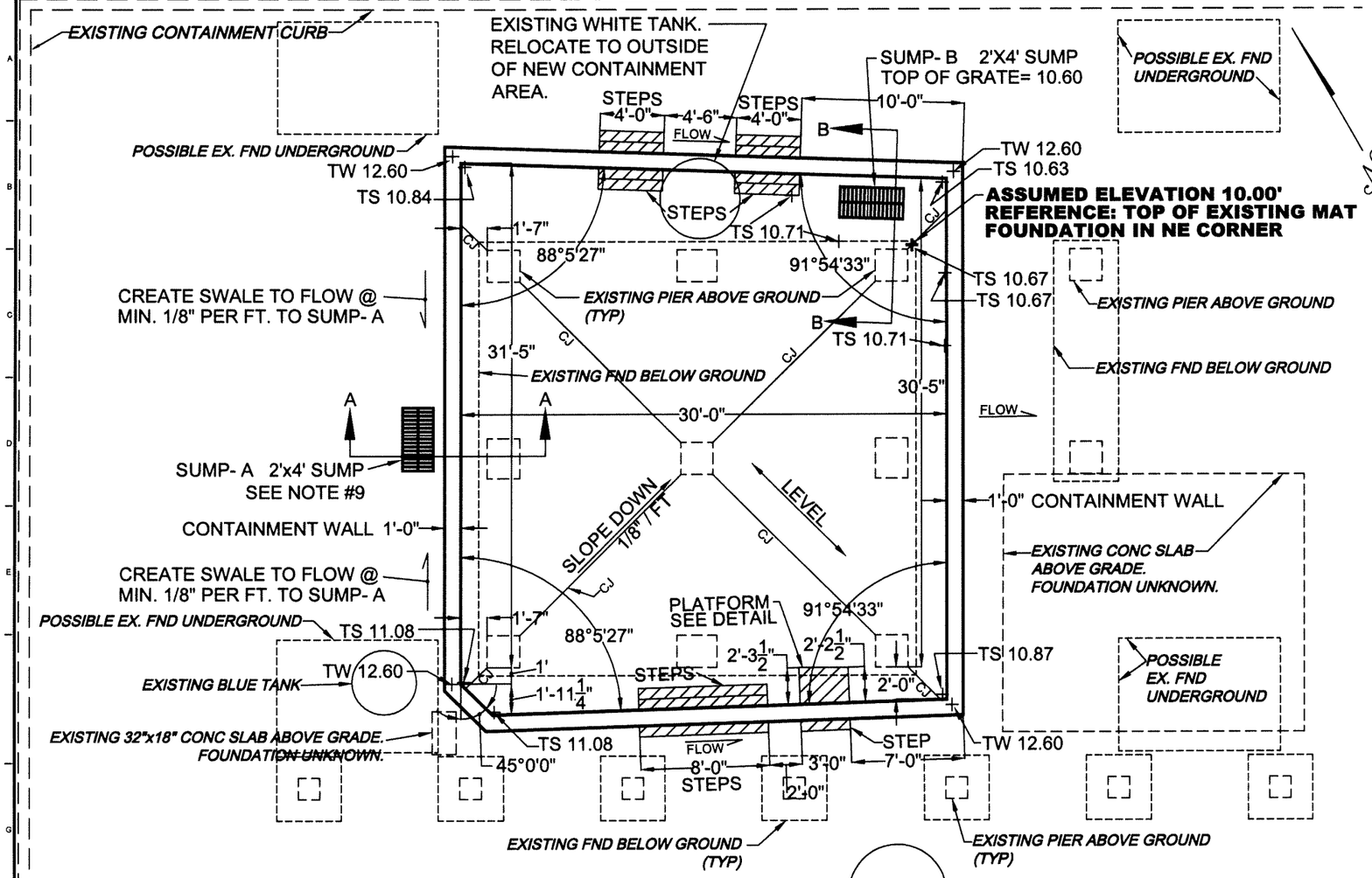
This Final Order shall be effective upon filing with the Regional Hearing Clerk.

Date

Joanna Delucia
Regional Judicial Officer
United States Environmental Protection Agency,
Region IX

Exhibit 1

T-Tank Containment Volume Calculations (2 Pages) Dated June 13, 2006
and
Containment Pad Plan (1 Page) Revision Dated May 23, 2006



CONTAINMENT PAD PLAN

SCALE: 1/4"= 1'

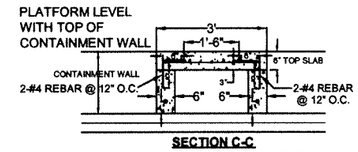
GRAPHIC SCALE 4' 2' 0 4' 8'

NOTES:

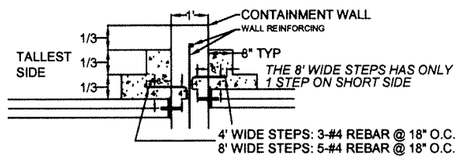
1. A FIELD SURVEY WAS NOT PERFORMED FOR THIS WORK. THE EXISTING CONDITIONS INFORMATION SHOWN HEREON WAS OBTAINED FROM 2 SETS OF PLANS AND SITE PHOTOS PROVIDED BY THE OWNER. THE 2 SETS OF PLANS ARE:
   1) THE FOUNDATION LAYOUT PLANS TITLED "WESTATES CARBON, LOS ANGELES, CA 90040" FOR PROJECT IN PARKER, AZ, PREPARED BY GMG ASSOCIATES, DATED 3-17-92 WITH LATEST REVISION "B" 3-23-92, DRAWING NO. D 9201-401 AND D 9201-402.
   2) PLANS TITLED "USFILTER WESTATES SURVEY OF CONTAINMENT VOLUME" PREPARED BY LEMME ENGINEERING INC., DATED 9-5-02 SHEETS 1&2 OF 5.
2. THE CONTRACTOR IS TO REVIEW THE SITE AND IT'S CONDITION BEFORE PROVIDING A PRICE AND AGAIN BEFORE BEGINNING CONSTRUCTION.
3. THE CONTRACTOR IS TO MOVE/RELOCATE ALL ITEMS AS NECESSARY TO DO THIS WORK. THE OWNER WILL INSTRUCT THE CONTRACTOR AS TO WHICH ITEMS HE WILL BE RESPONSIBLE FOR MOVING/RELOCATING DURING CONSTRUCTION AND WHICH ITEMS ARE TO BE MOVED BACK INTO THE CONTAINMENT AREA AFTER CONSTRUCTION.
4. THE CONTRACTOR IS TO REMOVE THE EXISTING CONCRETE CONTAINMENT PAD IN ITS ENTIRETY FROM THE AREA WHERE THE NEW PAD IS TO BE CONSTRUCTED. CONTRACTOR IS NOT TO DAMAGE THE EXISTING PIERS AND UNDERGROUND FOUNDATIONS.
5. THE CONTRACTOR IS TO UNCOVER THE EXISTING MAT FOUNDATION AND HAVE AN INDEPENDENT TESTING FIRM EXPERIENCED IN CONCRETE TESTING INSPECT THE EXISTING MAT FOUNDATION TO VERIFY ITS CONDITION. THE TESTING FIRM IS TO PROVIDE TO THE OWNER A REPORT SHOWING THAT THE PAD CONDITION IS NOT DAMAGED PRIOR TO THE CONTRACTOR PROCEEDING WITH CONSTRUCTION.
6. SUMP-A&B: USE NEENAH FOUNDRY FRAME & GRATE #R-1879-B8G 24"X48" LIGHT DUTY. GRATE COMES IN 2 PARTS
7. ALL CONSTRUCTION JOINTS ARE TO CONTAIN WATERSTOPS, EXPANSION JOINT MATERIAL AND CAULK.
8. ON BOTH SIDES OF THE CONTAINMENT WALL WHERE THE CONCRETE PAD MEETS THE WALL USE WATERSTOPS, EXPANSION JOINT MATERIAL AND CAULK.
9. SUMP-A TOP OF GRATE ELEVATION IS TO BE DETERMINED IN THE FIELD BY CREATING A SWALE ALONG THE CONTAINMENT WALL AT A MINIMUM SLOPE OF 1/8" PER FOOT FROM THE SW AND NW CORNER OF THE CONTAINMENT WALL SO THAT THE WATER DRAINS TO SUMP- A.

LEGEND

TW 12.60 = TOP OF WALL ELEVATION
TS 10.67 = TOP OF SLAB ELEVATION
CJ = CONSTRUCTION JOINT



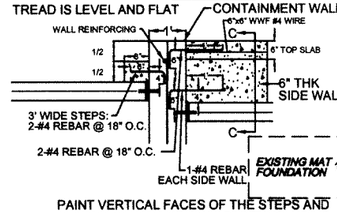
SECTION C-C



PAINT VERTICAL FACES OF THE STEPS WITH YELLOW PAINT INCLUDING THE WALL WITHIN THE LIMITS OF THE STEPS.

4' WIDE AND 8' WIDE STEP DETAIL

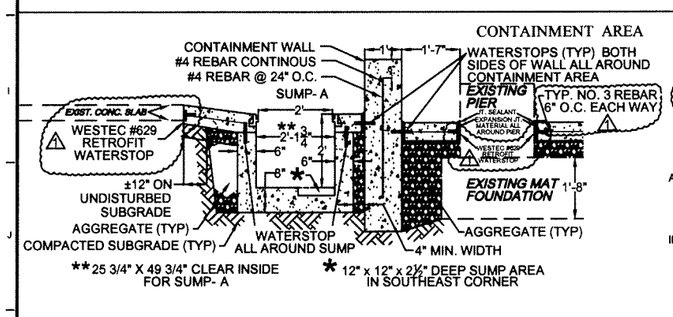
NTS



PAINT VERTICAL FACES OF THE STEPS AND PLATFORM WITH YELLOW PAINT INCLUDING THE WALL WITHIN THE LIMITS OF THE STEPS.

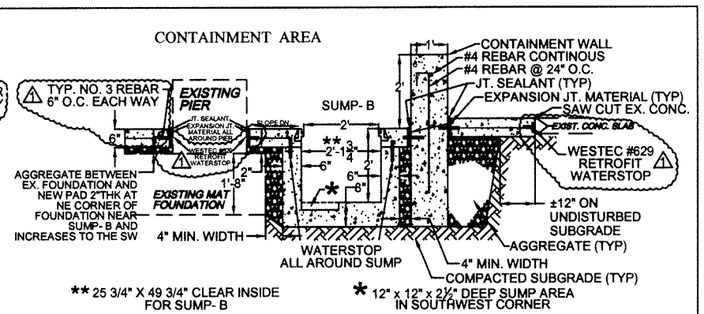
3' WIDE STEP & PLATFORM DETAIL

NTS

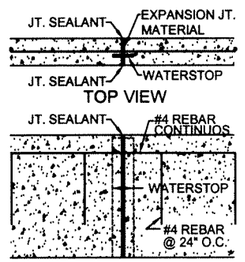


SUMP- A SECTION A-A

SCALE: HORZ & VERT 1/2"=1'-0"

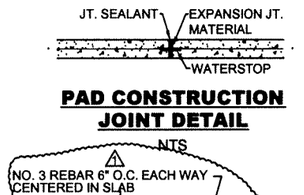


SUMP- B SECTION B-B



WALL CONSTRUCTION JOINT DETAIL

NTS



PAD CONSTRUCTION JOINT DETAIL

CONCRETE PAD DETAIL

NTS

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NO	DWN	CK'D	APP	REVISIONS	DATE
1	DMO	JBE	KEM	Changed reinforcing in slab & waterstop adjacent existing slab and existing piers	5/23/06

CBE CHAVOND-BARRY ENGINEERING CORP.
NJ Certificate of Authorization Number: 24GA27984700
400 Route 518 • P.O. Box 205 • Blawenburg, New Jersey 08504

U.S. FILTER WESTATES PLANT
2523 MUTAHAR STREET, PARKER, AZ 85344
CONTAINMENT PAD REPLACEMENT

T-TANK CONTAINMENT PAD PLAN

DRAWN	DATE	CHECKED	DATE	APPROVED	DATE
DMO	02/15/06	JBE	02/15/06	KEM	02/15/06

SCALE	DWG. NO.	REV.
1/4"=1'-0"	1541-C-001	1

REF. FILE:
DATE:

T-TANK CONTAINMENT VOLUME CALCULATIONS
US FILTER WESTATES CARBON
PARKER, AZ

CONTAINMENT VOLUME BELOW TOP OF PIERS					
	ELEV (FT)	DIFF ELEV (FT)	SURFACE AREA (SF)	AVE AREA (SF)	GROSS VOLUME (CF)
TOP OF GRATE	10.60		8.00		
		0.07		20.49	1.43
	10.67		32.97		
		0.04		45.39	1.82
	10.71		57.81		
		0.13		246.37	32.03
	10.84		434.92		
		0.03		486.21	14.59
	10.87		537.50		
		0.21		769.04	161.50
	11.08		1,000.57		
		0.92		1,000.57	920.52
TOP OF PIER	12.00		1,000.57		
				GROSS VOLUME TOTAL =	1,131.89
				LESS PIER VOLUME =	45.10
				LESS STEP AND PLATFORM WALL VOLUME =	21.63
				NET VOLUME TO TOP OF PIERS =	**1,065.16**

PIER VOLUME						
	TOP ELEV	AVERAGE BOTTOM ELEV	AVERAGE HEIGHT (FT)	SIZE (FTxFT)	SURFACE AREA (SF)	VOLUME (CF)
PIER #1	12.00	10.69	1.31	2 X 2	4.00	5.24
PIER #2	12.00	10.78	1.22	2 X 2.5	5.00	6.10
PIER #3	12.00	10.78	1.22	2 X 2.5	5.00	6.10
PIER #4	12.00	10.87	1.13	2 X 2	4.00	4.52
PIER #5	12.00	10.87	1.13	2 X 2	4.00	4.52
PIER #6	12.00	10.87	1.13	2 X 2	4.00	4.52
PIER #7	12.00	10.97	1.03	2 X 2.5	5.00	5.15
PIER #8	12.00	10.97	1.03	2 X 2.5	5.00	5.15
PIER #9	12.00	11.05	0.95	2 X 2	4.00	3.80
			TOTAL FOR PIERS=		**40.00**	**45.10**

STEP VOLUMES OCCUR BELOW TOP OF PIERS
PEDISTAL SIDE WALLS VOLUMES OCCUR ABOVE AND BELOW TOP OF PIERS
PEDISTAL PLATFORM ONY OCCURS ABOVE TOP OF PIER

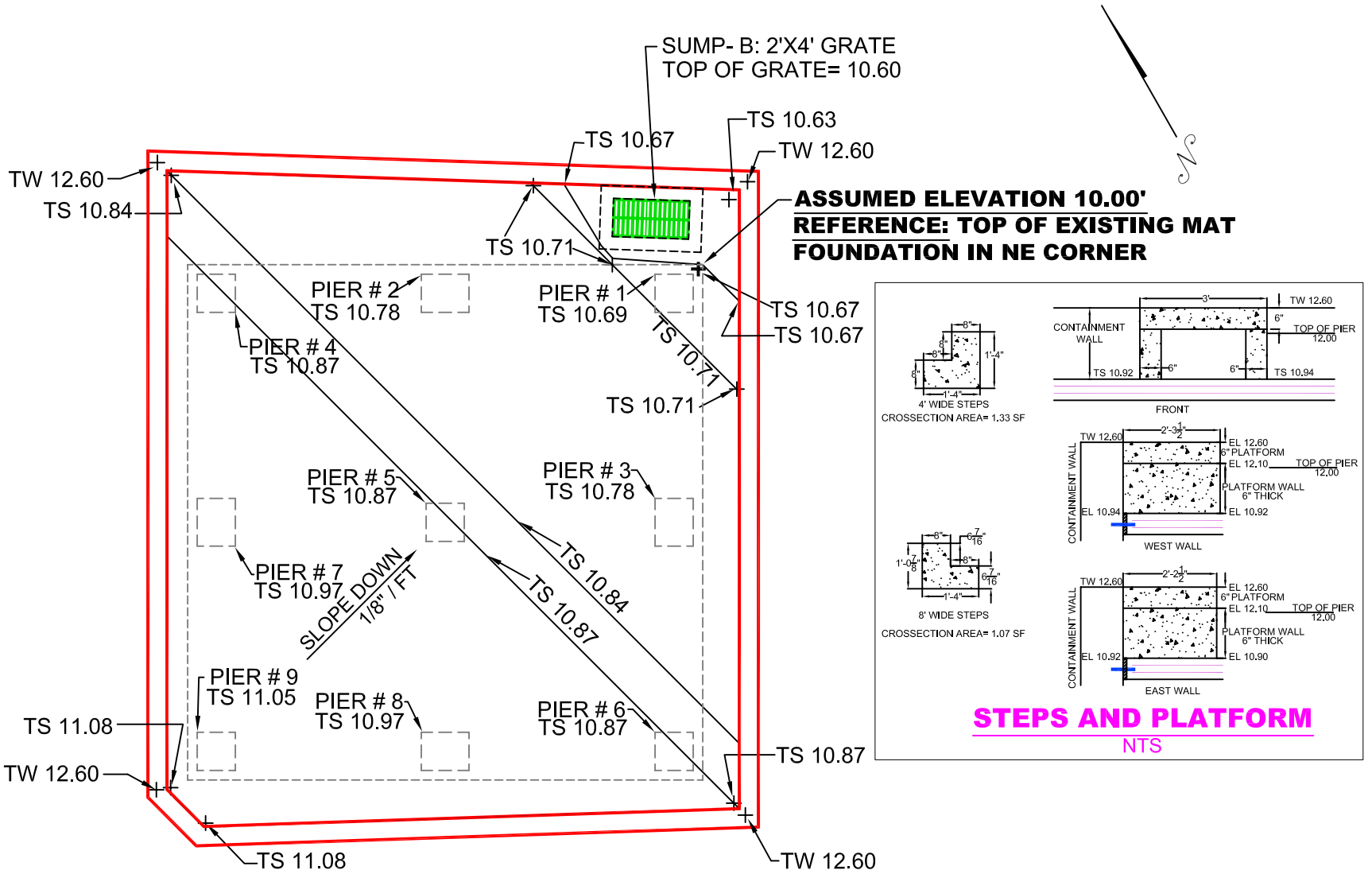
4' STEP VOLUME =	1.33 SF X 4 FT X 2 =	10.64 CF
8' STEP VOLUME =	1.07 SF X 8 FT =	8.56 CF
EAST PLATFORM WALL BELOW TOP OF PIER	.= 2.21' X 1.09' X .5' =	1.20 CF
WEST PLATFORM WALL BELOW TOP OF PIER	.= 2.29' X 1.07' X .5' =	1.23 CF
TOTAL STEP AND PLATFORM WALL VOLUME BELOW TOP OF PIERS =		**21.63 CF**
PLATFORM WALL AREA ABOVE TOP OF PIER =	(2.21'+2.29') X .5' =	**2.25 SF**
PLATFORM AREA ABOVE TOP OF PIER =	(2.21'+2.29') / 2 X 3' =	**6.75 SF**

NOTES:

1. FOR EASE OF CALCULATION AND BEING CONSERVATIVE, ASSUME PIER SURFACE AREA REMAINS CONSTANT TO ACCOUNT FOR THE SUPPORT STEEL
2. RESULTANT SURFACE AREA TAKING OUT PIER SURFACE AREA= 1,000.57 SF - 40 SF = 960.57 SF
3. FROM ELEV 12.00 TO ELEV 12.10 PLATFORM WALL SURFACE AREA= 2.25 SF
4. RESULTANT SURFACE AREA FROM ELEV 12.00 TO ELEV 12.10= 960.57 SF - 2.25 SF = 958.32 SF
5. FROM ELEV 12.10 TO ELEV 12.60 PLATFORM SURFACE AREA= 6.75 SF
5. RESULTANT SURFACE AREA FROM ELEV 12.10 TO ELEV 12.60= 958.32 SF - 6.75 SF = 951.57 SF

CONTAINMENT VOLUME ABOVE TOP OF PIERS								
	ELEV (FT)	DIFF ELEV (FT)	SURFACE AREA (SF)	AVE AREA (SF)	VOLUME (CF)	CUMULATIVE VOLUME (CF)	CUMULATIVE VOLUME (GAL)	
TOP OF PIER	12.00		958.32			1,065	7,967	
		0.10		958.32	95.83			
	12.10		958.32			1,161	8,684	
	12.10		951.57			1,161	8,684	
		0.17		951.57	161.77			
	12.27		951.57			1,323	9,894	
		0.33		951.57	314.02			
TOP OF WALL	12.60		951.57			1,637	12,243	
						TOTAL CONTAINMENT VOLUME TO TOP OF WALL =	**12,243**	**GALLONS**

T-TANK CONTAINMENT VOLUME REQUIRED			
LARGEST RCRA TANK VOLUME=		8,319	GALLONS
25-Year, 24 Hour Rain Event (PARKER, AZ) = 2.45 inches (Per ASU Office of Climatology)			
GROSS SURFACE AREA (SF)	RAIN DEPTH (INCHES)	VOL (CF)	VOL (GAL)
1,000.57	2.45	204	1,528
	TANK VOLUME=	8,319	GALLONS
	RAINFALL VOLUME=	1,528	GALLONS
	TOTAL REQUIRED VOLUME=	**9,847**	**GALLONS**



CONTAINMENT VOLUME CALCULATION PLAN

SCALE: 1/8"=1'

GRAPHIC SCALE

8’ 4’ 0 8’ 16’