MASTER FILE COPY
Scope 97M015 Classification 8351
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TestAmerica
INCORPORATED

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Rd.
Green Bay, WI 53407

09/08/2000

Job Number: 00.09414

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.

Project Description: Camu Landfill Const; Freeport/#97M015

Sample Number	Sample Description	Date Taken	Date Received
595344	WTZ-1 (N104+40,E105+90)	08/25/2000	08/28/2000
595345	WTZ-2 (N104+40,E106+75)	08/25/2000	08/28/2000
595346	WTZ-3 (N104+35,E105+45)	08/25/2000	08/28/2000
595347	WTZ-4 (N104+81,E106+30)	08/25/2000	08/28/2000
595348	WTZ-5 (N104+46,E107+13)	08/25/2000	08/28/2000

wetland 2

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:

Project Manager

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Rd.
Green Bay, WI 53407

09/08/2000

Sample No. : 595344

Job No.: 00.09414

Sample Description: WTZ-1 (N104+40,E105+90)
Camu Landfill Const; Freeport/#97M015

Date Taken: 08/25/2000
Time Taken: 10:00

Date Received: 08/28/2000
Time Received: 12:40

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	70.9		%	0.1	08/29/2000	kmt	SM 2540
Cadmium, ICP	4.1	S	mg/kg dw	0.71	09/06/2000	out	SW 6010B

S : Parameter analysis was sub-contracted to another TestAmerica location.

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TestAmerica
INCORPORATED

ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Rd.
Green Bay, WI 53407

09/08/2000

Sample No. : 595345

Job No.: 00.09414

Sample Description: WTZ-2 (N104+40,E106+75)
Camu Landfill Const; Freeport/#97M015

Date Taken: 08/25/2000
Time Taken: 10:05

Date Received: 08/28/2000
Time Received: 12:40

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	75.5		%	0.1	08/29/2000	kmt	SM 2540
Cadmium, ICP	2.6	S	mg/kg dw	0.66	09/06/2000	out	SW 6010B

S : Parameter analysis was sub-contracted to another TestAmerica location.

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TestAmerica
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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Rd.
Green Bay, WI 53407

09/08/2000

Sample No. : 595346

Job No.: 00.09414

Sample Description: WTZ-3 (N104+35,E105+45)
Camu Landfill Const; Freeport/#97M015

Date Taken: 08/25/2000
Time Taken: 11:00

Date Received: 08/28/2000
Time Received: 12:40

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	70.9		%	0.1	08/29/2000	kmt	SM 2540
Cadmium, ICP	3.1	S	mg/kg dw	0.71	09/06/2000	out	SW 6010B

S : Parameter analysis was sub-contracted to another TestAmerica location.

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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Rd.
Green Bay, WI 53407

09/08/2000

Sample No. : 595347

Job No.: 00.09414

Sample Description: WTZ-4 (N104+81,E106+30)
Camu Landfill Const; Freeport/#97M015

Date Taken: 08/25/2000
Time Taken: 11:05

Date Received: 08/28/2000
Time Received: 12:40

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	62.1		%	0.1	08/29/2000	kmt	SM 2540
Cadmium, ICP	14	S	mg/kg dw	0.81	09/06/2000	out	SW 6010B

S : Parameter analysis was sub-contracted to another TestAmerica location.

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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Rd.
Green Bay, WI 53407

09/08/2000

Sample No. : 595348

Job No.: 00.09414

Sample Description: WTZ-5 (N104+46,E107+13)
Camu Landfill Const; Freeport/#97M015

Date Taken: 08/25/2000
Time Taken: 11:10

Date Received: 08/28/2000
Time Received: 12:40

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	47.9		%	0.1	08/29/2000	kmt	SM 2540
Cadmium, ICP	3,860	S	mg/kg dw	1.0	09/06/2000	out	SW 6010B

S : Parameter analysis was sub-contracted to another TestAmerica location.

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KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
mg/L	:	Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	:	Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	:	Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	:	Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	:	These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	:	These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	:	Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	:	Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	:	Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	:	Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	:	Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

(1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.

(2) ASTM "American Society for Testing Materials"

(3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.

(4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.

(5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.

(6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.

(7) See "Methods for the Determination of Metals in Environmental Samples", Supplement I EPA-600/R-94/111, May 1994.

(8) See "Standard Methods for the Examination of Water and Wastewater", 18th Ed., APHA, 1992.

(9) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986, Including Updates I and II.

(10) This method is from the 2nd Edition of "Test Methods for Evaluating Solid Waste", USEPA SW-846. It has been dropped from the 3rd Edition, 1986.

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TestAmerica INCORPORATED

Bartlett Division
850 West Bartlett Road
Bartlett, IL 60103

Phone: 630-289-3100
Fax: 630-289-5445

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: MODERN PLATING CORP. Client #: 97M015

Address: 701 S. HANCOCK, ~~FREEPORT, IL~~

City/State/Zip Code: FREEPORT, IL 62704

Project Manager: RON MEISTER

Telephone Number: (920) 497-2500 Fax: (920) 497-8516

Sampler Name: (Print Name) BRIAN STANUL

Sampler Signature: Brian Stanul

Project Name: CAMU LANDFILL CONSTRUCTION

Project #: 97M015

Site/Location ID: FREEPORT State: IL

Report To: RON MEISTER

Invoice To: FOTH & VAN DYKE

Quote #: _____ PO#: _____

TAT
___ Standard
X Rush (surcharges may apply)

Date Needed: _____

Fax Results: (Y) N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: CADMIUM	QC Deliverables	REMARKS
WT2-1 (N104+40, E105+90)	8/25/00	10:60	G		S						1		X		
WT2-2 (N104+40, E106+75)	↓	10:05	↓		↓						1		X		
WT2-3 (N104+35, E105+45)		11:00									1		X		
WT2-4 (N104+81, E106+30)		11:05									1		X		
WT2-5 (N104+46, E107+13)	↓	11:10	↓		↓						1		X		

QC Deliverables
___ None
___ Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

Special Instructions:

Relinquished By: Brian Stanul	Date: 8/25/00	Time: 10:25	Received By: Paul C. Hoe	Date: 8/28/00	Time: 10:25
Relinquished By: Paul C. Hoe	Date: 8/28/00	Time: 10:50	Received By: BR Johnson	Date: 8-29-00	Time: 10 ~~45~~
Relinquished By: BR Johnson	Date: 8/29/00	Time: 12:40	Received By: [illegible]	Date: 8/30/00	Time: 0:10

LABORATORY COMMENTS:
Init Lab Temp: 2.3
Rec Lab Temp: All samples Rec'd @ 18°C
Custody Seals: Y N N/A
Bottles Supplied by TestAmerica: Y N
Method of Shipment:

25

R002160

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Scope 97M015 Classification 8351
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TestAmerica
INCORPORATED

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

09/01/2000

Job Number: 00.09351

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.

Project Description: Proj. #97M015

Sample Number	Sample Description	Date Taken	Date Received
595085	Lagoon No. 3 Sludge	08/24/2000	08/25/2000
595086	WT3-1 (N107+25,E108+20)	08/24/2000	08/25/2000
595087	WT3-2 (N107+00,E108+25)	08/24/2000	08/25/2000
595088	WT3-3 (N106+82,E107+77)	08/24/2000	08/25/2000
595089	WT3-4 (N106+50,E108+25)	08/24/2000	08/25/2000
595090	WT3-5 (N106+67,E108+68)	08/24/2000	08/25/2000
595091	Lagoon No. 3 Sludge-2	08/25/2000	08/25/2000
595092	Lagoon No. 3 Sludge-3	08/25/2000	08/25/2000

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:

Project Manager

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

09/01/2000

Sample No. : 595086

Job No.: 00.09351

Sample Description: WT3-1 (N107+25,E108+20)
Proj. #97M015

Date Taken: 08/24/2000
Time Taken: 09:20

Date Received: 08/25/2000
Time Received: 14:05

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	72		%	0.1	08/26/2000	out	SM 2540
Cadmium, ICP	1.4		mg/kg dw	0.69	08/28/2000	out	SW 6010B

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TestAmerica
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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

09/01/2000

Sample No. : 595087

Job No.: 00.09351

Sample Description: WT3-2 (N107+00,E108+25)
Proj. #97M015

Date Taken: 08/24/2000
Time Taken: 09:25

Date Received: 08/25/2000
Time Received: 14:05

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	68		%	0.1	08/26/2000	out	SM 2540
Cadmium, ICP	0.87		mg/kg dw	0.74	08/28/2000	out	SW 6010B

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

TestAmerica
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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

09/01/2000

Sample No. : 595088

Job No.: 00.09351

Sample Description: WT3-3 (N106+82,E107+77)
Proj. #97M015

Date Taken: 08/24/2000
Time Taken: 09:30

Date Received: 08/25/2000
Time Received: 14:05

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	67		%	0.1	08/26/2000	out	SM 2540
Cadmium, ICP	1.8		mg/kg dw	0.75	08/28/2000	out	SW 6010B

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

TestAmerica
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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

09/01/2000

Sample No. : 595089

Job No.: 00.09351

Sample Description: WT3-4 (N106+50,E108+25)
Proj. #97M015

Date Taken: 08/24/2000
Time Taken: 14:15

Date Received: 08/25/2000
Time Received: 14:05

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	67		%	0.1	08/26/2000	out	SM 2540
Cadmium, ICP	4.3		mg/kg dw	0.75	08/29/2000	out	SW 6010B

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

TestAmerica
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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

09/01/2000

Sample No. : 595090

Job No.: 00.09351

Sample Description: WT3-5 (N106+67,E108+68)
Proj. #97M015

Date Taken: 08/24/2000
Time Taken: 16:00

Date Received: 08/25/2000
Time Received: 14:05

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	64		%	0.1	08/26/2000	out	SM 2540
Cadmium, ICP	4.7		mg/kg dw	0.78	08/28/2000	out	SW 6010B

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

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INCORPORATED

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
mg/L	:	Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	:	Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	:	Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	:	Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	:	These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	:	These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	:	Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	:	Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	:	Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	:	Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	:	Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

(1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.

(2) ASTM "American Society for Testing Materials"

(3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.

(4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.

(5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.

(6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.

(7) See "Methods for the Determination of Metals in Environmental Samples", Supplement I EPA-600/R-94/111, May 1994.

(8) See "Standard Methods for the Examination of Water and Wastewater", 18th Ed., APHA, 1992.

(9) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986, Including Updates I and II.

(10) This method is from the 2nd Edition of "Test Methods for Evaluating Solid Waste", USEPA SW-846. It has been dropped from the 3rd Edition, 1986.

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Chain of Custody Record

TESTAMERICA INC.

☐ Asheville, NC (A) (828) 254-5169 ☒ Bartlett, IL (C) (630) 289-3100 ☐ Cedar Falls, IA (E) (319) 277-2401 ☐ Charlotte, NC (G) (704) 392-1164 ☐ Dayton, OH (I) (937) 294-6856 ☐ Lumberton, NC (K) (910) 738-6190 ☐ Nashville, TN (M) (615) 726-0177 ☐ Pontiac, MI (O) (248) 332-1940 ☐ Rockford. Il (Q) (815) 874-2171

☐ Atlanta, GA (B) (770) 368-0636 ☐ Brighton, CO (D) (303) 659-0497 ☐ Charleston, SC (F) (843) 849-6550 ☐ Columbia, SC (H) (803) 796-8989 ☐ Davenport. IA (J) (319) 323-7944 ☐ Indianapolis, IN (L) (317) 842-4261 ☐ Macon, GA (N) (912) 757-0811 ☐ Orlando, FL (P) (407) 851-2560 ☐ Watertown, WI (R) (920) 261-1660

Client: FOTH & VAN DYKE	Project No.: 97M015
Report Address: 2737 S. RIDGE RD	Invoice Address: SAME
GREEN BAY, WI 54307	
Attn: RON MEISTER	Attn:
Phone No.: (920) 497-2500	Sampled By: BRIAN STANUL
Fax No.: (920) 497-8516	P.O. No:
TURNAROUND TIME	Quote No.
☐ Standard	State Samples Collected IL
☒ Rush (surcharges may apply)	Date Needed: 8/28/00

REQUESTED PARAMETERS

Is this work being conducted for regulatory compliance monitoring? Yes___ No___

Is this work being conducted for regulatory enforcement action? Yes___ No___

Which regulations apply:
RCRA____ NPDESWastewater____
UST____ Drinking Water____
Other___ None____

Sample ID	Date	Time	Comp (C) Grab (G)	Matrix	Lab Use	% SOLIDS	CADMIUM	# and type of containers: HCl	NaOH	HNO_3	H_2SO_4	Other	None	REMARKS
LAGOON No. 3 SLUDGE	8/24/00	14:00	G	SLUDGE		X							1	
WT3-1 (N107+25, E108+20)		09:20	G	SOIL			X						1	
WT3-2 (N107+00, E108+25)		09:25					X						1	
WT3-3 (N106+82, E107+77)		09:30					X						1	
WT3-4 (N106+50, E108+25)		14:15					X						1	
WT3-5 (N106+67, E108+68)		16:00	↓	↓			X						1	
LAGOON NO. 3 SLUDGE-2	8/25/00	08:00	G	SLUDGE		X								
LAGOON NO. 3 SLUDGE-3	8/25/00	08:10	G	SLUDGE		X								

QC Deliverables: ☐ None ☐ Level 2 - Batch QC ☐ Level 3 ☐ Level 4 ☐ Other

21 Init Lab Temp

recd on ice Rec Lab Temp

COMMENTS: 12°C actual sample temp

Relinquished By: Brian Stanul	Date 8/25/00 Time 09:00	Received By: Paul E Hoxe	Date 8/25/00 Time 9:00	LAB USE ONLY:
Relinquished By: Paul E Hoxe	Date 8/25/00 Time 11:00	Received By: BR Johnson	Date 8-25-11 Time	
Relinquished By: BR Johnson	Date 8-25-11 Time	Received By: P. McGrill	Date 8/25/00 Time 1405	Custody Seal: ☐ Yes ☐ No ☑ N/A
Relinquished By:	Date Time	Received By:	Date Time	Bottles Supplied by TA: ☑ Yes ☐ No

33

R002168

R002169

TestAmerica
INCORPORATED

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Job Number: 00.13033

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of TestAmerica for analysis.

Project Description: #97M015; Modern Plating Corp/Freeport IL

Sample Number	Sample Description	Date Taken	Date Received
608350	WT3-6 (N106+10,E108+20)	11/21/2000	11/27/2000
608351	WT3-7 (N106+10,E107+75)	11/21/2000	11/27/2000
608352	WT3-8 (N106+15,E108+75)	11/21/2000	11/27/2000
608353	WT2-6 (N104+10,E105+90)	11/22/2000	11/27/2000
608354	WT2-7 (N104+20,E107+30)	11/22/2000	11/27/2000
608355	WT2-8 (N104+20,E106+60)	11/27/2000	11/27/2000

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow TestAmerica Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. TestAmerica has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:

Robert E. White

Project Manager

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

R002170

TestAmerica
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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Sample No. : 608350

Job No.: 00.13033

Sample Description: WT3-6 (N106+10,E108+20)
#97M015; Modern Plating Corp/Freeport IL

Date Taken: 11/21/2000
Time Taken: 13:45

Date Received: 11/27/2000
Time Received: 11:50

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	71.5		%	0.1	11/29/2000	kmt	SM 2540
Cadmium, ICP	2.0		mg/kg dw	0.70	11/29/2000	aks	SW 6010B

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R002171

TestAmerica INCORPORATED

ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Sample No. : 608351

Job No.: 00.13033

Sample Description: WT3-7 (N106+10,E107+75)
#97M015; Modern Plating Corp/Freeport IL

Date Taken: 11/21/2000
Time Taken: 14:00

Date Received: 11/27/2000
Time Received: 11:50

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	54.7		%	0.1	11/29/2000	kmt	SM 2540
Cadmium, ICP	130		mg/kg dw	0.91	11/29/2000	aks	SW 6010B

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R002172

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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Sample No. : 608352

Job No.: 00.13033

Sample Description: WT3-8 (N106+15,E108+75)
#97M015; Modern Plating Corp/Freeport IL

Date Taken: 11/21/2000
Time Taken: 14:20

Date Received: 11/27/2000
Time Received: 11:50

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	67.4		%	0.1	11/29/2000	kmt	SM 2540
Cadmium, ICP	28		mg/kg dw	0.74	11/29/2000	aks	SW 6010B

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R002173

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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Sample No. : 608353

Job No.: 00.13033

Sample Description: WT2-6 (N104+10,E105+90)
#97M015; Modern Plating Corp/Freeport IL

Date Taken: 11/22/2000
Time Taken: 10:25

Date Received: 11/27/2000
Time Received: 11:50

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	62.5		%	0.1	11/29/2000	kmt	SM 2540
Cadmium, ICP	120		mg/kg dw	0.80	12/01/2000	jtt	SW 6010B

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R002174

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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Sample No. : 608354

Job No.: 00.13033

Sample Description: WT2-7 (N104+20,E107+30)
#97M015; Modern Plating Corp/Freeport IL

Date Taken: 11/22/2000
Time Taken: 10:10

Date Received: 11/27/2000
Time Received: 11:50

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	71.2		%	0.1	11/29/2000	kmt	SM 2540
Cadmium, ICP	59		mg/kg dw	0.70	12/01/2000	jtt	SW 6010B

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ANALYTICAL REPORT

Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Sample No. : 608355

Job No.: 00.13033

Sample Description: WT2-8 (N104+20,E106+60)
#97M015; Modern Plating Corp/Freeport IL

Date Taken: 11/27/2000
Time Taken: 10:00

Date Received: 11/27/2000
Time Received: 11:50

Parameter	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Analytical Method
Solids, Total	70.0		%	0.1	11/29/2000	kmt	SM 2540
Cadmium, ICP	1.3		mg/kg dw	0.71	12/01/2000	jtt	SW 6010B

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Mr. Ron Meister
FOTH & VAN DYKE
2737 S. Ridge Road
P.O. Box 19012
Green Bay, WI 54307

12/01/2000

Job Number: 00.13033

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130

Project Description: #97M015; Modern Plating Corp/Freeport IL

CASE NARRATIVE

No analytical exceptions were noted outside of routine method protocols.

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

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KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
mg/L	:	Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	:	Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	:	Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	:	Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	:	These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	:	These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	:	Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	:	Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	:	Indicates analysis was performed using Atomic Absorption Spectroscopy.
GPAA	:	Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	:	Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

ASTM	"American Society for Testing Materials"
EPA	"Methods for Chemical Analysis of Water and Wastes", USEPA, EPA 600/4-79-020, Revised March 1983.
EPA	"Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", EPA 600/4-82-057, July 1982.
SDWA	"Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water", USEPA, September 1986.
SDWA	"Methods for the Determination of Metals in Environmental Samples", Supplement I USEPA, EPA-600/R-94/111, May 1994.
SM	"Standard Methods for the Examination of Water and Wastewater", APHA-AWWA-WPCF, 18th Edition.
SW	"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW-846.

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ATTACHMENT: CHAIN OF CUSTODY

Following are the chain of custody documents associated with the samples pertaining to this report.

850 W. Bartlett Rd. / Bartlett, IL 60103-4400 / 630-289-3100 / Fax: 630-289-5445 / 800-378-5700

TestAmerica INCORPORATED

Bartlett Division
850 West Bartlett Road
Bartlett, IL 60103

Phone: 630-289-3100
Fax: 630-289-5445

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring ____

Client Name: FOTH & VAN DYKE Client #: ____
Address: 2737 S. RIDGE RD.
City/State/Zip Code: GREEN BAY, WI 54307
Project Manager: RON MEISTER
Telephone Number: (920) 497-2500 Fax: (920) 497-8516
Sampler Name: (Print Name) BRIAN STANUL
Sampler Signature: Brian Stanul

Project Name: MODERN PLATING CORP.
Project #: 97M015
Site/Location ID: FREEPORT State: IL
Report To: RON MEISTER
Invoice To: FOTH & VAN DYKE
Quote #: ____ PO#: ____

TAT
___ Standard
X Rush (surcharges may apply)
Date Needed: 11/28/00
Fax Results: Y N

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: CADMIUM	REMARKS
WT3-6 (N106+10, E108+20)	11/21/00	13:45	G	N	S						1		X	
WT3-7 (N106+10, E107+75)	"	14:00	"	"	"						1		X	
WT3-8 (N106+15, E108+75)	↓	14:20	"	"	"						1		X	
WT2-6 (N104+10, E105+90)	11/22/00	10:25	"	"	"						1		X	
WT2-7 (N104+20, E107+30)	↓	10:10	"	"	"						1		X	
WT2-8 (N104+20, E106+60)	11/27/00	10:00	↓	↓	↓						1		X	

QC Deliverables
___ None
___ Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: ____

Special Instructions:

Relinquished By: Brian Stanul	11/27/00	10:26	Received By:	11/27/00	1035
Relinquished By:	11/27	1650	Received By:	11-27-00	1150
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

LABORATORY COMMENTS:
Init Lab Temp: 1°C Ice Temp
Rec Lab Temp: 3°C
Custody Seals: Y N
Bottles Supplied by TestAmerica: Y N
Method of Shipment:

44

R002179

Appendix N

Field and Laboratory Test Results - Compaction Soil Fill for Remediated Unit Covers

DENSITY TESTS OF COMPACTED FILL

Contractor: TERRA ENGR. & CONST.

Compaction Equipment: BACKHOE

Weather: 80°F, SUNNY

Method of Test:

☒ Nuclear Meter *(ASTM: D2922)*

☐ Sand Cone *(ASTM: D1556)*

Area/Location Tested: CYANIDE VAULT

Report Number:

Test No.	Test Location	Depth of Probe	Elevation	Proctor Used	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Percent Compaction	Remarks
1	N100+40, E105+00	6"	~775	MPC-CIVIL-1	135.3	9.9	123.1	95.9	

Proctor No.	Soil Classification	Max. Dry Density (pcf)	Moisture Content (%)	Compaction Spec. (%)
MPC-CIVIL-1	ML	128.4	9.5	95

General Note:
Density test results are valid only at the locations and elevations tested.

Nuclear Meter Used: TROXLER

Model: 3440 Serial No.: 25921

Standard Counts:

Density: 2803 Moisture: 703

Foth & Van Dyke

Client: MODERN PLATING CORP. Scope I.D.: 97M015

Project: CAMU LANDFILL CONSTRUCTION Page:

Prepared by: BJS1 Date: 7/20/01

Checked by: Date:

R002181

FORM CES011 (1/91)

DENSITY TESTS OF COMPACTED FILL

Contractor: TERRA ENGR. & CONST.

Compaction Equipment: BACKHOE

Weather: 80°F, SUNNY

Method of Test:

☒ Nuclear Meter *(ASTM: D2922)*

☐ Sand Cone *(ASTM: D1556)*

Area/Location Tested: SHAWNEE BLDG.

Report Number:

Test No.	Test Location	Depth of Probe	Elevation	Proctor Used	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Percent Compaction	Remarks
1	N96+30, E105+10	6"	~787	MPC-CIVIL-1	136.1	10.1	123.6	96.3	

Proctor No.	Soil Classification	Max. Dry Density (pcf)	Moisture Content (%)	Compaction Spec. (%)
MPC-CIVIL-1	ML	128.4	9.5	95

General Note:
Density test results are valid only at the locations and elevations tested.

Nuclear Meter Used: TROXLER

Model: 3440 Serial No.: 25921

Standard Counts:

Density: 2803 Moisture: 703

Foth & Van Dyke

Client: MODERN PLATING CORP. Scope I.D.: 97M015B2

Project: CAMU LANDFILL CONSTRUCTION Page:

Prepared by: BJS1 Date: 7/20/01

Checked by: Date:

FORM CES011 (1/91)

DENSITY TESTS OF COMPACTED FILL

Contractor: TERRA ENGR. & CONST.

Compaction Equipment: DYNAPAC CA15 SHEEPFOOT COMPACTOR

Weather: CLOUDY, 38°F

Method of Test:

☒ Nuclear Meter (ASTM: D2922)

☐ Sand Cone (ASTM: D1556)

Area/Location Tested: LAGOON No. 1A BACKFILL

Report Number:

Test No.	Test Location	Depth of Probe	Elevation	Proctor Used	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Percent Compaction	Remarks
197	N101+80, E102+80	6"	~762'	MPC-CIVIL-3	135.5	14.6	118.2	105.3	
198	N101+65, E103+00	↓	~763'	↓	132.1	14.2	115.7	103.1	
199	N102+40, E102+40		~763'		131.8	14.9	114.7	102.3	
200	N101+65, E102+40		~763'		127.5	15.4	110.5	98.5	
201	N102+10, E103+05		~764'		134.0	14.3	117.2	104.5	
202	N102+10, E102+35	↓	~764'	↓	133.6	15.0	116.2	103.6	

Proctor No.	Soil Classification	Max. Dry Density (pcf)	Moisture Content (%)	Compaction Spec. (%)
MPC-CIVIL-3	ML	112.2	16.2	95

General Note:
Density test results are valid only at the locations and elevations tested.

Nuclear Meter Used: TROXLER

Model: 3440 Serial No.: 25921

Standard Counts:

Density: 2765 Moisture: 711

Foth & Van Dyke

Client: MODERN PLATING CORP. Scope I.D.: 97MO183

Project: CAMU LANDFILL CONSTRUCTION Page: 1

Prepared by: BJS1 Date: 11/27/00

Checked by: Date:

R002183

FORM CES011 (1/91)

3

DENSITY TESTS OF COMPACTED FILL

Contractor: TERRA ENGR. & CONST.

Compaction Equipment: DYNAPAC CA15 SHEEPFOOT COMPACTOR

Weather: PARTLY CLOUDY, 40°F

Method of Test:

☒ Nuclear Meter (ASTM: D2922)

☐ Sand Cone (ASTM: D1556)

Area/Location Tested: LAGOON No. 1A BACKFILL

Report Number:

Test No.	Test Location	Depth of Probe	Elevation	Proctor Used	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Percent Compaction	Remarks
203	N102+35, E102+90	6"	~765'	MPC-CIVIL-3	136.3	14.5	119.0	106.0	
204	N101+70, E102+40	↓	~765'	↓	127.1	16.5	109.1	97.2	
205	N102+00, E103+00		~766'		136.7	14.2	119.7	106.7	
206	N102+00, E102+70		~766'		134.4	14.2	117.7	104.9	
207	N101+70, E103+00		~767'		130.8	14.7	114.0	101.6	
208	N102+35, E102+40		~767'		133.6	14.3	116.9	104.2	

Proctor No.	Soil Classification	Max. Dry Density (pcf)	Moisture Content (%)	Compaction Spec. (%)
MPC-CIVIL-3	ML	112.2	16.2	95

General Note:
Density test results are valid only at the locations and elevations tested.

Nuclear Meter Used: TROXLER
Model: 3440 Serial No.: 25921
Standard Counts:
Density: 2764 Moisture: 706

Foth & Van Dyke

Client: MODERN PLATING CORP. Scope I.D.: 97M01
Project: CAMU LANDFILL CONSTRUCTION Page: 1
Prepared by: BJS1 Date: 11/28/00
Checked by: Date:

FORM CES011 (1/91)

R002484

4

DENSITY TESTS OF COMPACTED FILL

Contractor: TERRA ENGR. & CONST.

Compaction Equipment: DYNAPAC CA15 SHEEPFOOT COMPACTOR

Weather: CLOUDY, SNOW FLURRIES, 32°F

Method of Test:

☒ Nuclear Meter (ASTM: D2922)

☐ Sand Cone (ASTM: D1556)

Area/Location Tested: LAGOON No. 0 BACKFILL

Report Number:

Test No.	Test Location	Depth of Probe	Elevation	Proctor Used	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Percent Compaction	Remarks
209	N101+20, E104+40	6"	~754'	MPC-CIVIL-3	133.0	14.2	116.5	103.8	
210	N101+10, E104+25		~755'		134.3	14.9	116.9	104.2	
211	N101+00, E104+15		~756'		132.5	14.4	115.8	103.2	
212	N100+85, E104+00		~757'		132.2	14.2	115.8	103.3	
213	N100+70, E103+90		~758'		130.0	14.9	113.1	100.8	
214	N101+25, E103+90		~759'		129.2	15.0	112.3	100.1	
215	N101+25, E104+05		~760'		129.6	15.3	112.4	100.2	
216	N101+10, E104+00		~761'		131.7	14.2	115.3	102.8	
217	N101+05, E104+00		~762'		127.4	15.1	110.7	98.7	
218	N101+10, E104+25		~763'		133.3	15.2	115.7	103.1	
219	N101+10, E104+25		~764'		129.7	16.0	111.8	99.6	
220	N101+10, E104+25		~765'		129.3	14.4	113.0	100.7	
221	N101+10, E104+25		~766'		128.3	15.1	111.5	99.4	
222	N101+10, E104+25		~767'		128.8	14.8	112.2	100.0	

Proctor No.	Soil Classification	Max. Dry Density (pcf)	Moisture Content (%)	Compaction Spec. (%)
MPC-CIVIL-3	ML	112.2	16.2	95

General Note:
Density test results are valid only at the locations and elevations tested.

Nuclear Meter Used: TROXLER
Model: 3440 Serial No.: 25921
Standard Counts:
Density: 2756 Moisture: 698

Foth & Van Dyke

Client: MODERN PLATING CORP. Scope I.D.: 97M0285
Project: CAMU LANDFILL CONSTRUCTION Page: 1
Prepared by: BJS1 Date: 11/29/00
Checked by: Date:

R002285

FORM CES011 (1/91)

5

DENSITY TESTS OF COMPACTED FILL

Contractor: TERRA ENGR. & CONST.

Compaction Equipment: DYNAPAC CA15 SHEEPFOOT COMPACTOR

Weather: CLOUDY, SNOW FLURRIES, 32°F

Method of Test:

☒ Nuclear Meter (ASTM: D2922)

☐ Sand Cone (ASTM: D1556)

Area/Location Tested: LAGOON No. 0 BACKFILL

Report Number:

Test No.	Test Location	Depth of Probe	Elevation	Proctor Used	Wet Density (pcf)	Moisture Content (%)	Dry Density (pcf)	Percent Compaction	Remarks
223	N101+10, E104+25	6"	~768'	MPC-CIVIL-3	126.2	14.6	110.1	98.1	
224	N101+10, E104+25	↓	~769'	↓	126.6	15.4	109.7	97.8	

Proctor No.	Soil Classification	Max. Dry Density (pcf)	Moisture Content (%)	Compaction Spec. (%)
MPC-CIVIL-3	ML	112.2	16.2	95

General Note:
Density test results are valid only at the locations and elevations tested.

Nuclear Meter Used: TROXLER

Model: 3440 Serial No.: 25921

Standard Counts:

Density: 2756 Moisture: 698

Foth & Van Dyke

Client: MODERN PLATING CORP. Scope I.D.: 97M0186

Project: CAMU LANDFILL CONSTRUCTION Page: 2

Prepared by: BJS1 Date: 11/29/00

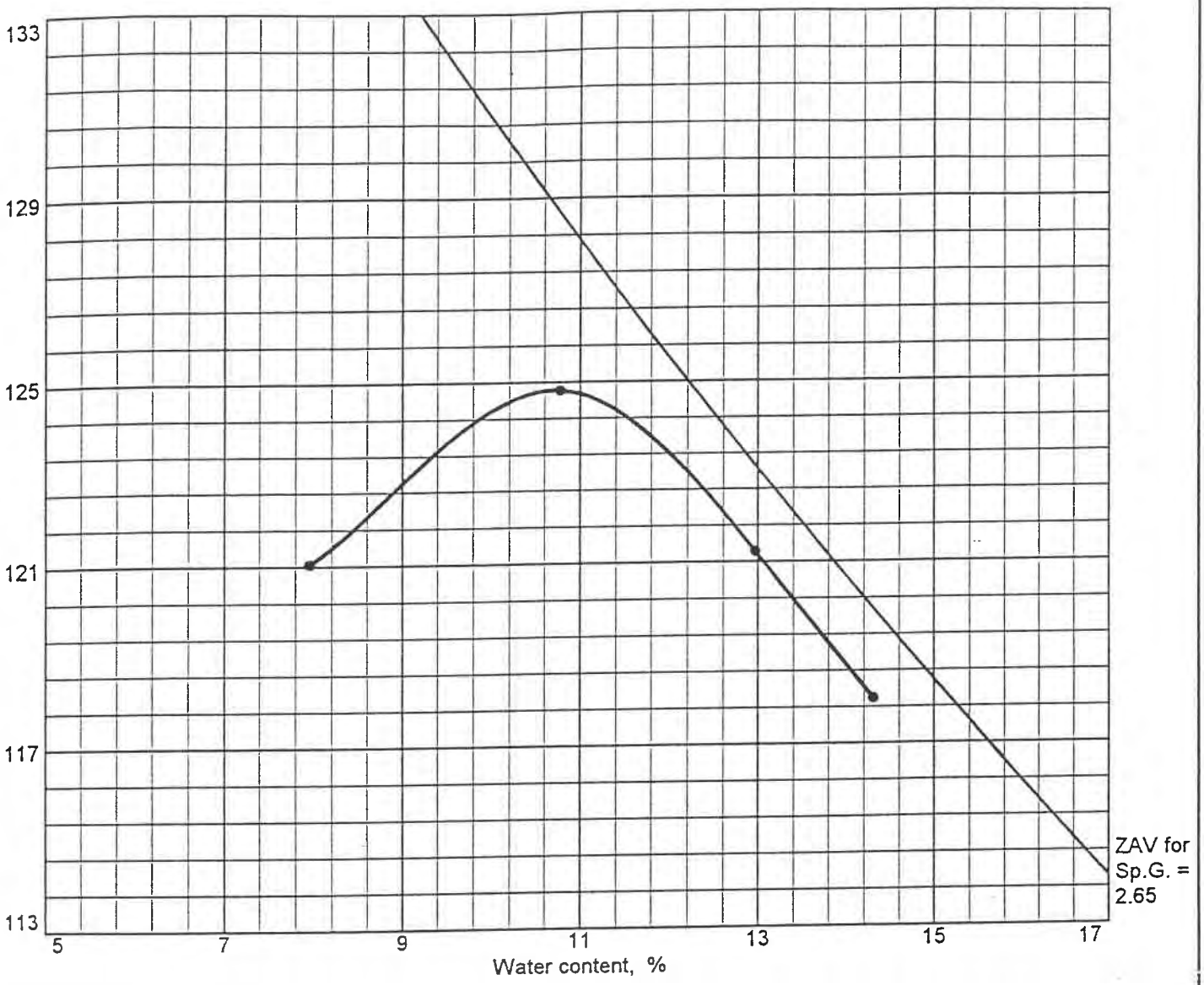
Checked by: Date:

R002186

FORM CES011 (1/91)

6

COMPACTION TEST REPORT



est specification: ASTM D 698-91 Procedure A Standard
versize correction applied to final results

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO						
	ML	A-4(0)		2.65			11.3	52.8

TEST RESULTS

Maximum dry density = 128.4 pcf

Optimum moisture = 9.5 %

MATERIAL DESCRIPTION

Brown Silt and fine Sand, little Gravel, trace medium and coarse Sand

Project No. 5M-0004006 **Client:** Foth & Van Dyke

Project: Modern Plating Corporation

Freeport, Illinois

Location: Civil Constructors Quarry

Remarks:

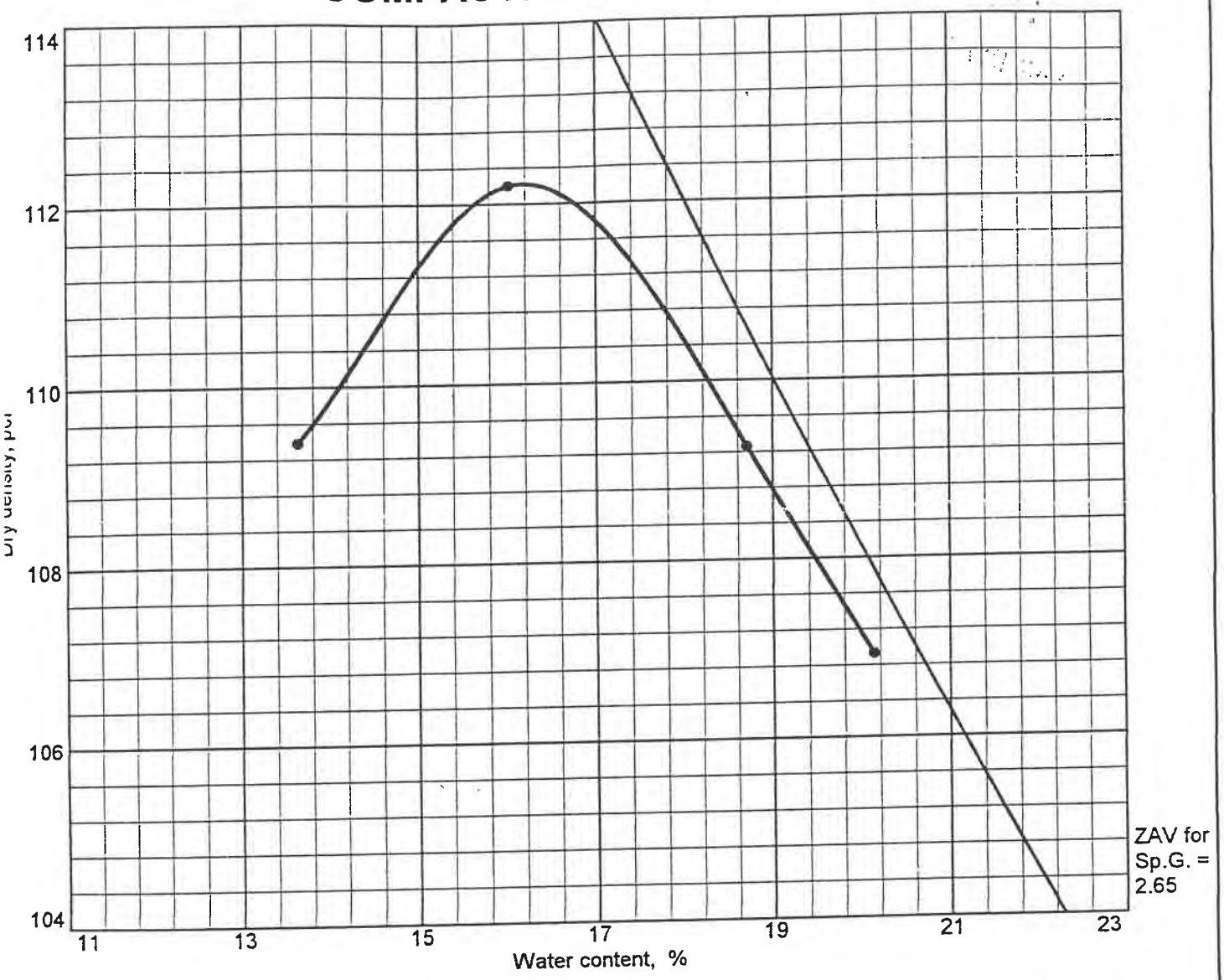
Assumed specific gravity
Sample No. 5MS-00026
Sample I.D. MPC-Civil-1

COMPACTION TEST REPORT

GILES ENGINEERING ASSOC., INC.

COMPACTION TEST REPORT

R002188



Test specification: ASTM D 698-91 Procedure A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO		2.65				

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 112.2 pcf Optimum moisture = 16.2 %	Brown Silty Clay, little fine and medium Sand, trace Gravel

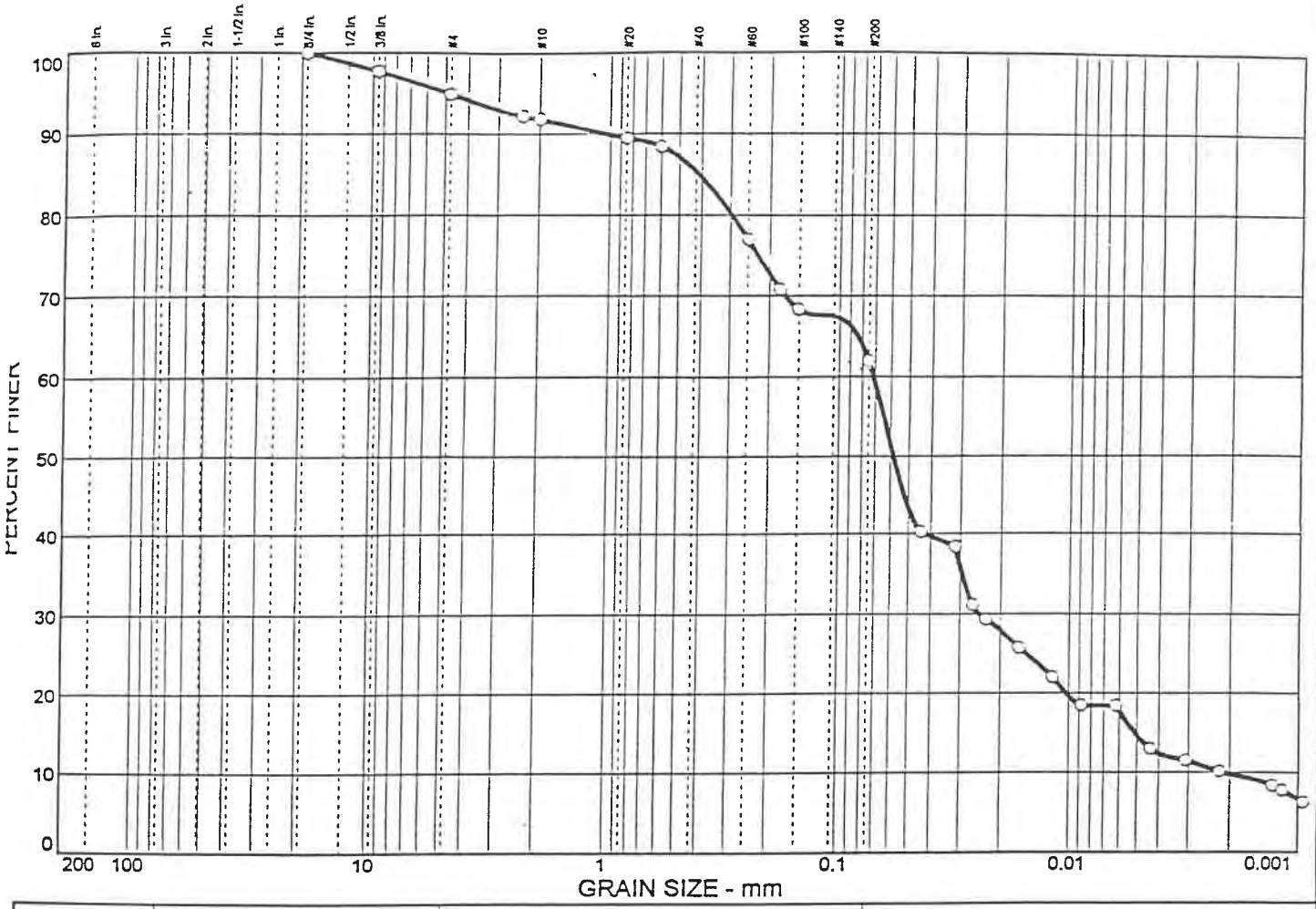
Project No. 5M-0004006 **Client:** Foth & Van Dyke
Project: Modern Plating Corporation
Freeport, Illinois
• **Source:** **Sample No.:** 5MS-00094

Remarks:
Sample No. 5MS-00094
Assumed Specific Gravity
Foth Van & Dyke Sample I.D. MPC-CIVIL-3

COMPACTION TEST REPORT

GILES ENGINEERING ASSOC., INC.

PARTICLE SIZE DISTRIBUTION TEST REPORT



	% COBBLES	% GRAVEL		% SAND			% FINES	
		CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	5.1	3.1	6.4	23.5	47.2	14.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	29	16	0.413	0.0714	0.0582	0.0249	0.0051	0.0022	4.04	33.18

	MATERIAL DESCRIPTION	USCS	AASHTO
○	Sandy lean clay	CL	A-6(5)

Project No. 5M-0004006 **Client:** Foth & Van Dyke
Project: Modern Plating Corporation
Freeport, Illinois
○ **Location:** On-site, MPC-CIVIL-3-H

Remarks:
○ Sample No. 5MS-00104

PARTICLE SIZE DISTRIBUTION TEST REPORT

GILES ENGINEERING ASSOC., INC.

Appendix O

Security Fence Information and Inspection Reports

OR HOSPITAL. OR ESTATE. OR THE POOL.

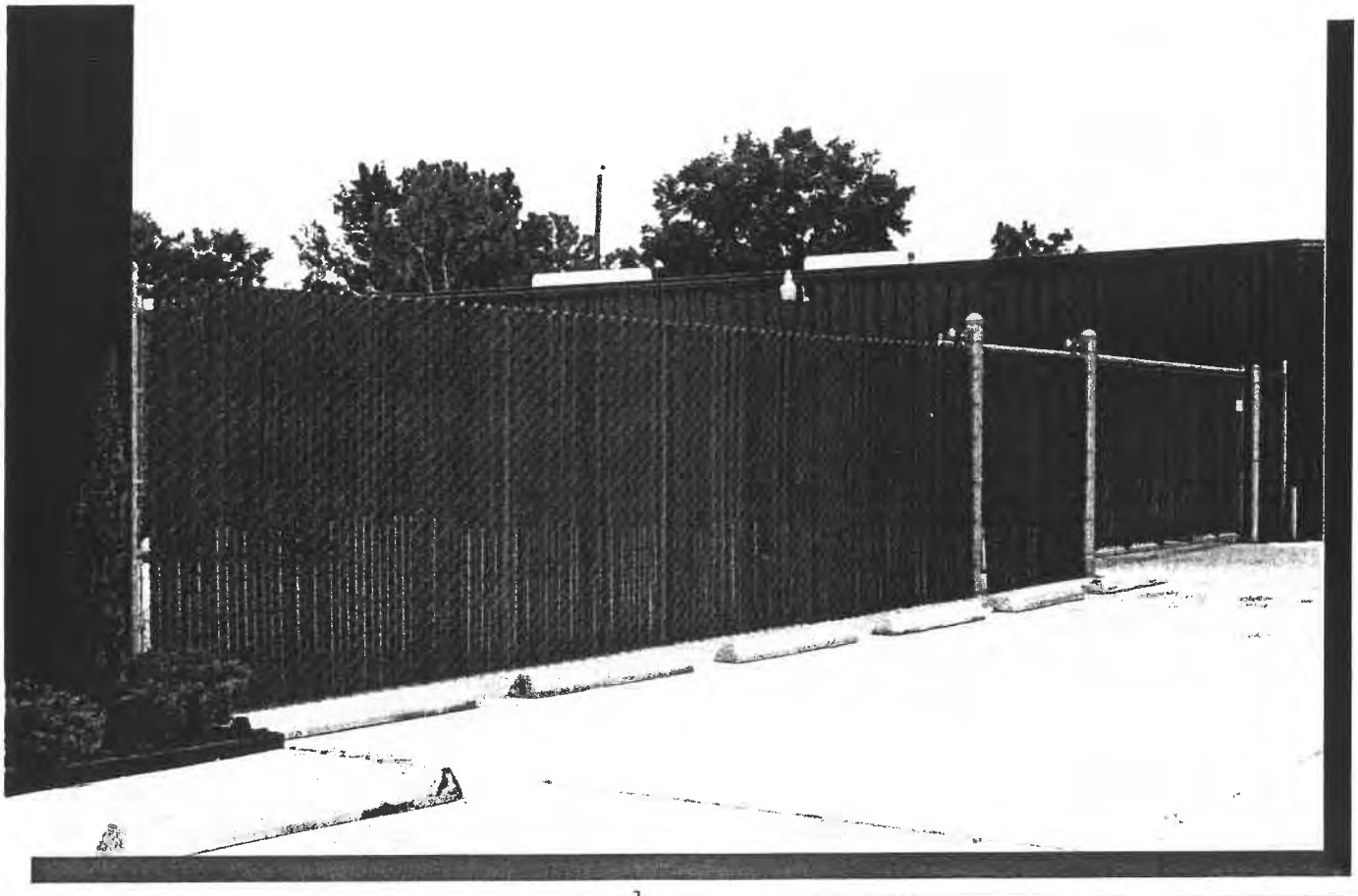
We make good sense... with WoodLink.

Merchants Metals' WoodLink fence systems are available in a popular range of heights from 4' to 9'. The stained redwood slats are a strong $^{5}/_{16}$ of an inch thick and $2^{3}/_{8}$ inches wide. The wire mesh is 9 gauge, .40 ounce aluminum coated steel for strength and long wear. The Merchants Metals WoodLink fence is designed to be secure, extremely handsome and especially durable. Installed by your Merchants Metals Authorized Dealer, WoodLink will mean many satisfying years of use.

Be sure to ask your Merchants Metals Authorized Dealer for all the facts about WoodLink. When you specify Merchants fencing, you receive only the best products available anywhere. Your Merchants Metals Authorized Dealer will provide only the most courteous and professional assistance, service and installation. Merchants Metals Authorized Dealers are fence professionals.

MERCHANTS METALS
The First Name In Fence

AUTHORIZED DEALER



YOU MAY HAVE SEEN US AROUND THE GOLF COURSE.

Merchants' WOODLINK® fencing has long been a favorite of those who want the security and durability of aluminum coated steel chain link combined with the beauty of redwood. WoodLink assures long, handsome, trouble-free service and adds a measure of privacy too! WoodLink has been used for over a decade to secure and decorate the perimeters of hospitals, country clubs, parks, and more. Ask your Merchants Metals Authorized Dealer how WoodLink can be the perfect answer to your fence needs.

Beauty Strength Long Life Security
Warranty Professional Installation



KEY FENCE SECTION

(1) CHAIN LINK FABRIC TO BE 2 3/8 INCH MESH,
9 GAGE, 72" IN HEIGHT, COATED AS FOLLOWS:
____ GALVANIZED PER ASTM-A392, CLASS ____
X ALUMINIZED PER ASTM-A491, .40 oz./SQ. FT.
____ PVC COATED PER _____, WITH A _____ GAGE CORE

TOP SELVAGE
☐ TWISTED - ☒ KNUCKLED.
BOTTOM SELVAGE
☐ TWISTED - ☒ KNUCKLED.

(2) BARBED WIRE TO BE:
☒ 3 STRANDS - ☐ 6 STRANDS Galv. STEEL, 12 1/2 GAGE.
4 PT. PATTERN WITH BARBS 5" O/C.
GALVANIZED - ASTM-A121, CLASS B.
ALUMINIZED - ASTM-A585.

(3) TOP RAIL DIMENSIONS: ☐ _____" O.D., _____#/ FT.
☒ C RAIL, 1 5/8" x 1 1/4", 14 GA., 1.35# /FT.

(4) BRACE RAIL DIMENSIONS: ☐ _____" O.D., _____#/ FT.
☒ C RAIL, 1 5/8" x 1 1/4", 14 GA., 1.35# /FT.
(USED ONLY ON FENCES OVER 5'-0" HIGH) - POSITION MIDWAY BETWEEN TOP RAIL AND GRADE EXCEPT ON FENCES WITHOUT TOP RAIL (THEN 1'-0 BELOW TOP OF FENCE.)

(5) END OF CORNER POST DIMENSIONS:
☒ 3 " O.D., 5.79# /FT.

(6) LINE POST DIMENSIONS:
☐ _____" O.D., _____# /FT.
☒ C LINE POST, 1.87" x 1.62", 2.34# /FT.

(7) TERMINAL POST CAP

(8) BARBED WIRE EXTENSION ARM
☒ 3 STRAND 45° SLANTED ☐ IN ☒ OUT
☐ 3 STRAND VERTICAL
☐ 6 STRAND V-SHAPED

(9) RAIL END

(10) BRACE END
10a TRUSS ROD ☒ REQUIRED
10b TRUSS TIGHTENER ☐ NOT REQUIRED

(11) TENSION BAND WITH CARRIAGE BOLT (USE ONE LESS THAN HEIGHT OF FABRIC IN FEET)

(12) BRACE BAND WITH CARRAGE BOLT

(13) TENSION BAR

(14) TOP RAIL SLEEVE

(15) 9 GAGE ALUMINUM TIE-WIRE
SPACED 1'-2" O/C ON LINE POSTS.

(16) 9 GAGE ALUMINUM TIE-WIRE
SPACED 2'-0" O/C ON HORIZONTAL RAILS.

CONSTRUCTION NOTES ON FENCE FRAMEWORK

R002193

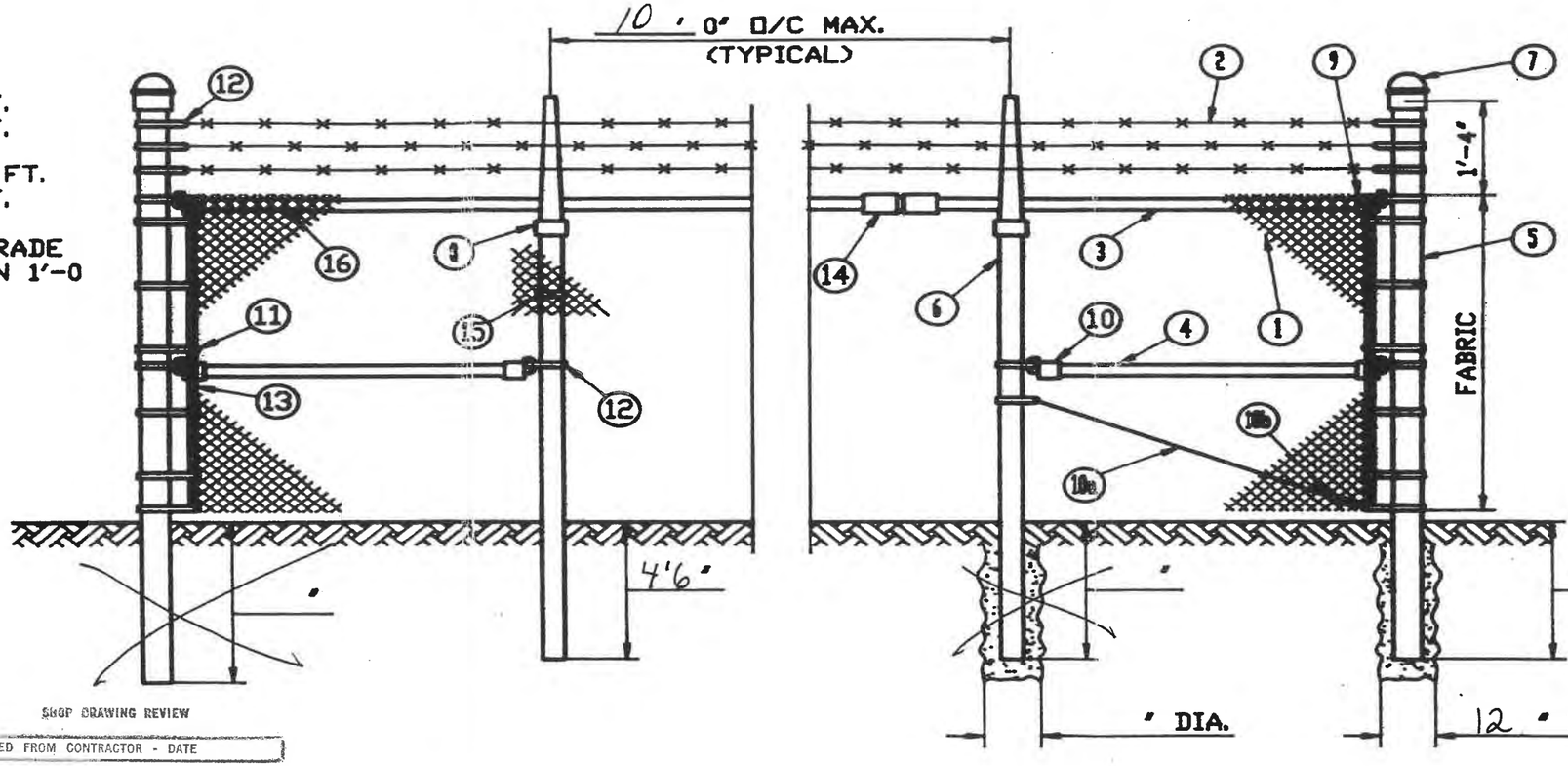
☒ FENCE TO HAVE TOP RAIL AS SHOWN.

☐ FENCE TO HAVE TOP TENSION WIRE (IN PLACE OF TOP RAIL SHOWN) OF No. 7 GAGE _____ STEEL, SECURED TO FABRIC WITH _____ GAGE HOG RINGS 2'-0" O/C

☒ FENCE TO HAVE BOTTOM TENSION WIRE OF No. 7 GAGE Galv. STEEL, SECURED TO FABRIC WITH 9 GAGE HOG RINGS 2'-0" O/C

☐ FENCE TO HAVE CONTINUOUS MIDDLE RAIL OF SAME MATERIAL AS TOP RAIL.

☐ FENCE TO HAVE BOTTOM RAIL OF SAME MATERIAL AS TOP RAIL.



DRIVE SET POSTS

CONCRETE SET POSTS

SHOP DRAWING REVIEW

RECEIVED FROM CONTRACTOR - DATE

REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS.
RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR DETAILS.

☐ NO EXCEPTIONS TAKEN
☐ MAKE CORRECTIONS NOTED
☐ AMEND AND RESUBMIT
☐ REJECTED - SEE REMARKS

FOTH & VAN DYKE

REVIEWED BY: DATE:

POSTS TO BE ANCHORED:
☒ CONCRETE SET AS SHOWN
☒ DRIVE SET AS SHOWN

NOTES:

(1) ALL FITTINGS TO BE IN ACCORDANCE WITH ASTM-A153

(2) INSTALLATION OF FENCE TO BE IN ACCORDANCE WITH ASTM F567

☒ RAMPART ☐ BULWARK STYLE

PROJECT: Modern Plating

ARCHITECT/ENGINEER:

SUBMITTED BY:
CENTURY FENCE Co.

Date: 6-6-00 | By: DR | Sht. 1 of 1

The are the originals with signatures. They are too close to bottom. Use clipped copies for reproducing

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/7/00	17:00	NO DUST WIND SPEED 15mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/7/00	17:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stamul 6/7/00

R002195

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/8/00	16:45	NO DUST 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/8/00	16:45	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	N/A		
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	N/A		
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	N/A		
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/8/00	16:45	OK

R002196

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/9/2000	13:40	NO DUST 12 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stamul 6/9/2000

R002197

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/12/00	18:00	OK, 5+ INCHES OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/12/00	18:00	OK, 5+ INCHES OF RAIN
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/12/00	18:00	SOME WASHING OUT, BUT OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/12/00	18:00	OK

Brian Stanek 6/12/00

R002198

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard ∞	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/13/00	17:00	OK, 0.50" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/13/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/13/00	17:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/13/00	17:00	OK

Brian Stanul 6/13/00

R002199

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/14/00	11:00	NO DUST. WINDS 12-15mph
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/14/00	11:00	OK, 0.5" RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/14/00	11:00	OK, 0.5" RAIN
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/14/00	11:00	OK, 0.5" RAIN
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/14/00	11:00	OK

R002200

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/15/00	16:00	No Dust. Winds 12-15 mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stanul 6/15/00

10

R002201

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/20/00	16:40	NO DUST WINDS 15-20mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stanul 6/20/00

10A

R002202

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/21/00	18:00	NO DUST FROM SLUDGE STOCKPILE, 15-25 mph WINDS.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/21/00	18:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/21/00	18:00	OK

Brian Stanul 6/21/00

11

R002203

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/22/00	17:30	NO SLUDGE DUST WIND SPEED 15 mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stanul 6/22/00

12

R002204

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/26/00	15:00	NO DUST 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/26/00	15:00	OK, 1.2" OF RAIN OVER WEEKEND
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/26/00	15:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/26/00	15:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/26/00	15:00	OK

Brian Stanuel 6/26/00

13

R002205

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/28/00	15:30	OK, 0.5" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/28/00	15:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/28/00	15:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/28/00	15:30	OK

Brian Stanul 6/28/00

14

R002220

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/5/00	18:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/5/00	18:00	OK, 1.2" OF RAIN OVER WEEKEND
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/5/00	18:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/5/00	18:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/5/00	18:00	OK

Brian Stamel 7/5/00

15

R002207

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/8/00	16:00	NO DUST FROM SLUDGE PILE 12-15mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stamel 7/8/00

16

R002208

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/10/00	08:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/10/00	08:00	OK, APPROX. 1.0" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/10/00	08:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/10/00	08:00	WASHOUTS RE-ERODED
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/10/00	08:00	TARP REPLACED

Brian Stamm 7/10/00

17

R002209

113

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/12/00	14:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/12/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/12/00	14:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/12/00	14:00	OK

18

R002210

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	7/12/00	14:00	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	7/12/00	20:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002211

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanuel Date 7/12/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002212

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002213

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	7/15/00	14:00	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002214

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift I Operator Brian Stamel Date 7/15/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002215

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/17/00	17:00	NO DUST 12-15mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/17/00	17:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/17/00	17:00	OK

Brian Stamul 7/17/00

R002216

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/27/00	09:20	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/27/00	09:20 ~~09:00~~	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/27/00	09:20	OK

Brian Stamul 7/27/00

25

R002217

1/3 1

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually	7/31/00	08:00	OK
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002218

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/31/00	08:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/31/00	08:00	OK
2 Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	7/31/00	08:00	OK

Signatures

Shift 1 Operator Brian Stanul Date 7/31/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002219

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/31/00	08:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/31/00	08:00	OK, 0.7" OF RAIN OVER NIGHT
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/31/00	08:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/31/00	08:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/31/00	08:00	OK

Brian J. Stanuf 7/31/00

R002220

13

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/7/00	17:00	NO DUST, 10-15mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/7/00	17:00	OK, 0.7" OF RAIN OVER WEEKEND
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/7/00	17:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/7/00	17:00	OK

Brian Stamel 8/7/00

R002221

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	8/7/00	17:00	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/7/00	17:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

30

R002222

5/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/7/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/7/00	17:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/7/00	17:00	OK

Signatures

Shift 1 Operator Brian Stanuel Date 8/7/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002223

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/17/00	07:30	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	8/17/00	07:30	OK, 2" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	8/17/00	07:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/17/00	07:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/17/00	07:30	ROADS VERY MUDDY
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/17/00	07:30	OK

Brian Stanal 8/17/00

R002224

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/17/00	07:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002225

3/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/17/00	07:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/17/00	07:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/17/00	07:30	OK

Signatures

Shift 1 Operator Brian Staunt Date 8/17/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002226

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/25/00	14:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	8/25/00	14:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/25/00	14:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/25/00	14:00	OK

35

R002227

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/25/00	14:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002228

3/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/25/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/25/00	14:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/25/00	14:00	OK

Signatures

Shift 1 Operator Brian Stanul Date 8/25/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R0022229

1/3 1

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/29/00	17:30	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	8/29/00	17:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/29/00	17:30	OK

R002230

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/29/00	17:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002231

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/29/00	17:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/29/00	17:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/29/00	17:30	OK

Signatures

Shift 1 Operator Brian Stanul Date 8/29/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002232

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/7/00	10:00	NO DUST, 15+mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/7/00	10:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	9/7/00	10:00	OK

Brian Stamel 9/7/00

41

R002233

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/7/00	10:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

42

R002234

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/7/00	10:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/7/00	10:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/7/00	10:00	OK

Signatures

Shift 1 Operator Brian Stanuel Date 9/7/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002235

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/12/00	09:30	DO DUST, 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/12/00	09:30	OK, 3.5" OF RAIN.
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/12/00	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/12/00	09:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002236

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event	9/12/00	09:30	OK

R0042237

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/12/00	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/12/00	09:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanul Date 9/12/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002238

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/18/00	14:40	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/18/00	14:40	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

47

R002239

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/18/00	14:40	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002240

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/18/00	14:40	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/18/00	14:40	OK

Signatures

Shift 1 Operator Brian Stanul Date 9/18/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002241

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/22/00	14:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/22/00	14:00	OK, 5.5" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/22/00	14:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

50

R002242

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/22/00	14:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

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R0002243

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/22/00	14:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/22/00	14:00	OK

Signatures

Shift 1 Operator Brian Stamm Date 9/22/00

Manager _____

O&M Manual - Operations and Maintenance Manual.
O&M Manual log for all mechanical equipment should be attached to this log.
To be compared with the action leakage rate of 4,680 gal/day.

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R002244

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/28/00	16:50	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/28/00	16:50	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/28/00	16:50	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	9/28/00	16:50	OK

R002245

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/28/00	16:50	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

54

R002246

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/28/00	16:50	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/28/00	16:50	OK

Signatures

Shift 1 Operator Brian J. Staual Date 9/28/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/29/00	14:00	NO DUST 20-25 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002248

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Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002249

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/29/00	14:00	NO DUST. 20-25 mph WINDS

Signatures

Shift 1 Operator Brian Stamel Date 9/29/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002250

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/4/00	15:00	NO DUST.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/4/00	15:00	OK, 0.7" OF RAIN.
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/4/00	15:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002251

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	10/4/00	15:00	NO LIQUID.
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002252

5/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/4/00	15:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/4/00	15:00	OK

Signatures

Shift 1 Operator Brian Stanul Date 10/4/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002253

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/25/00	12:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/25/00	12:00	NEEDS TO BE PUMPED.
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/25/00	12:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	10/25/00	12:00	OK

R002254

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	10/25/00	19:25	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/25/00	19:25	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually	10/25/00	12:00	OK
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002255

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/25/00	12:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/25/00	12:00	OK

Signatures

Shift 1 Operator Brian Stamel Date 10/25/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002256

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002257

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	10/26/00	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/26/00	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002258

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift I Operator Brian Stanuel Date 10/26/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002259

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Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
acility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
-2b(4)(b) urface Water Management and rosion Control tructure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
emporary ontaminated Soil tockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002260

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/27/00	18:00	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002261

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanul Date 10/27/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002262

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

71

R002263

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/28/00	1430	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002264

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanul Date 10/28/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002265

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/12/00	17:30	NO DUST, 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/12/00	17:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/12/00	17:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	10/12/00	17:30	OK

74

R0002266

2/3

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	10/12/00	17:30	OK
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	10/12/00	17:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002267

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/12/00	17:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/12/00	17:30	OK

Signatures

Shift 1 Operator Brian Stanul Date 10/12/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002268

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/18/00	16:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/18/00	16:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			N/A
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/18/00	16:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/18/00	16:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

R002269

2/3

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline 2. Check for leaks 3. Check for leaks weekly thereafter 4. Service pumps 5. Check pressure transducer for proper operation 6. Check flow meters and pump controls for proper operation 7. Check alarms and alarm lights, etc., for proper operation	Annually 5 days after start-up, repair leaks within 15 days. As per manufacturer's O&M manual[1, 2] As per manufacturer's O&M manual[1, 2] As per manufacturer's O&M manual[1, 2] 15 days			N/A
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3] 2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur. 3. Check pressure transduces for proper operation. 4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure. As per manufacturer's O&M manual Weekly during active site life; monthly after closure.			N/A
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks. 2. Check for settlement, slumping or sloughing 3. Check for erosion and bare sod areas.	Semiannually Semiannually Semiannually and after each major rainfall event			N/A

R002270

3/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/18/00	16:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/18/00	16:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/18/00	16:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			N/A
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/18/00	16:00	OK

Signatures

Shift 1 Operator Brian Stanul Date 10/18/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002271

1/3

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline 2. Check for leaks 3. Check for leaks weekly thereafter 4. Service pumps 5. Check pressure transducer for proper operation 6. Check flow meters and pump controls for proper operation 7. Check alarms and alarm lights, etc., for proper operation	Annually 5 days after start-up, repair leaks within 15 days. As per manufacturer's O&M manual[1,2] As per manufacturer's O&M manual[1,2] As per manufacturer's O&M manual[1,2] 15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3] 2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur. 3. Check pressure transduces for proper operation. 4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure. As per manufacturer's O&M manual Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks. 2. Check for settlement, slumping or sloughing 3. Check for erosion and bare sod areas.	Semiannually Semiannually Semiannually and after each major rainfall event			

R002272

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/2/00	15:15	OK

Signatures

Shift 1 Operator Brian Stamel Date 11/2/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002273

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Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/2/00	15:15	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/2/00	15:15	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/2/00	15:15	OK

R002274

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/6/00	13:30	NO DUST.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/6/00	13:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/6/00	13:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/6/00	13:30	OK

R002275

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R0022276

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/6/00	13:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	11/6/00	13:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/6/00	13:30	OK

Signatures

Shift 1 Operator Brian Stanuel Date 11/6/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R0022277

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/9/00	09:00	OK, 0.80" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/9/00	09:00	SOME MUD TRACKING
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/9/00	09:00	OK

R002278

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	11/9/00	09:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002279

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/9/00	09:00	SOME MUD-TRACKING
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	11/9/00	09:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamel Date 11/9/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002280

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/14/00	16:35	NO DUST, 15-25 WINDS.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/14/00	16:35	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/14/00	16:35	OK

R002281

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002282

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/14/00	16:35	OK

Signatures

Shift 1 Operator Brian Stanek Date 11/14/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002283

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/20/00	16:30	OK, 15-20 mph WINDS, SOME DUST ON PARKING LOT.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/20/00	16:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/20/00	16:30	OK

R002284

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002285

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/20/00	16:30	OK

Signatures

Shift 1 Operator Brian Stanul Date 11/20/00

Manager _____

O&M Manual - Operations and Maintenance Manual.
O&M Manual log for all mechanical equipment should be attached to this log.
To be compared with the action leakage rate of 4,680 gal/day.

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R002286

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/1/00	14:00	NO DUST
acility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			N/A
-2b(4)(b) urface Water Management and rosion Control tructure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
emporary ontaminated Soil tockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

R002287

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002288

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	12/1/00	14:00	NO DUST

Signatures

Shift 1 Operator Brian Stamel Date 12/1/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002289

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-2b(4)(c) - Wind ispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/7/00	16:30	NO DUST
acility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	12/7/00	16:30	N/A
-2b(4)(b) urface Water lanagement and rosion Control tructure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			N/A
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			N/A
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
emporary ontaminated Soil tockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

R002290

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			N/A
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R0022291

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			N/A
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			N/A
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			N/A
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	12/7/00	16:30	NO DUST

Signatures

Shift 1 Operator Brian Stanul Date 12/7/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002292

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/11/00	12:00	NO DUST, 20-25mph WINDS
Facility Freeboard 101	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			N/A
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK, 12" OF SNOW
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/11/00	12:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	12/11/00	12:00	OK

R002293

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-b(7)(d) eachate Collection ystem (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline 2. Check for leaks 3. Check for leaks weekly thereafter 4. Service pumps 5. Check pressure transducer for proper operation 6. Check flow meters and pump controls for proper operation 7. Check alarms and alarm lights, etc., for proper operation	Annually 5 days after start-up, repair leaks within 15 days. As per manufacturer's O&M manual[1,2] As per manufacturer's O&M manual[1,2] As per manufacturer's O&M manual[1,2] 15 days			N/A
-2b(7)(b) eachate Detection ystem (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3] 2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur. 3. Check pressure transduces for proper operation. 4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure. As per manufacturer's O&M manual Weekly during active site life; monthly after closure.			N/A
eosynthetic Clay ner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
eomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
xterior of CAMU andfill	Berms	1. Check for wet spots and leaks. 2. Check for settlement, slumping or sloughing 3. Check for erosion and bare sod areas.	Semiannually Semiannually Semiannually and after each major rainfall event			

102

R002294

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/11/00	12:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	12/11/00	12:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	12/11/00	12:00	OK

gnatures

ift 1 Operator Brian Stamul Date 12/11/00

anager _____

&M Manual - Operations and Maintenance Manual.
&M Manual log for all mechanical equipment should be attached to this log.
o be compared with the action leakage rate of 4,680 gal/day.

R002295

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/18/00	17:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			N/A
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK, 6" OF SNOW.
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/18/00	17:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

103

R0022296

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	12/18/00	17:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

104

R0022297

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/18/00	17:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	12/18/00	17:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Unit 1 Operator Brian Stanuel Date 12/18/00

Manager _____

O&M Manual - Operations and Maintenance Manual.
O&M Manual log for all mechanical equipment should be attached to this log.
To be compared with the action leakage rate of 4,680 gal/day.

R002298

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	1/13/01	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/13/01	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

106

R002299

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanul Date 1/13/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002300

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	1/14/01	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/14/01	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event	1/14/01	17:00	NO EROSION, GROUND FROZEN

108

R002301

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	1/14/01	17:30	OK, SOME STANDING WATER DRAINED FROM ANCHOR TRENCH. GROUND IS FROZEN.
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	1/14/01	17:30	OK, GROUND IS FROZEN
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamp Date 1/14/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002302

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,3]			
		4. Service pumps	As per manufacturer's O&M manual[1,3]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,3]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	1/15/01	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/15/01	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

110

R002303

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamm Date 1/15/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002304

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
-b(7)(d) eachate Collection ystem (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
-2b(7)(b) eachate Detection ystem (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
eosynthetic Clay ner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
eomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/16/01	17:15	Construction QA/QC activity
xterior of CAMU andfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

112

R002305

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Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamel Date 1/16/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002306

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/17/01	17:00	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

114

R0002307

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stonum Date 1/17/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	2/15/01	09:30	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	2/15/01	09:30	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	2/15/01	09:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

116

R002309

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	2/15/01	09:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	2/15/01	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	2/15/01	09:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift I Operator Brian Stamm Date 2/15/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002310

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	2/28/01	14:00	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	2/28/01	14:00	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	2/28/01	14:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

118

R002311

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	2/28/01	14:00	N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	2/28/01	14:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	2/28/01	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	2/28/01	14:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stanul Date 2/28/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002312

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	3/30/01	11:30	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	3/30/01	11:30	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	3/30/01	11:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

120

R002313

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	3/30/01	11:30	~~OK~~ N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	3/30/01	11:30	SOME EROSION TO SED. BASIN NO. 2
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	3/30/01	11:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	3/30/01	11:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stamel Date 3/30/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002314

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	5/1/01	10:00	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	5/1/01	10:00	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	5/1/01	10:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

122

R002315

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	5/1/01	10:00	N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	5/1/01	10:00	EROSION TO SED. BASIN NO. 2 REPAIRED
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	5/1/01	10:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	5/1/01	10:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stamel Date 5/1/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002316

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	5/30/01	09:30	SYSTEM START UP, WARNING LIGHT NEEDS REPLACEMENT
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	5/30/01	09:30	SYSTEM START UP. WARNING LIGHT NEEDS REPLACEMENT.
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	5/30/01	09:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

124

R002317

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	5/30/01	09:30	N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	5/30/01	09:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	5/30/01	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	5/30/01	09:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stanul Date 5/30/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002318

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	7/5/01	12:30	OK
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	7/5/01	12:30	OK
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	7/5/01	12:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

126

R002319

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	7/5/01	12:30	OK
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	7/5/01	12:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/5/01	12:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	7/5/01	12:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Date

Shift I Operator _____

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002320

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/7/00	17:00	NO DUST WIND SPEED 15mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/7/00	17:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stamul 6/7/00

R002321

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/8/00	16:45	NO DUST 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/8/00	16:45	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	N/A		
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	N/A		
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	N/A		
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/8/00	16:45	OK

R002322

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/9/2000	13:40	NO DUST 12 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stamm 6/9/2000

R002323

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/12/00	15:00	OK, 5+ INCHES OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/12/00	15:00	OK, 5+ INCHES RAIN
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/12/00	15:00	SOME WASHING OUT, BUT OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/12/00	15:00	OK

Brian Stoner 6/12/00

R002324

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard ∞	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/13/00	17:00	OK, 0.50" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/13/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/13/00	17:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/13/00	17:00	OK

Brian Stanul 6/13/00

R002325

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/14/00	11:00	NO DUST. WINDS 12-15mph
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/14/00	11:00	OK, 0.5" RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/14/00	11:00	OK, 0.5" RAIN
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/14/00	11:00	OK, 0.5" RAIN
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/14/00	11:00	OK

R002326

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/15/00	16:00	No Dust. Winds 12-15 mph
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stanek 6/15/00

10

R002327

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/20/00	16:40	No DUST WINDS 15-20mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stanul 6/20/00

104

R002328

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/21/00	18:00	NO DUST FROM SLUDGE STOCKPILE, 15-25 mph WINDS.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/21/00	18:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/21/00	18:00	OK

Brian Stamel 6/21/00

R002329

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/22/08	17:30	NO SLUDGE DUST WINDSPEED 15 mph.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stanul 6/22/08

12

R002330

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	6/26/00	15:00	NO DUST 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/26/00	15:00	OK, 1.2" OF RAIN OVER WEEKEND
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/26/00	15:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/26/00	15:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/26/00	15:00	OK

Brian Stamel 6/26/00

R002331

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	6/28/00	15:30	OK, 0.5" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	6/28/00	15:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	6/28/00	15:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	6/28/00	15:30	OK

Brian Stanwood 6/28/00

R002332

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/5/00	18:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/5/00	18:00	OK, 1.2" OF RAIN OVER WEEKEND
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/5/00	18:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/5/00	18:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/5/00	18:00	OK

Brian Stamel 7/5/00

R002333

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/8/00	16:00	NO DUST FROM SLUDGE PILE 12-Kmph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

Brian Stamel 7/8/00

R002334

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/10/00	08:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/10/00	08:00	OK, APPROX. 1.0" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/10/00	08:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/10/00	08:00	WASHOUTS RE-ERODED
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/10/00	08:00	TARP REPLACED

Brian Stamm 7/10/00

17

R002335

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Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/12/00	14:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/12/00	14:00	ok
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/12/00	14:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/12/00	14:00	OK

18

R002336

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	7/12/00	14:00	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	7/12/00	20:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R0002337

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamel Date 7/12/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002338

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002339

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Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	7/15/00	14:00	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002340

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamel Date 7/15/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/17/00	17:00	No DUST 12-15mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/17/00	17:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/17/00	17:00	OK

Brian Stamul 7/17/00

R002342

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/27/00	09:20	NO DUST
Facility Freeboard 25	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/27/00	09:20 ~~09:00~~	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/27/00	09:20	OK

Brian Stanul 7/27/00

R002343

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Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	7/31/00	08:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

26

R002344

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Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/31/00	08:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/31/00	08:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	7/31/00	08:00	OK

Signatures

Shift 1 Operator Brian Stanul Date 7/31/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002345

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	7/31/00	08:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	7/31/00	08:00	OK, 0.7" OF RAIN OVER NIGHT
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/31/00	08:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	7/31/00	08:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	7/31/00	08:00	OK

Brian J. Stanul 7/31/00

R002346

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Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/7/00	17:00	NO DUST, 10-15mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/7/00	17:00	OK, 0.7" OF RAIN OVER WEEKEND
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/7/00	17:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/7/00	17:00	OK

Brian Stamel 8/7/00

29

R002347

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Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	8/7/00	17:00	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/7/00	17:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

30

R002348

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/7/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/7/00	17:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/7/00	17:00	OK

Signatures

Shift 1 Operator Brian Stanuel Date 8/7/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002349

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/17/00	07:30	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	8/17/00	07:30	OK, 2" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	8/17/00	07:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/17/00	07:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/17/00	07:30	ROADS VERY MUDDY
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/17/00	07:30	OK

Brian Stanard 8/17/00

R002350

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/17/00	07:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002351

3/31

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/17/00	07:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/17/00	07:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/17/00	07:30	OK

Signatures

Shift 1 Operator Brian Stamel Date 8/17/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002352

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/25/00	14:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	8/25/00	14:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/25/00	14:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/25/00	14:00	OK

R002353

2/3

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/25/00	14:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002354

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/25/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/25/00	14:00	ok
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/25/00	14:00	OK

Signatures

Shift 1 Operator Brian Stamel Date 8/25/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

1/3 1

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	8/29/00	17:30	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	8/29/00	17:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	8/29/00	17:30	OK

R002356

2/31

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	8/29/00	17:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

36

R002357

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Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	8/29/00	17:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	8/29/00	17:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	8/29/00	17:30	OK

Signatures

Shift 1 Operator Brian Stanul Date 8/29/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002358

1/3 1

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/7/00	10:00	NO DUST, 15+mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/7/00	10:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	9/7/00	10:00	OK

Brian Stamp 9/7/00

41

R002359

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/7/00	10:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

42

R002360

3/3;

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/7/00	10:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/7/00	10:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/7/00	10:00	OK

Signatures

Shift 1 Operator Brian Stamel Date 9/7/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002361

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/12/00	09:30	NO DUST, 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/12/00	09:30	OK, 3.5" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/12/00	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/12/00	09:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002362

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event	9/12/00	09:30	OK

R002363

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/12/00	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/12/00	09:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stancil Date 9/12/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002364

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/18/00	14:40	OK.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/18/00	14:40	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

47

R002365

2/3

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/18/00	14:40	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002366

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/18/00	14:40	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/18/00	14:40	OK

Signatures

Shift 1 Operator Brian Stamel Date 9/18/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002367

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/22/00	14:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/22/00	14:00	OK, 5.5" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/22/00	14:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

50

R002368

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/22/00	14:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002369

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	9/22/00	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	9/22/00	14:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/22/00	14:00	OK

Signatures

Shift I Operator Brian Stanul Date 9/22/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002370

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/28/00	16:50	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	9/28/00	16:50	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/28/00	16:50	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	9/28/00	16:50	OK

R002371

2/3

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	9/28/00	16:50	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002372

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	9/28/00	16:50	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/28/00	16:50	OK

Signatures

Shift 1 Operator Brian J. Staual Date 9/28/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002373

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	9/29/00	14:00	NO DUST 20-25 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002374

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002375

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting.	After each storm event of ½ inch or more.			
		2. Erosion matting - inspect for washout and/or undercutting.	After each storm event of ½ inch or more.			
		3. Erosion bales or silt fencing - inspect for washout or undercutting.	After each storm event of ½ inch or more.			
		4. Ditches - inspect for erosion or siltation.	After each storm event of ½ inch or more.			
		5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	9/29/00	14:00	NO DUST. 20-25 mph WINDS

Signatures

Shift 1 Operator Brian Stamel Date 9/29/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002376

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/4/00	15:00	NO DUST.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/4/00	15:00	OK, 0.7" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/4/00	15:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002377

2/3 1

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	10/4/00	15:00	NO LIQUID.
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R0023378

3/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/4/00	15:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/4/00	15:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/4/00	15:00	OK

Signatures

Shift 1 Operator Brian Stanul Date 10/4/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002379

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/25/00	12:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/25/00	12:00	NEEDS TO BE PUMPED.
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/25/00	12:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	10/25/00	12:00	OK

R002380

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	10/25/00	19:25	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/25/00	19:25	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually	10/25/00	12:00	OK
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002381

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/25/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/25/00	12:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/25/00	12:00	OK

Signatures

Shift 1 Operator Brian Stamel Date 10/25/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002382

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

65

R002383

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	10/26/00	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/26/00	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002384

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanuel Date 10/26/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002385

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002386

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/27/00	18:00	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002387

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift I Operator Brian Stawel Date 10/27/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002388

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			

R002389

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	10/28/00	14:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002390

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanul Date 10/28/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002391

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/12/00	17:30	NO DUST, 10-15 mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/12/00	17:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/12/00	17:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	10/12/00	17:30	OK

74

R002392

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	10/12/00	17:30	OK
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	10/12/00	17:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002393

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/12/00	17:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/12/00	17:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/12/00	17:30	OK

Signatures

Shift 1 Operator Brian Stanul Date 10/12/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002394

1/3

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	10/18/00	16:00	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	10/18/00	16:00	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			N/A
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/18/00	16:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/18/00	16:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

77

R002395

2/3 1

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline 2. Check for leaks 3. Check for leaks weekly thereafter 4. Service pumps 5. Check pressure transducer for proper operation 6. Check flow meters and pump controls for proper operation 7. Check alarms and alarm lights, etc., for proper operation	Annually 5 days after start-up, repair leaks within 15 days. As per manufacturer's O&M manual[1, 2] As per manufacturer's O&M manual[1, 2] As per manufacturer's O&M manual[1, 2] 15 days			N/A
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3] 2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur. 3. Check pressure transduces for proper operation. 4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure. As per manufacturer's O&M manual Weekly during active site life; monthly after closure.			N/A
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks. 2. Check for settlement, slumping or sloughing 3. Check for erosion and bare sod areas.	Semiannually Semiannually Semiannually and after each major rainfall event			N/A

R002396

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	10/18/00	16:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	10/18/00	16:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	10/18/00	16:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			N/A
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	10/18/00	16:00	OK

Signatures

Shift I Operator Brian Stanwood Date 10/18/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R0022397

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002398

2/3

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/2/00	15:15	OK

Signatures

Shift 1 Operator Brian Stanuel Date 11/2/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002399

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/2/00	15:15	OK
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/2/00	15:15	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/2/00	15:15	OK

R002400

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/6/00	13:30	NO DUST.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/6/00	13:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/6/00	13:30	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/6/00	13:30	OK

R002401

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002402

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/6/00	13:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/6/00	13:30	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting.	After each storm event of ½ inch or more.	11/6/00	13:30	OK
		2. Erosion matting - inspect for washout and/or undercutting.	After each storm event of ½ inch or more.			
		3. Erosion bales or silt fencing - inspect for washout or undercutting.	After each storm event of ½ inch or more.			
		4. Ditches - inspect for erosion or siltation.	After each storm event of ½ inch or more.			
		5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/6/00	13:30	OK

Signatures

Shift 1 Operator Brian Stamel Date 11/6/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002403

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.			
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/9/00	09:00	OK, 0.80" OF RAIN
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/9/00	09:00	SOME MUD TRACKING
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/9/00	09:00	OK

R002404

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	11/9/00	09:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002405

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	11/9/00	09:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	11/9/00	09:00	SOME MUD TRACKING
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	11/9/00	09:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift I Operator Brian Stamel Date 11/9/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002406

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/14/00	16:35	NO DUST, 15-25 WINDS.
Facility Freeboard 68	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/14/00	16:35	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/14/00	16:35	OK

R002407

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002408

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/14/00	16:35	OK

Signatures

Shift 1 Operator Brian Stanek Date 11/14/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002409

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	11/20/00	16:30	OK, 15-20 mph WINDS, SOME DUST ON PARKING LOT.
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	11/20/00	16:30	OK
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	11/20/00	16:30	OK

R002410

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

93

R002411

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	11/24/00	16:30	OK

Signatures

Shift 1 Operator Brian Stanul Date 11/20/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002412

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/1/00	14:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			N/A
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

R002413

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002414

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	12/1/00	14:00	NO DUST

Signatures

Shift 1 Operator Brian Stamel Date 12/1/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002415

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/7/00	16:30	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.	12/7/00	16:30	N/A
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			N/A
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			N/A
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

R002416

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			N/A
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

R002417

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			N/A
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			N/A
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			N/A
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	12/7/00	16:30	NO DUST

Signatures

Shift I Operator Brian Stanul Date 12/7/00

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002418

Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/11/00	12:00	NO DUST, 20-25mph WINDS
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			N/A
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK, 12" OF SNOW
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/11/00	12:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.	12/11/00	12:00	OK

101

R002419

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

102

R002420

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/11/00	12:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/11/00	12:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	12/11/00	12:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.	12/11/00	12:00	OK

ignatures

hift I Operator Brian Stanul Date 12/11/00

lanager _____

)&M Manual - Operations and Maintenance Manual.
)&M Manual log for all mechanical equipment should be attached to this log.
To be compared with the action leakage rate of 4,680 gal/day.

R002421

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Revised Figure F-1

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Log
for Waste Pile Construction and Operation

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-2b(4)(c) - Wind Dispersal	Sludge Waste Piles	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speed exceeds 10 mph. Check continually throughout the day under dry windy conditions.	12/18/00	17:00	NO DUST
Facility Freeboard	Temporary Dewatering Sump	1. Check for proper operation and potential clogging. 2. Check dewatering sump for clogging. 3. Check dewatering pump for proper operation.	Weekly plus after each storm event of ½ inch of precipitation or more.			N/A
F-2b(4)(b) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK, 6" OF SNOW.
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/18/00	17:00	OK
Temporary Contaminated Soil Stockpile	Geosynthetic Cover (tarp)	1. Check for rips or tears 2. Check anchoring, including sand bags and/or tires 3. Check ditches for rips or tears 4. Check spillways and ditches for erosion or siltation	Weekly or when wind speeds exceed 10 mph or the occurrence of a storm event with ½ inch of precipitation or more. Inspect tarp and secure daily during excavation activities.			N/A

R002422

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	12/18/00	17:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

104

R002423

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	12/18/00	17:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.	12/18/00	17:00	OK
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	12/18/00	17:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stanuel Date 12/18/00

Manager _____

O&M Manual - Operations and Maintenance Manual.
O&M Manual log for all mechanical equipment should be attached to this log.
To be compared with the action leakage rate of 4,680 gal/day.

R002424

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transducer for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	1/13/01	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/13/01	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

106

R002425

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stanul Date 1/13/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002426

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	1/14/01	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/14/01	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event	1/14/01	17:00	NO EROSION, GROUND FROZEN

108

R002427

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	1/14/01	17:30	OK, SOME STANDING WATER DRAINED FROM ANCHOR TRENCH. GROUND IS FROZEN.
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	1/14/01	17:30	OK, GROUND IS FROZEN
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamm Date 1/14/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002428

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,3]			
		4. Service pumps	As per manufacturer's O&M manual[1,3]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,3]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.	1/15/01	17:30	Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/15/01	17:30	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

110

R002429

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stamm Date 1/15/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002430

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/16/01	17:15	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

112

R002431

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift I Operator Brian Stamel Date 1/16/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

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R002432

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually			
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,3]			
		4. Service pumps	As per manufacturer's O&M manual[1,3]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,3]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.			
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.	1/17/01	17:00	Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually			
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

114

R002433

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more			
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more			
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.			
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			

Signatures

Shift 1 Operator Brian Stonel Date 1/17/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002434

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	2/15/01	09:30	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation	15 days			
		7. Check alarms and alarm lights, etc., for proper operation				
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	2/15/01	09:30	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.	As per manufacturer's O&M manual			
		3. Check pressure transduces for proper operation.	Weekly during active site life; monthly after closure.			
		4. Check alarm lights for proper operation.				
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	2/15/01	09:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

116

R002435

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually			N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	2/15/01	09:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	2/15/01	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	2/15/01	09:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stamel Date 2/15/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	2/28/01	14:00	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	2/28/01	14:00	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	2/28/01	14:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

118

R002437

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	2/28/01	14:00	N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	2/28/01	14:00	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	2/28/01	14:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	2/28/01	14:00	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stanul Date 2/28/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	3/30/01	11:30	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	3/30/01	11:30	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	3/30/01	11:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

120

R002439

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	3/30/01	11:30	~~N/A~~
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	3/30/01	11:30	SOME EROSION TO SED. BASIN NO. 2
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	3/30/01	11:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	3/30/01	11:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stamel Date 3/30/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

R002440

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	5/1/01	10:00	N/A
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	5/1/01	10:00	N/A
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	5/1/01	10:00	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

122

R002441

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	5/1/01	10:00	N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	5/1/01	10:00	EROSION TO SED. BASIN NO. 2 REPAIRED
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	5/1/01	10:00	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	5/1/01	10:00	OK.
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift 1 Operator Brian Stamel Date 5/1/01

Manager

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	5/30/01	09:30	SYSTEM START UP. WARNING LIGHT NEEDS REPLACEMEI
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1, 2]			
		4. Service pumps	As per manufacturer's O&M manual[1, 2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1, 2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	5/30/01	09:30	SYSTEM START UP. WARNING LIGHT NEEDS REPLACEMEN
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	5/30/01	09:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

124

R002443

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	5/30/01	09:30	N/A
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	5/30/01	09:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	5/30/01	09:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	5/30/01	09:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

Shift I Operator Brian Stanul Date 5/30/01

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Revised Figure F-2

Modern Plating Corporation
CAMU Landfill
RCRA Part B Inspection Schedule and Log for Landfill Operations

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
F-b(7)(d) Leachate Collection System (LCS)	Side Slope Riser (SSR) Pump and Piping	1. Remove pump and clean pipeline	Annually	7/5/01	12:30	OK
		2. Check for leaks	5 days after start-up, repair leaks within 15 days.			
		3. Check for leaks weekly thereafter	As per manufacturer's O&M manual[1,2]			
		4. Service pumps	As per manufacturer's O&M manual[1,2]			
		5. Check pressure transducer for proper operation	As per manufacturer's O&M manual[1,2]			
		6. Check flow meters and pump controls for proper operation				
		7. Check alarms and alarm lights, etc., for proper operation	15 days			
F-2b(7)(b) Leachate Detection System (LDS)		1. Check liquid levels and remove liquids above pumping level. Record liquid level and leachate quantity in sump.[3]	Weekly during active site life; monthly after closure.	7/5/01	12:30	OK
		2. Check liquid levels and remove liquids above pumping level. Refer to 35 IAC 724.403 for frequencies if leakage does not occur.				
		3. Check pressure transduces for proper operation.	As per manufacturer's O&M manual			
		4. Check alarm lights for proper operation.	Weekly during active site life; monthly after closure.			
Geosynthetic Clay Liner (GCL)	Soil Liner/Cap	1. Inspect as per 35 IAC 724.403 and construction CQA plan	During, prior to placement and during covering.			Construction QA/QC activity
Geomembranes	Thermo-plastic Liners	1. Inspect as per 35 IAC 724.403 and construction CQA plan.	During, prior to placement and during covering.			Construction QA/QC activity
Exterior of CAMU Landfill	Berms	1. Check for wet spots and leaks.	Semiannually	7/5/01	12:30	OK
		2. Check for settlement, slumping or sloughing	Semiannually			
		3. Check for erosion and bare sod areas.	Semiannually and after each major rainfall event			

126

R002445

Revised Figure F-2 *(Continued)*

Equipment or Area	Description	Activity Description	Frequency	Date	Time	Comments
Security Devices	Means to Control Entry	1. Review condition of fencing and gates 2. Check for locks in operating order.	Semiannually Semiannually	7/5/01	12:30	OK
	Exterior Lighting	1. Check for proper light operation.	Semiannually			
F-2b(7)(a) Surface Water Management and Erosion Control Structure	Sedimentation Pond	1. Check for erosion; washouts 2. Check water and sediment depth 3. Check outfall water clarity 4. Remove sediments as required to maintain capacity.	For all semiannually and after each storm event of ½ inch or more	7/5/01	12:30	OK
	Ditches, Culverts, Spillways, etc.	1. Check for erosion, washouts 2. Check for siltation. 3. Check vegetated areas for washouts, rills, etc.	For all semiannually and after each storm event of ½ inch or more	7/5/01	12:30	OK
	Others	1. Check roads for mud tracking. 2. Check roads for washouts.	After each storm event of ½ inch or more.			N/A
Erosion Control Devices		1. Riprap - inspect for washout and/or undercutting. 2. Erosion matting - inspect for washout and/or undercutting. 3. Erosion bales or silt fencing - inspect for washout or undercutting. 4. Ditches - inspect for erosion or siltation. 5. Velocity Breaks - Inspect for washout, undercutting, or siltation	After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more. After each storm event of ½ inch or more.	7/5/01	12:30	OK
F-2b(7)(c) Wind Dispersal	Landfilled Sludge and Contaminated Soil	1. Check for visible dust generated by winds or vehicular traffic.	Weekly except daily if wind speeds exceed 10 mph. Check continually throughout the day under dry, windy conditions.			N/A

Signatures

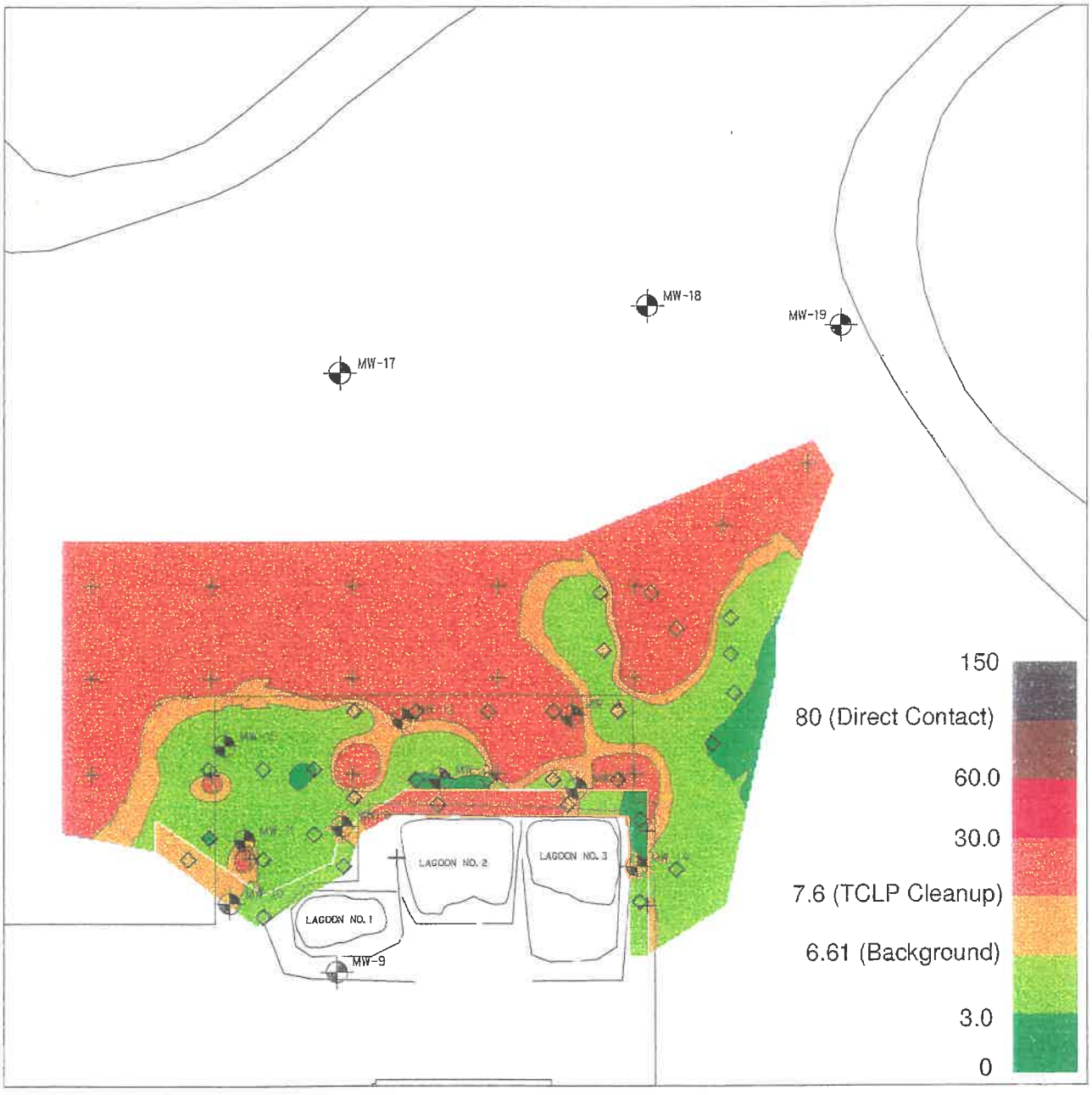
Date

Shift 1 Operator _____

Manager _____

[1]O&M Manual - Operations and Maintenance Manual.
[2]O&M Manual log for all mechanical equipment should be attached to this log.
[3]To be compared with the action leakage rate of 4,680 gal/day.

Soil Arsenic Concentrations (mg/kg)
0.5 - 1.5 Feet



+ 1991 Soil Sample

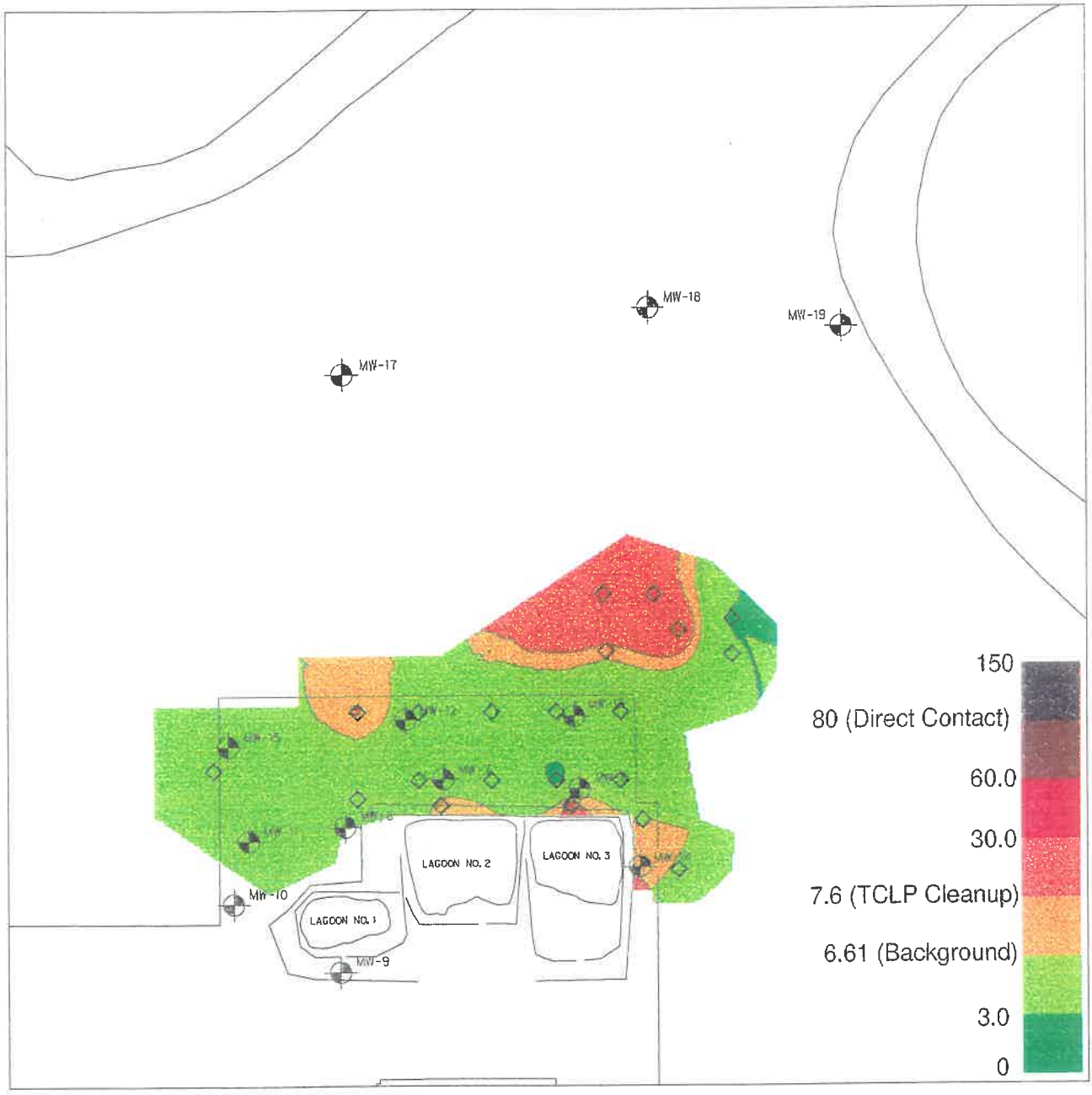
◇ 1994 Soil Sample

0 250 500 750 1000

Feet

1

Soil Arsenic Concentrations (mg/kg)
2.5 - 3.5 Feet

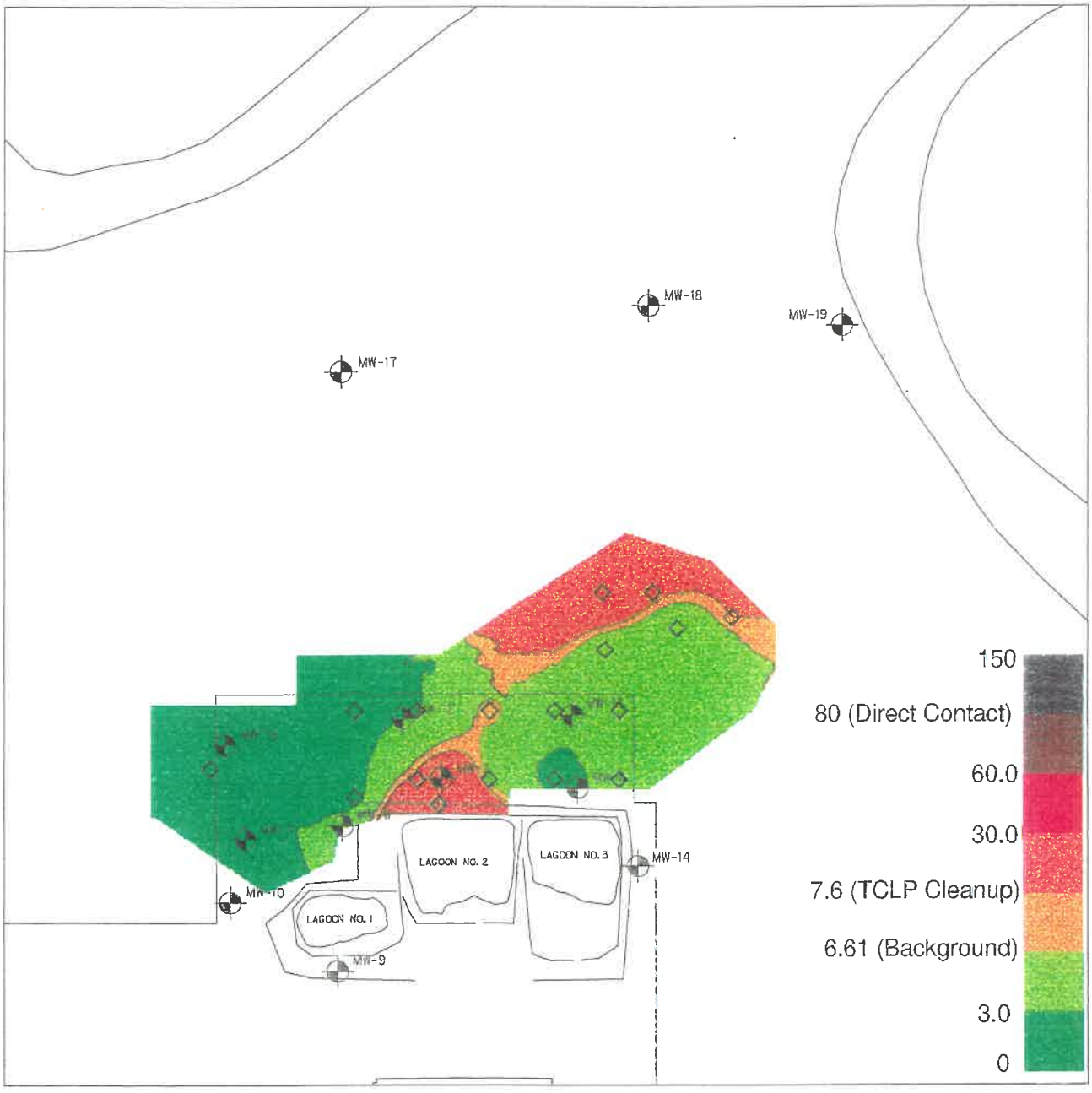


◇ 1994 Soil Sample

0 250 500 750 1000

Feet

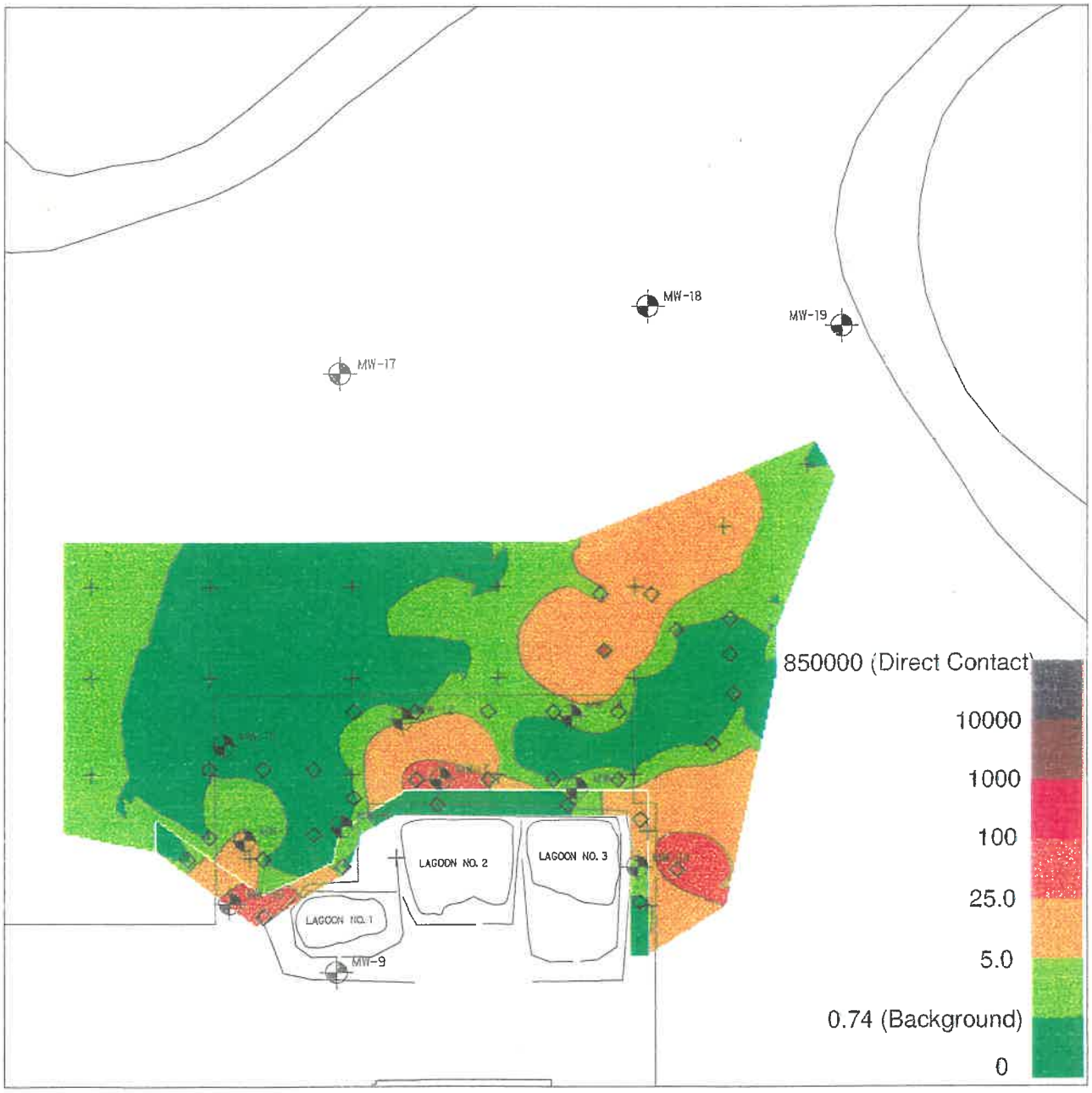
Soil Arsenic Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil Cyanide Concentrations (mg/kg)
0.5 - 1.5 Feet



+ 1991 Soil Sample

◇ 1994 Soil Sample

0 250 500 750 1000

Feet

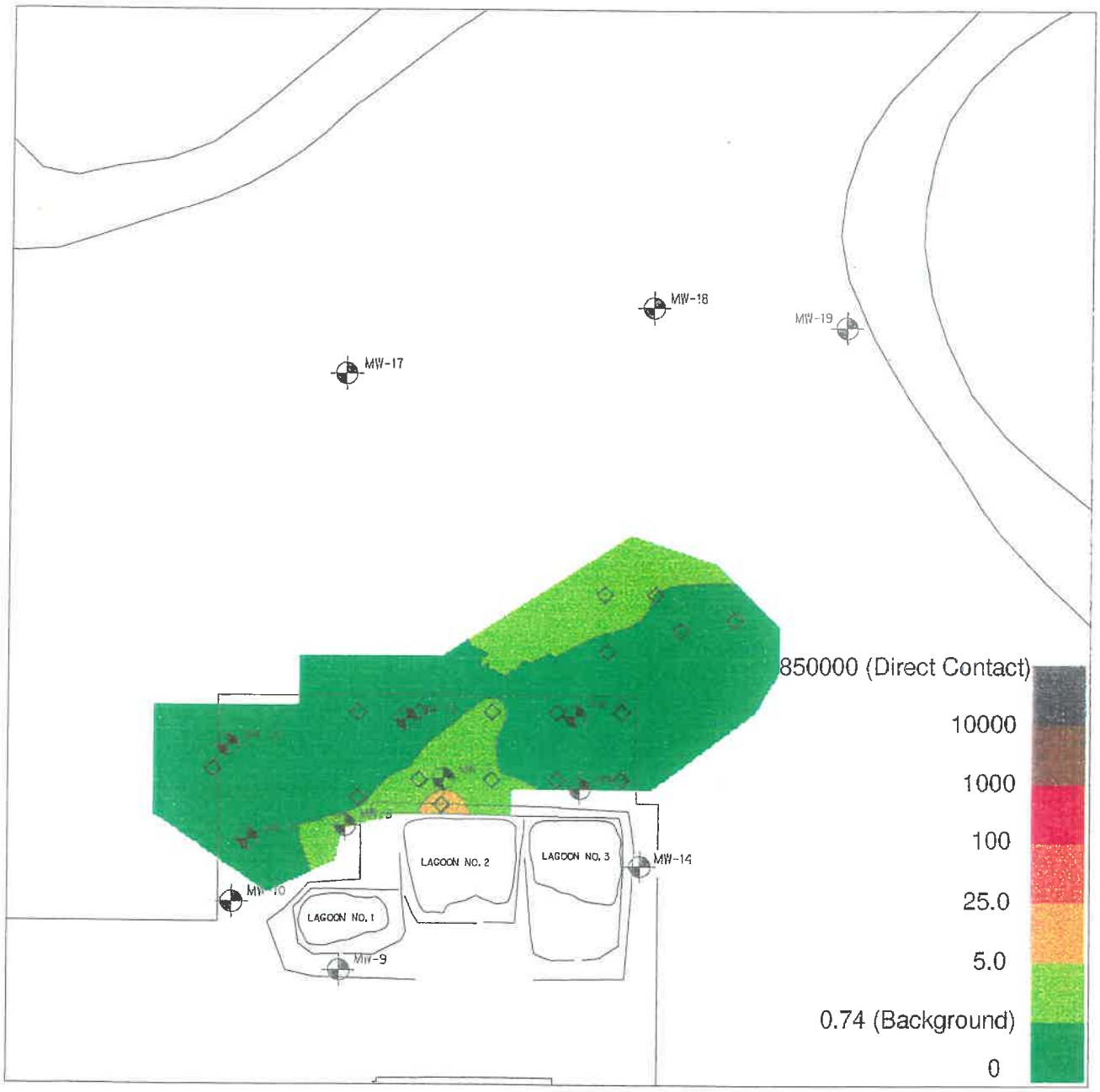
Soil Cyanide Concentrations (mg/kg)
2.5 - 3.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

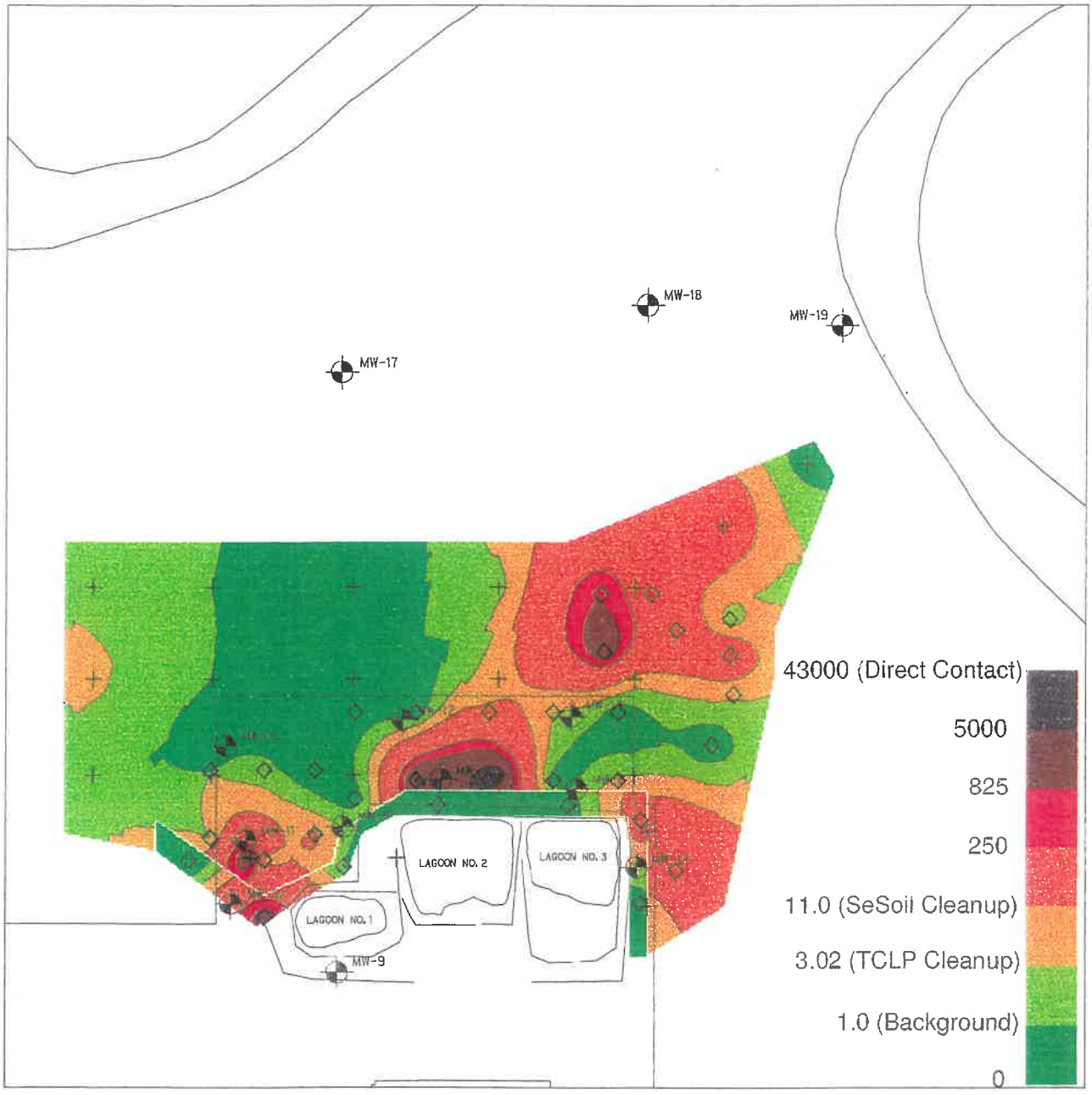
Soil Cyanide Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil Cadmium Concentrations (mg/kg)
0.5 - 1.5 Feet



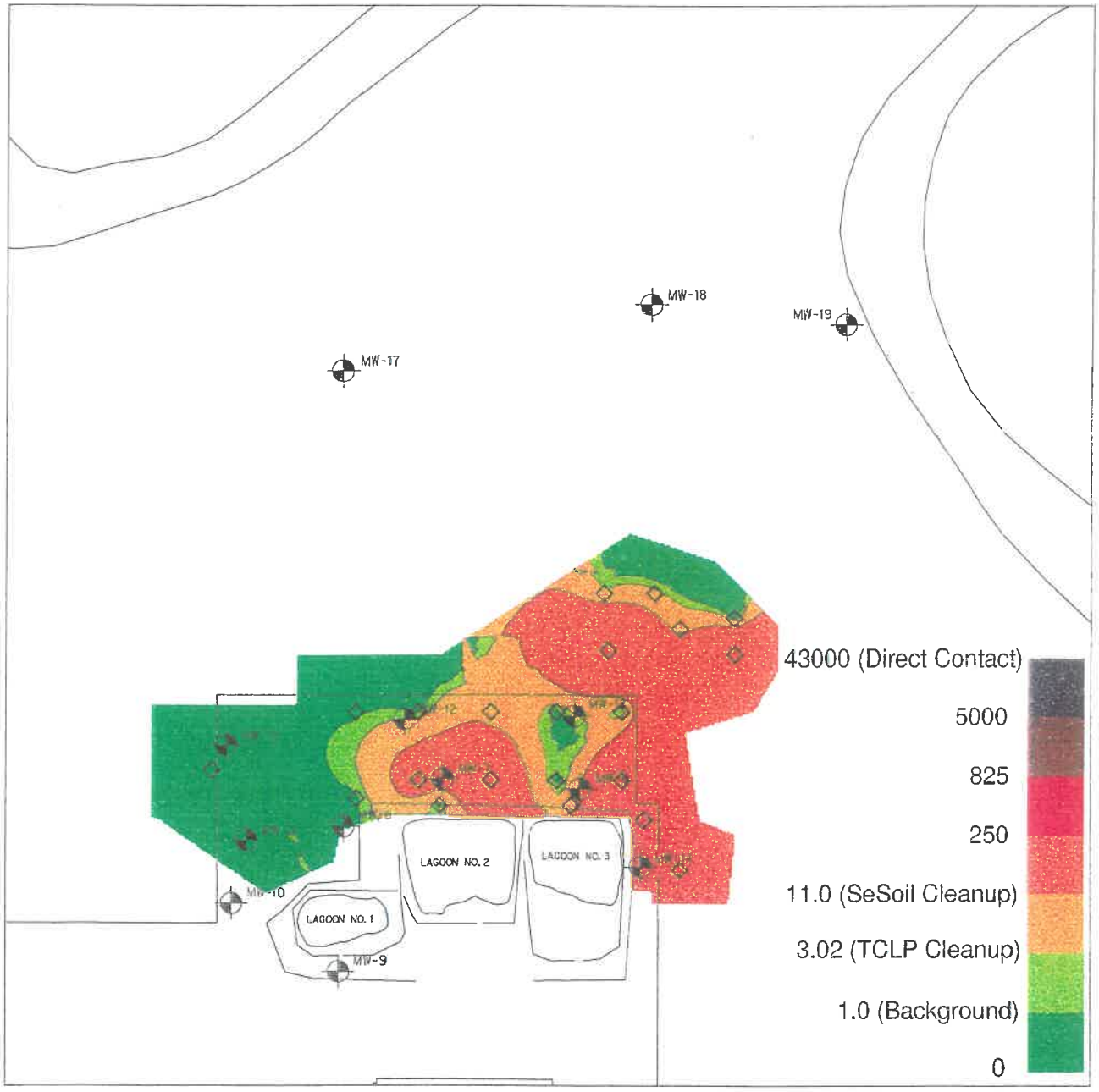
+ 1991 Soil Sample

◇ 1994 Soil Sample

0 250 500 750 1000

Feet

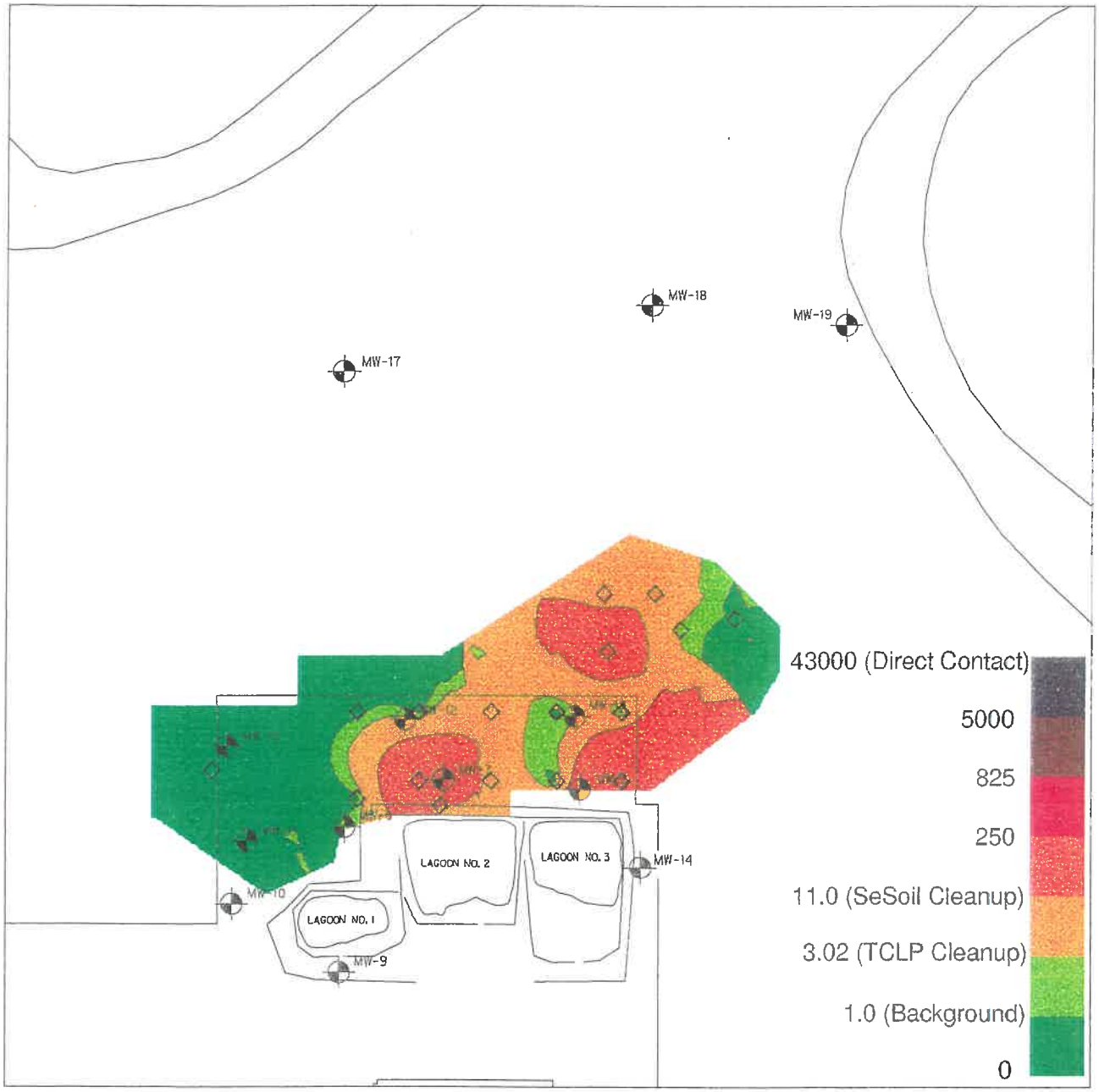
Soil Cadmium Concentrations (mg/kg)
2.5 - 3.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

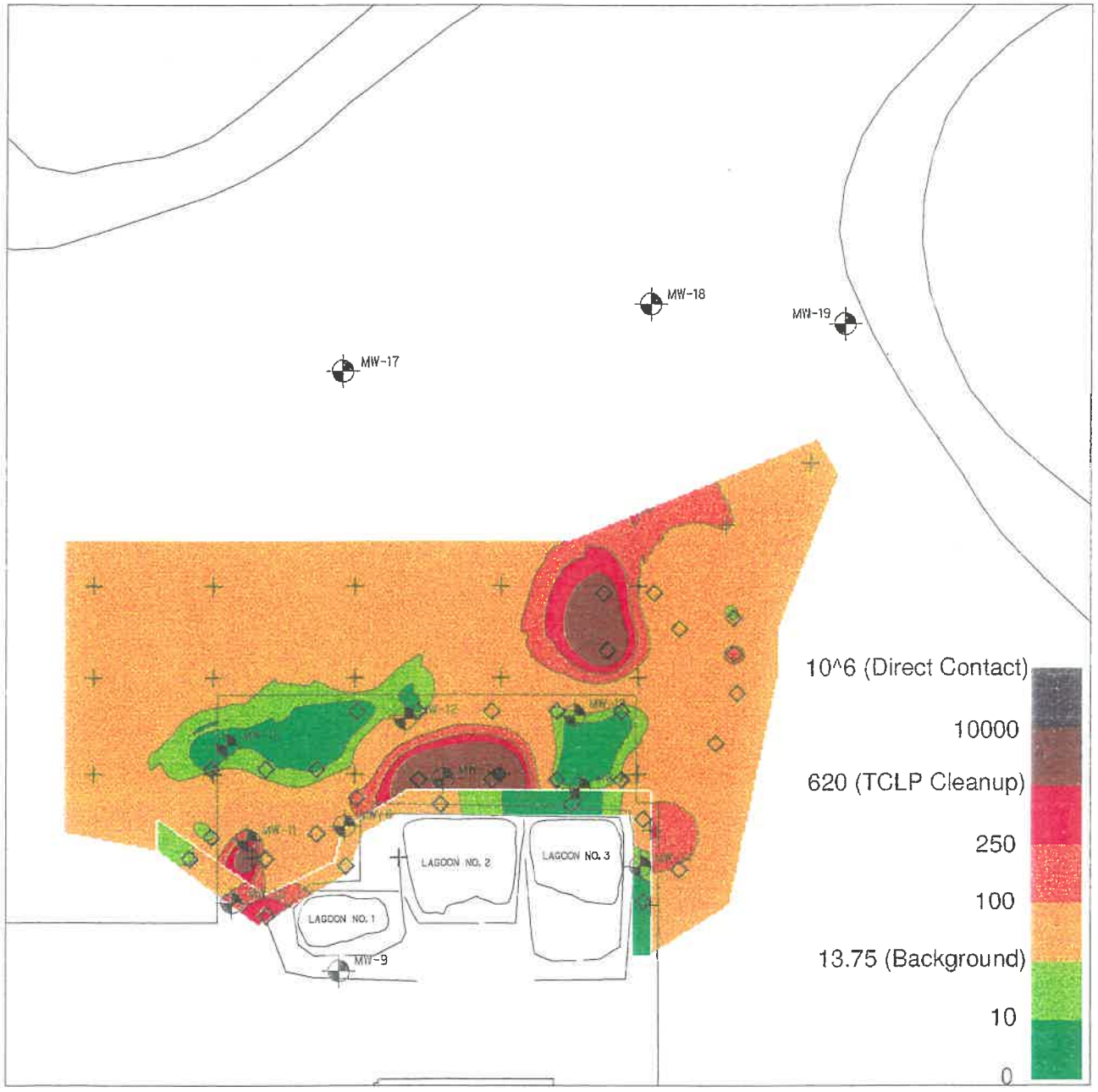
Soil Cadmium Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil Chromium Concentrations (mg/kg)
0.5 - 1.5 Feet



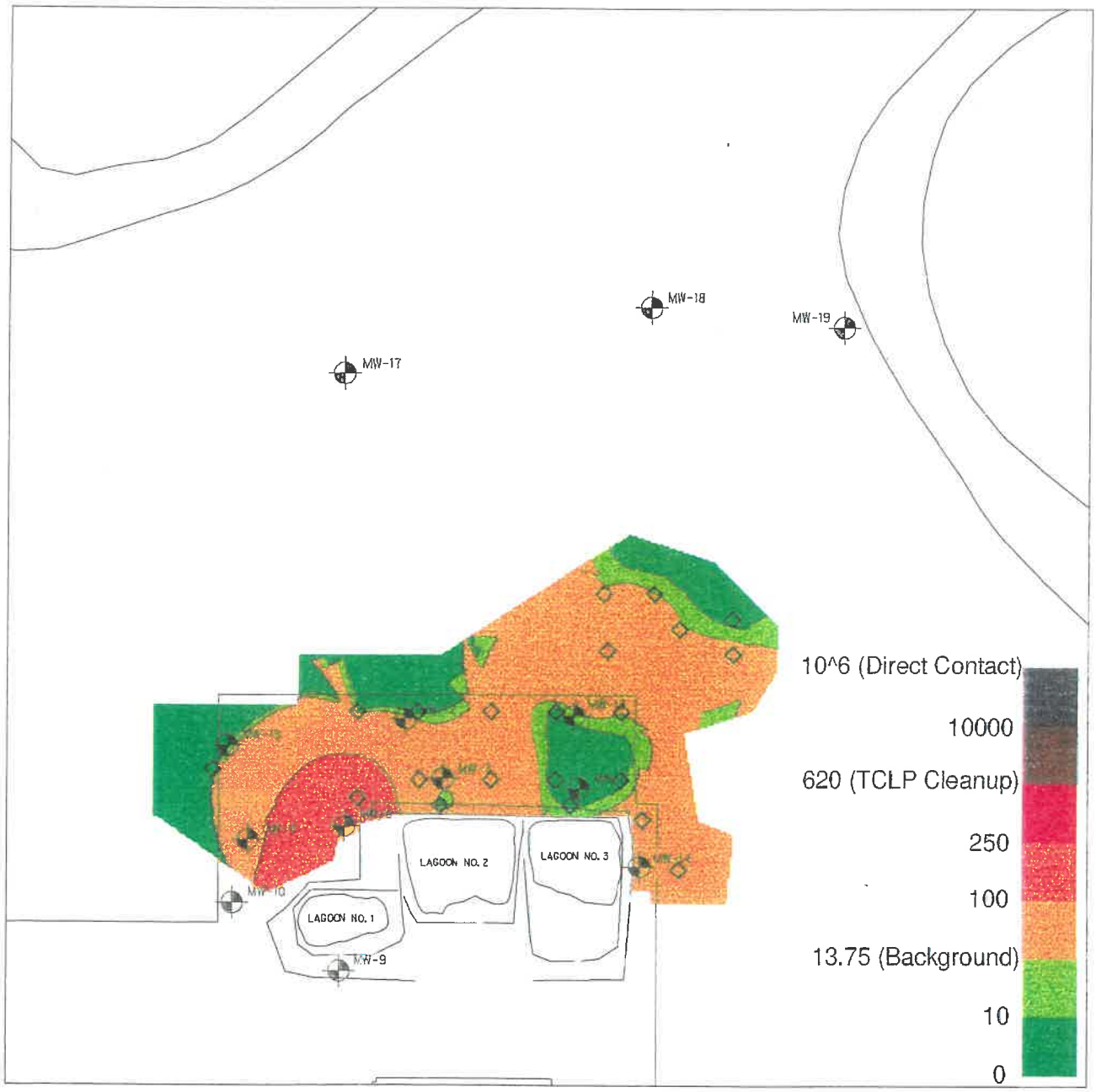
+ 1991 Soil Sample

◇ 1994 Soil Sample

0 250 500 750 1000

Feet

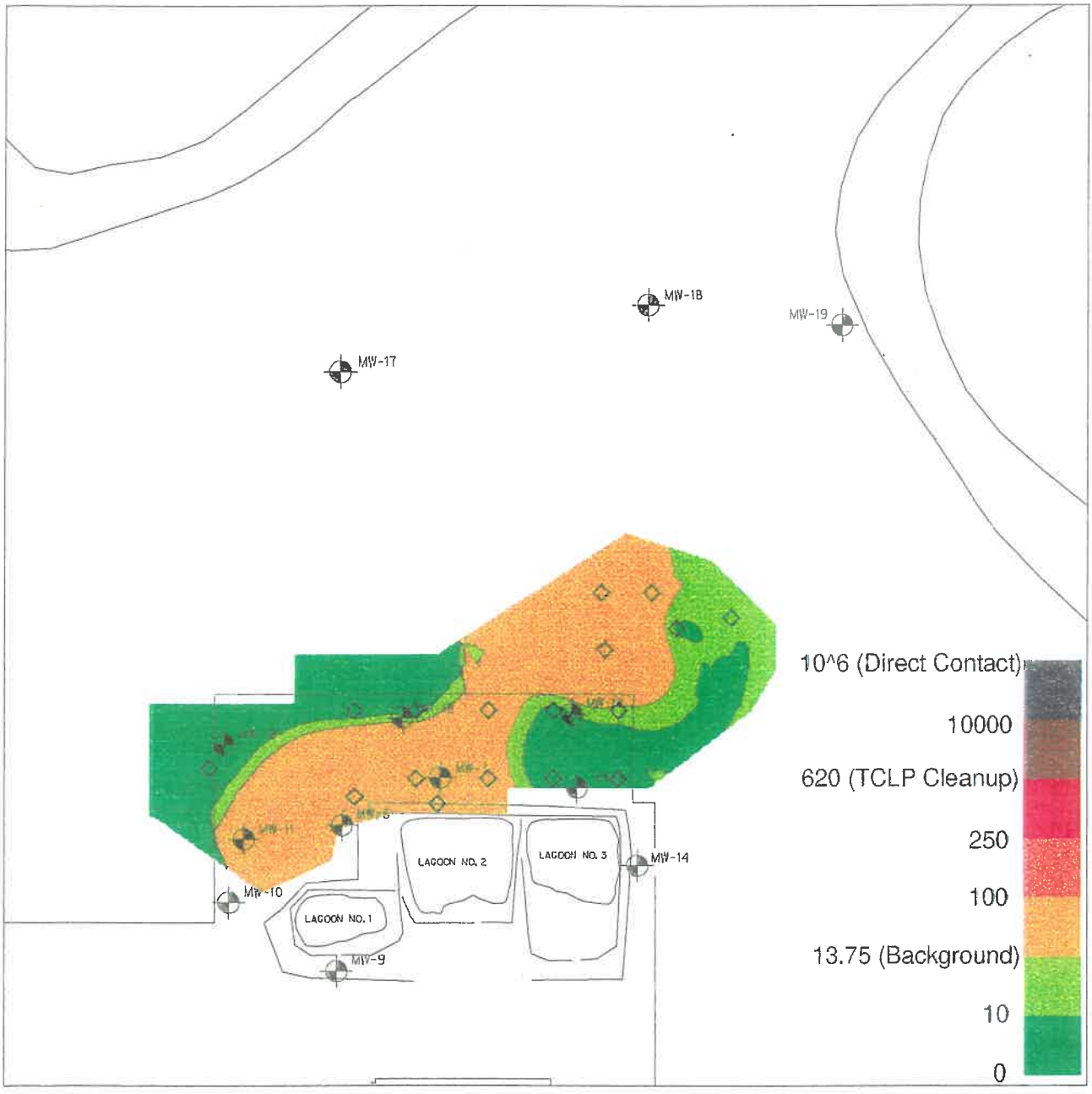
Soil Chromium Concentrations (mg/kg)
2.5 - 3.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

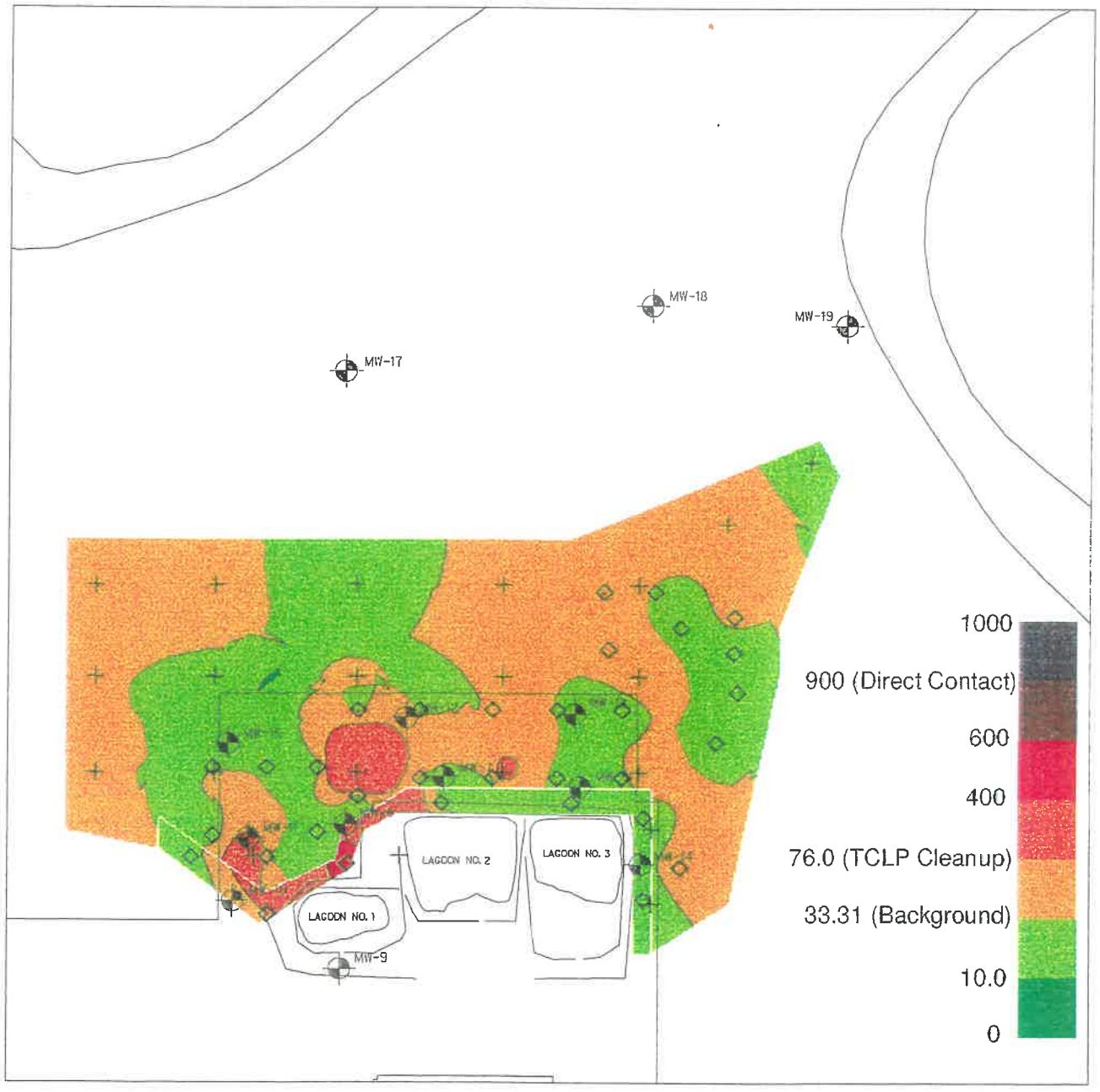
Soil Chromium Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil Lead Concentrations (mg/kg)
0.5 - 1.5 Feet



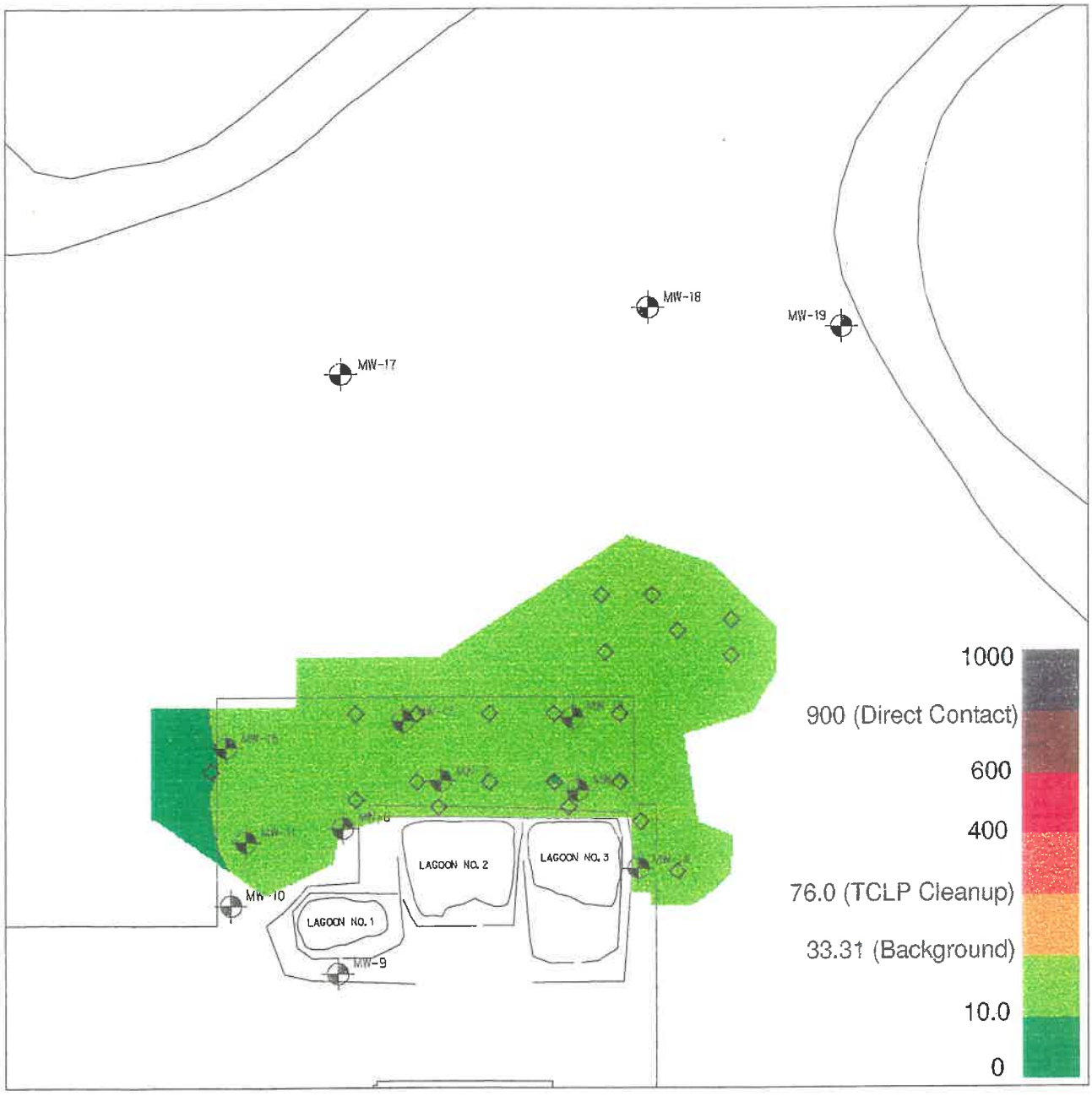
+ 1991 Soil Sample

◇ 1994 Soil Sample

0 250 500 750 1000

Feet

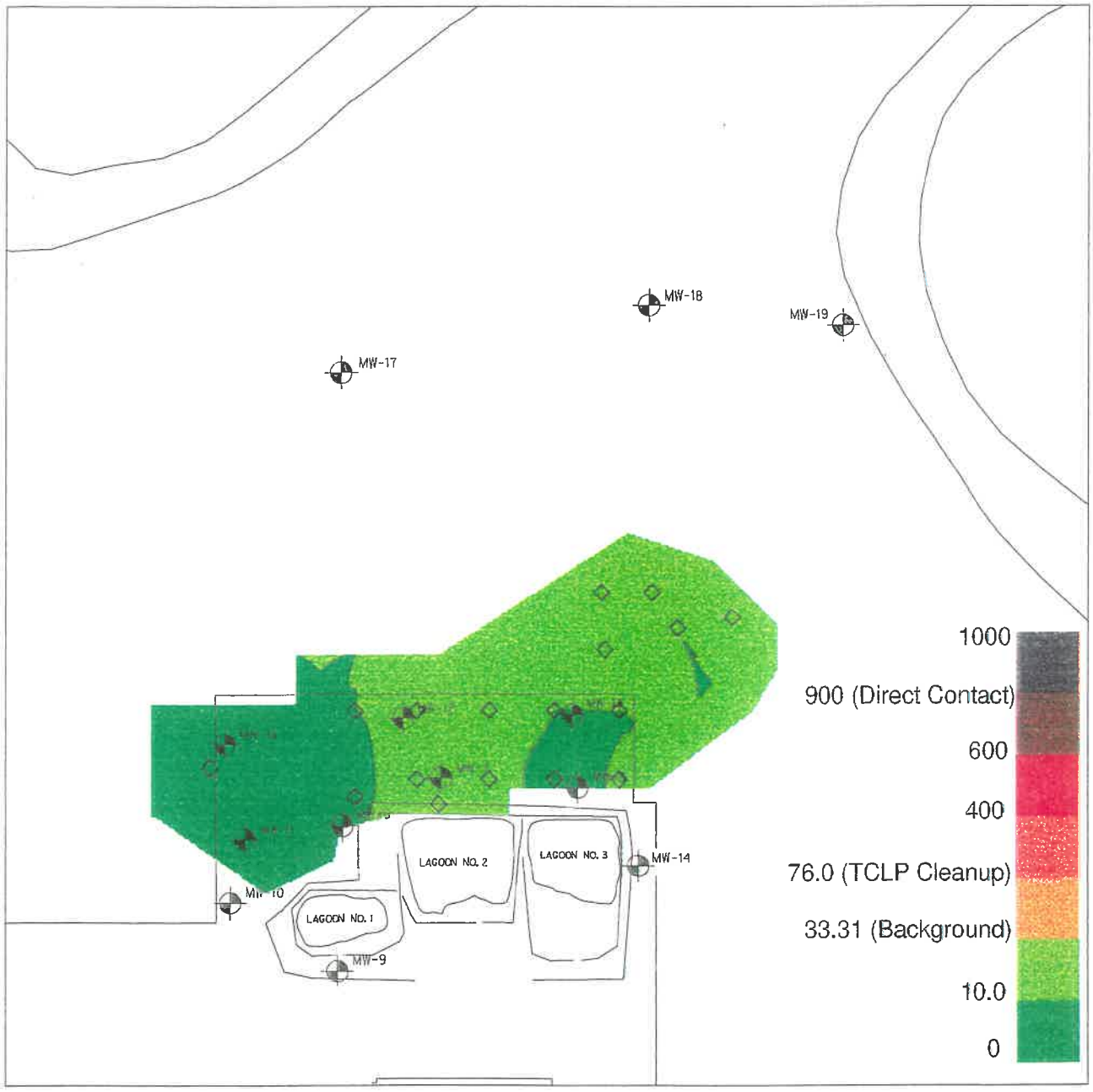
Soil Lead Concentrations (mg/kg)
2.5 - 3.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

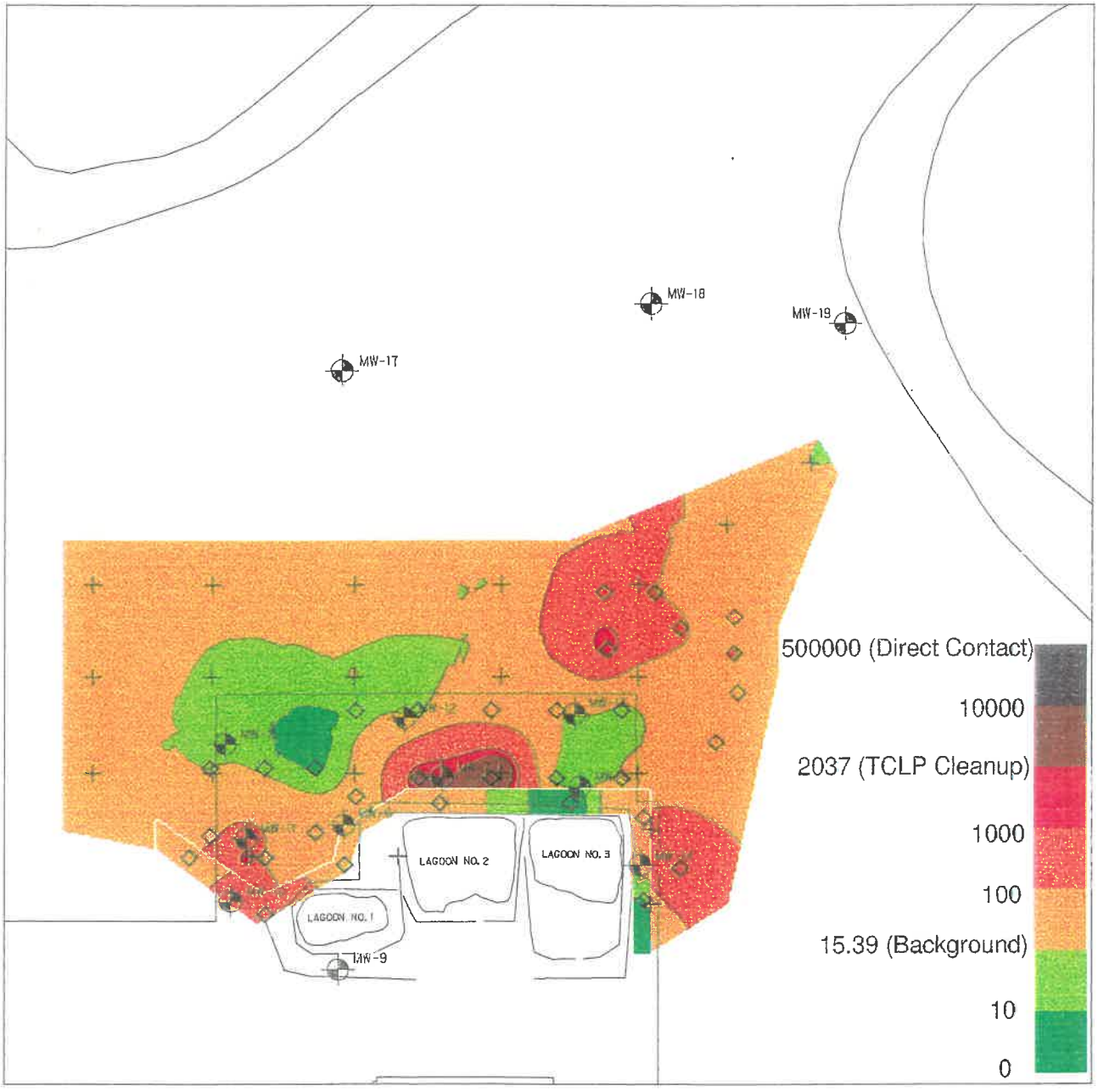
Soil Lead Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil Nickel Concentrations (mg/kg)
0.5 - 1.5 Feet



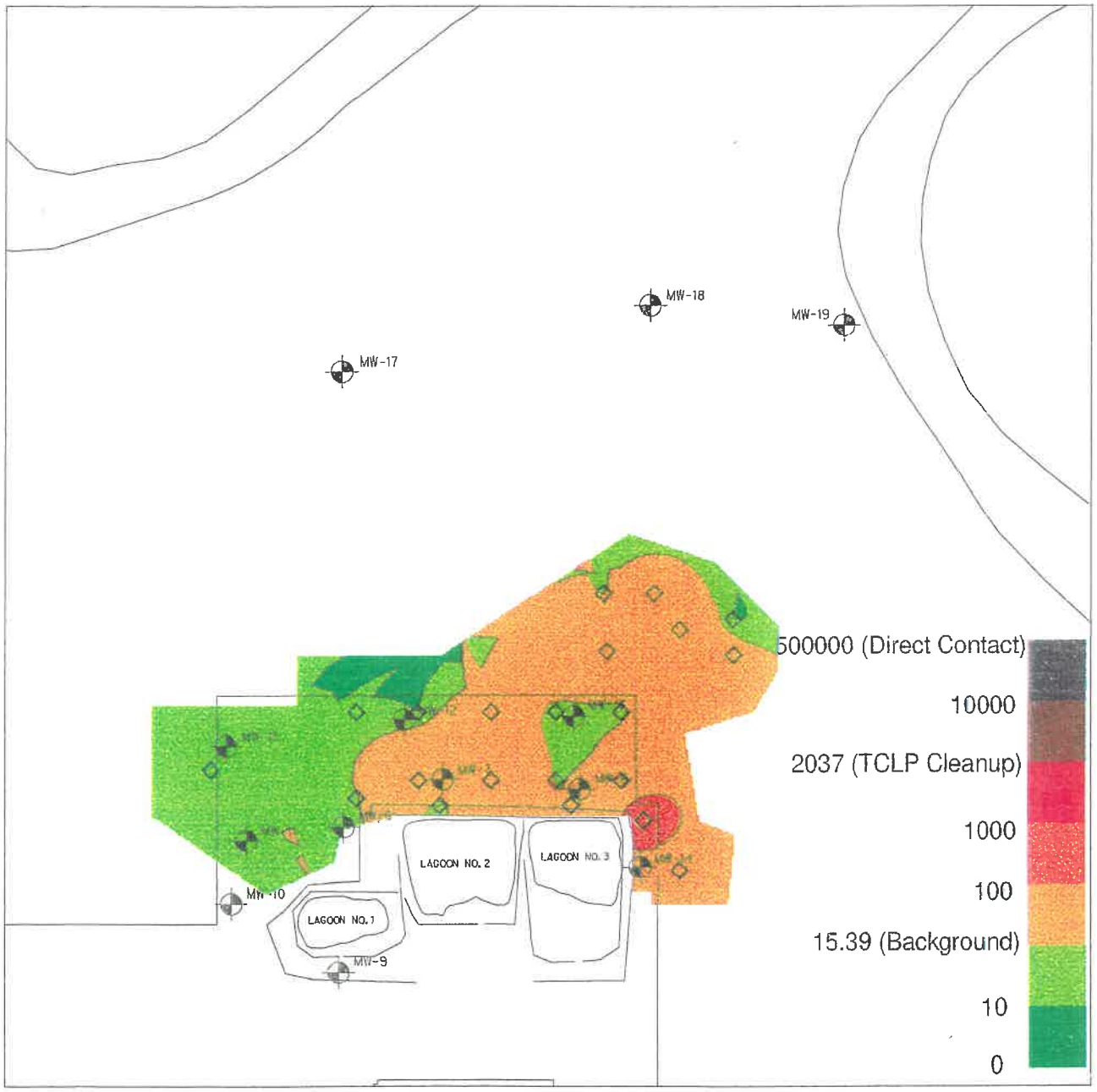
+ 1991 Soil Sample

◇ 1994 Soil Sample

0 250 500 750 1000

Feet

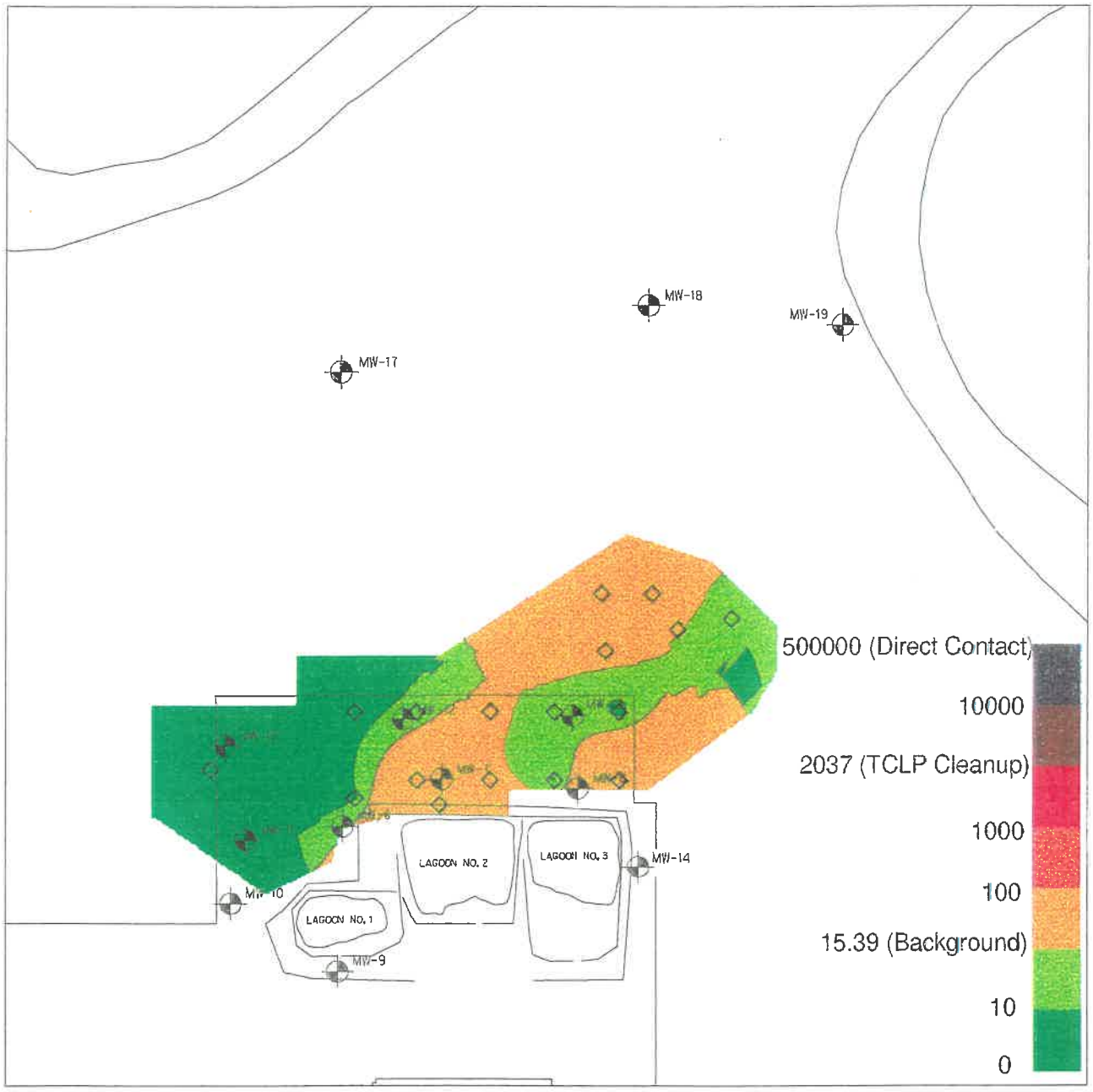
Soil Nickel Concentrations (mg/kg)
2.5 - 3.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

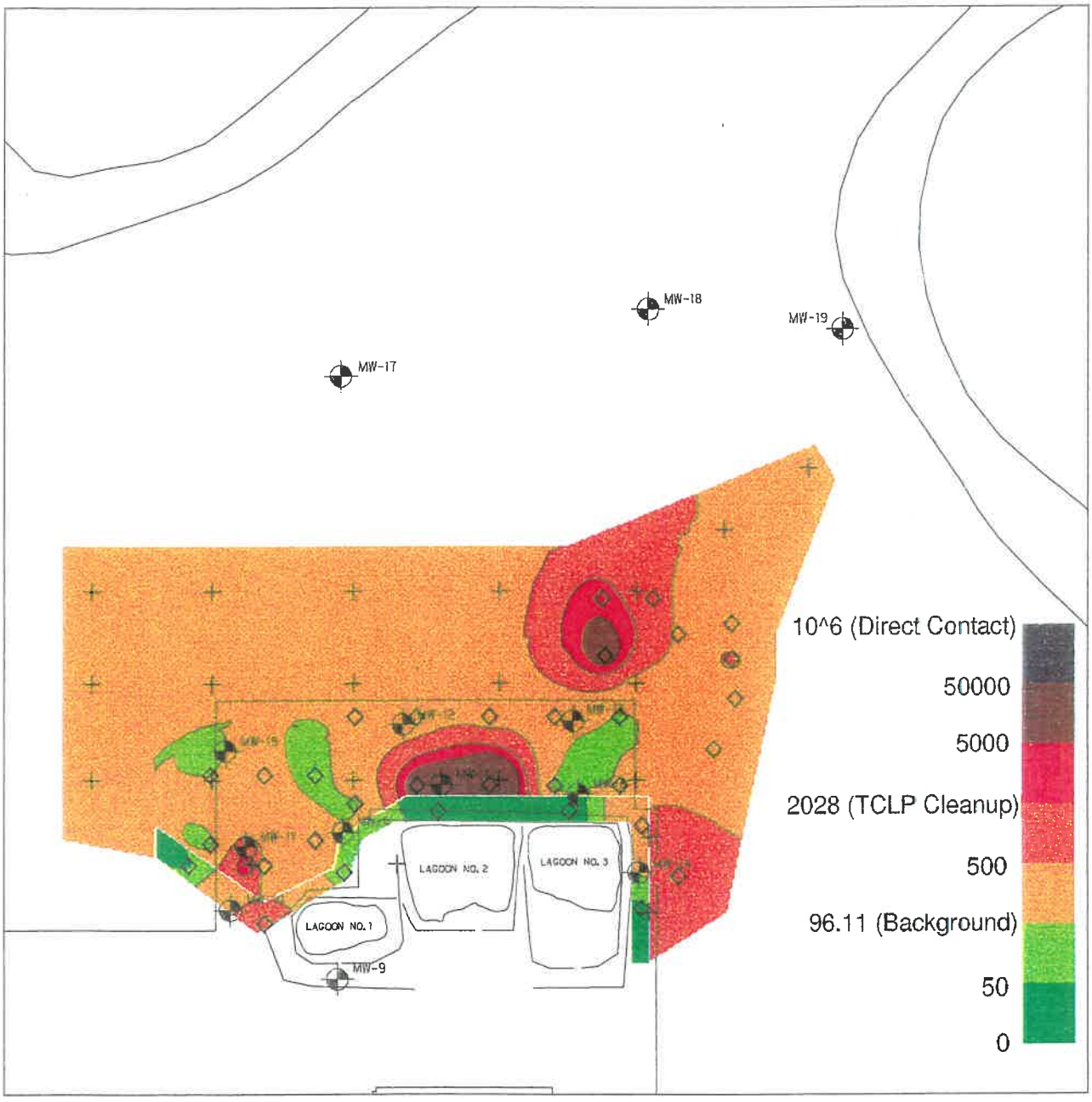
Soil Nickel Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil Zinc Concentrations (mg/kg)
0.5 - 1.5 Feet



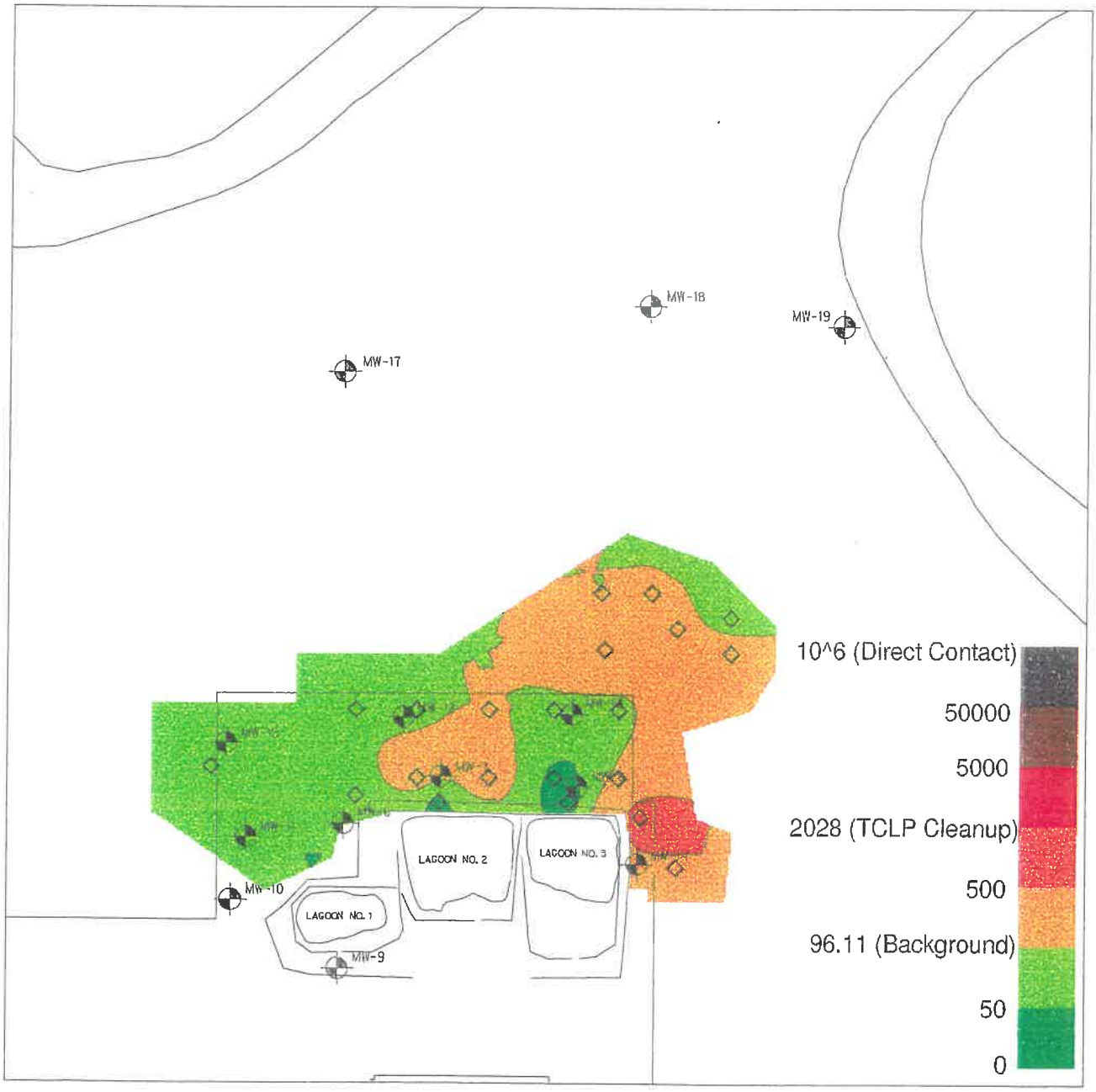
+ 1991 Soil Sample

◇ 1994 Soil Sample

0 250 500 750 1000

Feet

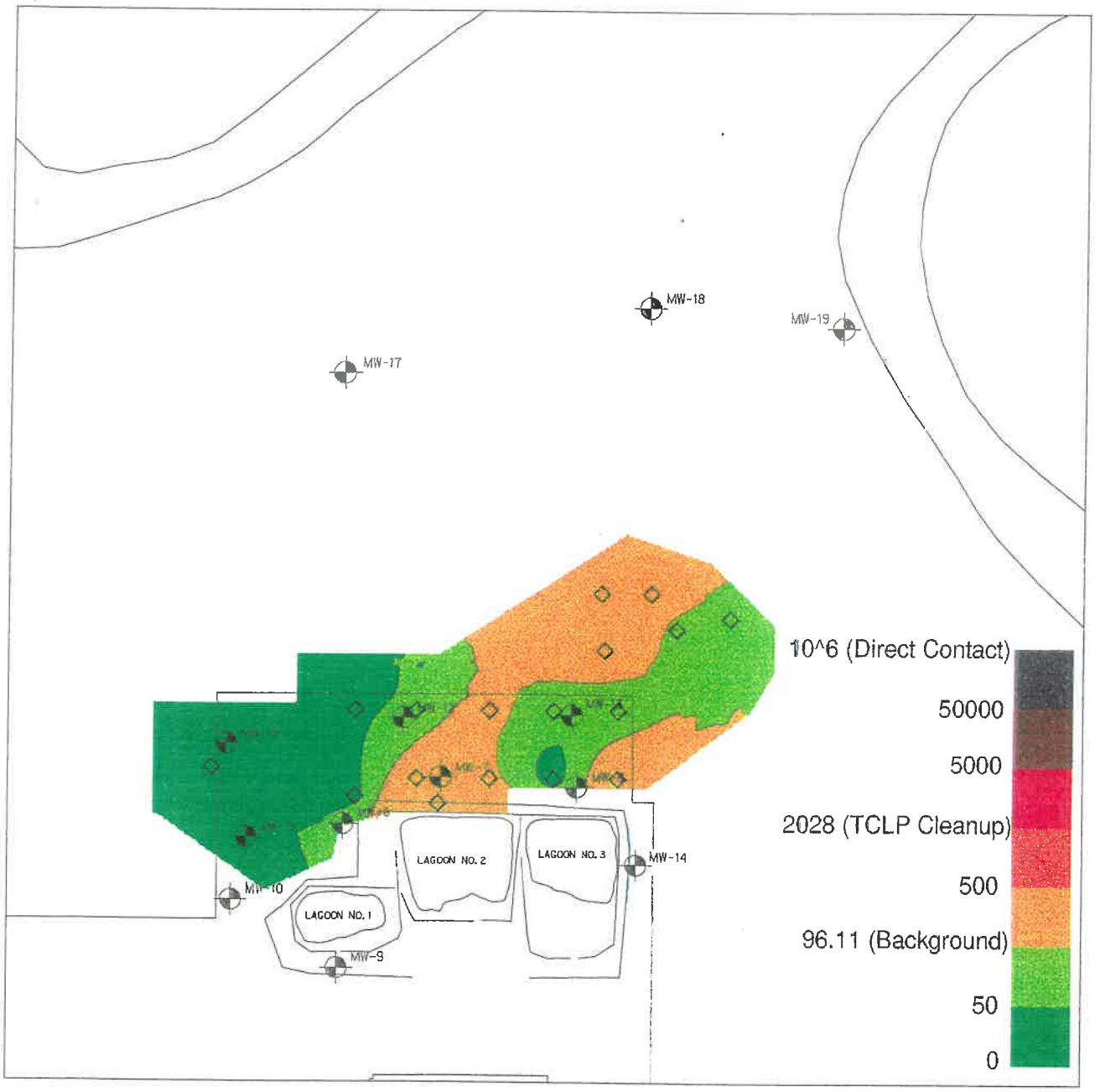
Soil Zinc Concentrations (mg/kg)
2.5 - 3.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

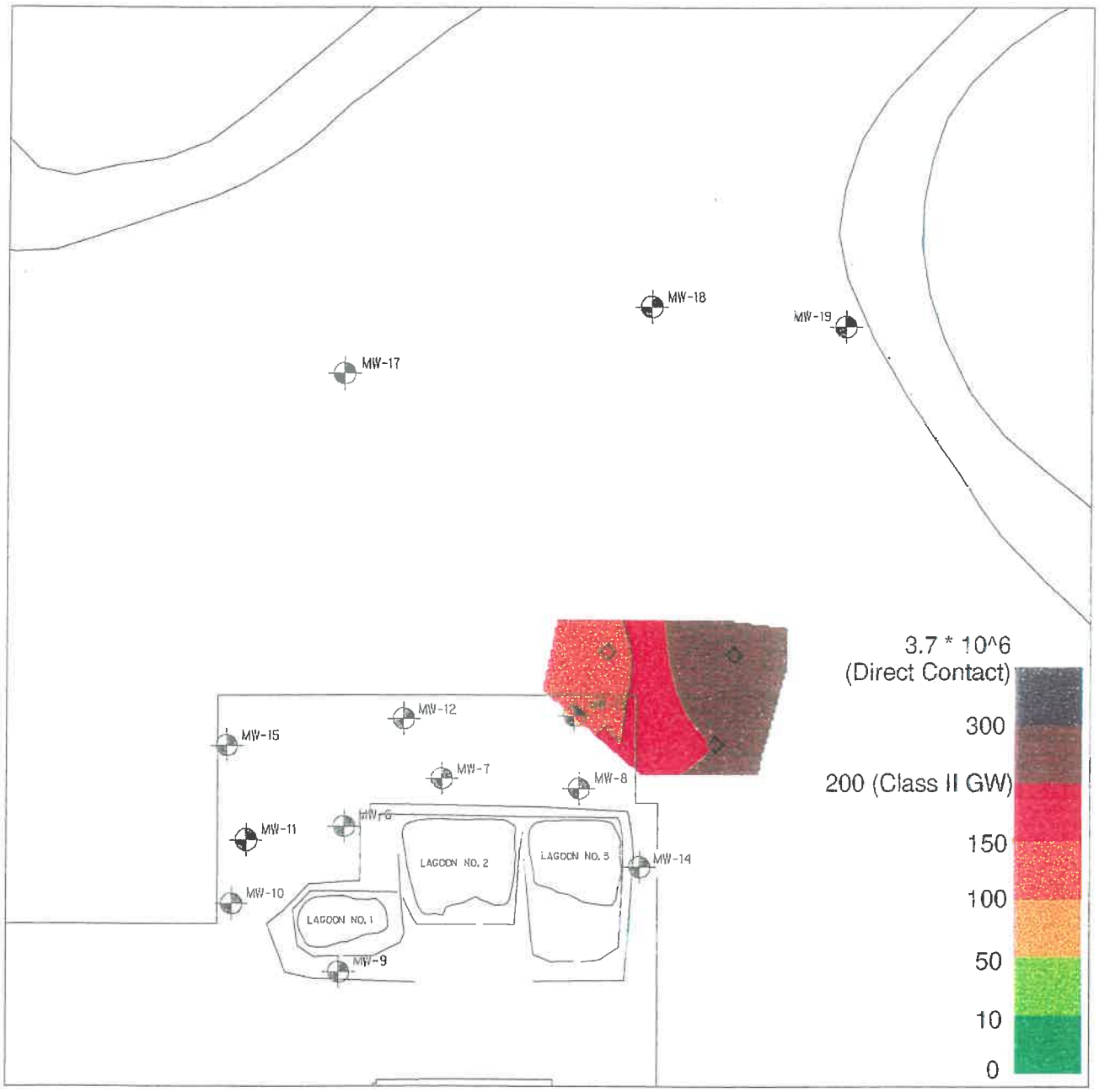
Soil Zinc Concentrations (mg/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

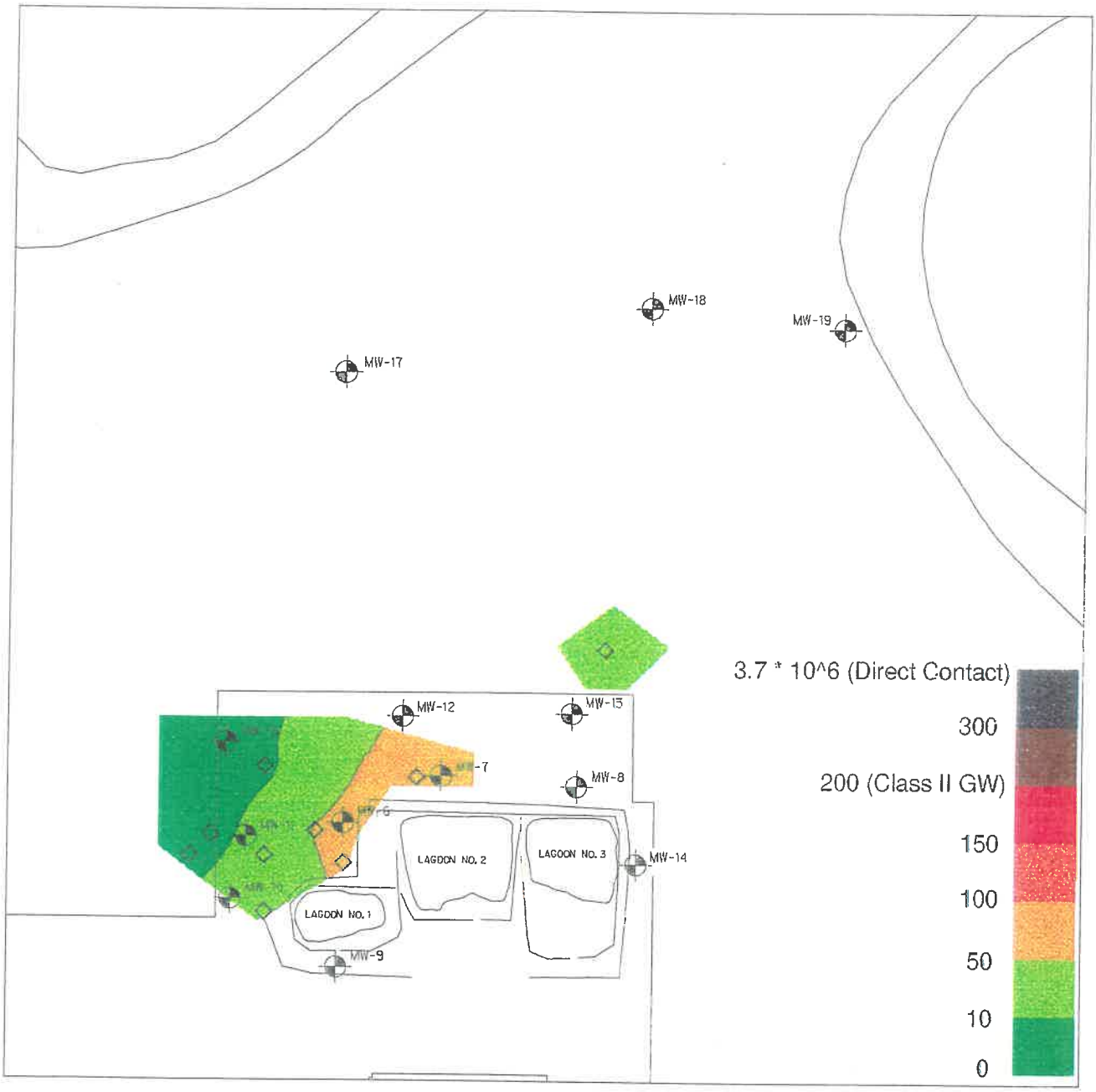
Soil cis-1,2-DCE Concentrations (ug/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Soil cis-1,2-DCE Concentrations (ug/kg)
0.5 - 1.5 Feet

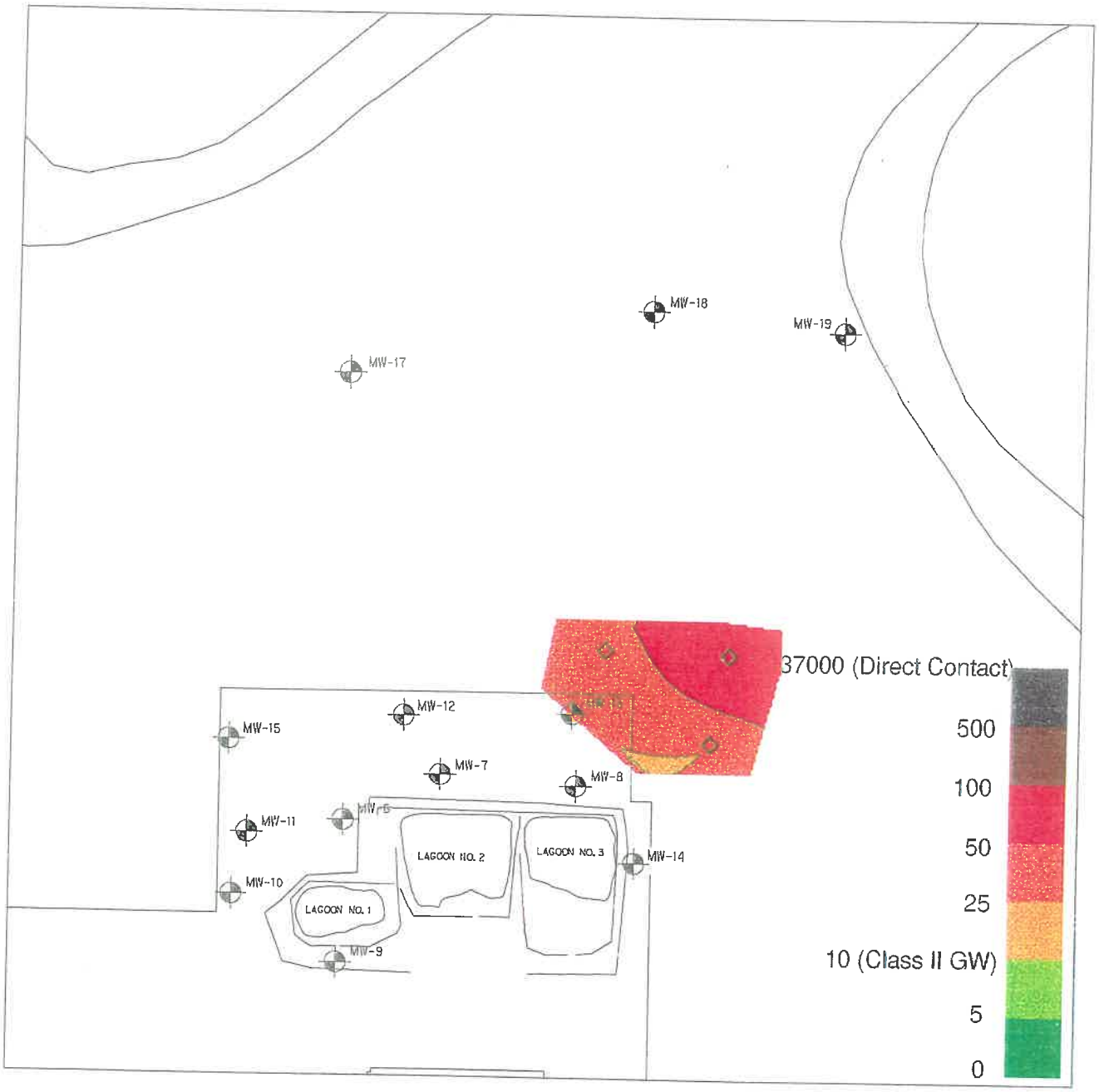


◇ 1994 Soil Sample

0 250 500 750 1000

Feet

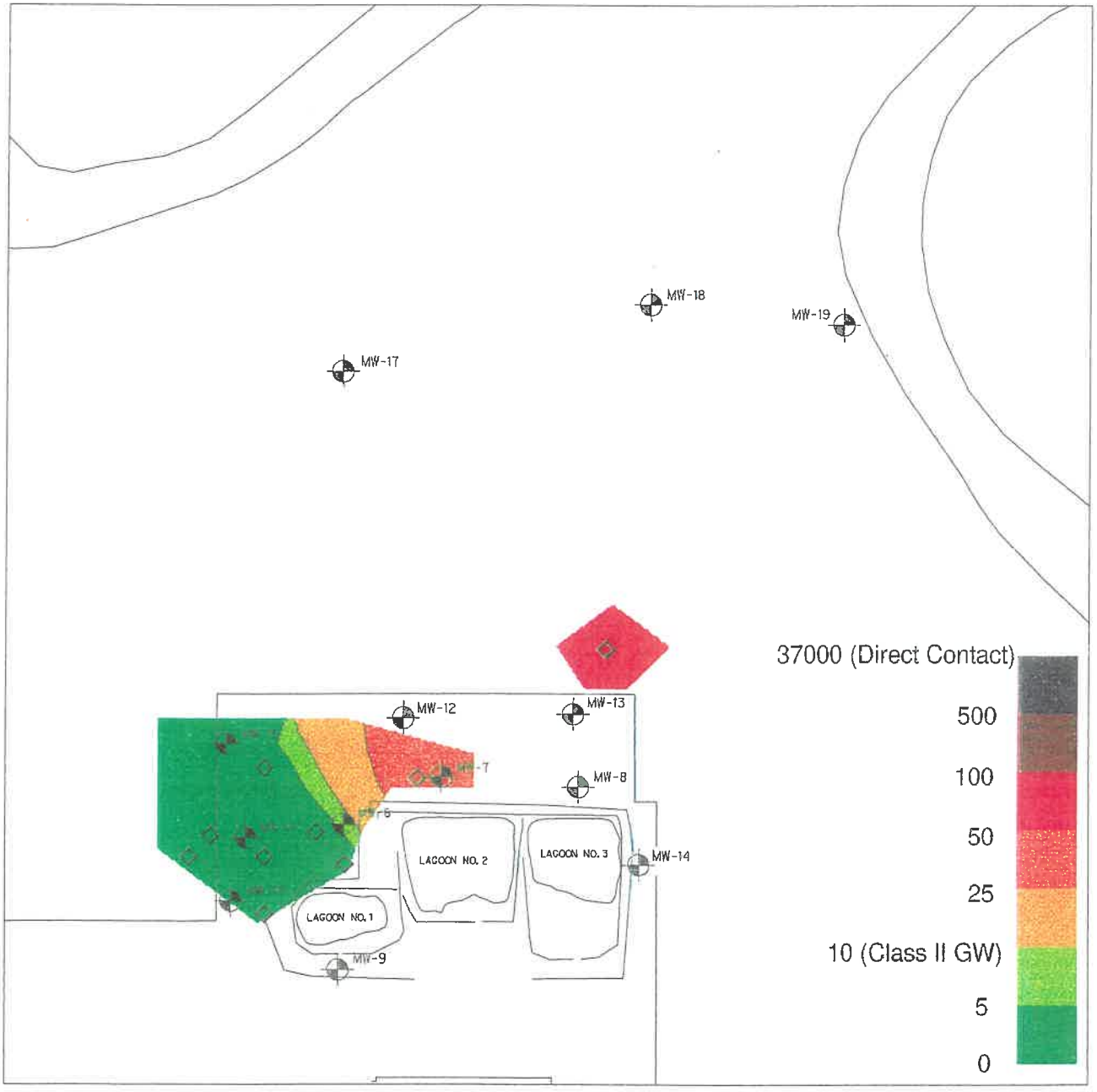
Soil Vinyl Chloride Concentrations (ug/kg)
4.5 - 5.5 Feet



◇ 1994 Soil Sample



Soil Vinyl Chloride Concentrations (ug/kg)
0.5 - 1.5 Feet

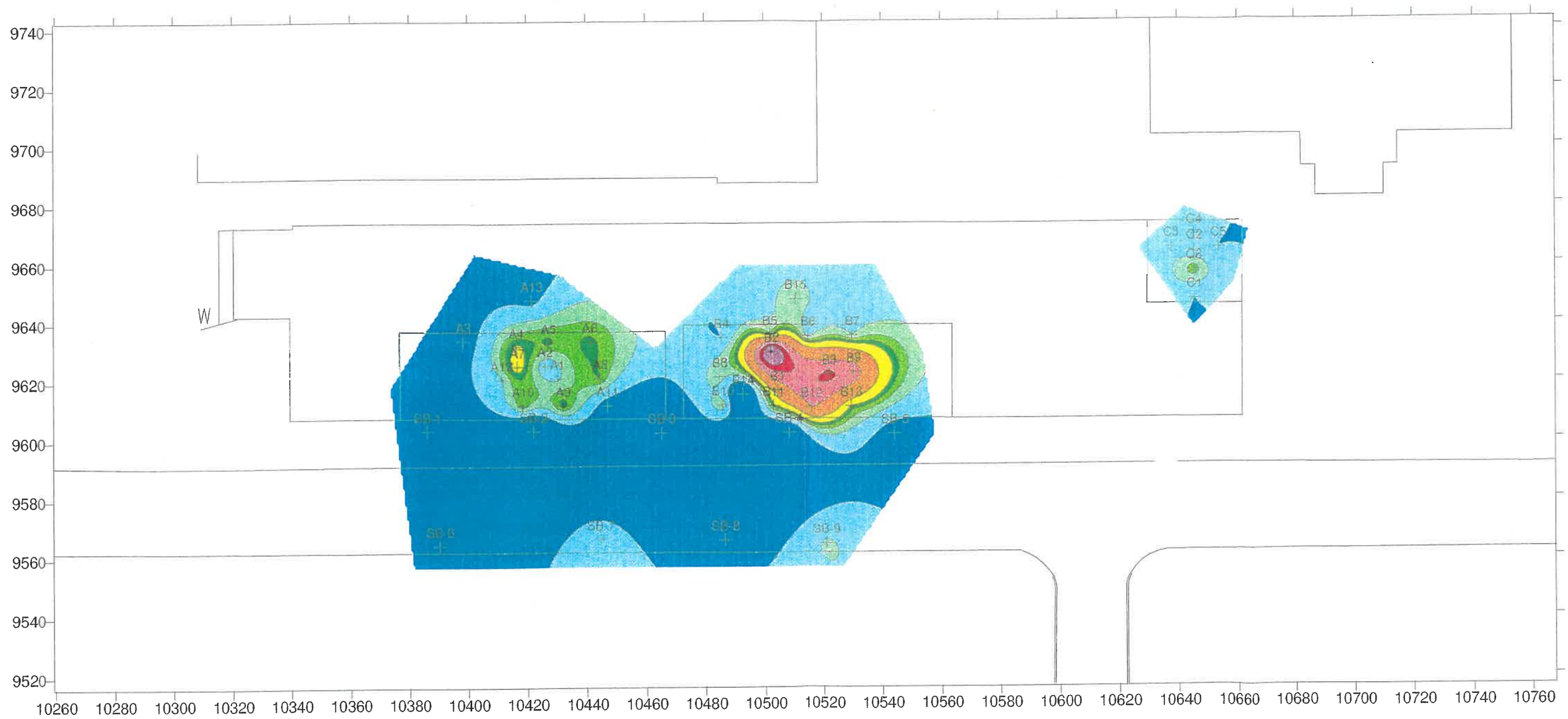


◇ 1994 Soil Sample

0 250 500 750 1000
Feet

Modern Plating Corporation

EP TOX Cadmium - ug/L
0 - 1'



Cleanup Objective

ug/L

0 5 10 15 20 25 50 200 500 1030 5000 15000

Scale

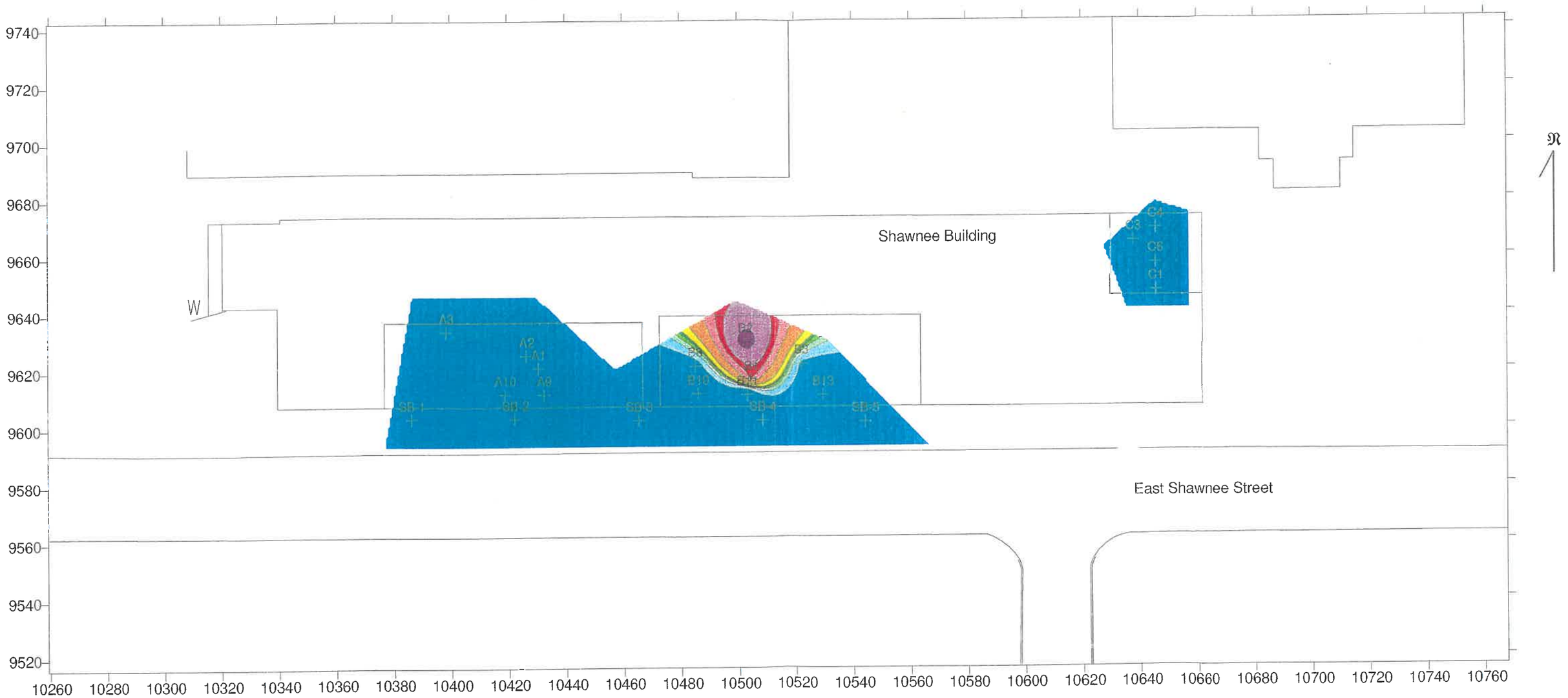
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-A EP TOX Cadmium - ug/L 0-1'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

EP TOX Cadmium - ug/L
1' - 2.5'



Cleanup Objective

ug/L

0 5 10 15 20 25 50 200 500 1030 5000 15000

Scale

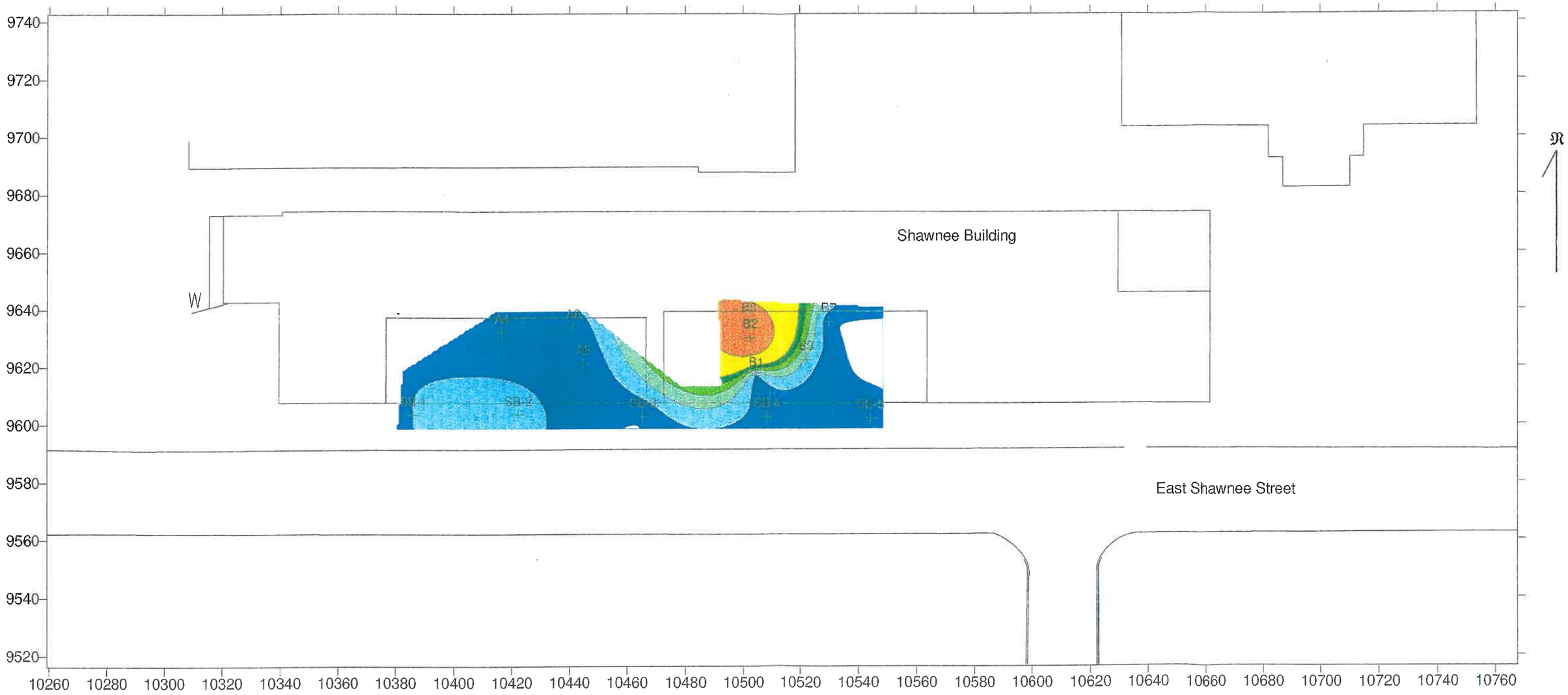
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-B EP TOX Cadmium - ug/L 1'-2.5'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

EP TOX Cadmium - ug/L
3' - 6'



Cleanup Objective

ug/L

0 5 10 15 20 25 50 200 500 1030 500 1500

Scale

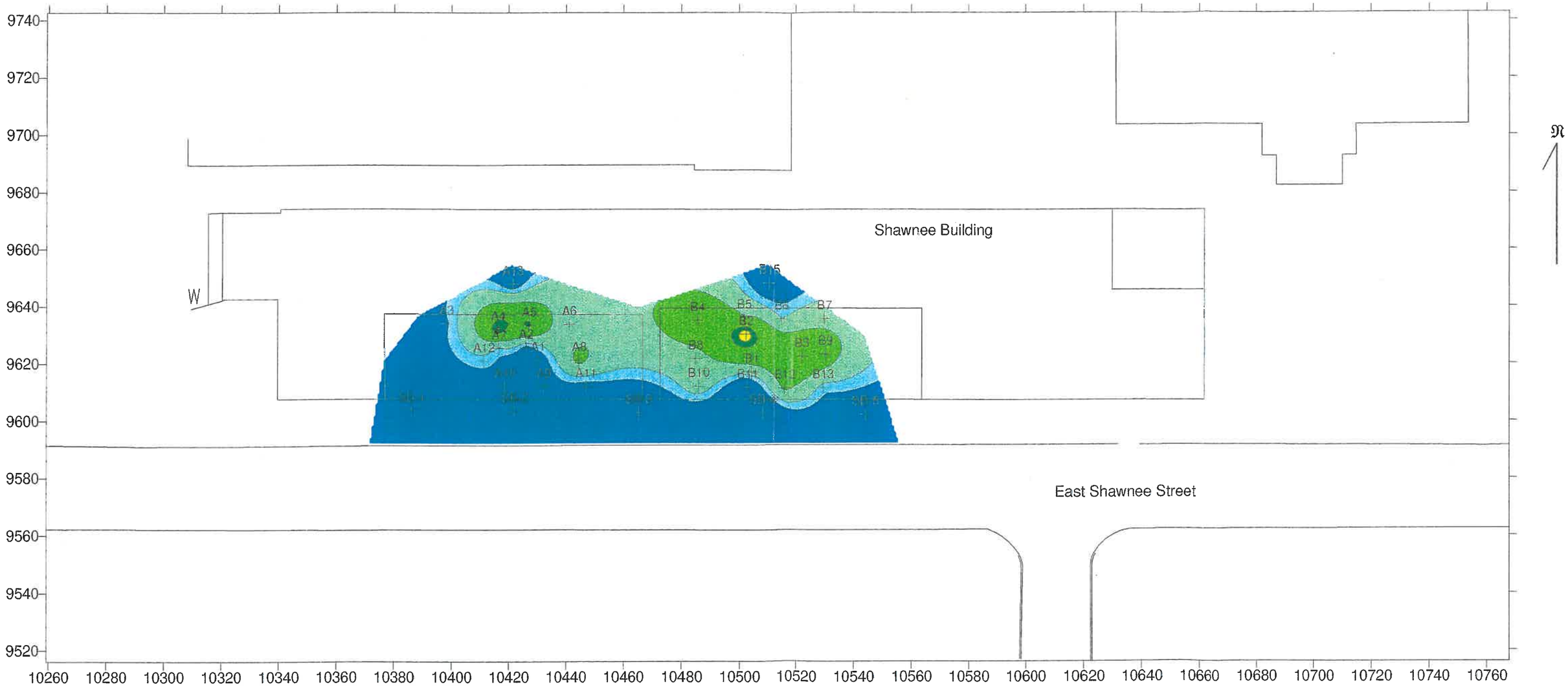
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-C EP TOX Cadmium - ug/L 3'-6'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

Cyanide - mg/kg
0' - 1'



Cleanup Objective

0	0.5	1	5	50	100	1000	4100	5000	10000	15000	20000

mg/kg

Scale

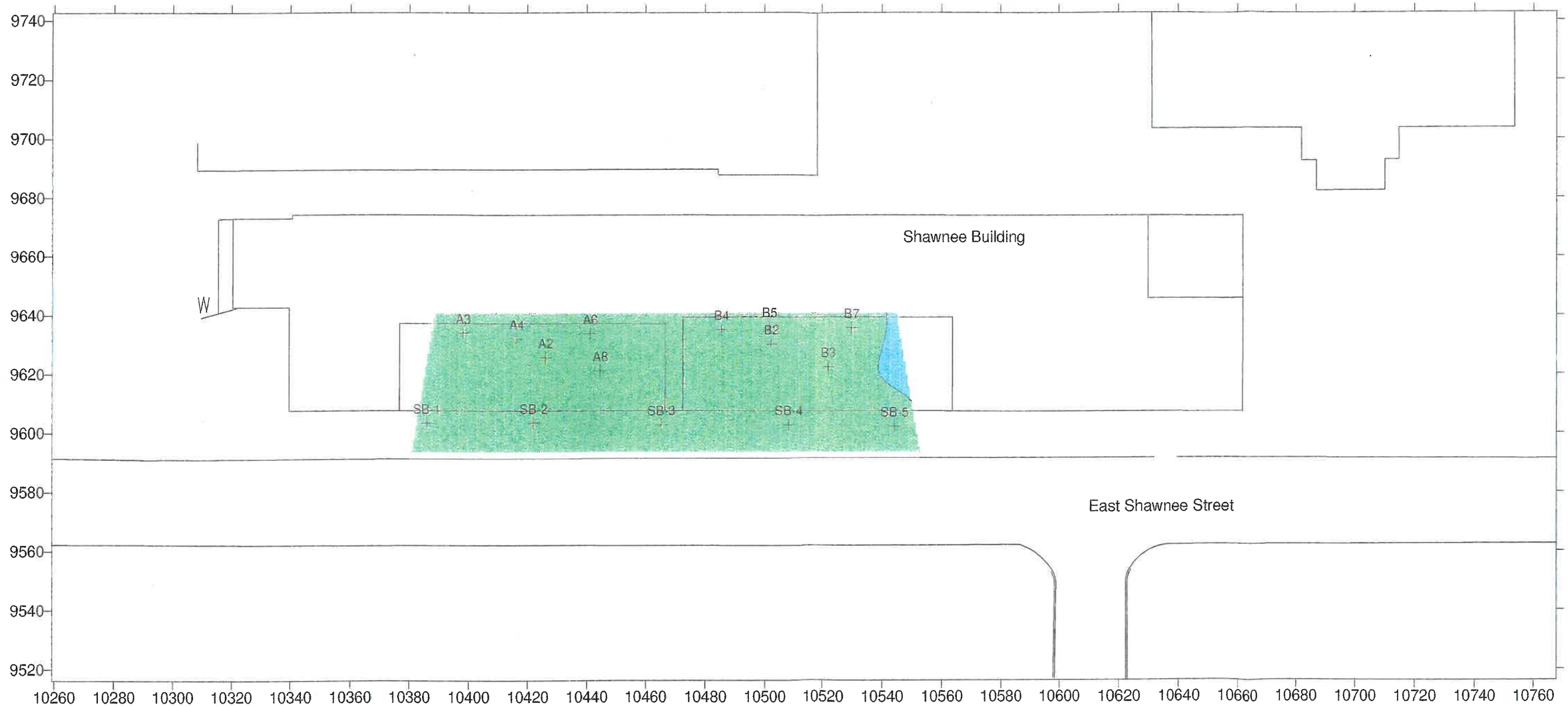
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-D Cyanide - mg/kg 0'-1'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

Cyanide - mg/kg
3' - 6'



Cleanup Objective

0	0.5	1	5	50	100	1000	4100	5000	10000	15000	20000

mg/kg

Scale

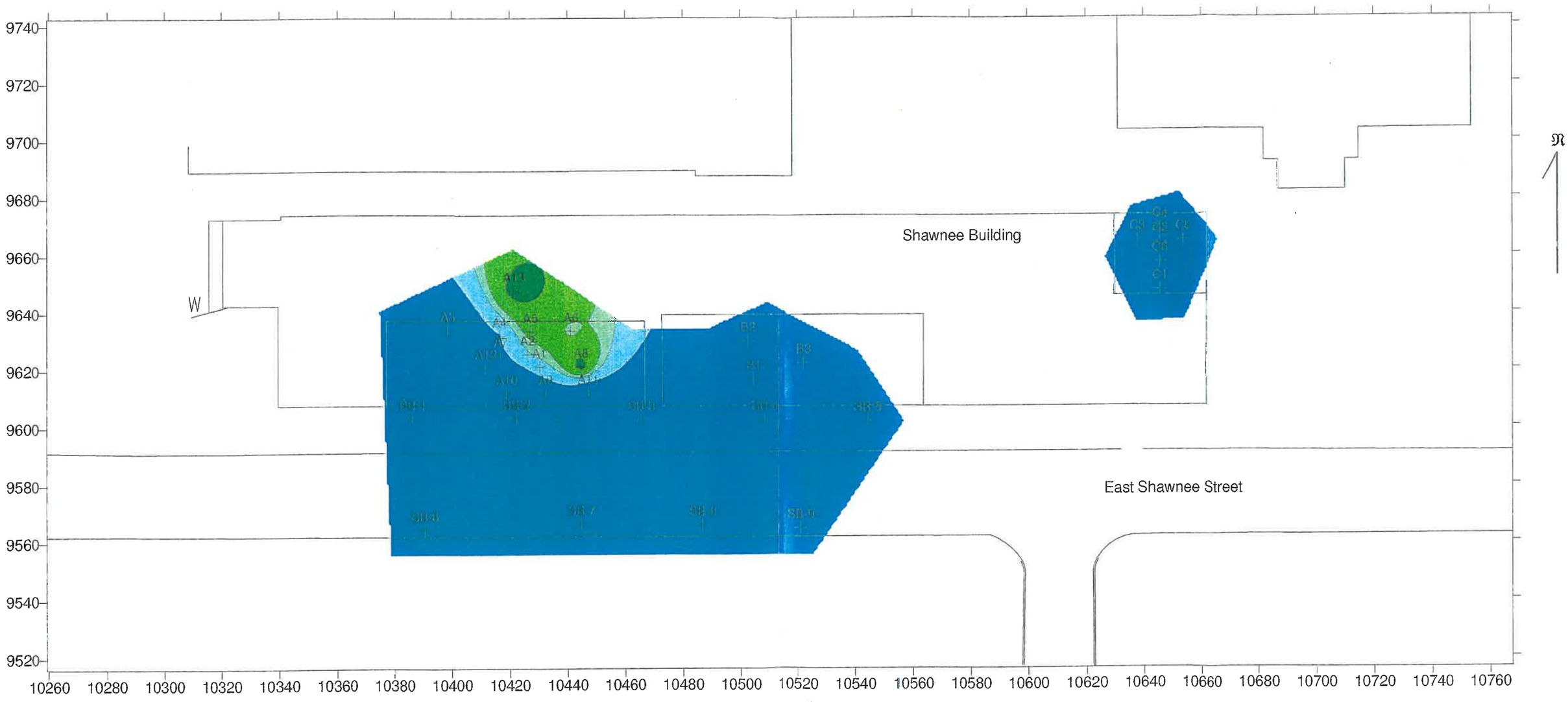
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-E Cyanide - mg/kg 3'-6'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

Trichloroethene - mg/kg
0' - 1'



Cleanup Objective

0	0.1	0.5	1	5	25	100	350	500	1000	1500	2000

mg/kg

Scale

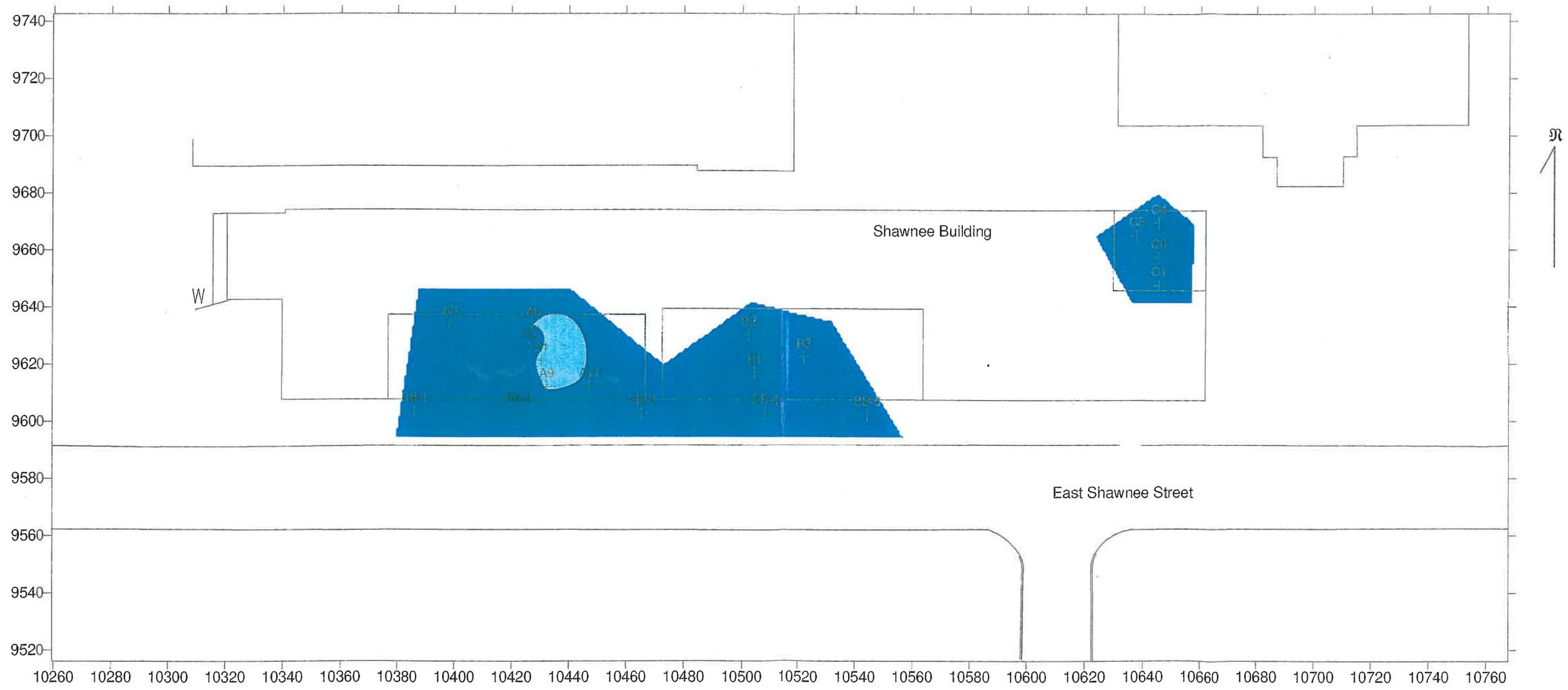
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-F Trichloroethene - mg/kg 0'-1'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

Trichloroethene - mg/kg
1' - 2.5'



Cleanup Objective

mg/kg

0 0.1 0.5 1 5 25 100 350 500 1000 1500 2000

Scale

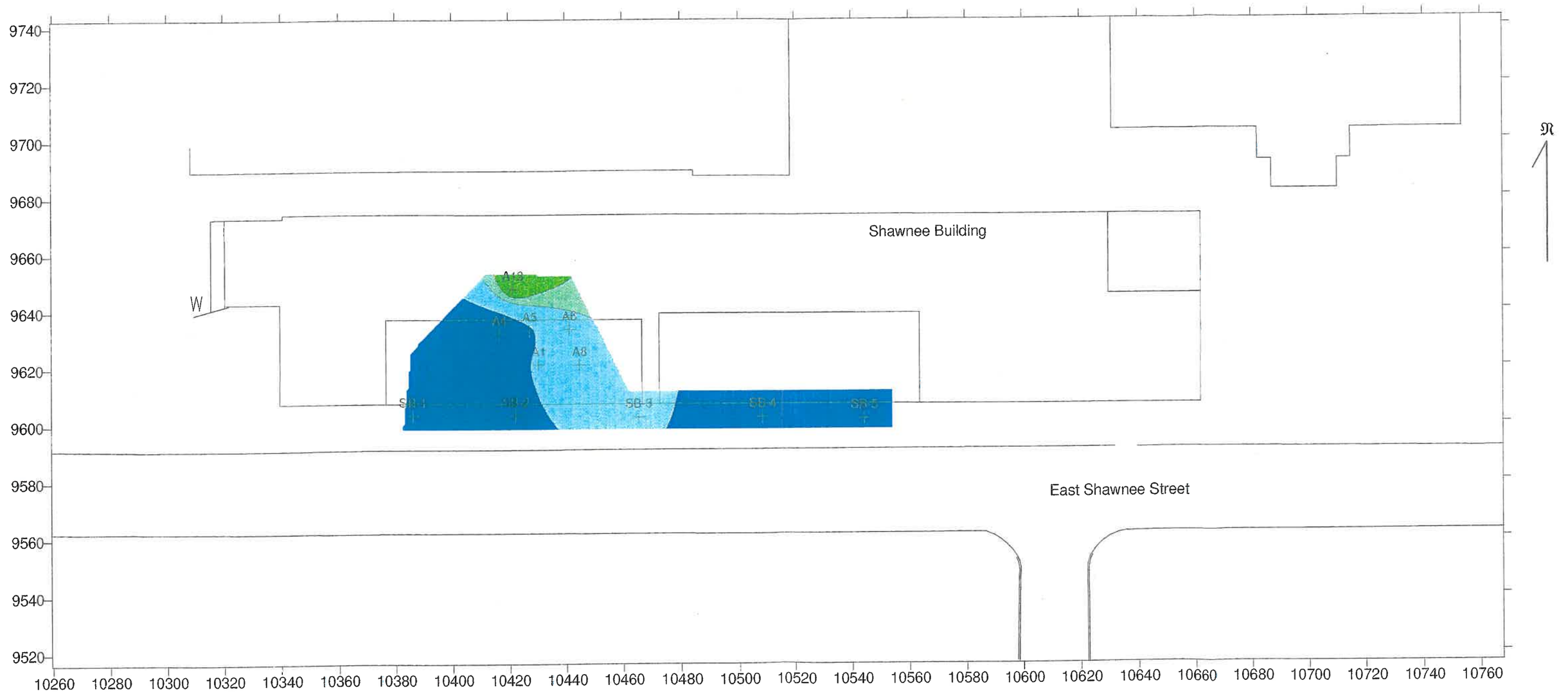
0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-G Trichloroethene - mg/kg 1'-2.5'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Modern Plating Corporation

Trichloroethene - mg/kg
3' - 6'



Cleanup Objective

mg/kg

0 0.1 0.5 1 5 25 100 350 500 1000 1500 2000

Scale

0 20 40 60 80

Feet

Modern Plating Facility	
Figure 2-H Trichloroethene - mg/kg 3'-6'	
Scale: 1" = 35'	Date: April, 1995
Prepared By: Foth & Van Dyke	By : SGL

Attachment 2

APPENDIX S

Appendix S

Wastewater Discharge Permit Issued by City of Freeport

Water & Sewer Commission
CITY OF FREEPORT,
524 WEST STEPHENSON STREET, SUITE 330
FREEPORT, ILLINOIS 61032
TELEPHONE: (815) 233 – 0111

Permit Number: FR050196

WASTEWATER DISCHARGE PERMIT

In accordance with the provisions of Section 1046.21 of the Codified Ordinance of the City of Freeport

Business Name and Mailing Address:	**Permitted Name and Site Address:**
Modern Plating Corp.	**Modern Plating Corp.**
701 S. Hancock Avenue	**701 S. Hancock Avenue**
P.O. Box 838	**Freeport, Illinois 61032**
Freeport, Illinois 61032	

is hereby authorized to discharge industrial wastewater from the above identified facility through the outfalls identified herein into the City of Freeport's sanitary sewer system in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all applicable pretreatment regulations, standards or requirements under local, State and Federal laws, including any such regulations, standards, requirements, or laws that may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the Codified Ordinance of the City of Freeport.

This permit becomes effective on: January 1, 2017

This permit shall expire on: December 31, 2021

If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a renewal permit in accordance with the requirements of Section 1046.21 of the Codified Ordinance of the City of Freeport, a minimum of 90 days prior to the expiration date.

This permit was issued on: December 27, 2016

By: _____
Tom Glendenning
Executive Director

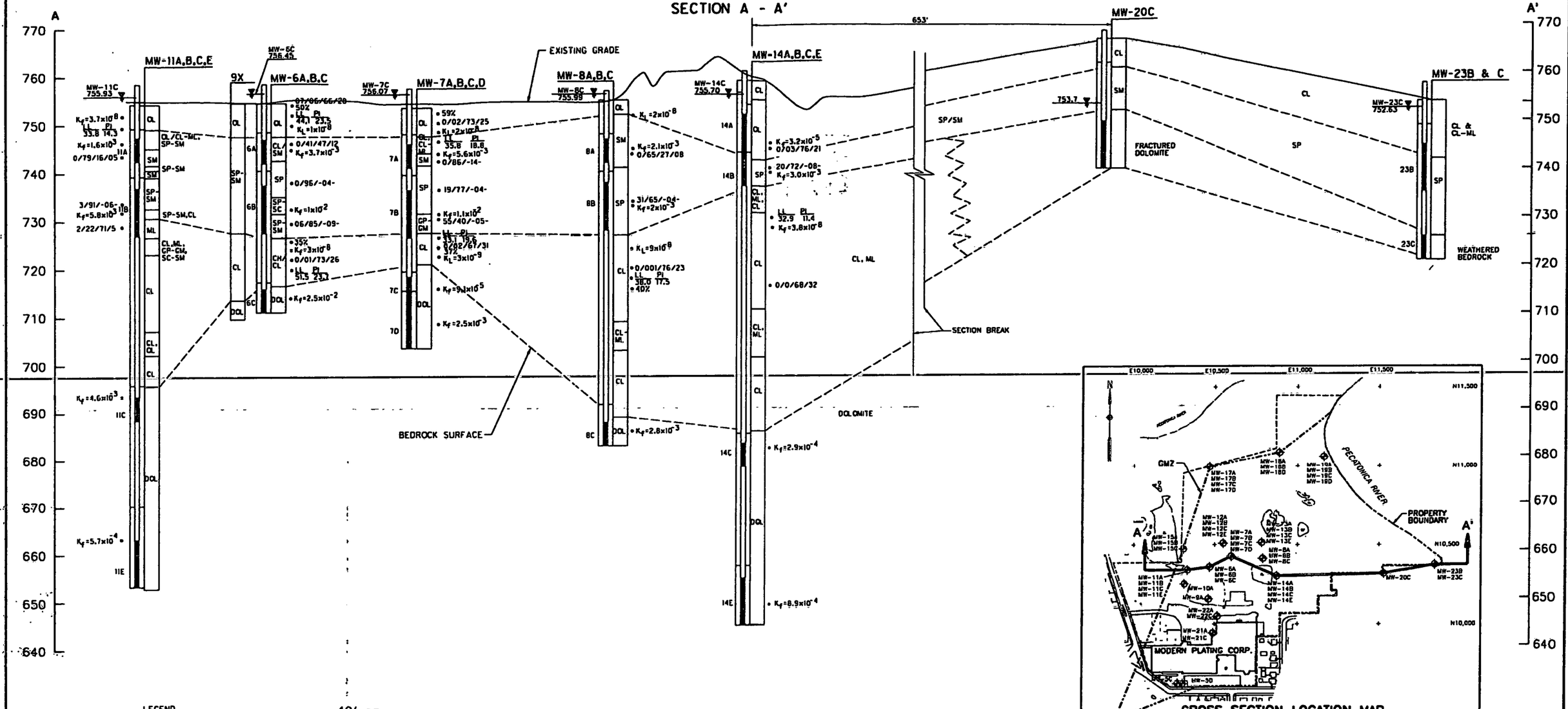
Attachment 2

APPENDIX T

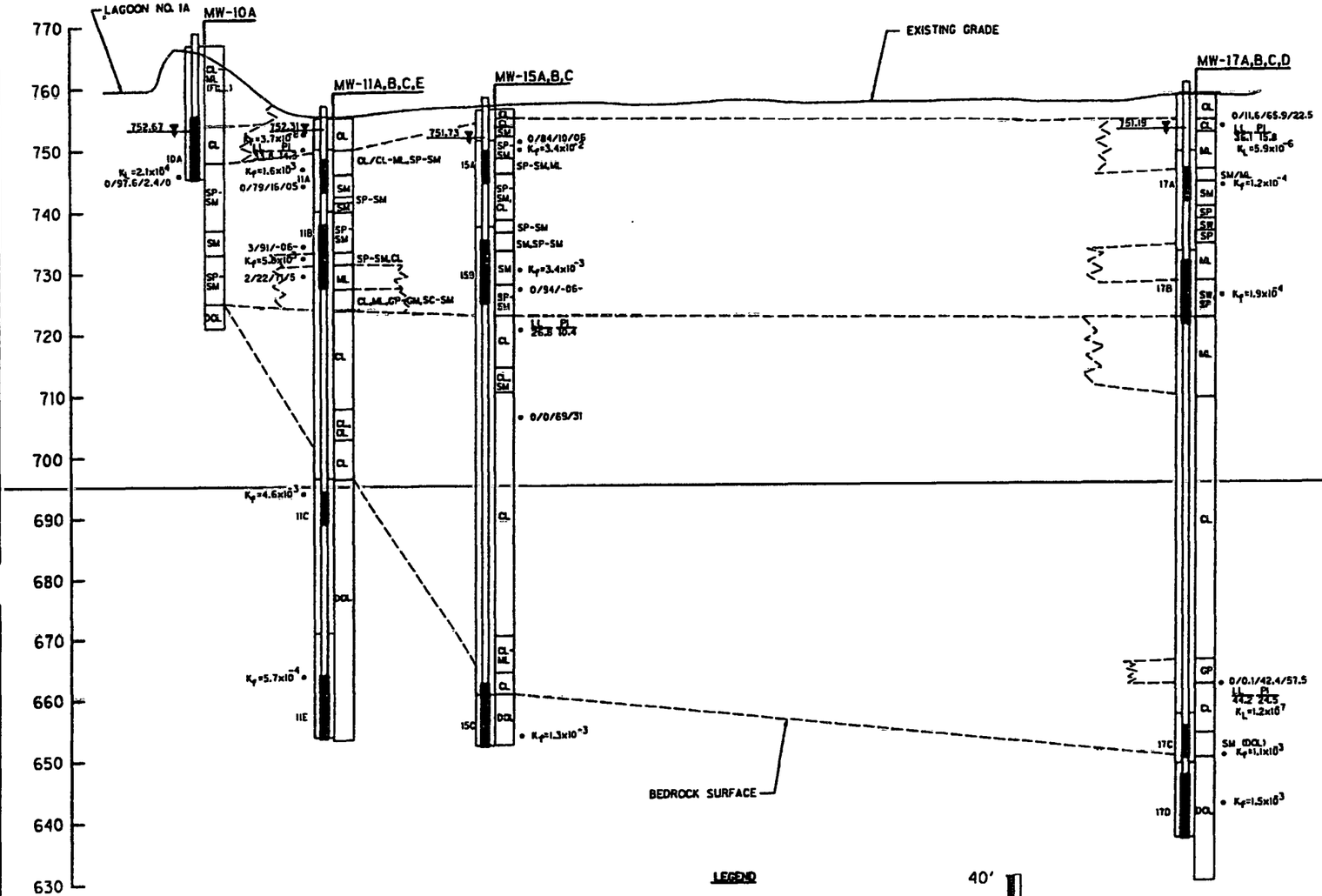
Appendix T

Geologic Cross-Sections

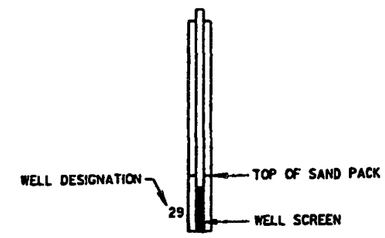
SECTION A - A'


A
A'
770
760
750
740
730
720
710
700
690
680
670
660
650
640
MW-11A,B,C,E
MW-11C 755.93
MW-6C 756.45
9X
MW-6A,B,C
MW-7C 756.07
MW-7A,B,C,D
EXISTING GRADE
MW-8A,B,C
MW-8C 755.98
MW-14C 755.70
MW-14A,B,C,E
653'
MW-20C
753.7
MW-23B & C
MW-23C 752.63
FRACTURED DOLOMITE
SP/SM
SP
CL
CL & CL-ML
WEATHERED BEDROCK
CL, ML
DOLOMITE
SECTION BREAK
BEDROCK SURFACE
11A
11B
11C
11D
11E
6A
6B
6C
7A
7B
7C
7D
8A
8B
8C
14A
14B
14C
14D
14E
23B
23C
K_f=3.7x10^{-8}
K_f=1.6x10^{-3}
K_f=4.6x10^{-3}
K_f=5.7x10^{-4}
K_f=5.8x10^{-3}
K_f=1x10^{-2}
K_f=3x10^{-8}
K_f=2.5x10^{-2}
K_f=9.1x10^{-5}
K_f=2.5x10^{-3}
K_f=1x10^{-8}
K_f=2.1x10^{-3}
K_f=9x10^{-9}
K_f=2.8x10^{-3}
K_f=3.2x10^{-5}
K_f=3.0x10^{-3}
K_f=3.8x10^{-8}
K_f=2.9x10^{-4}
K_f=8.9x10^{-4}
K_f=1.1x10^{2}
K_f=5.6x10^{-3}
K_f=2x10^{-3}
K_f=1.1x10^{2}
K_f=2x10^{-8}
K_f=9x10^{-9}
K_f=2x10^{-3}
K_f=1.1x10^{-5}
K_f=2.

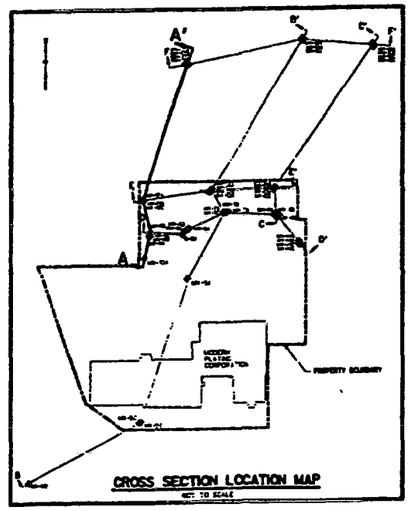
SECTION A-A'



WELL CONSTRUCTION INFORMATION



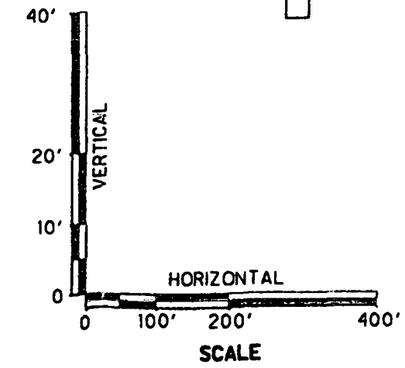
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
⊙	SOIL SAMPLE
LL PI / 23 13	ATTERBERG LIMITS
K_f=7.9x10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0x10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▽	WATER LEVEL



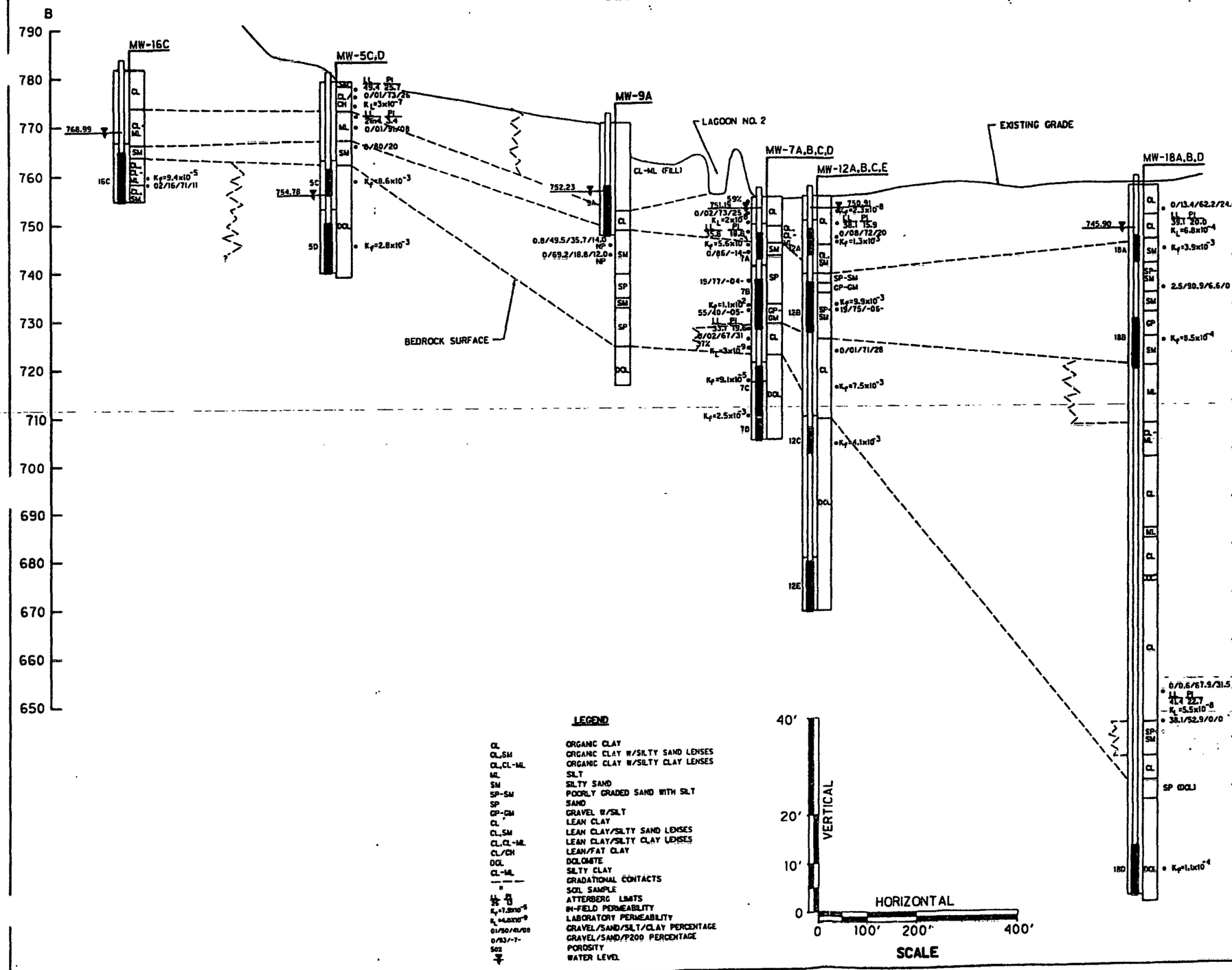
MODERN PLATING CORPORATION

FIGURE 2-3

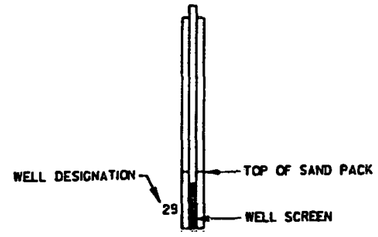
GEOLOGIC CROSS SECTION A-A'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

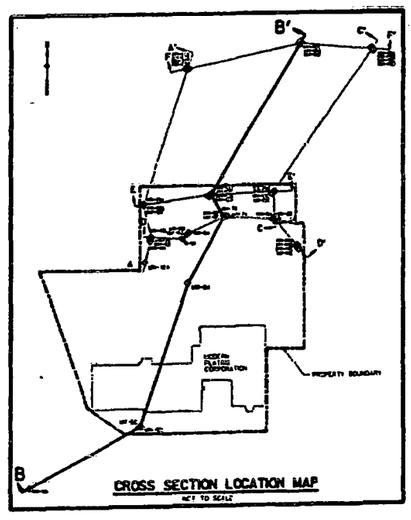
SECTION B-B'



WELL CONSTRUCTION INFORMATION



NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
———	GRADATIONAL CONTACTS
○	SOIL SAMPLE
LL PI / 25 10	ATTERBERG LIMITS
K_f=1.5x10^{-5}	IN-FIELD PERMEABILITY
K_L=4.6x10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/83/-/7-	GRAVEL/SAND/P200 PERCENTAGE
502	POROSITY
▼	WATER LEVEL

MODERN PLATING CORPORATION

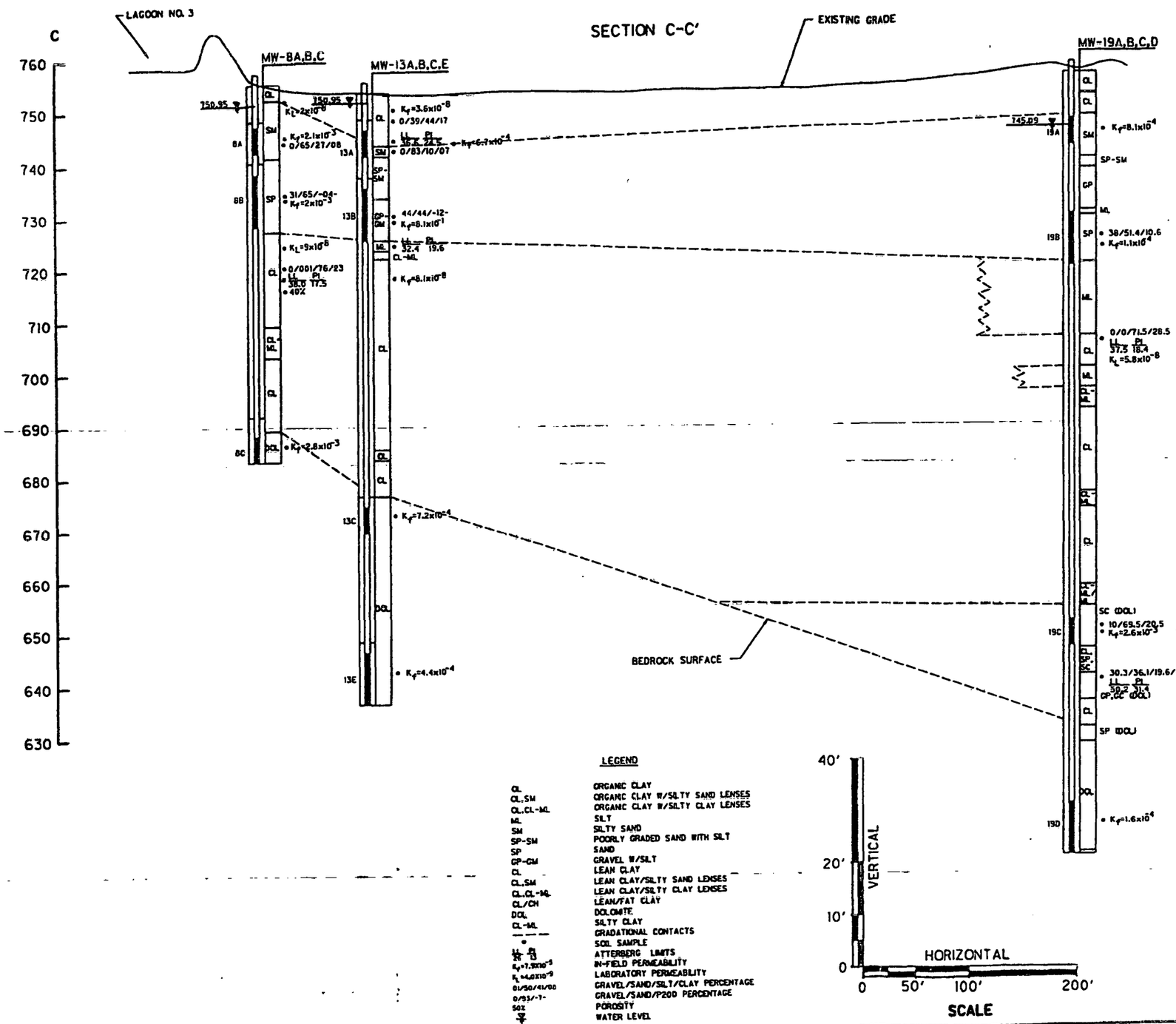
FIGURE 2-4

GEOLOGIC CROSS SECTION B-B'

Scale: SEE BAR SCALE | Date: AUGUST, 1997

Prepared By: Foth & Van Dyke | By: JOW

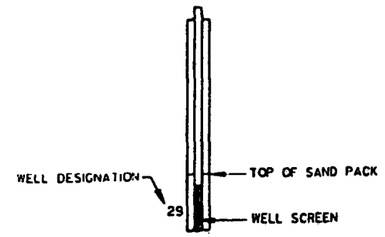
SECTION C-C'



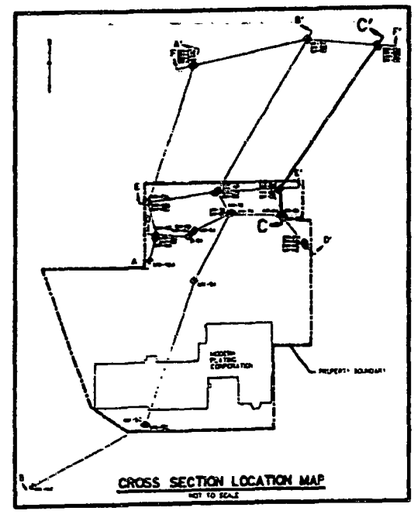
LEGEND

CL	ORGANIC CLAY
CL,SM	ORGANIC CLAY W/SILTY SAND LENSES
CL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
⊙	SOIL SAMPLE
LL PI OL	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L =4.0X10^{-5}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▽	WATER LEVEL

WELL CONSTRUCTION INFORMATION



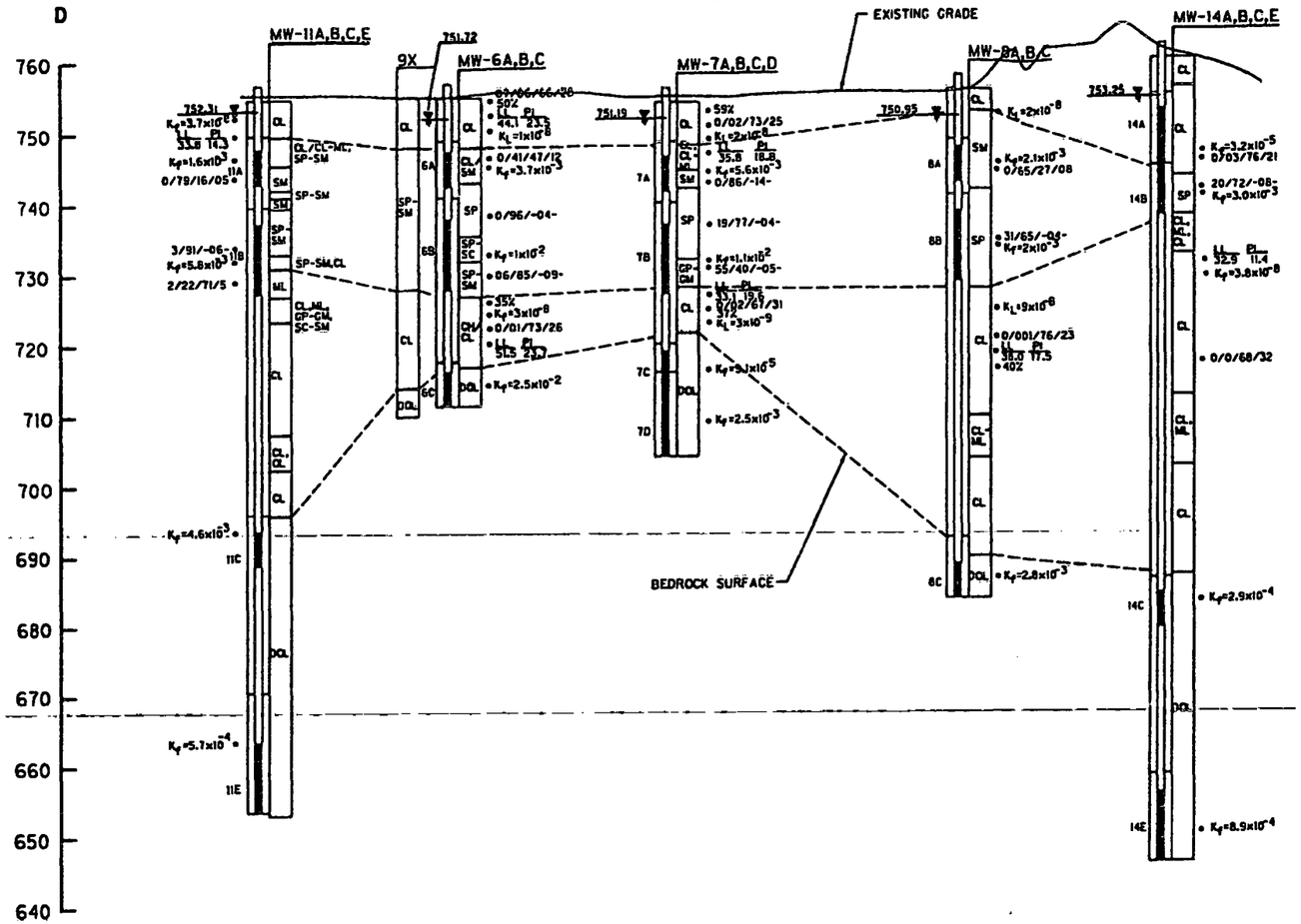
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



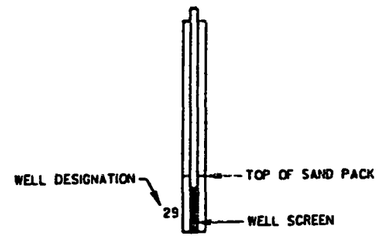
CROSS SECTION LOCATION MAP
NOT TO SCALE

MODERN PLATING CORPORATION	
FIGURE 2-5	
GEOLOGIC CROSS SECTION C-C'	
Scale: SEE BAR SCALE	Date: AUGUST, 1997
Prepared By: Foth & Van Dyke	By: JOW

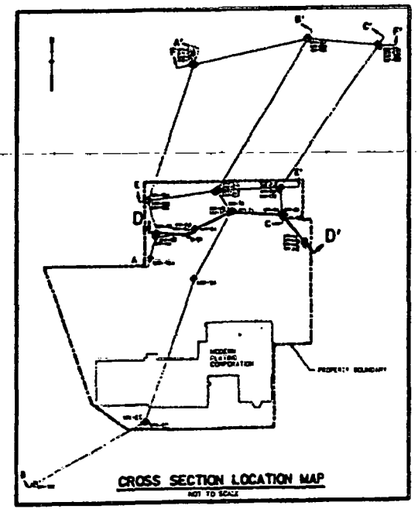
SECTION D-D'



WELL CONSTRUCTION INFORMATION

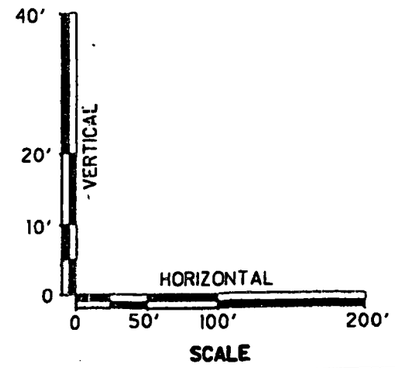


NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



LEGEND

CL	ORGANIC CLAY
CL,SM	ORGANIC CLAY W/SILTY SAND LENSES
CL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
———	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL PI	ATTERBERG LIMITS
K_f=7.8x10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0x10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL



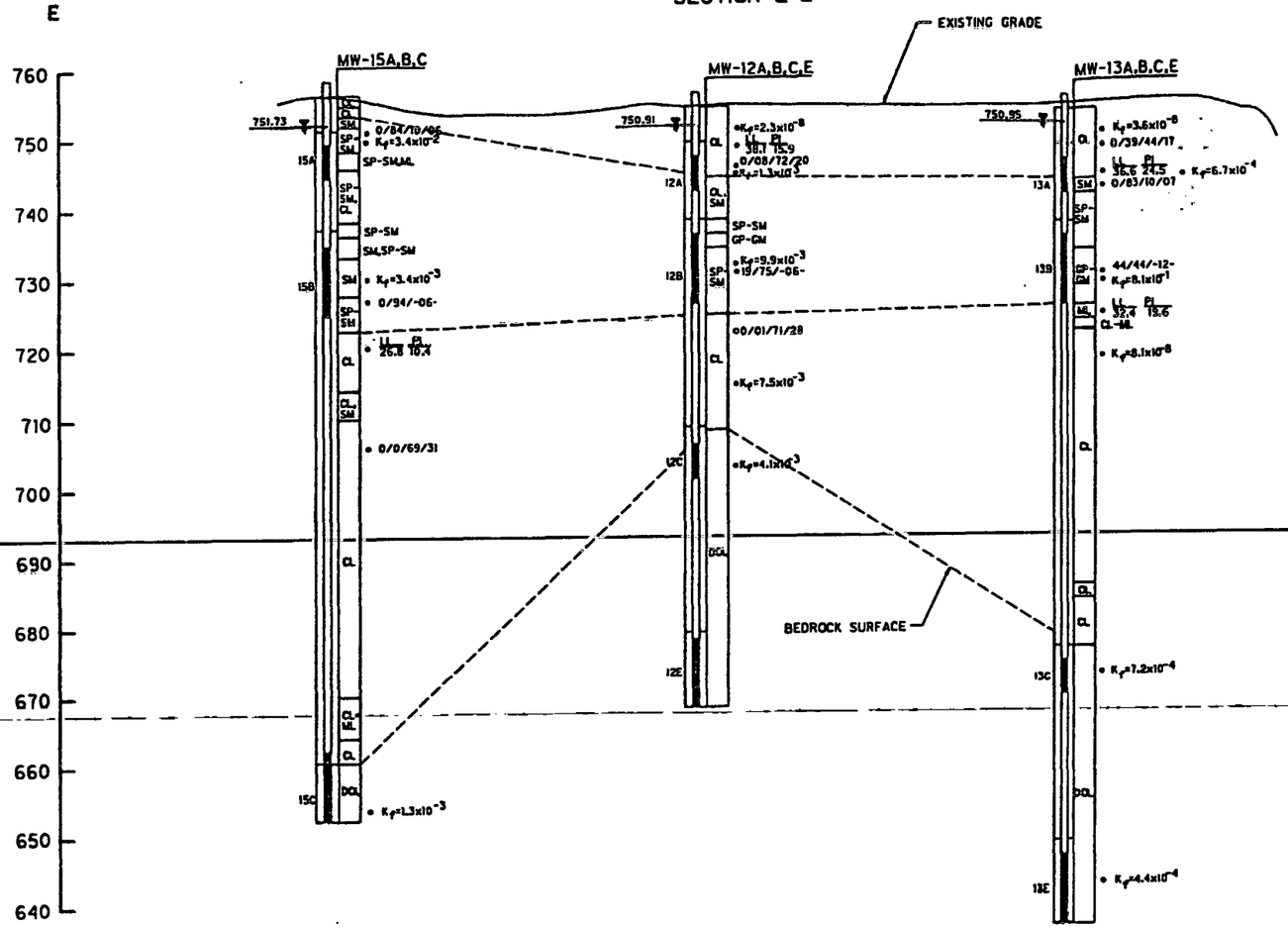
MODERN PLATING CORPORATION

FIGURE 2-6

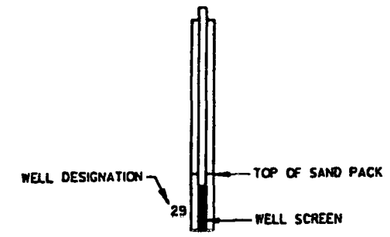
GEOLOGIC CROSS SECTION D-D'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

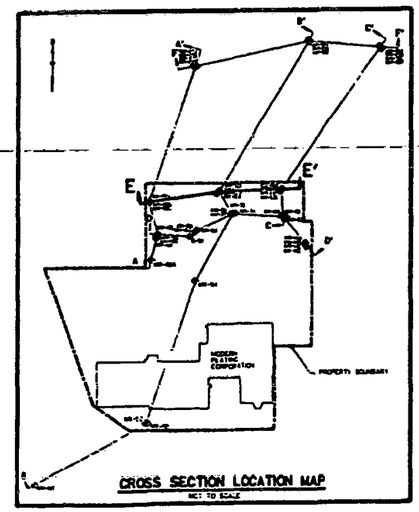
SECTION E-E'



WELL CONSTRUCTION INFORMATION



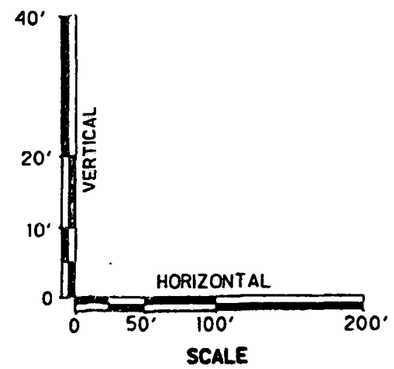
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

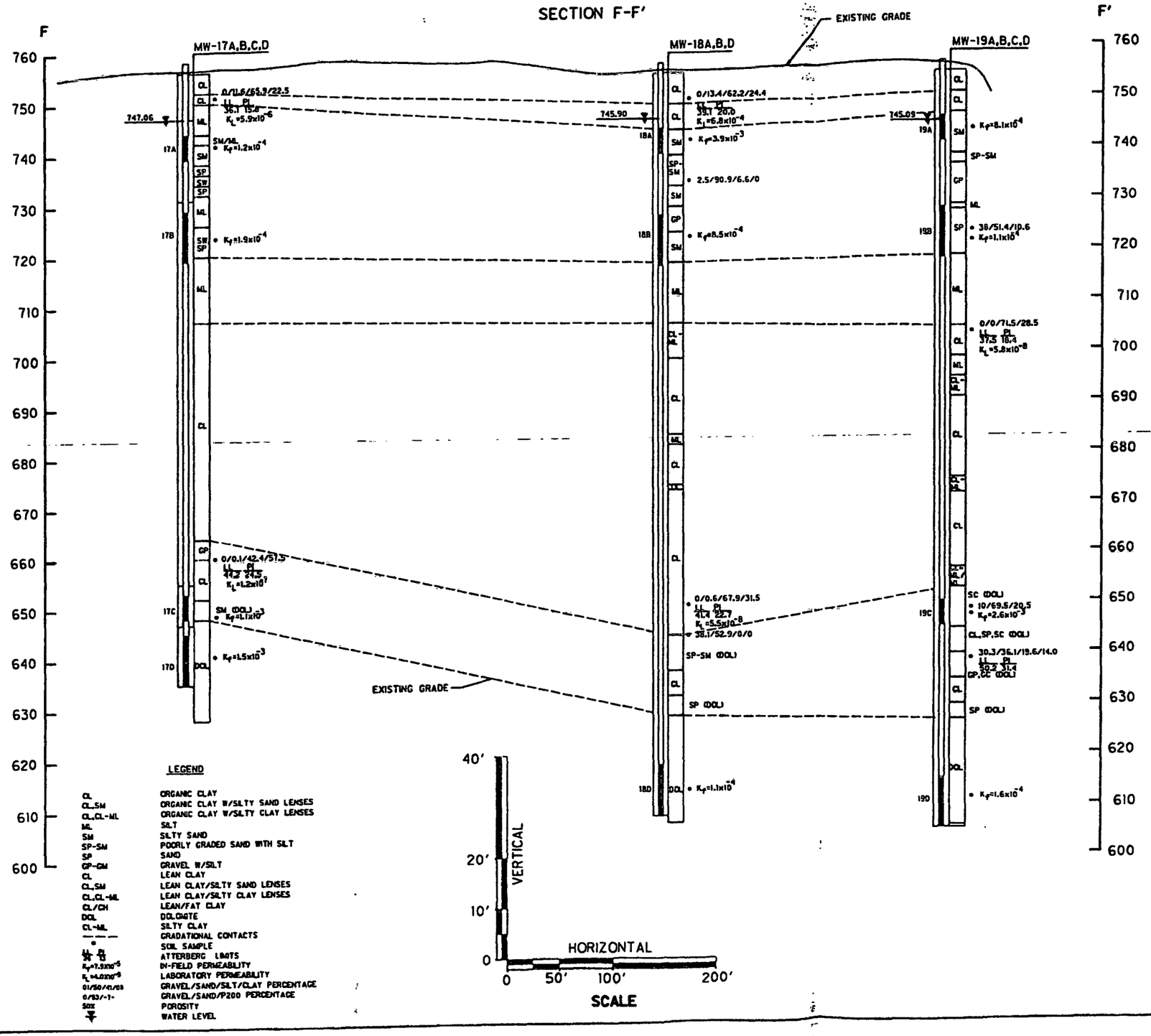
LEGEND

OL	ORGANIC CLAY
OL-SM	ORGANIC CLAY W/SILTY SAND LENSES
OL-CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL-SM	LEAN CLAY/SILTY SAND LENSES
CL-CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
●	SOIL SAMPLE
LL PI / 38 13	ATTERBERG LIMITS
K_f=7.5X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.6X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/83/-/7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▽	WATER LEVEL

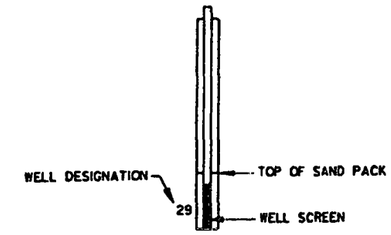


MODERN PLATING CORPORATION		
FIGURE 2-7 GEOLOGIC CROSS SECTION E-E'		
Scale: SEE BAR SCALE	Date: AUGUST, 1997	
Prepared By: Foth & Van Dyke		By: JOW

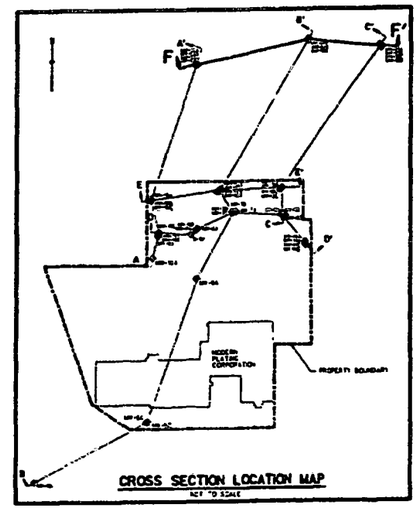
SECTION F-F'



WELL CONSTRUCTION INFORMATION



NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



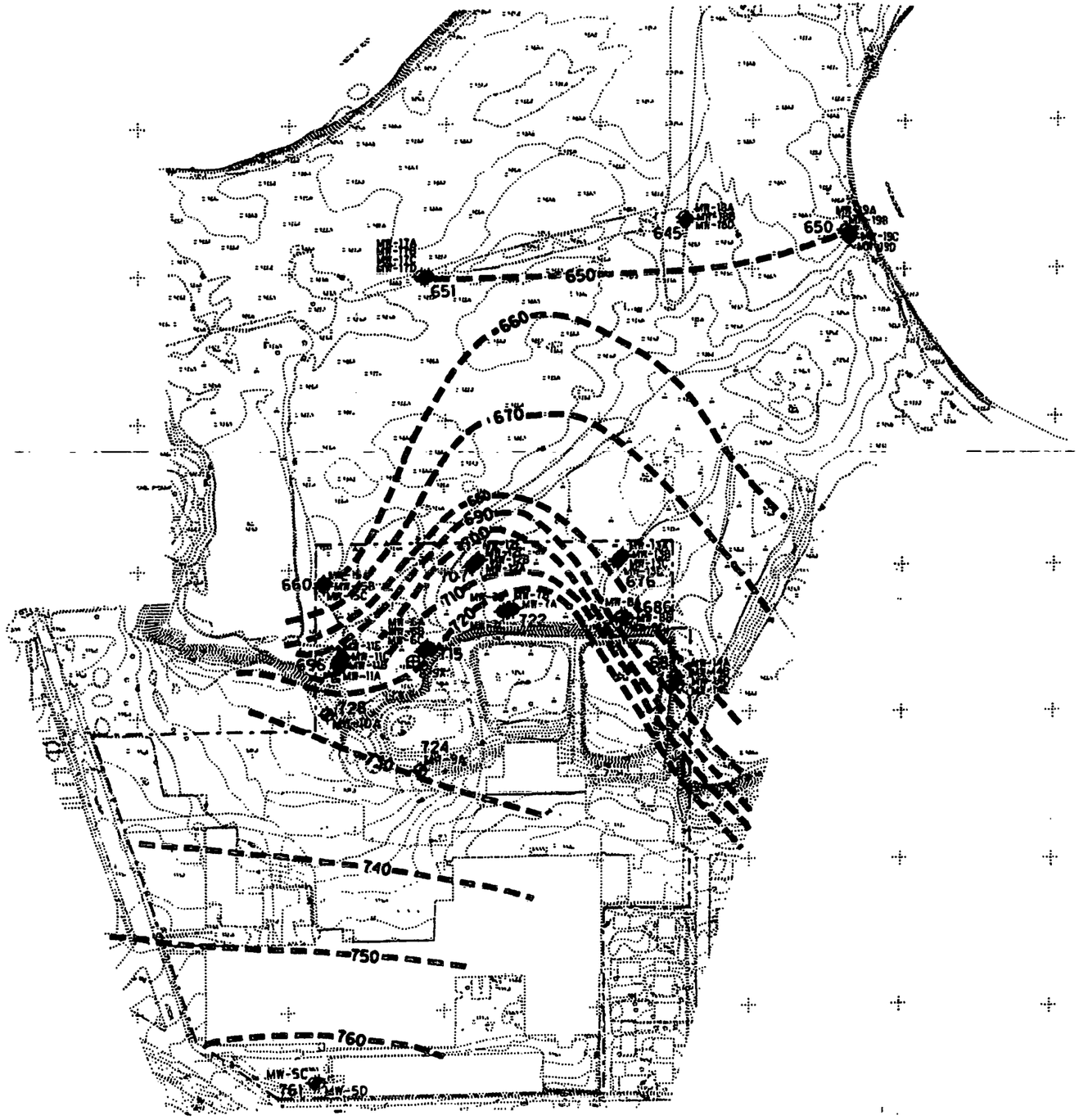
CROSS SECTION LOCATION MAP
NOT TO SCALE

MODERN PLATING CORPORATION

FIGURE 2-8

GEOLOGIC CROSS SECTION F-F'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW



N

LEGEND

- EXISTING GROUND CONTOUR
- EXISTING SPOT ELEVATION
- DEPRESSION
- TREES AND/OR BRUSH
- EXISTING ROADWAY
- EXISTING TRAIL
- CONTROL MONUMENT
- APPROXIMATE PROPERTY LINE
- MW-4 T22 — GROUNDWATER MONITORING WELL LOCATION, NUMBER AND ELEVATION
- EXISTING BUILDING
- EXISTING FENCE
- WEATHERED BEDROCK SURFACE CONTOUR
- W.L. 759.2 — SURFACE WATER LEVEL ELEVATION

NOTES:

1. SITE LOCATION SE 1/4 OF SECTION 32, T27N, R8E, STEPHENSON COUNTY, ILLINOIS.
2. TOPOGRAPHICAL MAP PREPARED FROM AERIAL SURVEY PERFORMED BY AERO-METRIC ENGINEERING, SHEBOYGAN, WISCONSIN. DATE OF PHOTOGRAPHY 11-28-86.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS ONE FOOT. BENCH MARK IS LOCATED ON THE N.W. CORNER OF THE PUMP STATION CONCRETE SLAB. COORDINATES N 10046.1, E 10491.0, AT ELEVATION 773.82 FEET.
4. BEDROCK ELEVATIONS MEASURED JUNE 19, 1989. CONTOUR INTERVAL IS TEN FEET.

MODERN PLATING CORPORATION

FIGURE 2-9

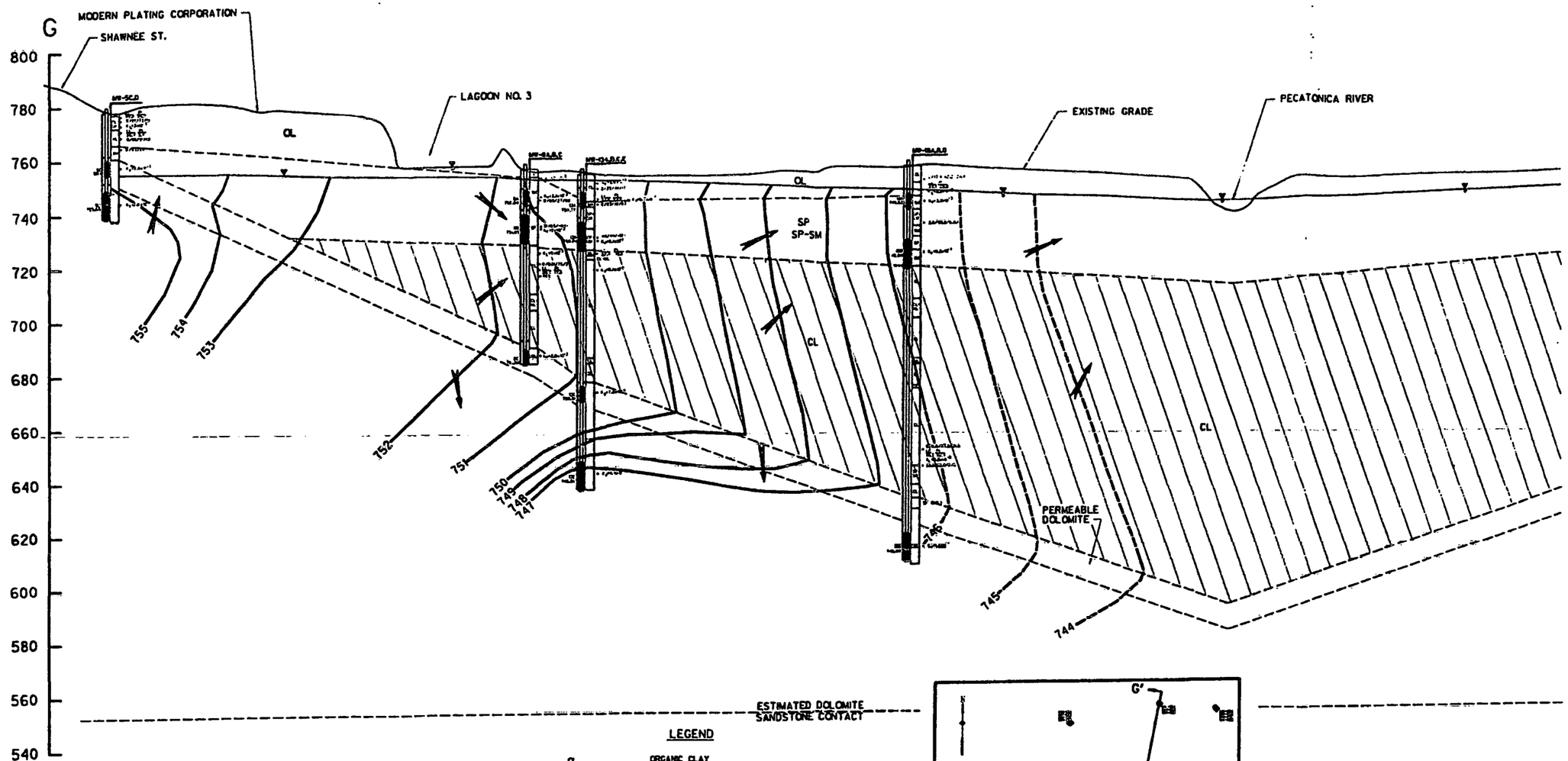
TOP OF WEATHERED BEDROCK SURFACE

Scale: 0 100' 200' | Date: AUGUST, 1997

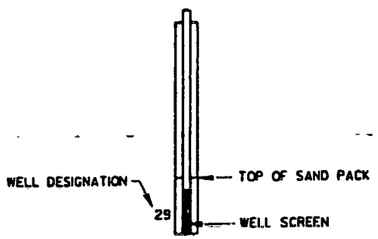
Prepared By: Foth & Van Dyke | By: JOW

97M015

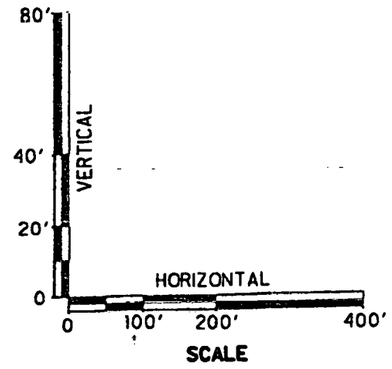
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WELL CONSTRUCTION INFORMATION



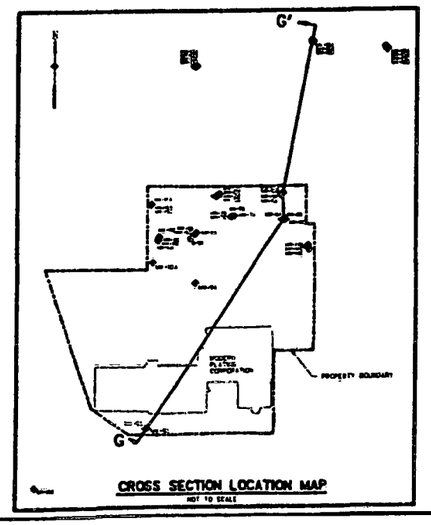
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
———	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL/PI	ATTERBERG LIMITS
K_F=1.83x10^{-5}	IN-FIELD PERMEABILITY
K_L=4.07x10^{-8}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
56%	POROSITY
	CLAY AQUITARD
755	EQUIPOTENTIAL LINE
742	INFERRED EQUIPOTENTIAL LINE

NOTE: GROUNDWATER ELEVATIONS MEASURED ON SEPT. 25, 1989



CROSS SECTION LOCATION MAP
NOT TO SCALE

MODERN PLATING CORPORATION

FIGURE 2-10

HYDRAULIC CROSS SECTION G - G'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

Attachment 2

APPENDIX U

Appendix U

Modification to RCRA Closure Plan and Basis of Design

Report

Modification to RCRA Closure Plan and Basis of Design

Scope ID: 97M015

Modern Plating Corporation
Freeport, Illinois

September 1997

September 17, 1997

Mr. Edwin C. Bakowski, P.E.
Manager, Permit Section
Illinois Environmental Protection Agency
Bureau of Land
2200 Churchill Road
Springfield, IL 62794-9276

Dear Mr. Bakowski:

Re: Modification to RCRA Closure Plan and Basis of Design Report
1770200010 - Stephenson County
Modern Plating Corporation
ILD005172325

On behalf of, and as directed by, Modern Plating Corporation, Foth & Van Dyke is submitting this report titled *Modification to RCRA Closure Plan and Basis of Design*. This report presents historical investigative data, soil and groundwater cleanup objectives, Modern Plating Corporation's preferred closure alternative, and a post-closure care plan. Also included as an attachment to this letter is Form LPC-PA18.

Modern Plating Corporation looks forward to working closely with the IEPA on the review of this document and preparation of subsequent submittals to achieve site closure according to the schedule presented in Section 3 of the Closure Report.

Please contact Modern Plating Corporation or Foth & Van Dyke with questions, comments, or concerns you may have on this report.

Sincerely,

Foth & Van Dyke

Stephen V. Donohue
Project Manager

Steven J. Laszewski, Ph.D.
Senior Technical Consultant

Nandakumaran Paruvakat, Ph.D., P.E.
Technical Director

SVD1:SJL1:NXP:lxb

LXB\97M015\GBAPP\52675.61\10000

Modification to RCRA Closure Plan and Basis of Design
Modern Plating Corporation

Distribution

No. of Copies	Sent To
4	Mr. Edwin C. Bakowski, P.E. Manager, Permit Section Illinois Environmental Protection Agency Bureau of Land 2200 Churchill Road Springfield, IL 62794-9276

Modification to RCRA Closure Plan and Basis of Design Modern Plating Corporation

Scope ID: 97M015

Prepared for
Modern Plating Corporation

Prepared by
Foth & Van Dyke and Associates Inc.

September 1997

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2737 S. Ridge Road, P.O. Box 19012, Green Bay, Wisconsin 54304, 920/497-2500, FAX: 920/497-8516

Modification to RCRA Closure Plan and Basis of Design
Modern Plating Corporation

Contents

Page

1 Introduction 1
1.1 Request to Modify Approval of RCRA Closure Plan 1
1.2 Purpose and Scope 2
1.3 Overview of RCRA Corrective Action and Closure Process for MPC 3

2 Revised RCRA Closure Plan 5
2.1 Introduction 5
2.2 Site History and Description of Facility 5
2.3 Identification and Description of RCRA Regulated and Non-RCRA Regulated Units 8
2.3.1 Sludge Lagoons 8
2.3.2 Shawnee Building 10
2.3.3 Cyanide Vault 10
2.3.4 Wetland Area Soils 11
2.4 Summary of Site Characterization Data Collected to Date 11
2.4.1 Geologic and Hydrogeologic Conditions 14
2.4.2 Groundwater Quality Data and Groundwater Use 28
2.4.3 Summary of Conditions At Sludge Lagoons 29
2.4.4 Summary of Soil Contamination Data 29
2.4.5 Surface Water and Sediment Sampling Data 43
2.4.6 Summary of Conditions at Cyanide Vault 43
2.4.7 Summary of Conditions at Shawnee Building 43
2.4.8 Ecological Environment 43
2.4.8.1 Screening Ecological Risk Assessment (SERA) 50
2.4.8.2 SERA Results 50
2.4.8.3 Wetland Monitoring 51
2.5 Site-Specific Cleanup Objectives per 35 IAC 742 52
2.5.1 Exclusion of Groundwater Pathways 52
2.5.2 Direct-Contact Soil Cleanup Objectives 53
2.5.3 Remedial Objective for Lead 64
2.5.4 Remedial Volumes 65
2.6 Proposed Remediation of Wastes in an On-Site CAMU Landfill 68
2.6.1 Designation of the Proposed Landfill as a CAMU 68
2.6.2 General Information - On-Site Landfill 71
2.6.3 Landfill Liner and Leachate Collection System 72
2.6.3.1 Liner and LCS Design and Specifications 72
2.6.3.1.1 Granular Drainage Materials 76
2.6.3.1.2 Geomembrane 76
2.6.3.1.3 Geocomposite (Drainage Material for LCS and LDS) 77

Contents *(continued)*

Page

2.6.3.1.4 Geosynthetic Clay Liner (GCL) . . . 77
2.6.3.1.5 Prepared Subgrade . . . 79
2.6.4 Landfill Final Cover . . . 80
2.6.4.1 General . . . 80
2.6.4.2 Final Cover Design and Construction (IAC 35 s. 725.410) . . . 80
2.6.4.3 Final Cover Design and Specifications . . . 81
2.6.4.3.1 Grading Layer . . . 81
2.6.4.3.2 Geosynthetic Clay Liner . . . 81
2.6.4.3.3 Geomembrane . . . 82
2.6.4.3.4 Geocomposite . . . 83
2.6.4.3.5 Cover Soil (Rooting Layer) . . . 83
2.6.4.3.6 Topsoil . . . 83
2.6.5 Surface Water Management . . . 83
2.6.6 Passive Gas Management System . . . 84
2.6.7 Site Security . . . 85
2.6.8 Cost Estimate for Closure (IAC 35 s. 725.242) . . . 85
2.6.9 Certification of Closure (IAC 35 s. 725.215) . . . 85
2.7 Post-Closure Care and Use of the Property (IAC 35 s. 725.217) . . . 85
2.7.1 General . . . 85
2.7.2 Post-Closure Groundwater Monitoring (Subpart F) . . . 89
2.7.2.1 Metals . . . 89
2.7.2.2 VOCs . . . 91
2.7.2.3 Monitoring Schedule and Parameters . . . 92
2.7.3 Maintenance and Monitoring of Containment System (Subpart N) . . . 92
2.7.3.1 Action Leakage Rate (IAC 35 s. 725.405) . . . 92
2.7.3.2 Response Action (IAC 35 s. 725.403) . . . 100
2.7.3.3 Monitoring and Inspection (IAC 35, s. 725.404) . . . 100
2.7.4 Surveying and Recordkeeping (IAC 35 s. 725.409) . . . 100
2.7.5 Post-Closure Inspection and Maintenance Plan (IAC 35 s. 725.218) . . . 100
2.7.5.1 General . . . 100
2.7.5.2 Inspection and Maintenance Procedures . . . 101
2.7.5.2.1 Vegetation . . . 101
2.7.5.2.2 Final Cover Settlement and Integrity . . . 101
2.7.5.2.3 Stormwater Management System . . . 101
2.7.5.2.4 Leachate Management System . . . 102
2.7.5.2.5 Gas Management System . . . 103
2.7.5.2.6 Facility Access and Security Devices . . . 103
2.7.6 Financial Assurance for Post-Closure Monitoring and Maintenance (IAC 35 s. 725.245) . . . 103
2.8 Operation and Closure Schedule (IAC 35 s. 725.213) . . . 103
2.8.1 Contingency Plan . . . 115
2.8.2 Personnel Safety . . . 117

Contents *(continued)*

Page

3 Summary 118

4 References 119

Tables

Table 2-1 Lagoon Data Summary 9
Table 2-2 Lagoon Chemical Analysis (mg/kg) 30
Table 2-3 Lagoon Summary 32
Table 2-4 RFI Surface Soil Samples (mg/kg) 33
Table 2-5 CMS Soil Samples (mg/kg) Metals, Cyanide, pH, and TOC 35
Table 2-6 CMS Soil Samples (μg/kg) Volatile Organic Compounds (VOCs) 39
Table 2-7 Soil Background Derivation (mg/kg) 40
Table 2-8 RFI Contaminant Release Borings - MW-9A and MW-10A 41
Table 2-9 Surface Water Parameters (mg/l) 44
Table 2-10 Surface Water Chemical Data (μg/l) (Total) 46
Table 2-11 Sediment Investigation 47
Table 2-12 Former Cyanide Vault Location Soil Analyses 48
Table 2-13 Former Cyanide Vault Location VOCs Soil Analyses 49
Table 2-14 Toxicity Values 55
Table 2-15 Summary of Exposure Routes Evaluated 56
Table 2-16 Equations for Determining Remediation Objectives (mg/kg) 57
Table 2-17 Values Used for SSL Equation Parameters 59
Table 2-18 Chemical-Specific Parameter Values 61
Table 2-19 Site-Specific Parameter Values 62
Table 2-20 Parameter Values for Particulate Emission Factor (PEF) 63
Table 2-21 Site-Specific Soil Saturation Limit (C_{sat}) Values 64
Table 2-22 Proposed Soil Remedial Objectives-Shawnee Building 66
Table 2-23 Proposed Soil Remedial Objectives-Wetlands Area 67
Table 2-24 CAMU Cost Estimate - Double Liner and Composite Cap 86
Table 2-25 Current Groundwater Monitoring Program - Monitoring Wells 95
Table 2-26 Current Groundwater Monitoring Program - Sampling Parameters 96
Table 2-27 Groundwater Monitoring Program 97
Table 2-28 Annual Long-Term Care Costs Estimate - Proposed CAMU Landfill 104

Figures

Figure 2-1 Lagoon No. 0 and No. 1A Verification Borings 13
Figure 2-2 CMS Soil Boring Locations 15
Figure 2-3 Geologic Cross-Section A-A′ 16
Figure 2-4 Geologic Cross-Section B-B′ 17

Contents *(continued)*

		Page
Figure 2-5	Geologic Cross-Section C-C′	18
Figure 2-6	Geologic Cross-Section D-D′	19
Figure 2-7	Geologic Cross-Section E-E′	20
Figure 2-8	Geologic Cross-Section F-F′	21
Figure 2-9	Top of Weathered Bedrock Surface	22
Figure 2-10	Hydraulic Cross-Section G-G'	23
Figure 2-11	Potentiometric Surface Upper Portion (A Wells) of Unconsolidated Aquifer	24
Figure 2-12	Potentiometric Surface Lower Portion (B Wells) of Unconsolidated Aquifer	25
Figure 2-13	Potentiometric Surface Upper Portion (C Wells) of Dolomite Aquifer	26
Figure 2-14	Potentiometric Surface Lower Portion (D&E Wells) of Dolomite Aquifer	27
Figure 2-15	CAMU Landfill Layout	69
Figure 2-16	CAMU Berm Configuration Detail	73
Figure 2-17	Conceptual CAMU Base Grade Layout	74
Figure 2-18	Interior Berm Detail	75
Figure 2-19	Proposed Monitoring Wells for Semi-Annual VOC Monitoring	93
Figure 2-20	Proposed Monitoring Wells for Annual Metals Monitoring	94
Figure 2-21	Timetable for CAMU Construction, Filling, and Closure	107
Figure 2-22	Temporary Waste Storage Area Plan and Section View	109
Figure 2-23	Section A-A' Temporary Waste Storage Area	110
Figure 2-24	CAMU Landfill Construction Sequence - Task 1 through Task 5 from Figure 2-21	111
Figure 2-25	CAMU Landfill Construction Sequence - Task 6 through Task 9 from Figure 2-21	112
Figure 2-26	CAMU Landfill Construction Sequence - Task 10 through Task 12 from Figure 2-21	113
Figure 2-27	CAMU Landfill - Contingency Filling Plan	116
Figure 3-1	CAMU Landfill Permitting, Construction and Closure Time Table	119

Appendices

Appendix A	Drawings
Appendix B	1992 Fehr-Graham & Associates Report on Shawnee Building Soil Sampling Results
Appendix C	Lagoon Liners - Groundwater Elevation
Appendix D	Historical Groundwater Quality Data
Appendix E	RFI Soil Sampling - Locations and Contour Plots
Appendix F	1994 CMS Soil Results - Figures D-1, D-2, and D-3
Appendix G	Underground Cyanide Vault - Soil Results
Appendix H	Wetland Delineation Forms - Endangered Species Search

Contents *(continued)*

Page

Appendix I	TACO Equation R26 Calculation
Appendix J	TACO Calculations for Soils
Appendix K	Soil Concentration Contour Maps Identifying Areas Exceeding Site-Specific Soil Cleanup Objectives
Appendix L	Underground Vault - Contaminated Material Volume Estimate
Appendix M	Geomembrane Products Data
Appendix N	Geocomposite Products Data
Appendix O	GCL Product Data and Equivalency Calculations
Appendix P	Outline of Closure Safety Plan

1 Introduction

On March 19, 1997, representatives of the Illinois Environmental Protection Agency (IEPA) and Modern Plating Corporation (MPC) met to discuss the RCRA Closure Plan for the MPC facility in Freeport, Illinois. During the meeting, it was acknowledged that the regulatory oversight on this project was transferred from federal U.S. Environmental Protection Agency (U.S. EPA) oversight to state IEPA oversight. An IEPA-approved Closure Plan for the MPC facility was approved in 1987. Since that time, subsequent engineering work, including a RCRA Facility Investigation (RFI) and a Corrective Measures Study (CMS), have been conducted at the facility. As a result, the IEPA requested the submittal of this Modification to RCRA Closure Plan and Basis of Permit Application to include the following:

- A summary to date of the MPC facility history.
- A description of the RCRA Units and non-RCRA solid waste management units (SWMUs) including units history, construction, size, waste handled, releases, etc.
- A groundwater section including previous data and a proposed groundwater monitoring program.
- A Tiered Approach to Corrective Action Objectives (TACO) analysis for the development of soil and groundwater cleanup objectives for the site.
- A conceptual remediation plan for RCRA units and SWMUs.
- Remediation cost estimates for both the RCRA and non-RCRA units.

1.1 Request to Modify Approval of RCRA Closure Plan

In November 1986, a *Revised Closure/Post-Closure Care Plan* (Foth & Van Dyke, 1986) was submitted to the IEPA for the MPC facility. This plan was approved on January 23, 1987 with several conditions. An addendum to the plan was submitted to the IEPA on March 20, 1987 with IEPA approval granted on June 19, 1987.

The primary purpose of this current document is to request IEPA approval of a Modified RCRA Closure Plan for the MPC facility. Modification of the approved RCRA Closure Plans are warranted for the following reasons:

- The need to address site remediation as a result of subsequent RCRA Facility Investigation (RFI) and Corrective Measures Study (CMS) data.
- The need to address RCRA closure at the site in the context of overall site remediation, i.e., non-RCRA-regulated SWMUs such as the cyanide treatment vault, closed Lagoon No. 0, and closed Lagoon No. 1A.

- The promulgation on February 16, 1993 by the U.S. EPA and subsequent adoption by the IEPA of Corrective Action Management Units (CAMUs) which provide for increased flexibility for management of RCRA-regulated units.

- The promulgation by the IEPA on June 5, 1997 of Tiered Approach to Corrective Action Objectives (TACO) 35 IAC 742.

1.2 Purpose and Scope

This document describes the general approach regarding the Modified RCRA Closure Plan for the MPC's four RCRA-regulated units that include:

- The three SO4 (IEPA unit code) surface impoundments (Log No. C-259), designated:
  - Lagoon No. 1
  - Lagoon No. 2
  - Lagoon No. 3
- The Shawnee Building Soil (Log No. C-472)

Also included in this document is a general approach describing the closure of non-RCRA-regulated SWMUs including:

- The cyanide treatment vault
- Lagoon No. 0
- Lagoon No. 1A, and
- Wetland soils surrounding the lagoons

This report provides a summary of the site's history, previous investigations and resulting data, a TACO analysis for the development of soil and groundwater cleanup objectives, remediation cost estimates, and a post-closure care and monitoring program. Preparation of this document relied upon the guidance provided in the IEPA's draft document titled "Guidance for Preparing RCRA Closure Plans".

The conceptual engineering design of the proposed on-site CAMU landfill was prepared in accordance with CAMU regulations promulgated in 35 IAC 724.652 and closure requirements in 35 IAC 725. In pursuing site closure via the CAMU approach, in which both site RCRA and non-RCRA wastes will be disposed, it is recognized that site closure will not meet the requirements of a clean closure as defined by the IEPA.

1.3 Overview of RCRA Corrective Action and Closure Process for MPC

The RCRA Corrective Action and Closure process for the MPC facility, the location of which is shown in Drawing No. 1 (Appendix A), dates back to the mid 1980s and has involved, at various points in time, regulatory oversight authority under both the U.S. EPA and the IEPA.

In November 1980, a RCRA Part A permit application was submitted. In July 1984, a RCRA Part B permit application was submitted. Compliance inspections and groundwater sampling of the MPC facility were conducted by the IEPA between September 1981 and June 1987.

In March 1984, MPC received a hazardous ranking system score of 22.4. In July 1985, MPC was placed on the Illinois Remedial Action Priorities list. The U.S. EPA issued a Complaint and Compliance Order dated June 18, 1985, which specified the U.S. EPA's determination of violations by MPC of the Resource Conservation and Recovery Act as amended. MPC entered into a Consent Agreement and Final Order with the U.S. EPA on November 23, 1985. On September 3, 1986, the U.S. EPA approved the Assessment Monitoring Program for MPC's RCRA lagoons.

The approved Assessment Monitoring Program was implemented in September 1986, and reported in 1987 (Foth & Van Dyke, 1987a). Twelve groundwater monitoring well locations (labeled MW-5C, MW-5D, MW-6A, MW-6B, MW-6C, MW-7A, MW-7B, MW-7C, MW-7D, MW-8A, MW-8B, and MW-8C), were installed and developed, (Drawing No. 2, Appendix A).

A second phase of assessment monitoring and well installation was performed during August and September 1987 (Foth & Van Dyke, 1987b). Twenty additional groundwater monitoring wells and well nests (labeled MW-11A, MW-11B, MW-11C, MW-11E, MW-12A, MW-12B, MW-12C, MW-12E, MW-13A, MW-13B, MW-13C, MW-13E, MW-14A, MW-14B, MW-14C, MW-14E, MW-15A, MW-15B, MW-15C, and MW-16C) were installed at six locations (Drawing No. 2, Appendix A).

In November 1986, a revised partial closure/post-closure care plan was submitted to the IEPA. This plan was approved by the IEPA on January 23, 1987, with several conditions. An addendum to the plan was submitted to the IEPA on March 20, 1987, and the plan modification was approved by the IEPA on June 19, 1987.

The IEPA issued a Notice Pursuant to Section 4 (q) of the Environmental Protection Act on June 20, 1986. As a result of this notice, a situation/preliminary report was submitted to the IEPA on September 18, 1986. Comments on the report were addressed on October 30, 1986. In addition, in December 1986, a remedial investigation work plan was submitted to the IEPA. An amended remedial investigation work plan was submitted to the IEPA in 1987. The amended work plan was not reviewed because MPC requested negotiations for a Consent Order to combine Federal and State actions. Negotiations between MPC and the U.S. EPA resulted in a Consent Order signed by the U.S. EPA on December 31, 1987, which became effective on January 15, 1988.

In February 1988, a RCRA Facility Investigation (RFI) work plan was submitted to the U.S. EPA and the IEPA. A revised RFI work plan was submitted to the U.S. EPA and the IEPA in June 1988. A second revised RFI work plan was submitted in September 1988. The U.S. EPA approved the RFI work plan on December 31, 1988. In February 1988, a Description of Current Conditions report was submitted to the U.S. EPA. A revised Description of Current Conditions was submitted in June 1988.

The RFI program constituted the third hydrogeologic investigation at the MPC facility. Hydrogeological, soil, surface water, and sludge characterization work was reported in the February 1990 RFI (Foth & Van Dyke 1990). In May 1991, a report titled *Final Corrective Measures Study (CMS) for the Modern Plating Facility - Part II, Volumes I and II*, presented MPC's preferred alternative for remediation of soil, groundwater and electroplating sludge at their facility.

Four subsequent CMS reports addressed the U.S. EPA's and the IEPA's comments on MPC's preferred alternative. Those reports were titled:

- *Final Corrective Measures Response to U.S. EPA Comments* (October 1991)
- *Final Corrective Measures Study, Response to U.S. EPA Comments, Response No. 2*, July 1992
- *Corrective Measures Study, Soil sampling Plan*, March 1993
- *Modern Plating Corporation - Response to July 21, 1993 Letter*

As a result of the reports, studies, review, and investigations, MPC submitted a Final Corrective Measures Study-Compendium Report on May 3, 1995. This report addressed IEPA and U.S. EPA comments and concerns regarding the RCRA Closure Plan for all RCRA and non-RCRA-regulated units, and provided final remedy selection. The Compendium Report recommended the phased excavation, treatment and off-site disposal of site wastes in addition to a phased implementation of a groundwater recovery system for remediating contaminated groundwater at the site.

In a September 4, 1996 letter, the U.S. EPA formally approved the CMS. In an October 17, 1996 IEPA letter to the U.S. EPA, the State of Illinois formally requested taking over the MPC site for implementation of the corrective action. The U.S. EPA granted the IEPA's request and also terminated the Administrative Order on Consent.

On March 19, 1997, MPC met with the IEPA to discuss modifications to the RCRA Closure Plan. As a result of this meeting and the transfer of regulatory oversight from the U.S. EPA to the IEPA, it was agreed that MPC would submit a revised RCRA Closure Plan that provides a comprehensive summary of the site history, a TACO analysis for soil and groundwater cleanup objectives, remediation cost estimates, and a post-closure care and monitoring plan.

2 Revised RCRA Closure Plan

This section of the report describes the revised RCRA closure plan for the MPC facility. This closure plan addresses both the RCRA-regulated units (Lagoon No. 1, Lagoon No. 2, Lagoon No. 3 and Shawnee Building soils), and non-RCRA-regulated units which include Lagoon No. 0, Lagoon No. 1A, the cyanide treatment vault, and impacted wetland soils.

2.1 Introduction

This closure plan is being submitted as a request for modification of the existing approved closure plans for the RCRA-regulated units at the MPC facility.

2.2 Site History and Description of Facility

The MPC facility is located on 19 acres at 701 South Hancock Avenue, Freeport, Illinois. The site is located in the SE ¼ of Section 32, Township 27 North, Range 8 East, Stephenson County (refer to Drawing No. 1 in Appendix A). This facility is a large job-shop plating business with the capabilities to plate a variety of metals. Drawing No. 2 is an existing conditions map of the site showing the location of RCRA-regulated units and SWMUs. The facility has operated as an electroplater since 1963 and has a U.S. Department of Labor Standard Industrial Code (SIC) of 3471 (Plating and Polishing).

The site is located within the Rock River Hill Country of the Till Plains Section of the Central Lowlands Province. The area was glaciated, however, drift is thin in many areas and the major uplands and valleys are controlled mainly by the bedrock surface. The area is characterized by rolling hills considered to be in the stage of late youth to early maturity.

The major drainage in the area is generally to the south and southeast via the Pecatonica River. A considerable portion of the MPC facility, including the five lagoons, is built upon fill in the floodplain of the Pecatonica River.

The area is surrounded by a mixture of residential and commercial properties to the south, east, and west. Agricultural property and wetlands exist between the MPC facility and the Pecatonica River located to the north of the facility.

The original owner of the MPC property was the Arcade Company, a toy and novelty manufacturer which operated on the site from 1885 until the late 1920s or 1930s. The Arcade Company performed casting, forging, stamping, and painting.

At the beginning of World War II, Rockwell Industries acquired the assets of the bankrupt Arcade Company and reconstructed several buildings on the site. Ordnance supplies (Howitzer shells, rockets (signal), etc.) were produced until about 1946. The plant was then operated on a reduced level until the Korean war, when a higher level of production was resumed. Some local companies rented warehouse space for storage from Rockwell during this period. Rockwell

apparently operated the plant for the U.S. government. Some Rockwell operations required large amounts of cooling water (no known wet processing); hence, at some point in the 1940s, a large (24-in) discharge line was installed to the Pecatonica River. A second sanitary sewer discharge line was also installed. In 1953-54, the Rockwell operation was permanently closed.

Modern Plating Corporation purchased the site from the Rockwell Charitable Trust in 1963 and began operation in 1964. In 1964 and 1965, Modern Plating Corporation removed much of Rockwell's equipment and began major building reconstruction, including new roofs, walls and floors. A used plating machine (Stevens nickel-chrome) was purchased. The unsegregated flow, which consisted of nickel, hexavalent and trivalent chromium, was directed through pipe in a newly-constructed tunnel to the northeast wall of the plant to connect with the existing cooling water discharge line. The Freeport Water and Sewer Commission treatment plant apparently had insufficient capacity to accept MPC flow. In 1965-66, MPC planned to prepare for waste treatment in the area northeast of the plant, taking advantage of natural grade. As additional plating lines were installed (VIP-1 zinc barrel plater in 1966; nickel-chrome hoist line and bronze-brass hoist line in 1967; zinc hoist line and phosphate line in 1968; hard chrome, barrel nickel, pan line in 1969; etc.), discharges from these lines were piped to the tunnel. Sometime in 1967-69, three separate discharge lines were created for cyanide, chrome, and acid alkali.

In 1968-69, a large excavation was made at the north wall and an underground room (20 ft by 15 ft x 12 ft deep) was created (the cyanide vault). In this underground room, a wastewater treatment system with cyanide oxidation, chromate reduction, and acid-alkali neutralization, was installed. There was no waste solids separation, but a consistent pH was produced (to protect the tile discharge line) with little cyanide or hexavalent chromium present. This system was operated manually with little or no instrumentation.

During the 1965-70 period, three separate environmental projects were undertaken. First, several acres to the north of the facility were filled in to present grade. A significant amount of clay, clayey loam, and clayey sand were brought to the site (purchased) and/or excavated from the site. Secondly, engineering plans were produced for a large wastewater treatment plant on the present site. The IEPA was heavily involved in this process of design, principally because no National Pollution Discharge Elimination System (NPDES) discharger in Standard Industrial Classification (SIC) Code 3471 apparently existed at that time. Thirdly, the past practice in metal finishing had been to rinse to sewer untreated sludges (bottom sludge, etc.). MPC's approach was to eliminate this practice and commence storing in an impoundment. As a result, in 1968 or 1969, a clay-lined impoundment constructed in clay soils (Lagoon No. 0), using 2 ft to 3 ft of partially compacted clay was created northwest of the office. The "lagoon" was approximately 50 ft by 50 ft by 15 ft deep and the above-ground berm extended 3 to 4 ft above grade with a ramp for adding materials. The nature of the materials added is in dispute. However, it is acknowledged that various cyanide sludges and zinc, cadmium, and copper stripping were added, as well as limited amounts of alkaline sludge (cleaner bottom sludge, nickel filter cake, etc.). There may have been trichloroethylene (TCE)-containing waste added to Lagoon No. 0. Sufficient solid waste was added such that some liquids could be added without reducing viscosity. Around the summer of 1970, a decision was made to close the lagoon. A

large amount of Oil Dry and lime was added for solidification, as well as several loads of sand. Several feet of clay were used to cover the lagoon and the adjoining land was filled to match the mound caused by lagoon closure.

In May of 1971, the current wastewater treatment plant was put into operation with simultaneous closure of the underground treatment system. The contents of the room (sludges in the cyanide treatment basin, chromium treatment basin and acid-alkali neutralization basin) were pumped through the new wastewater treatment plant. IEPA personnel were present during this process.

Following the closure of Lagoon No. 0, there was no further disposal, either on- or off-site, of untreated wastes. In the spring of 1971, before the treatment plant was in operation, the west lagoon (Lagoon No. 1) was constructed in a clay soil environment. A pipe (4-in or 6-in) was laid from the sludge thickening basin of the treatment plant to Lagoon No. 1. The initial clarifier sludge (bottom blowdown) was apparently quite low in solids, as primitive flocculate and polymers were used. The lagoon filled quite rapidly and, by mid-1972, was overflowing. The overflow was reportedly clear liquid. Pumps were installed to transfer topwater to either the wastewater treatment plant or to the final sewer line. During the 1972-73 winter, this pumping was impractical. In the spring of 1973, the center lagoon (Lagoon No. 2) was constructed in a clay soil environment and immediately put into service. Topwater was pumped out of Lagoon No. 1. Spring floods of 1973 caused erosion to the back berms of both lagoons. Collapse of the Lagoon No. 1 back berm was considered imminent. A contract was issued to chemically fix the contents of Lagoon No. 1 (approximately 1,850 cy), place the "cemented" product in a new pit (Lagoon No. 1A), and reconstruct the Lagoon No. 1 floor and berms. This work, performed by Chemfix, Inc. in the summer of 1973, was permitted under IEPA Permit 83-316 and observed by IEPA personnel.

From 1973 through 1979, the waste treatment sludge was alternately discharged into each of the two lagoons. The freeboard rule was not applied. Each lagoon was filled to overflowing before switching discharges, then topwater was pumped off. Solids content increased steadily during this period. Plans were made for a third lagoon to be constructed in 1979-80.

In 1978, quality problems resulted from operating an "open-air" treatment plant for several months. Compounding the problem was the deterioration of the wastewater segregation system, which necessitated a multi-year reconstruction of this system. During 1979-1980, there were repeated instances of lagoon overtopping. An Illinois Pollution Control Board case (PCB 78-226) resulted from the discharge of effluents containing several heavy metals to the Pecatonica River. A settlement was reached with MPC. They were fined $125,000.

Lagoon No. 3 was constructed in a clay soil environment in the spring of 1980 and was immediately utilized. Materials were removed from Lagoon No.1 and No. 2 in the summer of 1980, and the discharge lines to those lagoons were sealed.

During the 1977-1980 period, vegetative growth around the lagoons became very well established. Initially, the areas were mowed, but later a decision was made to cease mowing and

to spray the growth with trichloroethylene (TCE). TCE was used at MPC for industrial cleaning applications. The TCE was bought from an unknown distributor. The amount of TCE used has been reported by various MPC employees as two to four drums. The application(s) of TCE on the weeds most likely took place during mid-summer of 1979 and 1980. A firm was hired to apply an environmentally safe herbicide to the lagoon areas in 1981 and 1982. Subsequently, no chemicals have been used, and mowing or hand-cutting has been performed.

In 1980/1981, faced with the need for a significant addition to the waste treatment plant in order to meet NPDES limits, MPC obtained permission from the Freeport Water and Sewer Commission (FWSC) and the IEPA (January, 1982) to connect to the FWSC plant. The discharge line from the MPC wastewater treatment plant to the Pecatonica River was sealed. As one condition, MPC agreed to install (by June 1, 1983), solids dewatering equipment and to cease, at that point, discharge into the lagoons. The sludge discharge line to Lagoon No. 3 was therefore sealed. This action was completed on May 27, 1983. The dewatering capacity of the first pressure filter was inadequate, and a second unit was purchased and installed in October of 1983. MPC overlooked a discharge pipe from a sump in an underground vault in front of the treatment plant. This vault was used to contain two tanks used in MPC's process. Precipitation and runoff occasionally seeped into the vault and were pumped into the lagoons. This flow resulted in a minimal overtopping condition in the winter of 1985/1986. This line was sealed in March 1986. All discharge routes to the lagoons have now been sealed.

2.3 Identification and Description of RCRA Regulated and Non-RCRA Regulated Units

This section contains a description of each RCRA and non-RCRA-regulated unit at the MPC facility.

2.3.1 Sludge Lagoons

As a result of past waste-handling practices at MPC, five sludge storage impoundments or lagoons are present at the site. These five lagoons received wastes from 1968 to 1983. Two of the lagoons, Lagoon No. 0 and No. 1A, have been capped, and the other three, identified as Lagoon No. 1, Lagoon No. 2, and Lagoon No. 3, are currently open to the atmosphere. Lagoon locations are shown in Drawing No. 2 (in Appendix A). Lagoons No. 1, No. 2, and No. 3 are regulated as RCRA units. Lagoons No. 0 and No. 1A are non-RCRA-regulated SWMUs.

Foth & Van Dyke estimates that 13,978 cubic yards (cy) of electroplating sludge is contained in the five lagoons (Table 2-1). The sludge is classified as an F006 listed waste. In addition, Lagoons No. 0 and No. 3 also contain trichloroethene (TCE). Lagoons No. 0 and No. 3 carry an additional F002 listing.

Table 2-1

Lagoon Data Summary
Modern Plating Corporation

Lagoon Number	Surface Area (square feet)	Approximate Maximum Thickness of Waste (feet)	Waste Volume (cubic yards)[a]
0	4,950	9	614
1A	9,580	5.5	1,624
1	10,290	8	2,198
2	18,110	7	3, 615
3	24,560	8	5,927
			13,978

[a]Waste volume calculations assumed a 1:1 side slope for Lagoons 0 and 1A, and 2:1 side slopes for Lagoons 1, 2, and 3.

Prepared by: RJC1
Checked by: SJL1

R002513

2.3.2 Shawnee Building

Within the Shawnee Building, various cyanide wastes were stored in containers and tanks, and chromium solution was stored in containers. In addition, a waste pile composed of zinc "dummy" blanks was located in the Shawnee Building.

In 1991, the various cyanide wastes, chromium solutions and zinc blanks within the Shawnee Building were removed and disposed of, under the direction of an Illinois-certified professional engineer. The documentation for that portion of the Shawnee closure will be submitted to the IEPA in the planned 1998 Closure Documentation Report, which will encompass the closure work proposed in this report.

In 1995, the Shawnee Building was razed to accommodate site investigation work. Currently, a concrete slab is present at the Shawnee location.

2.3.3 Cyanide Vault

Foth & Van Dyke conducted an investigation in 1994 to evaluate whether the underground vault, located southeast of Lagoon No. 0 could act as a potential source of contamination to soil and groundwater. The location of the vault is shown in Drawing No. 2, Appendix A.

The vault was constructed in 1968-1969. In this underground location, a waste water treatment system was installed which consisted of cyanide oxidation, chromate reduction and acid-alkali neutralization. In 1971, with onset of operation of the site's waste water treatment plant, the underground vault was closed. In May of 1971, the current wastewater treatment plant was put into operation with simultaneous closure of the underground treatment system. The contents of the room (sludges in the cyanide treatment basin, chromium treatment basin and acid-alkali neutralization basin) were pumped through the new wastewater treatment plant. IEPA personnel were present during this process. Closure details have not been available. This unit is considered a non-RCRA-regulated SWMU.

On May 17, 1990, Foth & Van Dyke inspected the underground vault. The vault is approximately 20 ft long by 15 ft wide, and is approximately 12 ft deep. It is constructed of poured concrete walls and floor. A concrete slab with an access manhole covers the vault.

The May 1990 inspection noted water in the vault bottom, perhaps due to surface seepage. Yellowish-orange staining was observed on the walls. There were no observable openings in the walls or on the floor of the vault.

Section 2.4.6 describes the results of the 1994 Foth & Van Dyke cyanide vault investigation.

2.3.4 Wetland Area Soils

The final unit being considered for remedial action is referred to as the wetland area soils. The wetland is located immediately to the north of the MPC sludge lagoons as shown in Drawing No. 2. These soils were impacted by overflow from Lagoons No. 1, No. 2, and No. 3. The characterization data on the extent and magnitude of impacted soils are described in Section 2.4.4, and site-specific remedial objectives for the wetland are described in Section 2.5.2.

2.4 Summary of Site Characterization Data Collected to Date

A large number of investigations have been completed to characterize geologic and hydrogeologic conditions, the extent and magnitude of soil contamination in wetland areas around the sludge lagoons, contaminant composition and concentrations in lagoon sludge, soil contaminant conditions in the vicinity of the Shawnee Building, and contaminant conditions in the vicinity of the underground cyanide treatment vault. These investigations serve the purpose of determining the extent of contamination and groundwater quality required for a RCRA closure.

The following is summary of the main investigations that have been completed at the MPC facility to define the magnitude and extent of contamination of the facility:

- September 1986 Assessment Monitoring Program. Five soil/rock borings were completed and used for the installation of wells labeled MW-5C, MW-5D, MW-6A, MW-6B, MW-6C, MW-7A, MW-7B, MW-7C, MW-7D, MW-8A, MW-8B, and MW-8C. Four wells previously installed by Miller Consulting Engineers and designated B-1, B-2, B-3, and B-4 were abandoned during this investigation. The location of the wells installed by Foth & Van Dyke are shown in Drawing No. 3 (Appendix A).

- A second phase assessment monitoring well installation program was completed in August and September of 1987. Twenty additional groundwater monitoring wells were installed (MW-11A, MW-11B, MW-11C, MW-11E, MW-12A, MW-12B, MW-12C, MW-12E, MW-13A, MW-13B, MW-13C, MW-13E, MW-14A, MW-14B, MW-14C, MW-14E, MW-15A, MW-15B, MW-15C, AND MW-16C) at six locations as shown in Drawing No. 3 (Appendix A).

- The RFI hydrogeologic investigation program was the third hydrogeologic investigation program. Wells MW-17A, MW-17B, MW-17C, MW-17D, MW-18A, MW-18B, MW-18D, MW-19A, MW-19B, MW-19C, AND MW-19D were installed at locations 800 to 900 ft down gradient of the lagoons near the Pecatonica River. Wells MW-9A, and MW-10A were installed north of Lagoons No. 0 and No. 1A. Soil samples from MW-9A and MW-10A were collected for chemical analysis. The location of these wells are shown on Drawing No. 3 (Appendix A).

- RFI Soils Investigation. Soil borings B-1A through B-6A were completed to verify the boundaries of Lagoons No. 0 and No. 1A which were mapped by EM Survey. The location of these borings are shown on Figure 2-1. To characterize the extent of surficial soil contamination in the vicinity of the lagoons, soil samples were collected from 23 locations at MPC. The sampling locations were identified through use of a grid with 150-ft centers and are displayed on Drawing No. 3 (Appendix A). An additional four samples were collected at SS-1, SS-2, SS-7, and SS-8 locations since the initial samples at these four locations ranged in depth from 1 to 2 ft. The U.S. EPA requested additional analysis at a shallow depth (0 to 1.0) ft to more accurately assess human exposure to surface soils. The four additional samples were analyzed for arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel, selenium, zinc, and VOCs.

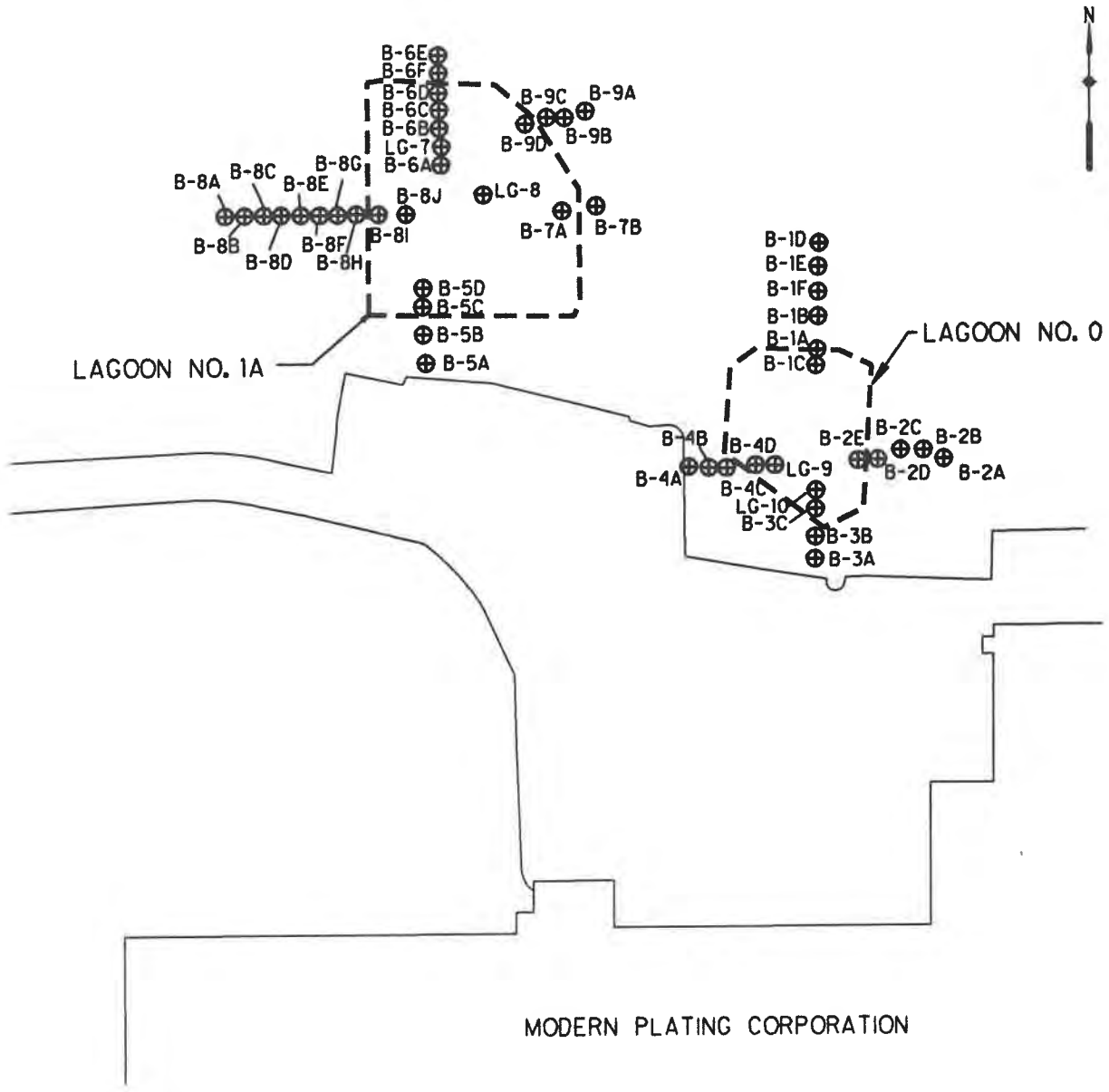
- RFI surface water and sediment investigation. Three surface water sediment sampling stations were established on the Pecatonica River (S-1, S-2, and S-3), one station on the meander lake northwest of the lagoons (S-4), and one station in the flowage northeast of the lagoons (S-5). The sampling locations are shown in Drawing No. 4 (Appendix A).

- RFI lagoon sampling. Samples of the waste sludge in the five lagoons were collected from each of the impoundments. A total of ten borings were performed (LG-1 through LG-10). The locations of the ten lagoon borings are shown on Drawing No. 3 (Appendix A).

- Shawnee Building 1992 soils investigation. Concurrent with the RFI/CMS at MPC, a RCRA closure was occurring at MPC in the area referred to as the Shawnee Building. Drawing No. 2 in Appendix A shows the location of the Shawnee Building. This closure activity has been under the direction of the IEPA and has been conducted by a separate environmental engineering firm (Fehr-Graham, Freeport, Illinois). At the request of the RFI/CMS U.S. EPA project manager, and with agreement from the IEPA and MPC (June 17, 1993 project meeting at Region V), the Shawnee Building closure activity will be incorporated into this RCRA corrective action.

  Considerable soil sampling and analysis has occurred at the Shawnee Building location. Compounds of concern at this location include cadmium, cyanide, and TCE. Sufficient characterization work has been performed at this location to identify the extent of soil impacts. As with the rest of the project, previous reports for the Shawnee Building are not reproduced here, but are in the possession of both the U.S. EPA and the IEPA.

  A brief report prepared by Fehr-Graham & Associates documenting soil sampling locations and soil analytical data at the Shawnee Building is included in Appendix B.



LEGEND

⊕ B-2D — BORING LOCATION AND NUMBER

— — — LAGOON BOUNDARY AS DETERMINED BY BORINGS

MODERN PLATING CORPORATION		
FIGURE 2-1 LAGOON NO.S 0 AND 1A VERIFICATION BORINGS		
Scale: 0 40' 80'	Date: AUGUST, 1997	
Prepared By: Foth & Van Dyke		By: JOW

C:\cadwork\7m15f5.dgn

- During January and October 1994, Foth & Van Dyke field geologists collected soil samples to further characterize soil contamination at the MPC site. The location of the collected soil samples is shown in Figure 2-2. The samples were collected and analyzed in accordance with Foth & Van Dyke's August 13, 1993 proposed plan and the U.S. EPA's October 29, 1993 approval letter. Soil samples were analyzed for metals, cyanide, VOC's, pH, and total organic carbon.

- CMS cyanide vault investigation. In February 1993, wells MW-21A, MW-21C, MW-22A, and MW-22C were installed near the cyanide vault to assess soil and groundwater contamination in the vicinity of the vault. The location of these wells are shown on Drawing No. 3 (Appendix A).

- CMS well installation. In February 1994 well MW-20C was installed east of Lagoon No. 3 to provide additional information on the extent of groundwater contamination east of Lagoon No. 3. The location of this well is shown on Drawing No. 3 (Appendix A).

2.4.1 Geologic and Hydrogeologic Conditions

Hydrogeologic conditions are described in detail in the RFI (Foth & Van Dyke, 1990). Figures 2-3 through 2-14 display geologic cross sections and potentiometric surface maps that provide a detailed visual representation of the site's hydrogeology. The following is a summary of key points with respect to hydrogeologic conditions at the site:

- Two aquifers were identified at the MPC site including an upper aquifer consisting of permeable alluvial sand and gravel and the lower bedrock aquifer consisting of Ordovician age Galena and Platteville Group dolomites.

- The two aquifers are separated by a clay aquitard that is thin to absent near the bedrock high in the vicinity of the sludge lagoons and increases to over 70 ft thick near the Pecatonica River.

- Groundwater flow in both aquifers is north northeast with a relatively uniform flow field exhibited in the unconsolidated aquifer and more divergent flow in the dolomite aquifer. Horizontal gradients are approximately 0.005 ft/ft in the unconsolidated aquifer and range from approximately 0.01 ft/ft to 0.006 ft/ft in the dolomite aquifer.

- Vertical hydraulic gradients within the unconsolidated aquifer are upwards near the Pecatonica River and downward near the sludge lagoons.

- The unconsolidated aquifer is permeable with an average measured field permeability of 3.17×10^{-3} cm/sec. Similarly the dolomite aquifer exhibits and average field permeability of 4.27×10^{-3} cm/sec.

100+00 E
102+50 E
105+00 E
107+50 E
105+00 N
102+50 N
100+00 N
97+50 N
N
LAGOON NO. 1A
LAGOON NO. 0
LAGOON NO. 1
LAGOON NO. 2
LAGOON NO. 3
VAULT
BUILDING
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56

LEGEND

APPROXIMATE PROPERTY LINE

53 CMS BORING LOCATION AND NUMBER

MODERN PLATING CORPORATION

FIGURE 2-2

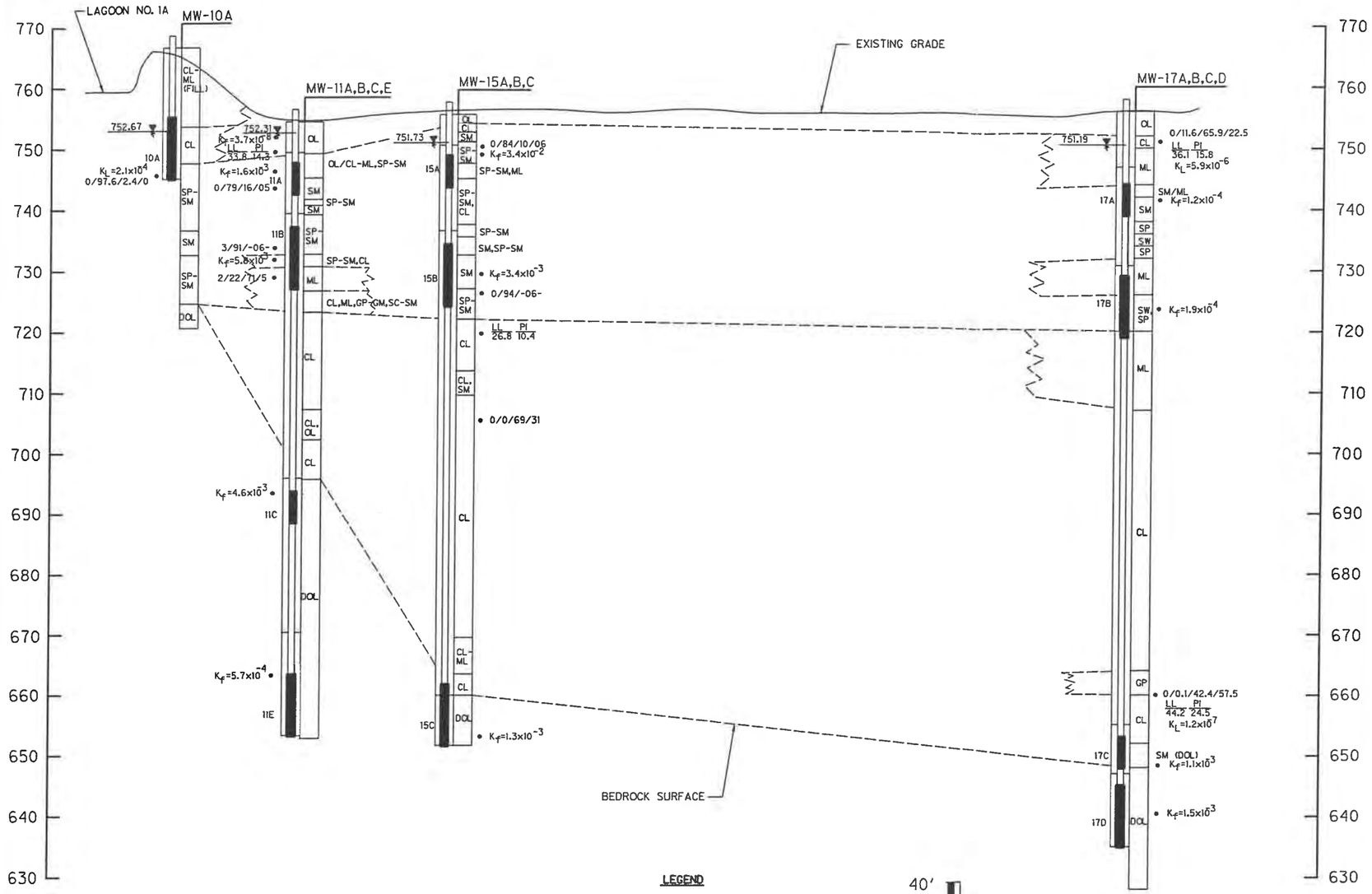
CMS SOIL BORING LOCATIONS

Scale: 0 50' 100' | Date: AUGUST, 1997

Prepared By: Foth & Van Dyke | By: JOW

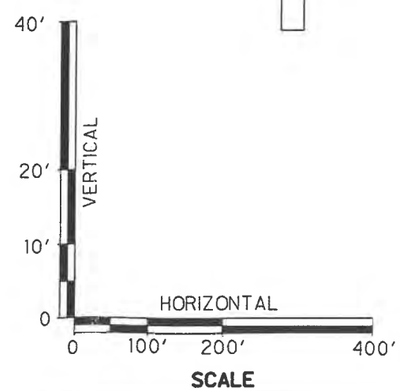
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SECTION A-A'

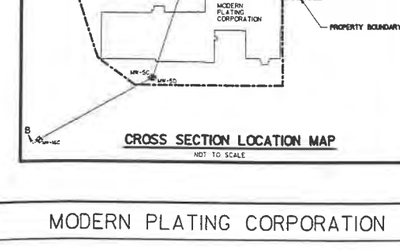


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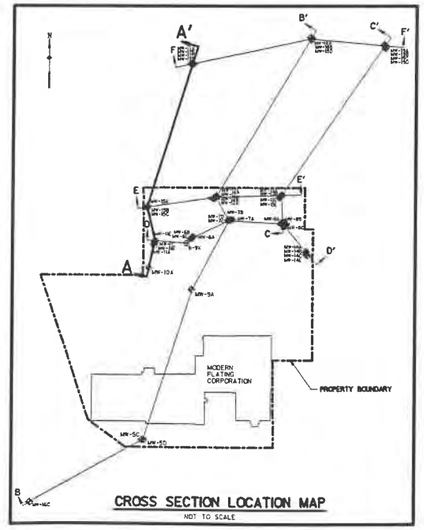
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OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL PI / 26 13	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL



WELL CONSTRUCTION INFORMATION



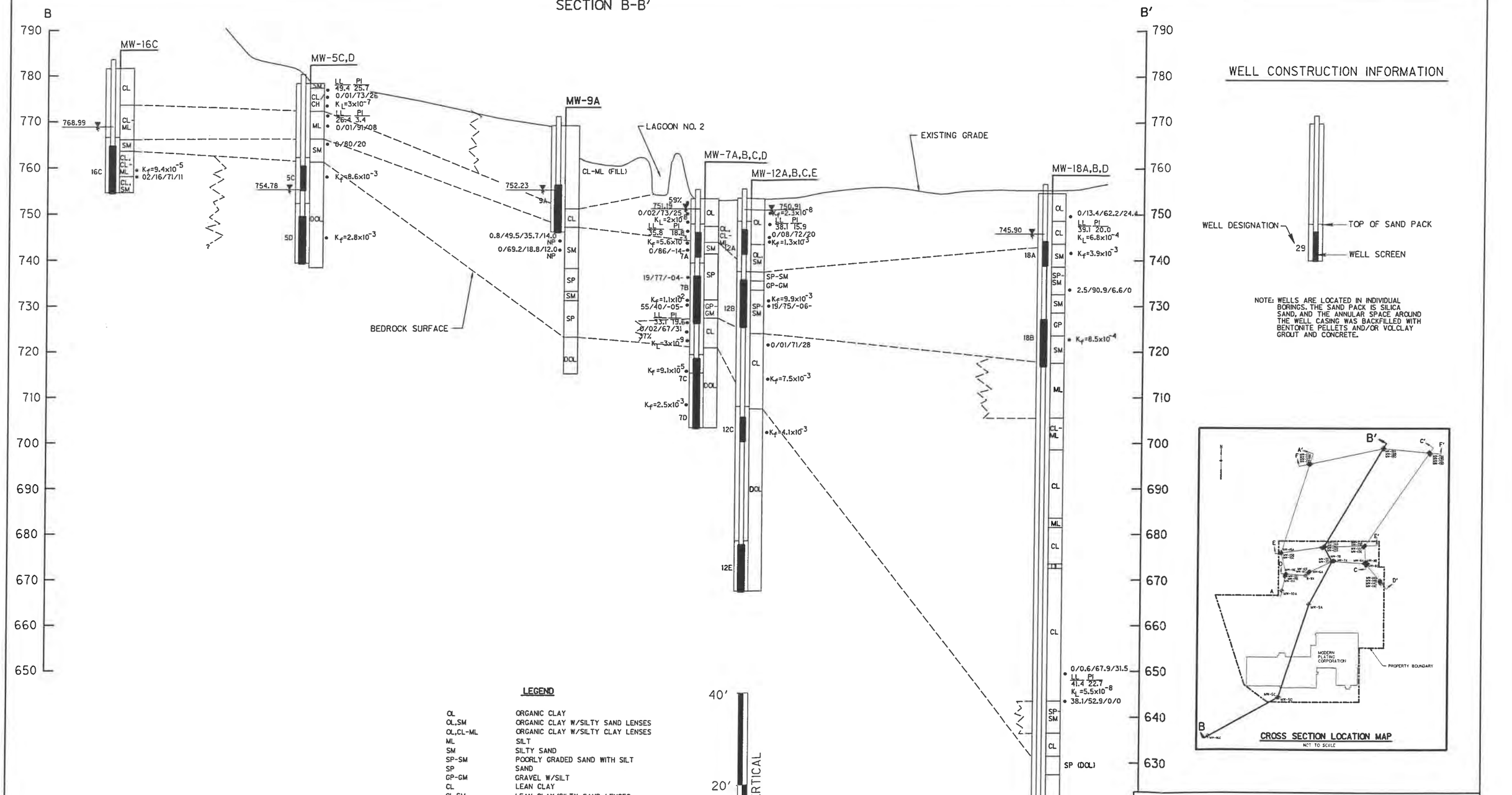
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

MODERN PLATING CORPORATION			
FIGURE 2-3			
GEOLOGIC CROSS SECTION A-A'			
Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

SECTION B-B'



LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL PI / 26 13	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL

WELL CONSTRUCTION INFORMATION

NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.

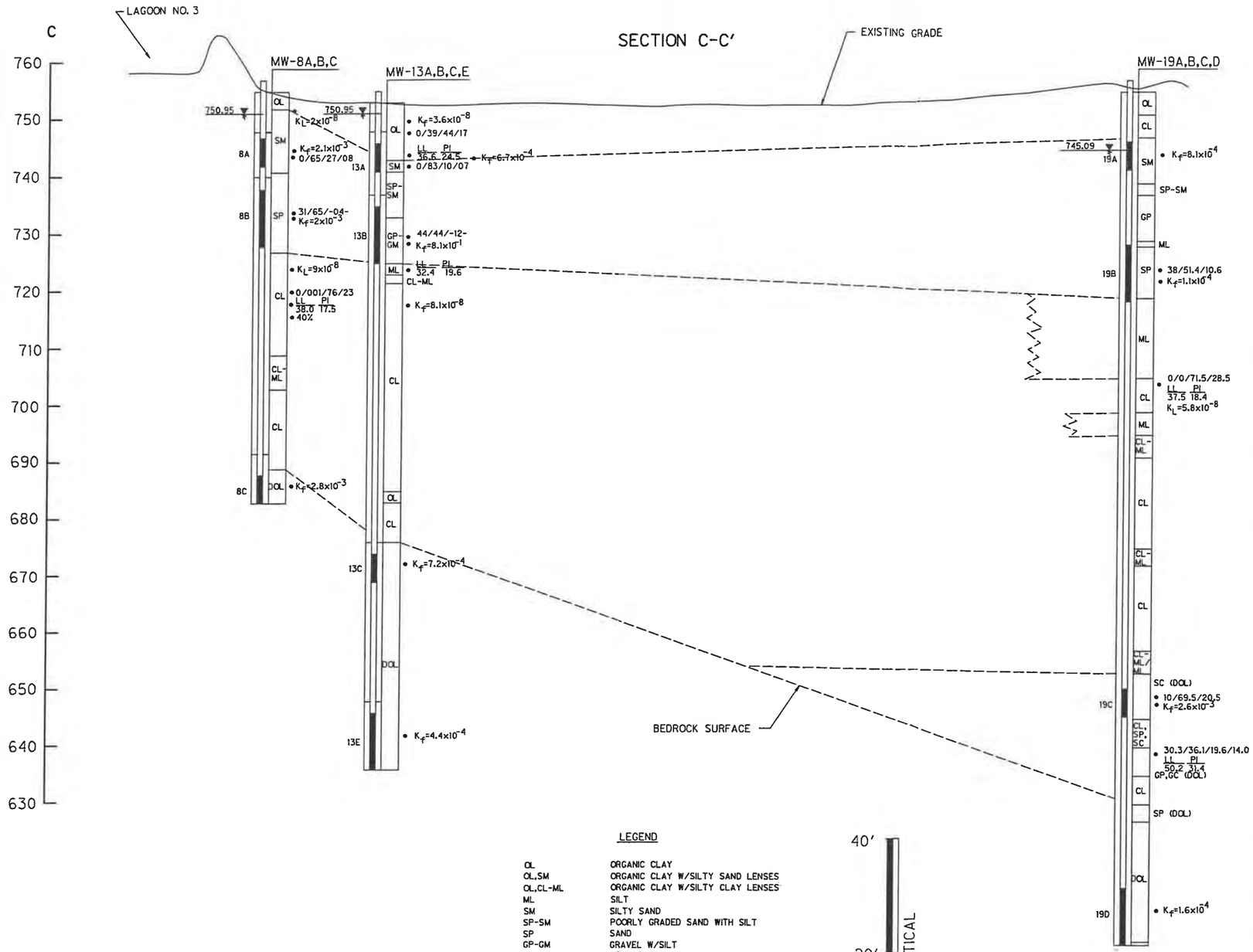
MODERN PLATING CORPORATION

FIGURE 2-4

GEOLOGIC CROSS SECTION B-B'

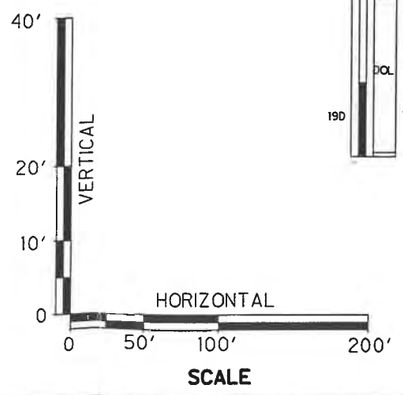
Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

SECTION C-C'

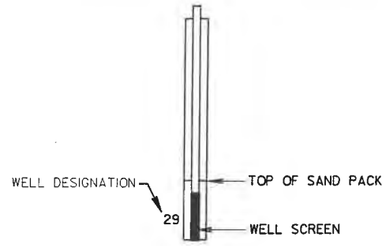


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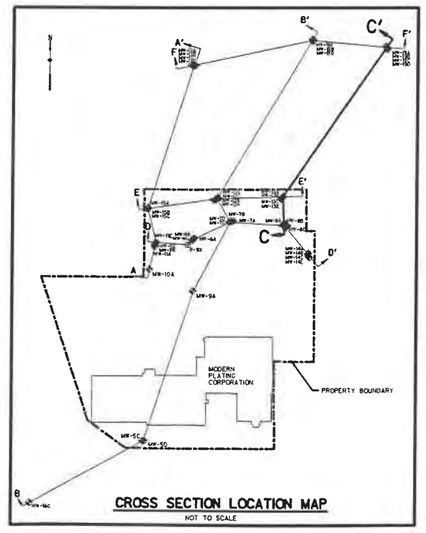
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OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL PI / 26 13	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL



WELL CONSTRUCTION INFORMATION



NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

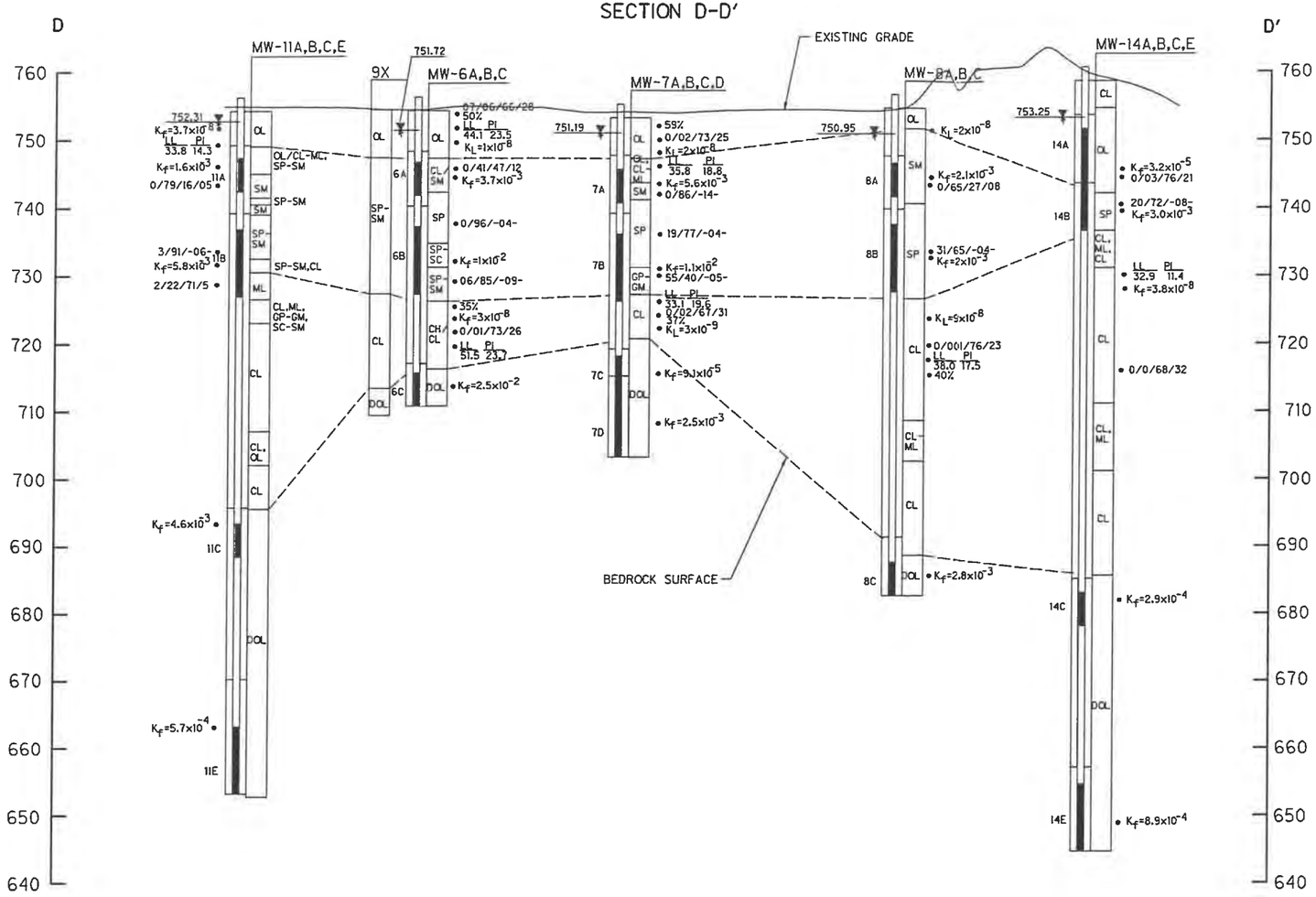
MODERN PLATING CORPORATION

FIGURE 2-5

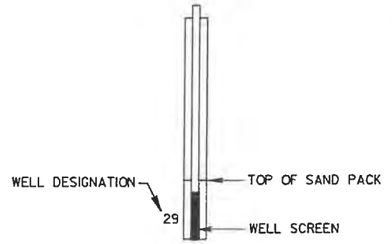
GEOLOGIC CROSS SECTION C-C'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

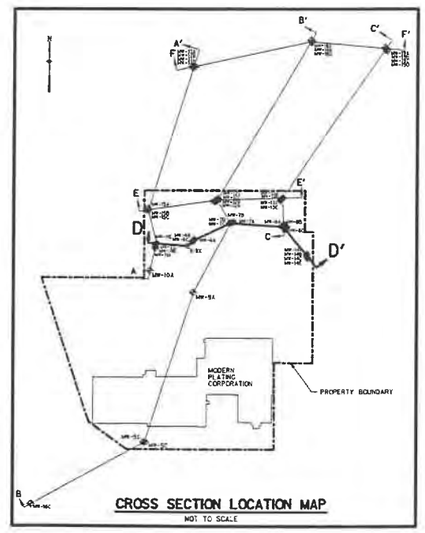
SECTION D-D'



WELL CONSTRUCTION INFORMATION



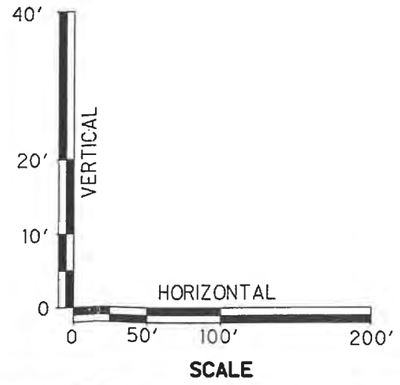
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

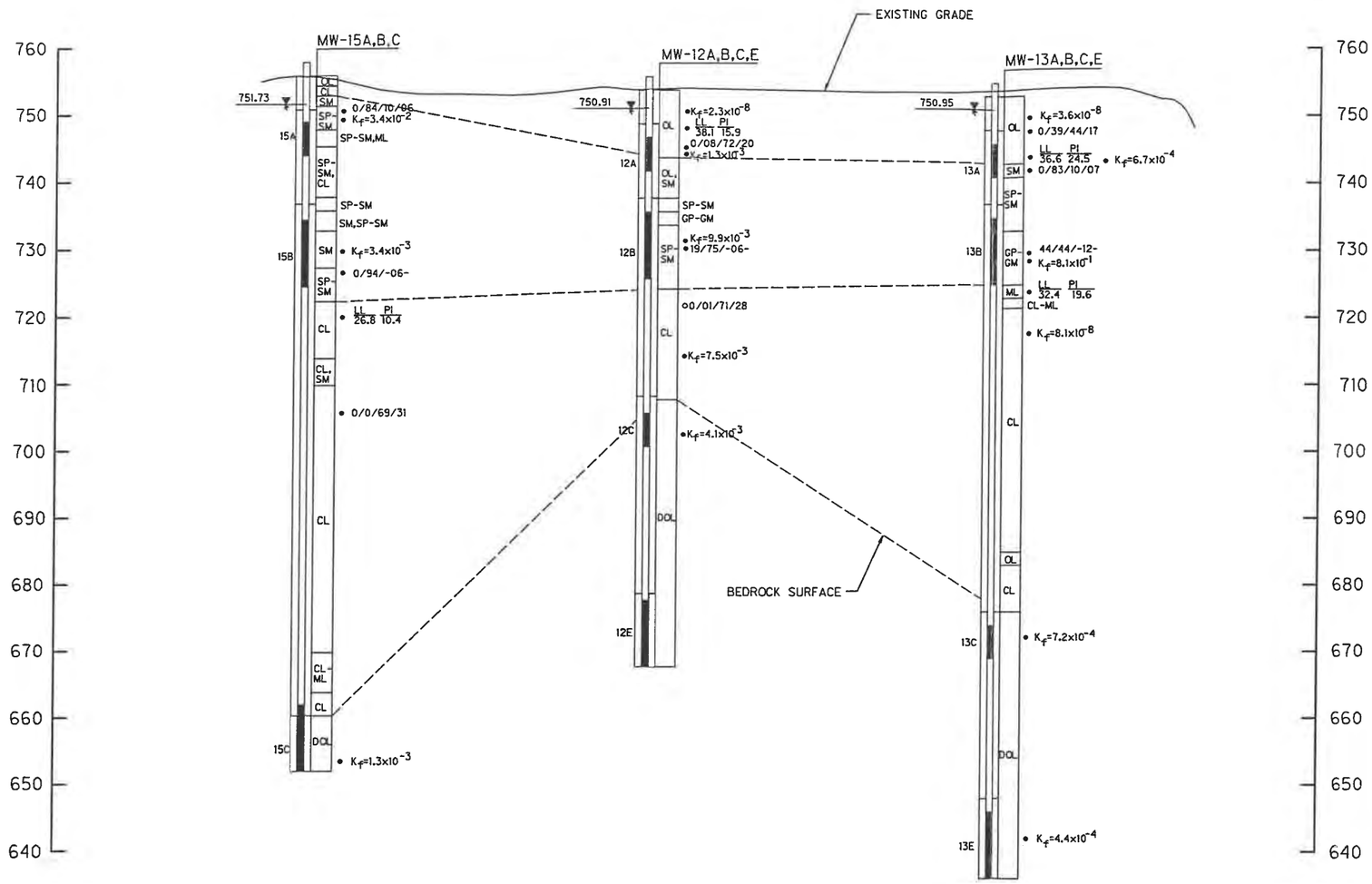
LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL 26 PI 13	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL

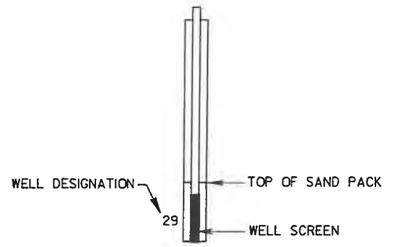


MODERN PLATING CORPORATION			
FIGURE 2-6 GEOLOGIC CROSS SECTION D-D'			
Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

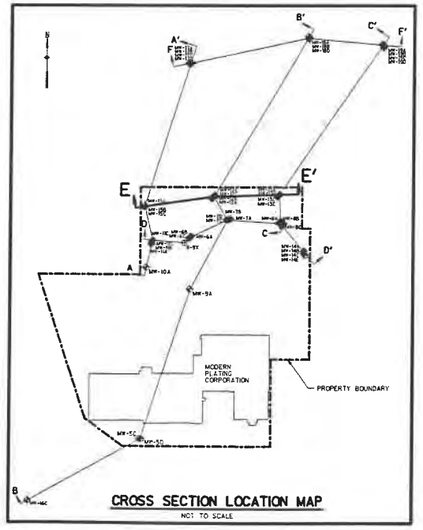
SECTION E-E'



WELL CONSTRUCTION INFORMATION



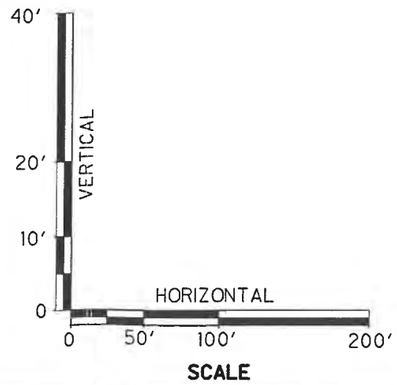
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



CROSS SECTION LOCATION MAP
NOT TO SCALE

LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
— — —	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL 26 PI 13	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL



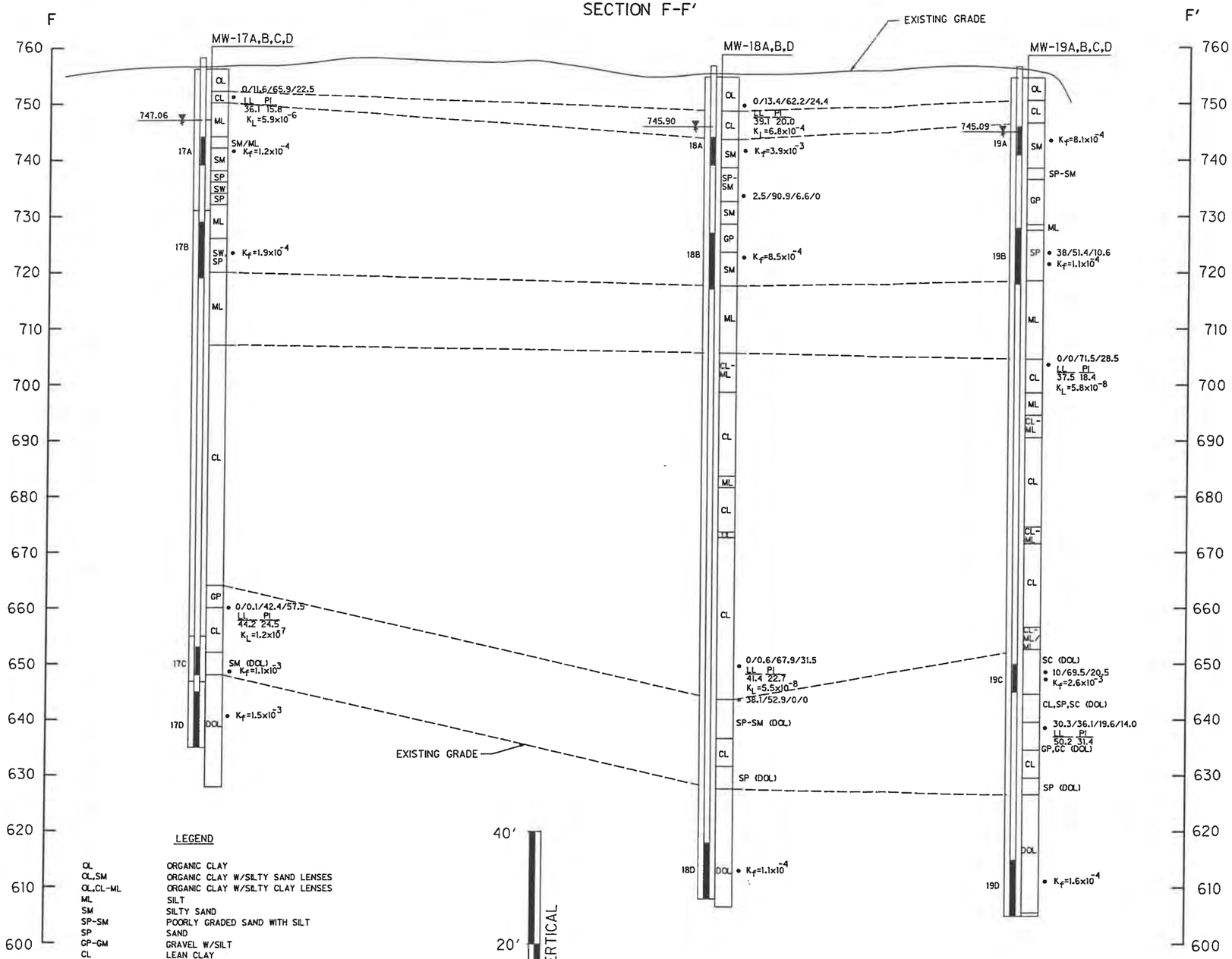
MODERN PLATING CORPORATION

FIGURE 2-7

GEOLOGIC CROSS SECTION E-E'

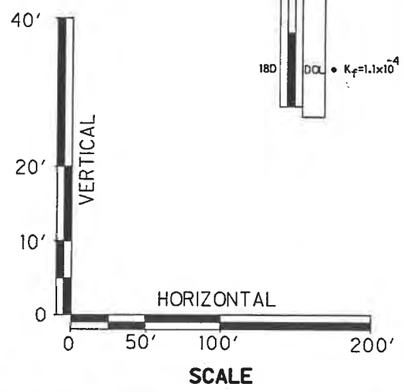
Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW

SECTION F-F'

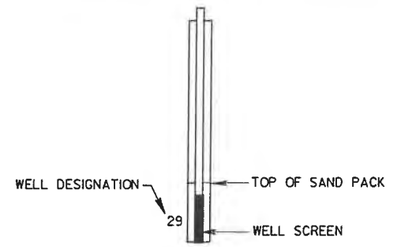


LEGEND

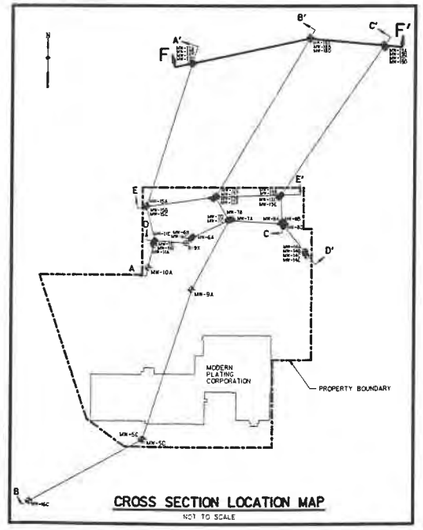
OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
—·—	GRADATIONAL CONTACTS
·	SOIL SAMPLE
LL / PI (26 / 13)	ATTERBERG LIMITS
K_f=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
▼	WATER LEVEL



WELL CONSTRUCTION INFORMATION



NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.

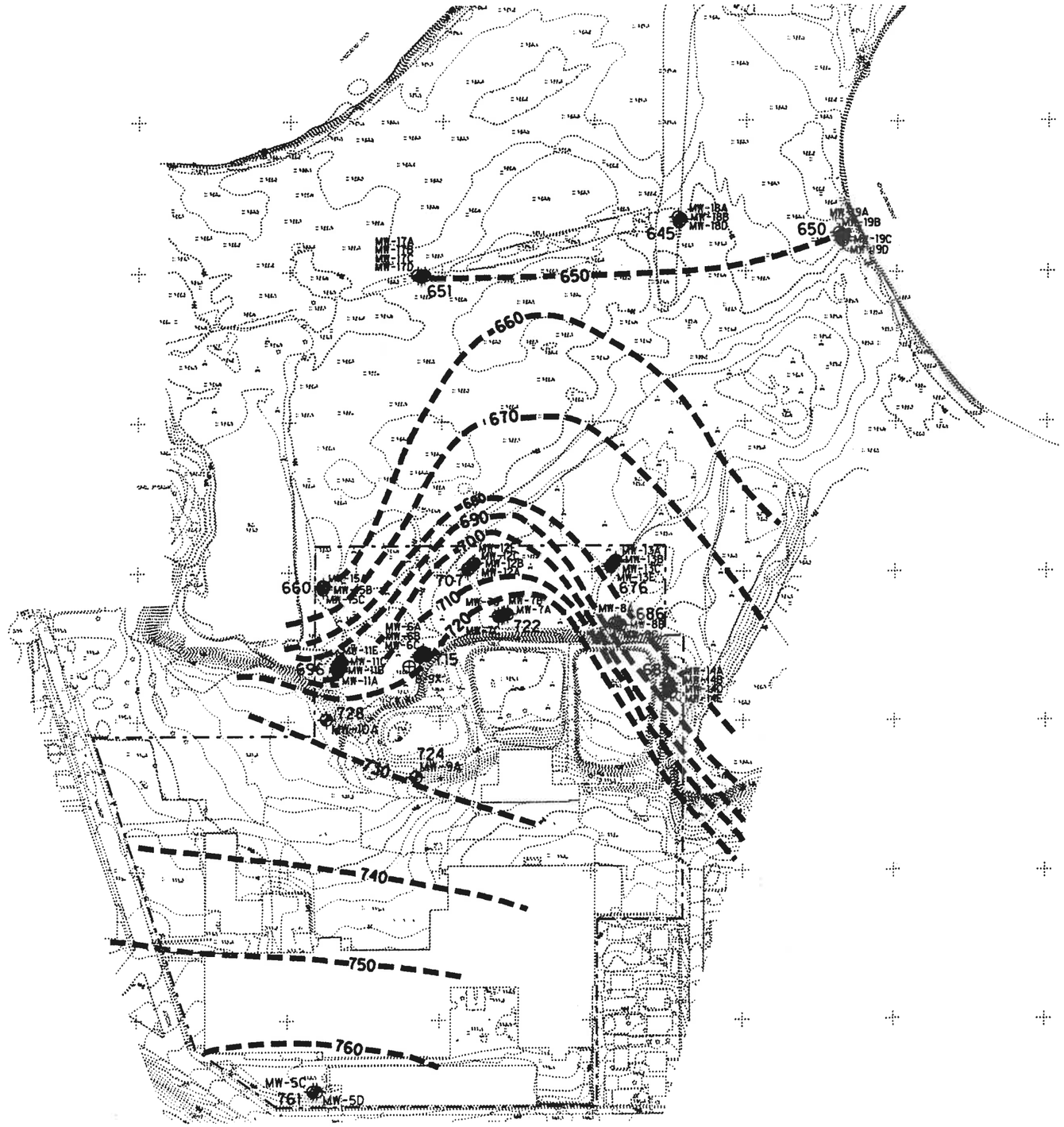


MODERN PLATING CORPORATION

FIGURE 2-8

GEOLOGIC CROSS SECTION F-F'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW



N

LEGEND

- EXISTING GROUND CONTOUR
- EXISTING SPOT ELEVATION
- DEPRESSION
- TREES AND/OR BRUSH
- EXISTING ROADWAY
- EXISTING TRAIL
- CONTROL MONUMENT
- APPROXIMATE PROPERTY LINE
- MW-4 T22 — GROUNDWATER MONITORING WELL LOCATION, NUMBER AND ELEVATION
- EXISTING BUILDING
- EXISTING FENCE
- WEATHERED BEDROCK SURFACE CONTOUR
- W.L. T59.2 — SURFACE WATER LEVEL ELEVATION

NOTES:

1. SITE LOCATION: SE 1/4 OF SECTION 32, T27N, R8E, STEPHENSON COUNTY, ILLINOIS.
2. TOPOGRAPHICAL MAP PREPARED FROM AERIAL SURVEY PERFORMED BY AERO-METRIC ENGINEERING, SHEBOYGAN, WISCONSIN. DATE OF PHOTOGRAPHY 11-28-86.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS ONE FOOT. BENCH MARK IS LOCATED ON THE N.W. CORNER OF THE PUMP STATION CONCRETE SLAB, COORDINATES N 10046.1, E 10491.0, AT ELEVATION 773.82 FEET.
4. BEDROCK ELEVATIONS MEASURED JUNE 19, 1989. CONTOUR INTERVAL IS TEN FEET.

MODERN PLATING CORPORATION

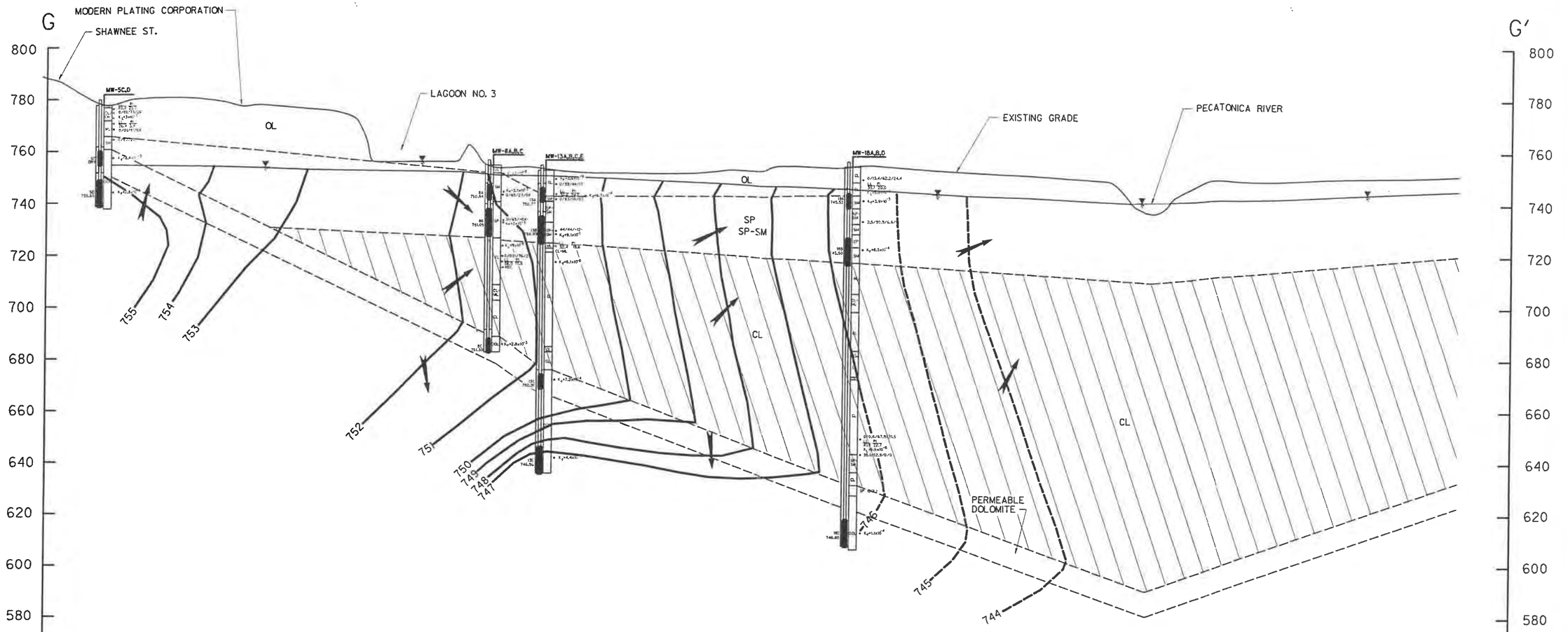
FIGURE 2-9

TOP OF WEATHERED BEDROCK SURFACE

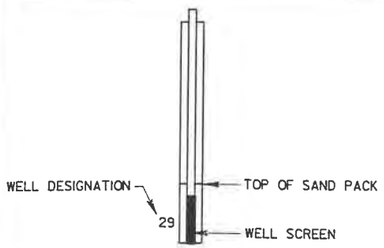
Scale: 0 100' 200'		Date: AUGUST, 1997	
Prepared By: Foth & Van Dyke		By: JOW	

C:\cadwork\7m15f13.dgn

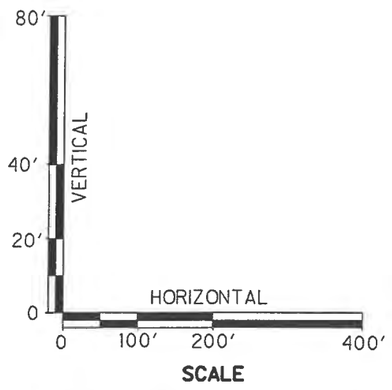
97M015



WELL CONSTRUCTION INFORMATION



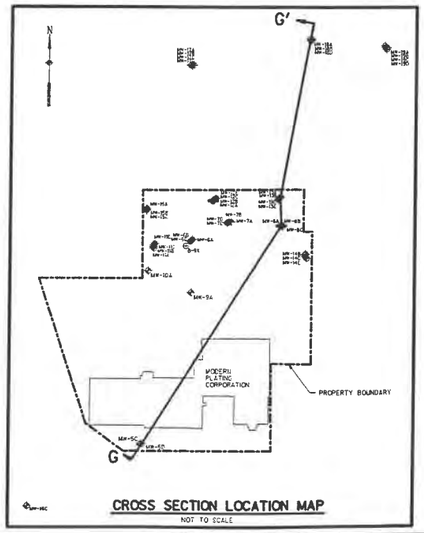
NOTE: WELLS ARE LOCATED IN INDIVIDUAL BORINGS. THE SAND PACK IS SILICA SAND, AND THE ANNULAR SPACE AROUND THE WELL CASING WAS BACKFILLED WITH BENTONITE PELLETS AND/OR VOLCLAY GROUT AND CONCRETE.



LEGEND

OL	ORGANIC CLAY
OL,SM	ORGANIC CLAY W/SILTY SAND LENSES
OL,CL-ML	ORGANIC CLAY W/SILTY CLAY LENSES
ML	SILT
SM	SILTY SAND
SP-SM	POORLY GRADED SAND WITH SILT
SP	SAND
GP-GM	GRAVEL W/SILT
CL	LEAN CLAY
CL,SM	LEAN CLAY/SILTY SAND LENSES
CL,CL-ML	LEAN CLAY/SILTY CLAY LENSES
CL/CH	LEAN/FAT CLAY
DOL	DOLOMITE
CL-ML	SILTY CLAY
———	GRADATIONAL CONTACTS
•	SOIL SAMPLE
LL PI / 26 13	ATTERBERG LIMITS
K_H=7.9X10^{-5}	IN-FIELD PERMEABILITY
K_L=4.0X10^{-9}	LABORATORY PERMEABILITY
01/50/41/08	GRAVEL/SAND/SILT/CLAY PERCENTAGE
0/93/-7-	GRAVEL/SAND/P200 PERCENTAGE
50%	POROSITY
	CLAY AQUITARD
755	EQUIPOTENTIAL LINE
742	INFERRED EQUIPOTENTIAL LINE

NOTE: GROUNDWATER ELEVATIONS MEASURED ON SEPT. 25, 1989



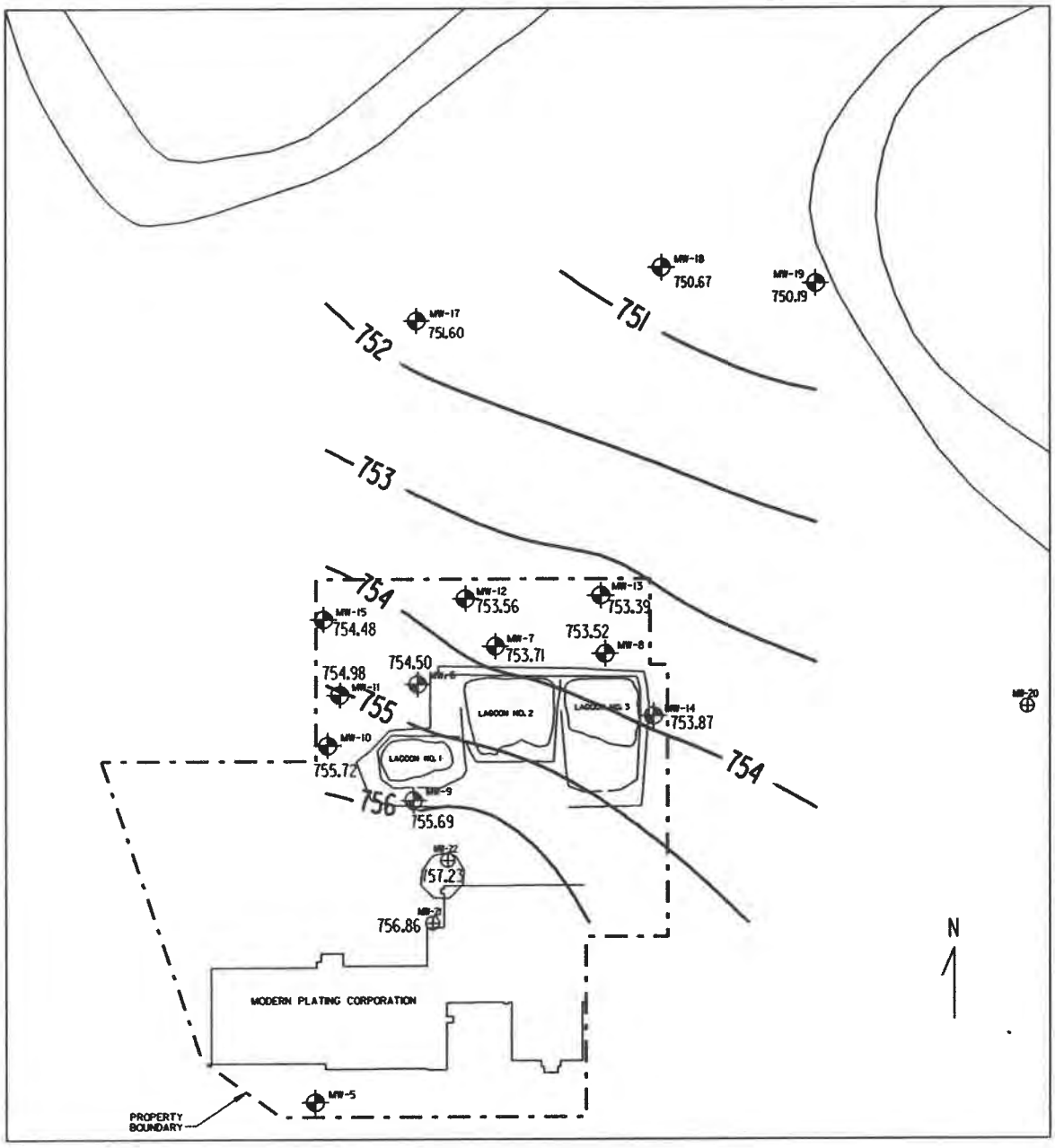
CROSS SECTION LOCATION MAP
NOT TO SCALE

MODERN PLATING CORPORATION

FIGURE 2-10

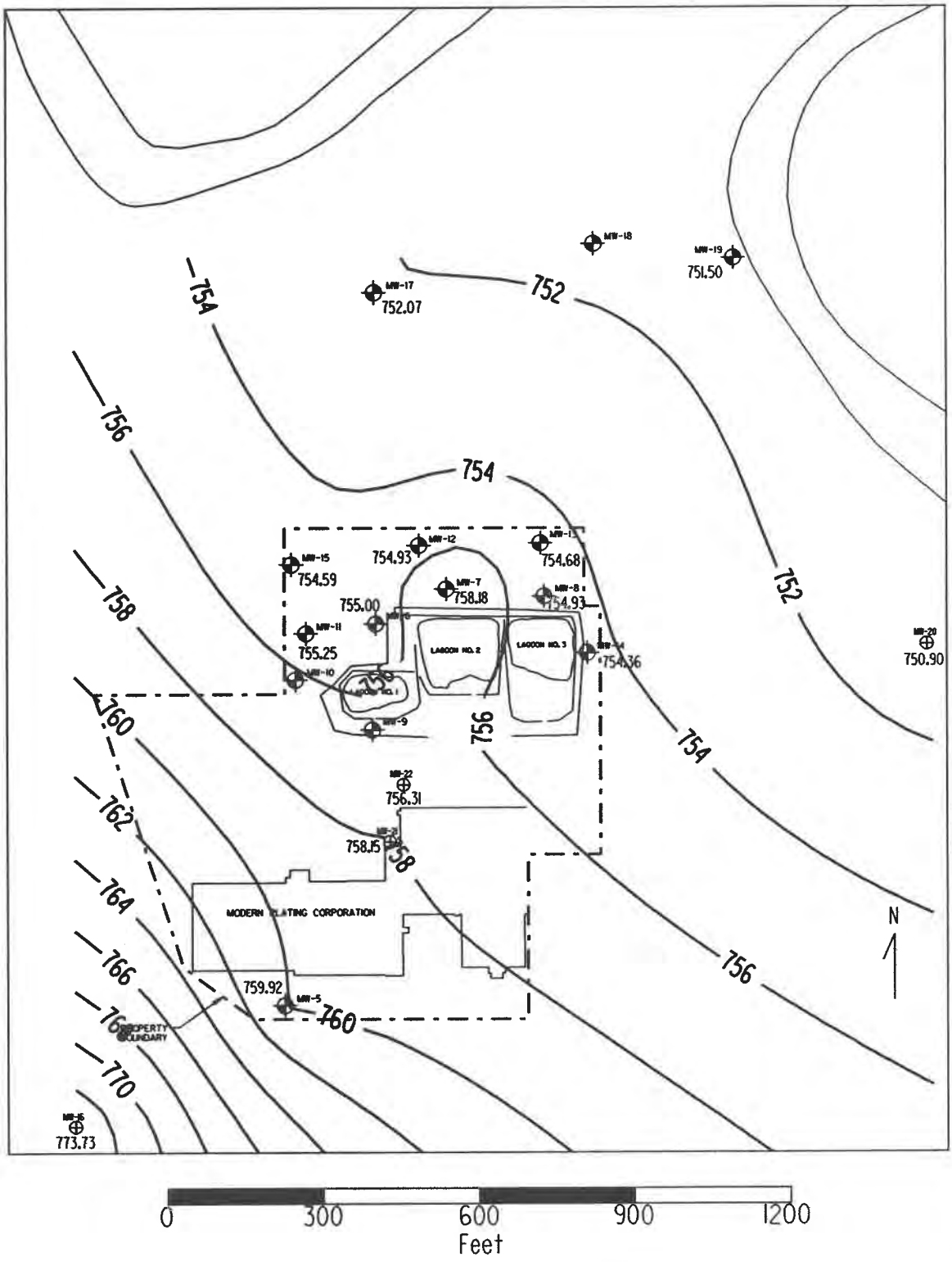
HYDRAULIC CROSS SECTION G - G'

Scale:	SEE BAR SCALE	Date:	AUGUST, 1997
Prepared By:	Foth & Van Dyke	By:	JOW



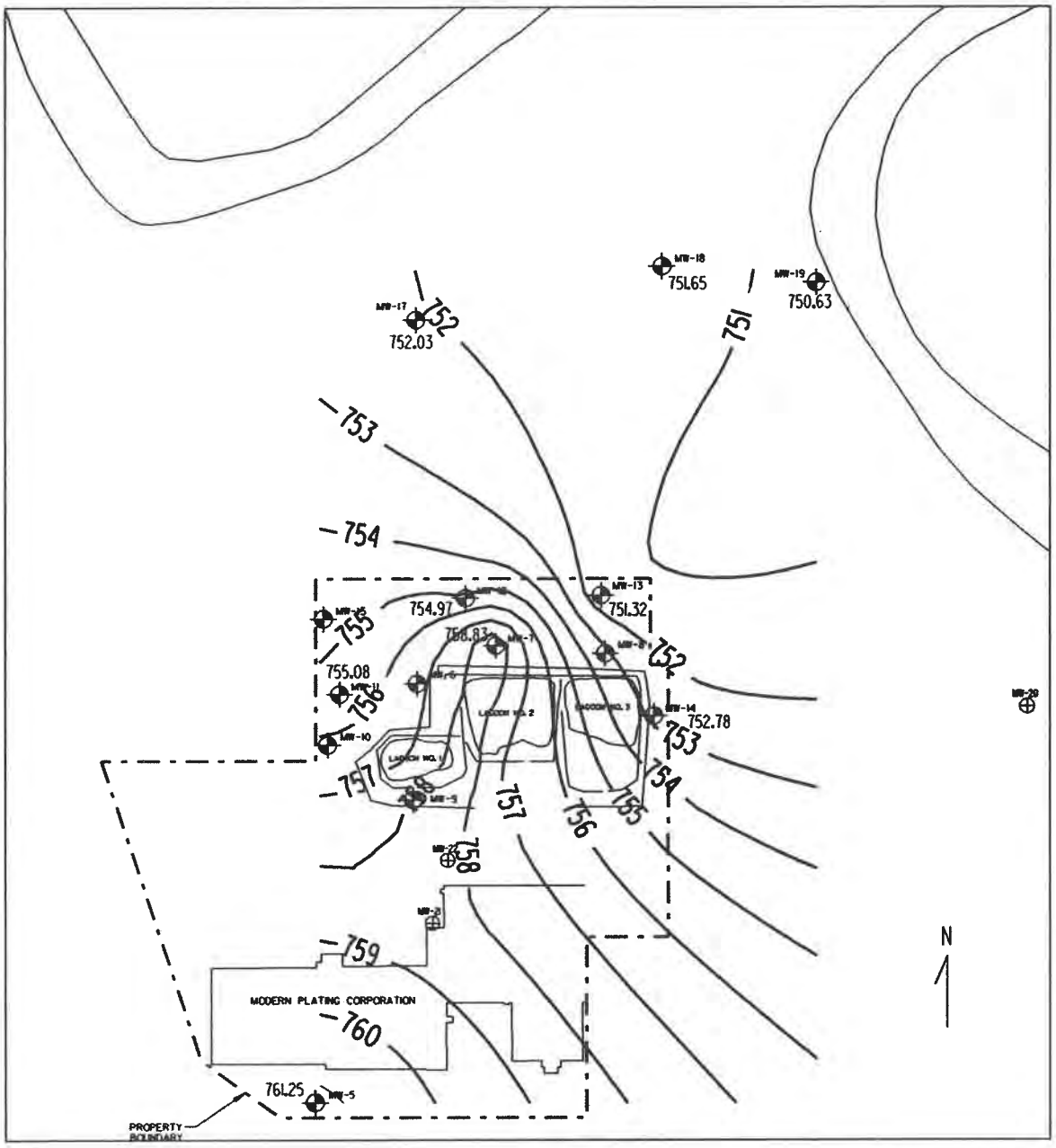
Modern Plating Facility	
FIGURE 2-11 POTENTIOMETRIC SURFACE UPPER PORTION (A WELLS) OF UNCONSOLIDATED AQUIFER MAY 5-7, 1997	
Scale: As Shown	Date: July, 1997
Prepared By: Foth & Van Dyke	By: SGL

j:scopes:92ml3:qrtly:gwmaps:feb97a.dat,,srf,basemap2.bln,newwells.dat



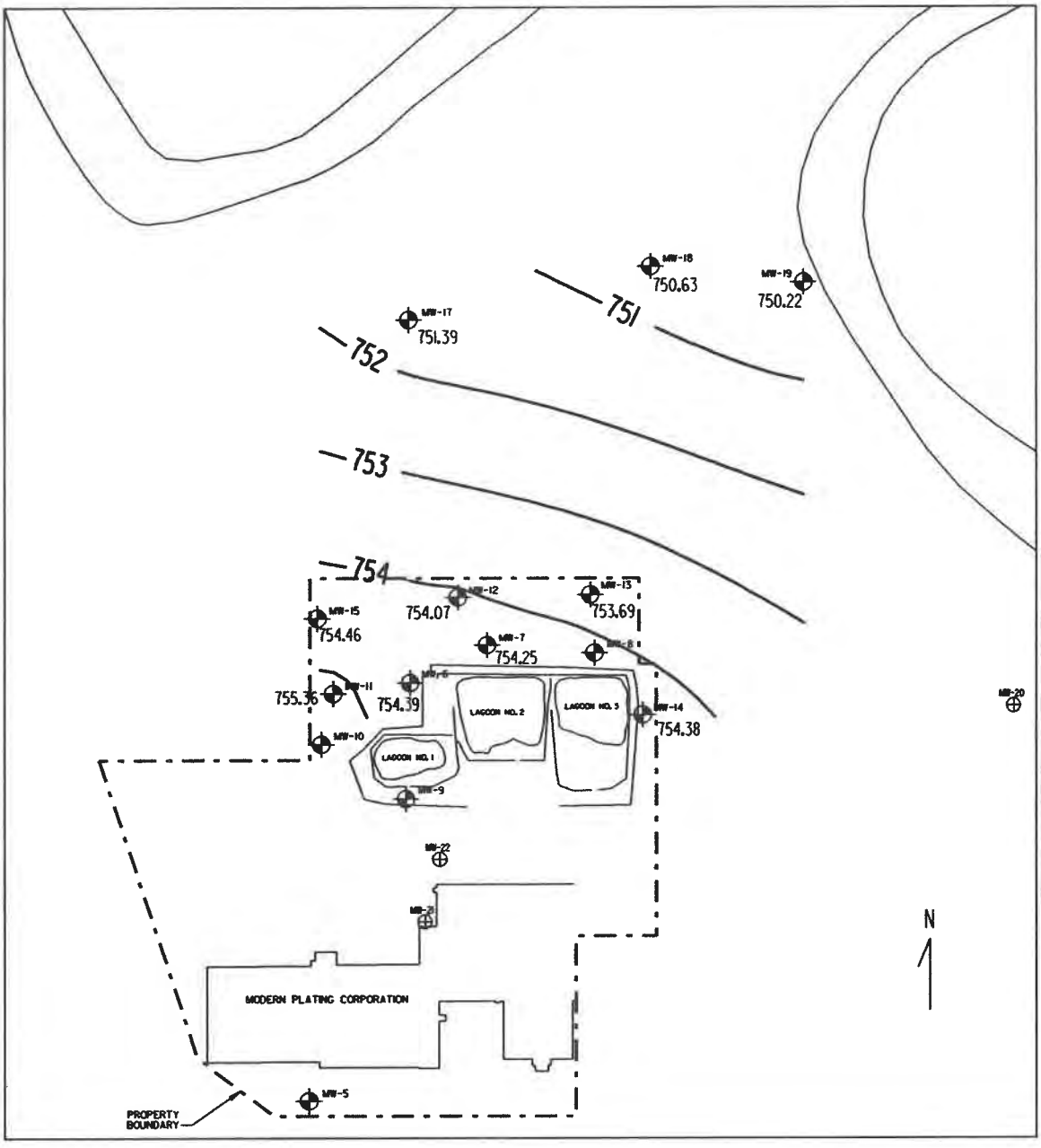
Modern Plating Facility	
FIGURE 2-12 POTENTIOMETRIC SURFACE LOWER PORTION (B WELLS) OF UNCONSOLIDATED AQUIFER MAY 5-7, 1997	
Scale: As Shown	Date: July, 1997
Prepared By: Foth & Van Dyke	By: SGL

jscopes:92ml3;qrt1yrgwmaps:feb97c.dat,,srf,basemap2.bln,new&16c.dat



Modern Plating Facility	
FIGURE 2-13 POTENTIOMETRIC SURFACE UPPER PORTION (C WELLS) OF DOLOMITE AQUIFER MAY 5-7, 1997	
Scale: As Shown	Date: July, 1997
Prepared By: Foth & Van Dyke	By: SGL

j:\scopes\92ml3\qrtly\gwmaps\feb97d.dat,,srf,basemap2.bln,newwells.dat



Modern Plating Facility	
FIGURE 2-14 POTENTIOMETRIC SURFACE LOWER PORTION (D & E WELLS) OF DOLOMITE AQUIFER MAY 5-7, 1997	
Scale: As Shown	Date: July, 1997
Prepared By: Foth & Van Dyke	By: SGL

j:\scopes\92ml3\qrtly\gwmaps\feb97.dat,.srf,basemap2.bln,newwells.dat

- The permeability of the clay aquitard as measured by lab permeameter tests ranges from $8.5x10^{-8}$ cm/s to $1.2x10^{-7}$ cm/s.

- Water exchange between the two aquifers primarily occurs where the clay aquitard is absent. Where the clay aquitard is present, water exchange is restricted due to the low permeability of the clay.

- Based on elevation data, it was concluded that four of the five sludge lagoons are at times in contact with the groundwater. Waste in Lagoon No. 1A is above the groundwater table (see data in Appendix C).

2.4.2 Groundwater Quality Data and Groundwater Use

Appendix D contains a series of graphs depicting the concentration of chemicals-of-concern in the groundwater at MPC from April 1989 to May 1997. These graphs have been routinely submitted to the IEPA as part of the quarterly groundwater submittals. Chemicals-of-concern, previously identified during the RFI/CMS process, include:

Metals	Inorganics	VOCs
Arsenic	Cyanide	Tetrachloroethene
Cadmium		Trichloroethene
Chromium		*cis*-1,2 dichloroethene
Lead		Vinyl Chloride
Nickel		
Zinc		

The groundwater graphs show few metal exceedances of IEPA's Class II standards, however, VOC exceedances are present, especially in the upper unconsolidated aquifer as monitored by the "A" and "B" wells.

Groundwater reports are prepared and submitted to the IEPA four times per year. Trend analyses performed for the quarterly reports, generally show stable to slightly downward trends in the concentrations of VOCs over time.

In the first quarter of 1994, MPC installed monitoring well MW-20C (Drawing No. 3, Appendix A). This well, installed at the request of the IEPA, is located approximately 675 ft east of the lagoons to demonstrate the eastern extent of groundwater contamination. To date no VOC's have been detected in this well. The concentrations of metals in groundwater at MW-20C have typically been below the 35 IAC 620 Class II standards. However, the concentration of chromium exceeded the Class II standard in August of 1995 and November of 1996. It should be noted that 35 IAC 620 Class II standards have been approved for this site by the IEPA.

MPC has previously submitted information describing the location of municipal and private wells in the vicinity of the site. This information was submitted in reports titled *RCRA Facility Investigation* (RFI), Volume I, pp. 195-199, February 1990, and *Final Corrective Measures Study*, Volume I, Part II, pp. 4-5, May 1991.

The City of Freeport's municipal wells are located 10,150 ft northwest of MPC. The municipal wells derive their water from the St. Peter Sandstone, a water-bearing unit which underlies the dolomite. The sandstone unit was not encountered during drilling activities at the MPC site.

The nearest private well to the site is at 1900 East Shawnee Street, Freeport, Illinois. This well is cased to the bedrock aquifer to a depth of 140 ft and was drilled in 1983. This well is located 2,600 ft east-southeast of MPC. Based on potentiometric surface maps of the bedrock aquifer and data from MW-20C, it is extremely unlikely that this well could be impacted from releases at the MPC site.

2.4.3 Summary of Conditions At Sludge Lagoons

Table 2-2 summarizes the inorganic and organic constituents-of-concern in the sludge waste that are contained in Lagoons No. 0, No. 1A, No. 1, No. 2, and No. 3. During the RFI sampling of the lagoon sludge, samples were also collected for assessing the physical characteristics of the lagoon liners. Table 2-3 summarizes these data. The chemical and physical data from the lagoons, coupled with site groundwater monitoring data indicate that the lagoons are the principal source of contamination of the environment at the site. As such, removal or environmental isolation of the lagoons, is a critical component of remedial action at the MPC site.

2.4.4 Summary of Soil Contamination Data

Soil concentration contours based on RFI data (Table 2-4) were developed and presented in previous reports. Appendix E contains copies of previously presented soil contour plots. Examination of the plots in Appendix E shows soil contamination centered immediately north of Lagoon No. 2 and Lagoon No. 3.

During the RFI soil sampling event, two background samples (SS-22 and SS-23) were collected 1,000 ft northwest of MPC's sludge lagoons. These locations were approved by the U.S. EPA in the RFI work plan and validated in the field by U.S. EPA contracted scientists. The background values are presented along with background values from the literature in Table 2-4.

Since the RFI data only described surficial soil contamination, additional soil characterization work at deeper depths was requested by the U.S. EPA and the IEPA during the CMS comment period. Tables 2-5 and 2-6 show analytical results from the CMS sampling event at borings SB-25 through SB-56 displayed on Figure 2-2. Appendix F contains figures showing contamination with depth. In these figures, the analyte concentration from the sampling location is divided by the site-specific analyte background concentration. The background metal

Table 2-2

Lagoon Chemical Analysis (mg/kg)
Modern Plating Corporation

Lagoon Number		Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Nickel	Tin	Zinc	Cyanide
0	mean	5.4	205	235	3932	1579	356	904	194	4293	838
	std dev	7.1	189	354	7462	3636	562	2153	273	4898	662
1A	mean	5.5	227	2252	6090	1312	47	3797	105	17200	741
	std dev	1	107	1729	4723	1000	19	2853	86	13035	560
1	mean	20	569	14575	14074	4823	337	13060	391	75000	1118
	std dev	9.3	271	10995	4179	3158	178	5548	283	25876	613
2	mean	7.9	312	10217	15100	3583	150	8150	173	52167	332
	std dev	3.8	152	6068	9607	2699	80	5299	130	36493	333
3	mean	7.7	592	33500	25500	5437	255	15833	900	87117	916
	std dev	3.7	253	29737	10291	2953	98	8010	526	52045	455

R002534

Table 2-2 (*Continued*)

Lagoon ID		o-Cresol	m,p-Cresol	Toluene	Trichloro-ethene	Tetra-chloro-ethene	Dichloro-ethene	DEHP	Phenol
0	mean	3	8.5	ND	100	3.6	8	13.6	78.0
	std dev	2.6	12.3		162	4.3	11.4	17.5	12.4
1A	mean	ND[a]	ND	1.3	ND	ND	ND	2.3	ND
	std dev			0.75				1.3	
1	mean	ND	ND	ND	ND	ND	ND	76.0	ND
	std dev							41.6	
2	mean	ND	ND	ND	ND	ND	ND	19.2	ND
	std dev							20.5	
3	mean	ND	ND	ND	42	ND	ND	44.2	
	std dev				61			16.3	

[a]ND, Not Detected in sample, for statistical expressions used one-half of detection limit.

[b]DEHP; Di (2-ethylhexyl) phthalate

Prepared by: JJA1
Checked by: SJL1

R002535

Table 2-3

Lagoon Summary
Modern Plating Corporation

Sample Number	Depth of Sample (feet)	Sample Elevation	Grain Size Gravel/Sand/Silt/ Clay	Permeability (cm/sec)	Percent Moisture	Dry Density (lbs/cu.ft.)	Porosity	USCS Classification
Lagoon 0 (LG-10T)	12-14	757.2-755.0	38.1/41.4/16.2/3.3	2.8×10^{-3}	35.4	78.0	54	SM
Lagoon 1A (LG-7)	15-17	751.5-749.5	0.3/9.4/59.8/30.5	1.6×10^{-7}	33.3	77.0	54	CL
Lagoon 1 (LG-2T)	9-11.5	750.5-748.0	0/1.1/68.4/30.5	3.3×10^{-8}	33.6	93.5	44	CH
Lagoon 2 (LG-3T)	5-7	759.5-757.5	0/2.1/54.9/43.0	3.7×10^{-8}	42.7	75.4	55	CL/CH
Lagoon 3 (LG-6T)	7-9	756.9-754.9	0/1.8/72.7/25.5	8.8×10^{-8}	30.7	89.7	47	ML

Prepared by: SJL1
Checked by: SVD1

R002536

Table 2-4

RFI Surface Soil Samples (mg/kg)
Modern Plating Corporation

Location	Arsenic	Cadmium	Chromium	Copper	Cyanide	Iron	Lead	Manganese	Nickel	Selenium	Silver	Sulfate	Zinc	1,2-dichloro-ethene	tri-chloro-ethene
SS-1	10.0	6100.0	4000.0	320.0	13.0[a]	38000.0	160.0	970.0	2000.0	<0.5	2.6[a]	1400.0[a]	7300.0	ND	ND
SS-2	12.0	4.7	31.0	16.0	<1.2[a]	19000.0	24.0	560.0	22.0	<0.5	<0.6[a]	<61.0[a]	83.0	ND	ND
SS-3	7.1	5.0	52.0	17.0	3.1	36000.0	14.0	260.0	78.0	<0.4	<0.6	<65.0	630.0	ND	ND
SS-4	7.6	100.0	330.0	68.0	22.0	25000.0	16.0	430.0	210.8	<0.4	<0.6	<63.0	1400.0	ND	ND
SS-5	9.7	1.7	25.0	NA	<1.8	NA	49.0	NA	22.0	NA	NA	<60.0	150.0	ND	ND
SS-6	9.8	4.0	29.0	35.0	<1.5	23000.0	46.0	3100.0	26.0	<0.5	<0.6	135.0	200.0	ND	ND
SS-7	13.0	0.9	17.0	33.0	<1.4[a]	20000.0	320.0	1000.0	18.0	<0.5	<0.6[a]	390.0[a]	180.0	0.010	0.014
SS-8	9.8	15000.0	21000.0	4400.0	3.9[a]	81000.0	100.0	2500.0	12000.0	0.9	<0.6[a]	1200.0[a]	60000.0	ND	ND
SS-9	10.0	3.0	39.0	38.0	<1.5	28000.0	53.0	840.0	30.0	<0.4	<0.6	150.0	240.0	ND	ND
SS-10	8.0	4.0	25.0	NA	<1.8	NA	35.0	NA	24.0	NA	NA	<68.0	160.0	0.012	0.019
SS-11	8.7	1.0	19.0	26.0	<1.0	17000.0	30.0	900.0	14.0	<0.4	<0.6	<62.0	120.0	ND	ND
SS-12	13.0	<1.0	27.0	34.0	<1.0	23000.0	39.0	1800.0	16.0	<0.4	<0.6	<67.0	160.0	ND	ND
SS-13	8.6	7.0	51.0	37.0	3.5	23000.0	41.0	1300.0	34.0	<0.4	<0.6	420.0	210.0	ND	ND
SS-14	10.0	6.0	47.0	68.0	<1.5	29000.0	50.0	2000.0	43.0	<0.4	<0.6	200.0	270.0	0.074	0.010
SS-15	8.5	2.4	33.0	NA	<1.8	NA	50.0	NA	26.0	NA	NA	<68.0	210.0	ND	ND
SS-16	9.7	1.0	23.0	30.0	<1.3	22000.0	40.0	1200.0	18.0	<0.4	<0.6	<64.0	170.0	ND	ND
SS-17	9.3	<1.0	23.0	18.0	<1.3	21000.0	21.0	1000.0	17.0	<0.4	<0.6	<64.0	110.0	ND	ND
SS-18	8.9	2.0	26.0	26.0	<1.3	21000.0	42.0	1200.0	16.0	<0.4	<0.6	<64.0	160.0	ND	0.007
SS-19	12.0	120.0	130.0	150.0	22.0	28000.0	47.0	870.0	180.0	<0.4	<0.6	560.0	910.0	ND	ND
SS-20	9.3	75.0	116.0	99.0	9.1	20000.0	39.0	1500.0	70.0	<0.4	<0.6	170.0	380.0	ND	ND
SS-21	11.0	<1.0	22.0	21.0	<1.2	22000.0	29.0	1200.0	15.0	<0.4	<0.6	<62.0	130.0	ND	ND
SS-22[b]	8.0	<1	16	19	<1.3	18000	68	930	15	<0.39	<0.6	200	98	<0.005	<0.005
SS-23[b]	5.7	<1	21	15	<1.2	17000	18	630	16	<0.39	<0.6	<58	54	<0.005	<0.005

Table 2-4 *(Continued)*

Location	Arsenic	Cadmium	Chromium	Copper	Cyanide	Iron	Lead	Manganese	Nickel	Selenium	Silver	Sulfate	Zinc	1,2-dichloro-ethene	tri-chloro-ethene
Literature Background[c]	7.4	0.3	52.0	22.0		25000.0	17.0	640.0	18.0	0.45			52.0		

[a]Locations where the soil sample was deeper than 12 inches.
[c]Source of Literature Background: Agency for Toxic Substances and Disease Registry (ATSDR), Health Assessment Guidance Manual, July 1990.
[b]SS-22 and SS-23 were the background soil samples.
NA = Indicates samples not analyzed for this metal at this location.
ND = Indicates not detected at method detection limit.

Table 2-5

CMS Soil Samples (mg/kg)
Metals, Cyanide, pH, and TOC
Modern Plating Corporation

Sample	Depth (feet)	Arsenic	Cadmium	Chromium	Lead	Nickel	Zinc	Cyanide	pH	TOC
SB-25	0.5-1.5	2.3	2.9	11	12	59	72	0.63	-	5700
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-26	0.5-1.5	4.2	8.1	20	33	56	140	<0.30	-	12000
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-27	0.5-1.5	3.3	13	21	20	30	160	0.33	-	11000
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-28	0.5-1.5	4.1	<1.0	170	24	26	84	<0.25	-	-
	2.5-3.5	4.6	<1.0	210	14	15	69	<0.25	7.83	4,300
	4.5-5.5	1.7	<1.0	53	7.8	9.4	37	<0.25	-	-
SB-29	0.5-1.5	2.4(3.4)[a]	6,660(5,920)[a]	7,710(7,140)[a]	32(38)[a]	2,750(2,510)[a]	14,290(13,450)[a]	35(51)[a]	-	-
	2.5-3.5	5	22	38	18	33	160	0.27	7.91	80,600
	4.5-5.5	8.5	32	49	14	30	150	1.3	-	-
SB-30	0.5-1.5	1.8	7,240	8,020	31	3,790	25,380	30	-	-
	2.5-3.5	6	31	42	19	45	190	4	8.46	16,200
	4.5-5.5	5.8	10	19	13	19	110	0.94	-	-
SB-31	0.5-1.5	5.4	<1.0	7.9	21	11	78	<0.25	-	-
	2.5-3.5	2.2	<1.0	5.6	9.6	15	43	<0.25	8.06	9,800
	4.5-5.5	1.6	<1.0	3.4	6.7	9.7	30	<0.25	-	-
SB-32	0.5-1.5	9.1	4.5	13	23	17	110	2.7	-	-
	2.5-3.5	5.1	42	8.2	13	45	120	<0.50	8.09	8,900
	4.5-5.5	4.3	57	7.6	11	40	170	<0.50	-	-
SB-33	0.5-1.5	3	<1.0	7.2	12	13	77	<0.25	-	-
	2.5-3.5	3.8	<1.0	6.5	9.8	15	57	<0.25	7.8	5,000
	4.5-5.5	1.4	<1.0	2.1	4.3	3.2	17	<0.25	-	-

Table 2-5 (*Continued*)

Sample	Depth (feet)	Arsenic	Cadmium	Chromium	Lead	Nickel	Zinc	Cyanide	pH	TOC
SB-34	0.5-1.5	3.8	1.5	11	30	13	140	<0.30	-	5100
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-35	0.5-1.5	2.6	0.36	9.4	16	9.2	71	<0.30	-	3200
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-36	0.5-1.5	4.4	<1.0	6.6	26	10	98	<0.25	-	-
	2.5-3.5	7.7	<1.0	10	14	11	80	<0.25	8.21	7,000
	4.5-5.5	2.6	<1.0	5.4	10	7.4	43	<0.25	-	-
SB-37	0.5-1.5	8.5	<1.0	9.4	30	12	120	<0.25	-	-
	2.5-3.5	5.7	<1.0	8.4	13	10	73	<0.25	7.85	3,700
	4.5-5.5	2.7	<1.0	7.1	11	12	59	<0.25	-	-
SB-38	0.5-1.5	9.1	17	27	36	34	210	1.6	-	-
	2.5-3.5	4.1	8.4	18	14	22	100	3.4	8.89	8,700
	4.5-5.5	7.3	8.1	20	16	18	120	1	-	-
SB-39	0.5-1.5	12	3	11	32	16	150	1.3	-	-
	2.5-3.5	5.6	<1.0	8.5	13	13	74	<0.50	8.23	8,600
	4.5-5.5	5	<1.0	7.8	10	13	60	<0.25	-	-
SB-40	0.5-1.5	2.9	<1.0	9.2	20	12	82	2.2	-	-
	2.5-3.5	3.7	<1.0	14	12	11	67	<0.50	7.84	2,900
	4.5-5.5	4	<1.0	12	10	8.4	60	0.49	-	-
SB-41	0.5-1.5	4.2(4.6)[a]	3,100(4,700)[a]	3,710(5,180)[a]	38	1,880	13,060	27	-	-
	2.5-3.5	7	51	65	19	47	310	0.8	8.18	14400
	4.5-5.5	3.9	24	42	13	19	150	<0.50	-	-
SB-42	0.5-1.5	5.3	810	1,340	33	550	3,990	3	-	-
	2.5-3.5	13	3.6	15	17	15	96	<0.50	8.02	8,900
	4.5-5.5	14	7.3	19	19	28	170	1.9	-	-
SB-43	0.5-1.5	18	36	14	28	100	740	10	-	-
	2.5-3.5	8.5	4.2	14	15	25	130	<0.50	8.63	5,100
	4.5-5.5	8.8	9.3	18	14	22	140	0.71	-	-

Table 2-5 (*Continued*)

Sample	Depth (feet)	Arsenic	Cadmium	Chromium	Lead	Nickel	Zinc	Cyanide	pH	TOC
SB-44	0.5-1.5	3.5	3.7	16	33	21	180	0.78	-	-
	2.5-3.5	-	-	-	-	-	-	-	8.22	14,100
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-45	0.5-1.5	4.7(3.4)[a]	75(13)[a]	190(57)[a]	22(28)[a]	120(36)[a]	690(200)[a]	0.13(0.57)[a]	-	-
	2.5-3.5	-	50	18	-	21	170	-	7.42	10,400
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-46	0.5-1.5	4.1	1.6	12	38	19	150	0.5	-	-
	2.5-3.5	2.4	<1.0	7.6	12	9.8	60	<0.50	8.38	7,100
	4.5-5.5	7.6	<1.0	12	12	11	80	0.6	-	-
SB-47	0.5-1.5	4.9	<1.0	7.8	13	9.8	44	0.10	8.06	33,100
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-48	0.5-1.5	7.6	<1.0	5.9	12	6.4	26	<0.25	-	-
	2.5-3.5	8.2	5.1	9.1	14	16	34	<0.50	8.17	91,100
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-49	0.5-1.5	11	<1.0	16	15	25	47	<0.25	-	-
	2.5-3.5	7	<1.0	6.6	11	12	40	<0.25	8.6	37,300
	4.2-4.7	21	11	51	18	46	280	7.7	-	-
SB-50	0.5-1.5	5.6	0.94	23	490	30	58	0.4	-	870
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-51	0.5-1.5	6.2	1900	620	76	810	1500	48	-	6700
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-52	0.5-1.5	7.6	0.24	12	12	29	47	<0.30	-	1600
	2.5-3.5	-	-	-	-	-	-	-	-	-
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-53	0.5-1.5	4.2	96	88	56	190	1,020	35	-	-
	2.5-3.5	-	31	46	-	51	410	5(A)[a]	7.65	9,400
	4.5-5.5	-	-	-	-	-	-	-	-	-

Table 2-5 (*Continued*)

Sample	Depth (feet)	Arsenic	Cyanide	pH	TOC
SB-54	0.5-1.5	2.4	0.75	-	-
	2.5-3.5	-	-	7.99	16,000
	4.5-5.5	-	-	-	-
SB-55	0.5-1.5	14	0.59	-	-
	2.5-3.5	10	0.5	8.02	7,100
	4.5-5.5	3.6	0.4	-	-
SB-56	0.5-1.5	1.1	11	-	-
	2.5-3.5	-	8.8(A)[a]	7.39	16,600
	4.5-5.5	-	-	-	-

[a]Results in parenthesis represent duplicate analyses.
-No Sample Result

Prepared by: SGL
Checked by: JFS

Table 2-5 (*Continued*)

Sample	Depth (feet)	Arsenic	Cadmium	Chromium	Lead	Nickel	Zinc	Cyanide	pH	TOC
SB-54	0.5-1.5	2.4	<1.0	16	23	21	110	0.75	-	-
	2.5-3.5	-	-	-	-	-	-	-	7.99	16,000
	4.5-5.5	-	-	-	-	-	-	-	-	-
SB-55	0.5-1.5	14	58	23	27	130	440	0.59	-	-
	2.5-3.5	10	8.4	15	14	33	130	0.5	8.02	7,100
	4.5-5.5	3.6	2.2	9.2	10	16	82	0.4	-	-
SB-56	0.5-1.5	1.1	37	21	13	58	410	11	-	-
	2.5-3.5	-	110	-	-	150	1000	8.8(A)[a]	7.39	16,600
	4.5-5.5	-	-	-	-	-	-	-	-	-

[a]Results in parenthesis represent duplicate analyses.
-No Sample Result

Prepared by: SGL
Checked by: JFS

Table 2-6

CMS Soil Samples (μg/kg)
Volatile Organic Compounds (VOCs)
Modern Plating Corporation

Sample	Depth (feet)	Tetrachloroethene	Trichloroethene	cis-Dichloroethene	trans-Dichloroethene	Vinyl Chloride
SB-25	0.5-1.5	<5.0	<5.0	<5.0	<5.0	<25
SB-26	0.5-1.5	<5.0	<5.0	23	<5.0	<25
SB-27	0.5-1.5	<5.0	<5.0	52	<5.0	<25
SB-29	0.5-1.5	<5.0 (<5.0)[a]	<5.0 (<5.0)[a]	70(120)[a]	<5.0 (<5.0)[a]	40(70)[a]
SB-34	0.5-1.5	<5.0	<5.0	<5.0	<5.0	<25
SB-35	0.5-1.5	<5.0	<5.0	<5.0	<5.0	<25
SB-41	0.5-1.5	<5.0 (<5.0)[a]	<5.0 (<5.0)[a]	34 (52)[a]	<5.0 (<5.0)[a]	55 (73)[a]
SB-50	0.5-1.5	<5.0	<5.0	<5.0	<5.0	<25
SB-51	0.5-1.5	<5.0	<5.0	<5.0	<5.0	<25
SB-52	0.5-1.5	<5.0	<5.0	<5.0	<5.0	<25
SB-28	2.5-3.5	29	220	28	<5.0	<25
SB-41	2.5-3.5	<5.0	<5.0	88	<5.0	40
SB-41	4.5-5.5	<5.0	<5.0	120	<5.0	35
SB-45	4.5-5.5	<5.0	<5.0	290	<5.0	90
SB-54	4.5-5.5	<5.0	<5.0	200	<5.0	26

[a]Results in parentheses represent duplicate analyses.

Prepared by: SGL
Checked by: SJL1

R002544

concentrations were derived using the IEPA's procedure for determining background concentrations, and are summarized in Table 2-7.

Table 2-7

Soil Background Derivation (mg/kg)
Modern Plating Corporation

Location	Arsenic	Cadmium	Chromium	Lead	Nickel	Zinc	Cyanide
SS-22 (RFI)	8	1	16	68	15	98	1.3
SS-23 (RFI)	5.7	1	21	18	16	54	1.2
SB-31 (0.5-1.5)	5.4	1	7.9	21	11	78	0.25
SB-33 (0.5-1.5)	3	1	7.2	12	13	77	0.25
SB-33 (2.5-3.5)	3.8	1	6.5	9.8	15	57	0.25
SB-36 (0.5-1.5)	4.4	1	6.6	26	10	98	0.25
SB-36 (2.5-3.5)	7.7	1	10	14	11	80	0.25
SB-37 (0.5-1.5)	8.5	1	9.4	30	12	120	0.25
SB-47 (0.5-1.5)	4.9	1	7.8	13	9.8	44	0.1
SB-54 (0.5-1.5)	2.4	1	16	23	21	110	0.75
Mean	5.3	1	10.8	23.4	13.3	81.6	0.48
Std. Deviation	2.1	0.0	5.0	16.9	3.4	25.0	0.44
Upper 95% C.L.	6.6	1.0	13.7	33.3	15.3	96.1	0.74

ND values used at detection limit.

The y-axis on the figures in Appendix F becomes unitless when location concentrations are divided by background concentration. Using this method, an analyte's concentration can be directly compared against unimpacted soil at the site. Results of the sampling event show that the soil contamination is most pronounced at the ½- to 1½-ft depth, contamination is most significant for cadmium, and at three locations where cadmium is not the principal contaminant (SB-28, SB-40, and SB-49), the degree or level of contamination above background is considerably less than when cadmium is the principal contaminant. In summary, the soil north of the lagoons is characterized by surficial cadmium contamination.

During the drilling of wells MW-10A and MW-9A, soil samples were collected for the analysis of contaminant concentrations in the soil to assess the impact from buried Lagoon No. 0 and No. 1A. Table 2-8 summarizes the VOC and metal concentrations in the soil north of these two

Table 2-8

RFI Contaminant Release Borings
Borings MW-9A (Lagoon No. 0) and MW-10A (Lagoon No. 1A)
Modern Plating Corporation

ID	Depth (Ft)	TCE	1,2-DCE	As	Cd	Cr	Pb	Ni	Ca	Fe
SL 9-1	1-4	0.0	0.0	12.0	12.0	29.0	18.0	21.0	22.0	19,000.0
SL 9-2	4-5	0.0	0.0	16.0	14.0	38.0	35.0	24.0	24.0	24,000.0
SL 9-3	7-8	0.0	0.0	18.0	96.0	48.0	24.0	200.0	92.0	66,000.0
SL 9-4	10-11	32.0	6.3	90.0	290.0	1,300.0	360.0	760.0	4,700.0	260,000.0
SL 9-9	13-14	56.0	67.0	20.0	160.0	530.0	130.0	180.0	350.0	34,000.0
SL 9-5	15	150.0	260.0	6.0	82.0	840.0	39.0	22.0	170.0	28,000.0
SL 9-6	16	23.0	36.0	11.0	15.0	270.0	17.0	57.0.	50.0	2,300.0
SL 9-7	17	0.0	0.0	85.0	58.0	120.0	22.0	34.0	32.0	28,000.0
SL 9-8	21	18.0	23.0	22.0	29.0	88.0	18.0	28.0	62.0	24,000.0
SL 10-1	1-2	0.0	0.0	18.0	9.0	56.0	27.0	34.0	37.0	21,000.0
SL 10-2	4-5	0.0	0.0	16.0	10.0	74.0	38.0	33.0	36.0	21,000.0
SL 10-3	7-8	0.0	0.0	12.0	4.0	32.0	100.0	120.0	79.0	18,000.0
SL 10-4	11-12	0.0	0.0	10.0	3.0	47.0	94.0	43.0	48.0	11,000.0
SL 10-5	12-13	0.0	0.0	10.0	<0.1	25.0	18.0	17.0	12.0	21,000.0
SL 10-6	13-14	0.0	11.0	12.0	2.0	20.0	15.0	16.0	14.0	18,000.0
SL 10-7	14-15	17.0	9.7	77.0	2.0	13.0	13.0	12.0	9.0	13,000.0
SL 10-8	15-16	16.0	6.8	56.0	<0.1	12.0	13.0	7.0	6.0	90,000.0
SL 10-9	16-17	12.0	27.0	67.0	<0.1	12.0	22.0	11.0	7.0	10,000.0

TCE and 1,2-DCE results are in μg/kg, all other results are in mg/kg.

R002546

Table 2-8 *(Continued)*

ID	Depth (Ft)	Mn	Se	Ag	Zn	CN-	Sulfate	pH
SL 9-1	1-4	760.0	0.45	<0.6	78.0	5.3	<57.0	7.8
SL 9-2	4-5	1,200.0	<.35	<0.6	100.0	16.0	<58.0	7.5
SL 9-3	7-8	1,300.0	<.35	2.0	520.0	<1.0	200.0	7.7
SL 9-4	10-11	2,300.0	<.39	2.0	2,400.0	7.5	260.0	7.6
SL 9-9	13-14	2,000.0	<.39	<0.6	1,100.0	490.0	240.0	7.5
SL 9-5	15	350.0	<.46	1.0	1,400.0	400.0	2,800.0	7.7
SL 9-6	16	1,200.0	<.35	<0.6	450.0	32.0	900.0	8.0
SL 9-7	17	1,200.0	<.40	2.0	250.0	3.1	360.0	7.9
SL 9-8	21	920.0	<.40	<0.6	190.0	65.0	560.0	7.8
SL 10-1	1-2	840.0	<.37	1.0	1,50.0	2.9	210.0	8.1
SL 10-2	4-5	990.0	<.37	<0.6	1,30.0	<1.2	78.0	8.3
SL 10-3	7-8	510.0	<.35	<0.6	1,60.0	3.7	1,30.0	8.2
SL 10-4	11-12	450.0	<.39	1.0	1,40.0	1.4	4,10.0	7.9
SL 10-5	12-13	770.0	<.39	<0.6	1,00.0	<1.3	63.0	7.8
SL 10-6	13-14	650.0	<.40	<0.6	94.0	<1.3	1,10.0	8.0
SL 10-7	14-15	790.0	<.39	<0.6	65.0	<1.2	75.0	8.1
SL 10-8	15-16	580.0	<.35	<0.6	50.0	<1.3	77.0	8.0
SL 10-9	16-17	520.0	<.38	1.0	60.0	<1.3	62.0	8.1

All results are in mg/kg.

R002547

lagoons. These data show a significant release from Lagoon No. 0 as compared to Lagoon No. 1A.

2.4.5 Surface Water and Sediment Sampling Data

During the RFI two rounds of surface water quality data were obtained from stations S1 through S4 and one round of sediment data was collected from stations S1 through S5. The location of these monitoring points are displayed on Drawing No. 4. Surface water quality data are summarized in Tables 2-9 and 2-10. Sediment quality data are summarized in Table 2-11.

Sediment sampling data show no measurable impact on sediment quality at the sampling stations due to the MPC facility. However, the water quality data indicate elevated cadmium, chromium, and nickel concentrations relative to background (S1) in the meander lake monitored by S4. A health assessment described on pages 185 and 186 of the 1990 RFI indicates that the potential exposure posed by the concentrations in the meander lake presents no health risk.

2.4.6 Summary of Conditions at Cyanide Vault

Groundwater quality data from wells MW-21A, MW-21C, MW-22A, and MW-22C are provided in Appendix D. In general, the data show elevated metal concentrations in down gradient well MW-22A compared to well MW-21 A. Note that the A wells are screened in the unconsolidated aquifer. With respect to the bedrock aquifer, data from wells MW-21C and MW-22C indicate that water quality in the bedrock aquifer has not been noticeably impaired due to the cyanide vault.

Soil metal and VOC data from the borings around the cyanide vault are presented in Tables 2-12 and 2-13, respectively. Soil metal concentrations at MW-22 increase at the 13-ft to 15-ft sampling interval. The figure in Appendix G shows the cadmium and chromium concentration with depth at location MW-21 and MW-22. Cadmium and chromium are the two metals historically linked to contamination of the site. Soil VOC concentrations, principally TCE, were observed in the part-per-billion range in both borings MW-21 and MW-22.

2.4.7 Summary of Conditions at Shawnee Building

A summary of the soil concentration data at the Shawnee Building is described in the Fehr-Graham & Associates reports in Appendix B. As stated in Section 2.3.2, closure activities have already been performed at this location. Soil cleanup objectives are derived in Section 2.5.2 for the Shawnee soils.

2.4.8 Ecological Environment

As requested by the U.S. EPA in November 1994 correspondence to MPC, a Screening Ecological Risk Assessment (SERA) was performed for this site. This section presents SERA

Table 2-9

Surface Water Parameters (mg/l)
Modern Plating Corporation

Parameter	S1M	S1B	S2M	S2B	S3M	S3B	S4
Alkalinity	290.0	300.0	300.0	300.0	290.0	290.0	210.0
Alkalinity	640.0	320.0	620.0	620.0	620.0	620.0	DRY
BOD	7.0	10.0	9.0	6.0	8.0	8.0	8.0
BOD	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	DRY
COD	15.0	26.0	16.0	17.0	13.0	16.0	110.0
COD	14.0	20.0	18.0	10.0	7.0	13.0	DRY
NO_2+NO_3-N	2.3	2.1	2.2	2.1	2.1	2.1	<0.2
NO_2+NO_3-N	2.7	2.5	2.6	2.6	2.5	2.6	DRY
NH_3-N	0.5	0.4	<0.2	<0.2	<0.2	<0.2	<0.2
NH_3-N	1.0	1.0	0.4	0.4	0.4	0.4	DRY
Phosphorus	0.3	0.3	0.3	0.3	0.2	0.3	0.8
Phosphorus	0.5	0.5	0.3	0.4	0.4	0.4	DRY
TSS	90.0	230.0	80.0	140.0	240.0	120.0	140.0
TSS	180.0	110.0	86.0	130.0	130.0	130.0	DRY
TDS	440.0	410.0	410.0	420.0	480.0	330.0	1,000.0
TDS	0.0	0.0	0.0	0.0	0.0	0.0	DRY

R002549

Table 2-9 *(Continued)*

Parameter	S1M	S1B	S2M	S2B	S3M	S3B	S4
TOC	4.0	8.0	3.7	3.6	3.3	3.4	30.0
TOC	11.0	10.0	8.2	7.0	9.2	8.2	DRY

BOD = Biological Oxygen Demand
COD = Chemical Oxygen Demand
TSS = Total Suspended Solids
TDS = Total Dissolved Solids
TOC = Total Organic Carbon
M = Middle-of-River Sample
B = Bottom-of-River Sample

Note: Drawing No. 4 (Appendix A) shows the sampling locations of the surface water samples.

R002550

Table 2-10

Surface Water Chemical Data (μg/l)
(Total)
Modern Plating Corporation

Chemical	S1M	S1B	S2M	S2B	S3M	S3B	S4
Arsenic	3.0	<3.0	<3.0	3.0	3.0	<3.0	4.0
Arsenic	4.0	6.0	3.0	4.0	4.0	<3.0	Dry
Cadmium	0.4	0.3	<0.3	<0.3	0.3	<0.3	210.0
Cadmium	1.7	1.6	0.7	1.0	0.7	0.9	Dry
Chromium	5.0	4.0	5.0	4.0	4.0	3.0	19.0
Chromium	6.0	3.0	3.0	4.0	3.0	4.0	Dry
Cyanide	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Cyanide	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	Dry
Nickel	<30.0	<30.0	<30.0	<30.0	<30.0	<30.0	160.0
Nickel	<60.0	<30.0	<30.0	<30.0	<30.0	46.0	Dry
Sulfide	2,400.0	17,000.0	<1,000.0	<1,000.0	<1,000.0	<1,000.0	3,600.0
Sulfide	<1,000.0	<1,000.0	<1,000.0	<1,000.0	<1,000.0	<1,000.0	Dry
Zinc	50.0	36.0	21.0	30.0	33.0	24.0	78.0
Zinc	230.0	52.0	200.0	190.0	75.0	230.0	Dry

Note: Surface water data were collected and reported as total (unfiltered) values.
Drawing No. 4 (Appendix A) shows the sampling locations of the surface water samples.

R002551

Table 2-11

Sediment Investigation
Modern Plating Corporation

Compound (mg/kg)	Location				
	SD-1	SD-2	SD-3	SD-4	SD-5
As	9.1	11.0	7.5	14.0	16.0
Cd	2.4	<1.0	1.6	820.0	450.0
Cr	18.0	26.0	19.0	530.0	1,700.0
Ni	9.0	25.0	5.0	610.0	620.0
Zn	180.0	160.0	130.0	530.0	2,800.0
CN-	<1.7	<1.7	<1.6	51.0	110.0
Sulfide	<84.0	<84.0	<100.0	<100.0	<109.0
1,2-DCE	ND	ND	ND	ND	12.0*

*μg/kg
Note: Drawing No. 4 (Appendix A) shows the sampling locations of the sediment samples.

Table 2-12

Former Cyanide Vault Location
Soil Analyses
Modern Plating Corporation

Borehole ID	Depth (feet)	Cyanide (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
MW-21	3-5	<0.30	4.9	<1.0	7.6	14	43
	9-11	0.47	9.7	<1.0	7.0	13	7.9
	13-15	1.0	4.8	17	4.1	180	730
	21-23	<0.30	2.2	<1.0	6.2	11	32
MW-22	3-5	<0.30	9.7	<1.0	4.5	5.4	15
	9-11	<0.30	37	<1.0	15	14	28
	13-15	6.5	13	200	200	1480	2310
	19-21	4.8	12	200	170	320	4100

Prepared by: XXC
Checked by: SJL1

Table 2-13

Former Cyanide Vault Location
VOCs Soil Analyses
Modern Plating Corporation

Borehole ID	Depth (feet)	Benzene (μg/kg)	1,1,-Dichloro-ethene (μg/kg)	cis-1,2-Dichloroethene (μg/kg)	trans-1,2-Dichloroethene (μg/kg)	Ethyl-benzene (μg/kg)	Tetrachloro-ethene (μg/kg)	Toluene (μg/kg)	Trichloro-ethene (μg/kg)	Vinyl Chloride (μg/kg)	Total Xylenes (μg/kg)
MW-21	3-5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.4	<25	<5.0
	9-11	NA	NA	<10	<10	NA	<10	NA	64	<50	NA
	12-15	NA	NA	<5.0	<5.0	NA	<5.0	NA	32	<25	NA
	21-23	NA	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<25	NA
MW-22	13-15	<5.0	NA	5.2	<5.0	<5.0	<5.0	<5.0	7.8	<25	<5.0
	21-23	<5.0	NA	26	<5.0	<5.0	<5.0	<5.0	71	<25	6.2
	33-35	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<5.0
Trip Blank		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Prepared by: SJL1
Checked by: RTB

R002554

results. Of note, ecological risk assessment techniques were performed in 1989 at MPC and presented in the 1990 RFI report.

2.4.8.1 Screening Ecological Risk Assessment (SERA)

The U.S. EPA's 1994 paradigm for ecological risk assessments consisted of three tiers referred to as SERA, preliminary ecological risk assessment (PERA), and detailed ecological risk assessment (DERA). Each succeeding tier requires more detailed and quantitative information. The process is iterative, where at the culmination of one tier, a decision is made whether to conduct more work at the current tier, progress to the next tier, or conclude the process.

During the RFI, the U.S. EPA project manager requested the collection of data to support an ecological assessment. In response to this request, cattails (*Typha latifolia*) and earthworms (*Lumbricus species*) were collected and analyzed for VOCs and metals. The complete results of that ecological investigation are found in the 1989 RFI report. Conclusions from that study were that the ecological data suggested the same general areas of concern, from metal contamination, identified in the RFI baseline risk assessment and in Section 2.6.

Additional site ecological work was performed for the CMS. This work, consisting of a wetland delineation and endangered species/sensitive habitat inquiry, is consistent with the SERA guidelines described in the October 1994 Region 5 RCRA Corrective Action Interim Draft Ecological Risk Assessment Guidance Document. Results of the CMS ecological work, consistent with a SERA, are provided in Section 2.5.8.2.

2.4.8.2 SERA Results

On May 29, 1992, a Foth & Van Dyke wetland scientist performed field work at MPC to complete a wetland delineation assessment of the property. This delineation assessment was performed to satisfy regulatory requirements for excavation and placement of fill material into the wetland under the nationwide permit authority of Section 404 in the event of surface soil remediation within the wetland. To complete this delineation assessment, Foth & Van Dyke used the routine on-site determination method as well as wetland criteria described in the 1987 Corps of Engineers Wetlands Delineation Manual.

Prior to completing field delineation activities, Foth & Van Dyke reviewed the following existing data: 1978, East Freeport, Illinois 7.5 min. USGS quadrangle; aerial photographs dated 1958, 1964, 1970, and 1977; and the USDA Soil Survey; Stephenson County, Illinois, published in April 1976. Topographic maps show a decrease in elevation north of the existing lagoons and then a relatively level surface to the Pecatonica River which meanders approximately 1,000 ft north of the lagoons. Aerial photographs show filling occurred between 1958 and 1970 in the area of the lagoons where wetland areas may have existed. In addition, between 1964 and 1970, cultivated land was left fallow, possibly due to wetness according to aerial photograph interpretation. The 1977 aerial photo shows site features similar to existing conditions with the exception of west of MPC's property boundary which has changed from a wetland area to a pond.

The Stephenson County Soil Survey shows three soil series (Huntsville, Otter, and Lawson) mapped north of the existing lagoons. These soils range from poorly drained to moderately well-drained and are typically found in flood plains of major streams. The poorly-drained Otter Series is mapped north of the lagoons. The somewhat poorly-drained Lawson series and the moderately well-drained Huntsville series are mapped between the Otter map unit and the Pecatonica River.

Eleven wetland determination data forms (numbered W-1 through W-11) are included in Appendix H. Five of the wetland determinations were completed in non-wetland areas. Because of property boundaries and distinct topographic features, wetland determination data forms were primarily completed at the northern wetland boundary. Drawing No. 5 in Appendix A, shows wetland determination locations and the areas staked and flagged showing wetland boundaries (numbered WB-1 through WB-17). The results of the wetland delineation found one approximately two-acre wetland on-site which is part of a larger approximately nine-acre contiguous wetland unit.

In June 1992, Foth & Van Dyke requested a review of records from the Illinois Department of Conservation, Division of Natural Heritage, Endangered Species Program regarding the occurrence of endangered or threatened species or natural community areas and special or unique habitats in the area north and east of MPC's lagoons. In response to our inquiry, the Illinois Department of Conservation reported that there are no records of occurrence of endangered or threatened species or other sensitive resources within one mile of the project site. Appendix H contains the letters documenting the inquiry and response.

2.4.8.3 Wetland Monitoring

Hydrographs from monitoring wells located within the wetland indicate the water table is typically within 2 ft or less of the wetland surface. Sources of water to the wetland include water table coincidence, Pecatonica River floodwater, and surface water runoff. If groundwater recovery were to occur at the site, a significant drawdown in the groundwater elevation of the unconsolidated aquifer would likely occur. Figure H-1 (Appendix H) shows projected drawdown contours within the wetland delineation area if groundwater recovery were to occur.

If groundwater recovery of the unconsolidated aquifer occurs, MPC proposes annual wetland monitoring for signs of vegetative stress. Baseline wetland monitoring would be performed for at least one year prior to groundwater recovery. During groundwater recovery, annual monitoring in July, August, or September would occur. In addition to wetland vegetation monitoring, MPC also proposes to monitor the wetland's hydrologic budget, e.g., surface water inputs, groundwater elevations, precipitation, etc. The monitoring program would extend throughout the period of groundwater recovery.

Details of the monitoring program would be developed as part of remedial implementation, including necessary permits with the Corps of Engineers and the State of Illinois.

2.5 Site-Specific Cleanup Objectives per 35 IAC 742

Site-specific remedial objectives were developed for the MPC site using the Tiered Approach to Corrective Action Objectives in 35 Ill. Adm. Code 742 (TACO), Adopted Rule, Final Order. The compounds-of-concern identified at the site for which objectives were developed are arsenic, cadmium, chromium, nickel, zinc, cyanide, *cis*-1,2-dichloroethene (*cis*-1,2-DCE), *trans*-1,2-dichloroethene (*trans*-1,2-DCE), trichloroethene (TCE), tetrachloroethene (PCE), vinyl chloride, and lead.

2.5.1 Exclusion of Groundwater Pathways

The groundwater ingestion exposure route was evaluated for the site. Based on this evaluation, the groundwater exposure route was excluded as per 35 Ill. Adm. Code 742.925. The following discussion describes the basis for excluding the groundwater route of exposure.

Groundwater at the site in both the upper sand-and-gravel aquifer and the lower bedrock aquifer, flows north-northeast (Figures 2-11 through 2-14). Vertical hydraulic gradients within the upper aquifer are upwards near the Pecatonica River, suggesting groundwater discharges into the Pecatonica River. The river forms a natural barrier to limit transport of contaminants by groundwater. There are currently no potable wells located between the site and the river. The nearest potable well is located 2,600 ft sidegradient of the site and is screened at a depth of 140 ft. The private well survey was conducted by Foth & Van Dyke in 1991 and was reported in Section 2.1.1 of the report titled *Final Corrective Measures Study for the Modern Plating Corporation Facility - Part II, Volume I.*

The nearest City of Freeport municipal well is located more than 10,000 ft northwest of the site. Stephenson County Code Section 18-10 prohibits the installation of new private potable wells in a community in which a public water supply is available. Freeport has a public water supply. The area between the site and the river is all within Freeport city limits. In addition, 77 Ill. Adm. Code 920 encourages the avoidance of placing potable wells in a floodplain. The area between the site and the river is designated as a floodplain.

There are currently no buildings between the site and the river. City ordinance (Freeport City Ordinance ch. 1260 - Floodplain District and ch. 1460 - Flood Management Areas) prohibits building, including the moving of earth, in a floodplain. As mentioned, the area between the site and the river is a floodplain.

The extent of groundwater contamination at the site has been determined through the installation and monitoring of the site's 50 monitoring wells. Free product has not been detected at the site. The soil attenuation capacity has not been exceeded in any soil sample. The soil saturation limit has not been exceeded for any organic chemical of concern. Soil pH at the site ranges from 7.4 to 8.9.

Seven of the 12 site contaminants-of-concern are inorganics. Inorganics migrate slowly in soil and groundwater. At the site, the top 3 to 10 ft of soil is clay. Inorganics will tend to bind tightly to the clay, further retarding their potential to migrate. Impacts of inorganics on site groundwater has not been marked, e.g., no off-site groundwater exceedances of Class II standards, indicating that little migration has occurred in the past.

Five of the 12 site contaminants are chlorinated solvents. Using vinyl chloride as a representative compound, equation R26 from TACO Appendix C, Table C, was used to estimate impact, if any, to the river from groundwater transport. Using this model, it was estimated that groundwater discharging to the river would have a vinyl chloride concentration of approximately 10 μg/l. The water quality criterion for vinyl chloride, based on fish consumption, is 525 μg/l (U.S. EPA, 1986, Quality Criteria for Water, Office of Water Regulations and Standards). After dilution and volatilization, concentrations of vinyl chloride in the river would be expected to be much less than 10 μg/l. The calculation using equation R26 is located in Appendix I.

There is no reasonable possibility that the groundwater exposure route will become active in the future. County ordinance prohibits the installation of wells, and the City ordinance prohibits construction of buildings in a floodplain.

In conclusion, there is no current or future exposure potential of receptors to the groundwater exposure route. Consistent with the requirements of 35 Ill. Adm. Code 742.925, the groundwater exposure route is excluded from further consideration at this site. In addition, soil cleanup objectives were developed excluding the soil component of the groundwater route of exposure.

2.5.2 Direct-Contact Soil Cleanup Objectives

Land use at the site is currently industrial/commercial. Future land use will likely remain industrial/commercial. Institutional controls will be employed at MPC to ensure an industrial future land use. The TACO evaluation was based on an industrial/commercial property use.

SSL equations listed in Appendix C, Table A of TACO were used to determine soil cleanup objectives. Exposure routes evaluated were soil ingestion, inhalation of volatiles, and inhalation of fugitive dusts. As discussed, the groundwater pathway was not evaluated because the applicable requirements at 35 Ill. Adm. Code 742.925 for excluding that exposure route were met.

Remedial objectives were developed separately for two areas: the former Shawnee Building area and the wetlands area. For the Shawnee Building, remedial objectives were developed at the Tier 2 level using exposure parameters from TACO, Appendix C, Table B. For each potential exposure pathway, exposures to an industrial worker population and to a construction worker population were evaluated separately at the Shawnee Building area.

For the wetlands area, remedial objectives were developed at the Tier 3 level according to 35 Ill. Adm. Code 742.900(c)(1). For the Tier 3 evaluation, a site-specific Exposure Frequency (EF)

value of 12 days per year was used for the industrial worker population. All other exposure parameters, and all equations, were the same as those in the Tier 2 evaluation. The EF value of 12 days per year is indicative of exposure conditions in the wetland area. The wetland area is overgrown with vegetation and is located at the bottom of a steep slope. The wetland is situated in a flood plain which is often under water in the spring of the year. The wetland is not visited by employees, including maintenance workers, except to occasionally assist consultants in sampling monitoring wells. As such, it is assumed that the area is visited at most once per month, and therefore, an EF of 12 days per year is descriptive of industrial worker exposure in this area.

For the wetlands area, the construction worker population was not evaluated. Building projects, including moving of earth, cannot be performed in a floodplain according to Freeport City Ordinance Chapter 1260 (Floodplain district) and Chapter 1460 (Flood Management Areas). It is, therefore, unlikely that there will be a future exposure of a construction worker population to contaminants in the wetlands area.

Toxicity values for the chemicals-of-concern are presented in Table 2-14. Toxicity values were obtained from the IRIS database, or if no value was available in IRIS, from the HEAST database. Values not available from either IRIS or HEAST were obtained from the U.S. EPA Technical Support Center. For some chemicals, toxicity values were not available and pathways requiring these parameters were not evaluated. For chromium, toxicity values for chromium (III) were used. It was demonstrated that over 99.9% of chromium in site soils is chromium (III) (*Final Corrective Measures Study Response to USEPA Comments*, 1991).

RfD values in Table 2-14 are for chronic exposure. Subchronic RfD values were available from HEAST for arsenic, chromium, cyanide, *cis*-1,2-DCE, and PCE. The subchronic values for arsenic, chromium, and cyanide were the same as the chronic values and so are not separately listed in Table 2-14. The subchronic values for *cis*-1,2-DCE and PCE differ from the chronic values and are listed in parentheses in Table 2-14. The subchronic values were used in assessing the construction worker population.

Table 2-15 summarizes the routes that were evaluated and the SSL equations that were use in the evaluation. Ten SSL equations (equations S1, S3, S4, S5, S6, S7, S11, S12, S13, and S14) were used in the evaluation. These equations are summarized in Table 2-16. Table 2-17 contains values used for equation parameters and the source of each value. The volatilization factor (VF) was calculated using the following equation:

$$VF = \frac{Q}{C} \times \frac{(3.14 \times D_A \times T)^{1/2}}{(2 \times \rho_b \times D_A)} \times 10^{-4} \frac{m^2}{cm^2}$$

Table 2-14

Toxicity Values[1]

	RfD_o (mg/kg day)	RfC (mg/m^3)	SF_o $(mg/kg\ day)^{-1}$	URF $(\mu g/m^3)^{-1}$	Carcino-genic Classifi-cation
Arsenic	0.0003	NA	1.5	0.0043	A
Cadmium	0.001	NA	NA	0.0018	B1
Chromium (III)	1	NA	NA	NA	NA
Nickel	$2e^{-2}$	NA	NA	2.4e-4	NA
Zinc	0.3	NA	NA	NA	D
Cyanide	0.02	NA	NA	NA	D
cis-1,2-Dichloroethene	0.01[2] (0.1[3])	NA	NA	NA	D
trans-1,2-Dichloroethene	0.02	NA	NA	NA	D
Tetrachloroethene	0.01 (0.1[3])	0.4[4]	0.052[4]	0.00058(4)	C/B2[4]
Trichloroethene	0.006[4]	NA	0.011[4]	0.0017[4]	C/B2[4]
Vinyl Chloride	NA	NA	1.9[2]	8.4e-5[2]	A[2]

NA = Not Available.
[1]Toxicity values obtained from IRIS unless otherwise labeled.
[2]Toxicity value from HEAST
[3]Subchronic RfD value.
[4]Toxicity value from U.S. EPA Technical Support Center.

Prepared by: JJA1
Checked by: SJL1

Table 2-15

Summary of Exposure Routes Evaluated

	SSL Equation Used for Evaluation[1]											
	Industrial Worker						Construction Worker					
			Inhalation						Inhalation			
	Ingest.		Volatile		Fug. Dust		Ingest.		Volatile		Fug. Dust	
	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C
Arsenic	S1	S3	(2)	(3)	(2)	S13	S1	S3	(2)	(3)	(2)	S14
Cadmium	S1	(2)	(2)	(3)	(2)	S13	S1	(2)	(2)	(3)	(2)	S14
Chromium (III)	S1	(2)	(2)	(2)	(2)	(2)	S1	(2)	(2)	(2)	(2)	(2)
Cyanide	S1	(2)	(2)	(2)	(2)	(2)	S1	(2)	(2)	(2)	(2)	(2)
Nickel	S1	(2)	(2)	(3)	(2)	S13	S1	(2)	(2)	(3)	(2)	S14
Zinc	S1	(2)	(2)	(2)	(2)	(2)	S1	(2)	(2)	(2)	(2)	(2)
cis-1,2-Dichloroethene	S1	(2)	(2)	(2)	(2)	(2)	S1	(2)	(2)	(2)	(2)	(2)
trans-1,2-Dichloroethene	S1	(2)	(2)	(2)	(2)	(2)	S1	(2)	(2)	(2)	(2)	(2)
Tetrachloro-ethene	S1	S3	S4	S6	S11	S13	S1	S3	S5	S7	S12	S14
Trichloroethene	S1	S3	(2)	S6	(2)	S13	S1	S3	(2)	S7	(2)	S14
Vinyl Chloride	(2)	S3	(2)	S6	(2)	S13	(2)	S3	(2)	S7	(2)	S14

Vol. = Volatiles
Fug. Dst = Fugitive Dusts
NC = Noncarcinogenic
C = Carcinogenic

Prepared by: JJA1
Checked by: SJL1

[1] SSL Equations refer to those in TACO Appendix C, Table A
[2] Route not evaluated because toxicity value not available
[3] Toxicity value available, but route not applicable because compound not appreciably volatile

Table 2-16

Equations for Determining Remediation Objectives[1] (mg/kg)

Equation No.	Exposure Route	Equation
S1	Ingestion of noncarcinogen - all populations	$\frac{THQ \times BW \times AT \times 365\ d/yr}{\frac{1}{RfD_o} \times 10^{-6}\ \frac{kg}{mg} \times EF \times ED \times IR_{soil}}$
S3	Ingestion of carcinogen - industrial/commercial and construction worker populations	$\frac{TR \times BW \times AT_c \times 365\ d/yr}{SF_o \times 10^{-6}\ \frac{kg}{mg} \times EF \times ED \times IR_{soil}}$
S4	Inhalation of volatile noncarcinogen - industrial/commercial population	$\frac{THQ \times AT \times 365\ d/yr}{EF \times ED \times \left(\frac{1}{RfC} \times \frac{1}{VF}\right)}$
S5	Inhalation of volatile noncarcinogen - construction worker population	$\frac{THQ \times AT \times 365\ d/yr}{EF \times ED \times \left(\frac{1}{RfC} \times \frac{1}{VF'}\right)}$
S6	Inhalation of volatile carcinogen - industrial/commercial population	$\frac{TR \times AT_c \times 365\ d/yr}{URF \times 1000\ \frac{\mu g}{mg} \times EF \times ED \times \frac{1}{VF}}$
S7	Inhalation of volatile carcinogen - construction worker population	$\frac{TR \times AT_c \times 365\ d/yr}{URF \times 1000\ \frac{\mu g}{mg} \times EF \times ED \times \frac{1}{VF'}}$

Table 2-16 *(Continued)*

Equation No.	Exposure Route	Equation
S11	Inhalation of noncarcinogen fugitive dusts - industrial/ commercial population	$\frac{THQ \times AT \times 365\ d/yr}{EF \times ED \times \left(\frac{1}{RfC} \times \frac{1}{PEF}\right)}$
S12	Inhalation of noncarcinogen fugitive dusts - construction worker population	$\frac{THQ \times AT \times 365\ d/yr}{EF \times ED \times \left(\frac{1}{RfC} \times \frac{1}{PEF'}\right)}$
S13	Inhalation of carcinogen on fugitive dusts - industrial/ commercial population	$\frac{TR \times AT_c \times 365\ d/yr}{URF \times 1000\ \frac{\mu g}{mg} \times EF \times ED \times \frac{1}{PEF}}$
S14	Inhalation of carcinogen on fugitive dusts - construction worker population	$\frac{TR \times AT_c \times 365\ d/yr}{URF \times 1000\ \frac{\mu g}{mg} \times EF \times ED \times \frac{1}{PEF'}}$

(1)All equations from TACO Appendix C, Table A

Table 2-17

Values Used for SSL Equation Parameters

Parameter	Parameter Value: Industrial/Commercial Population	Parameter Value: Construction Worker Population	Source or Rationale
AT	25 yr	0.115 yr	TACO, App. C, Table B
At_c	70 yr	70 yr	TACO, App. C, Table B
BW	70 kg	70 kg	TACO, App. C, Table B
ED	25 yr	1 yr	TACO, App. C, Table B
EF	250 d/yr 12 d/yr[(1)]	30 d/yr	TACO, App. C, Table B
IR_{soil}	50 mg/d	480 mg/d	TACO, App. C, Table B
PEF	1,243,904,160	--	see Text and Table 6
PEF '	--	124,390,416	1/10 PEF (TACO, App. C, Table A, Equation S16)
RfD_o	chemical specific	chemical specific	see Table 1
SF_o	chemical specific	chemical specific	see Table 1
THQ	1	1	TACO, App. C, Table B
TR	10^{-6}	10^{-6}	TACO, App. C, Table B
URF	chemical specific	chemical specific	see Table 1
VF	15,850	--	see Text and Table 5
VF '	--	1,585	1/10 VF (TACO, App. C, Table A, equation S9)

Prepared by: JJA1
Checked by: SJL1

[(1)]For the wetlands area, an EF of 12 d/yr was used in a Tier 3 evaluation. Rationale described in the text.

The apparent diffusivity (D_A) in the VF equation is derived from the following equation:

$$D_A = \frac{(\theta_a^{3.33} \times D_i \times H') + (\theta_w^{3.33} \times D_w)}{\eta^2} \times \frac{1}{(\rho_b \times K_d) + \theta_w + (\theta_a \times H')}$$

Table 2-18 presents chemical-specific parameter values for calculation of the VF and DA for applicable chemicals. Site-specific values used for the parameters in the VF and D_A equations are presented in Table 2-19. Surface soils at MPC, comprising roughly the top 10 ft, consist of organic clay or lean clay. During the RFI, the only locations where soil was sampled at depths of less than 6 ft were MW-17C, MW-18B, Lagoon No. 2, and MW-9A. Lagoon data were disqualified because they may contain liner clays which are not indigenous to the site. Data from MW-9A were disqualified because they are located between two lagoons and may contain liner clays not indigenous to the site. Data from MW-18B were not used because the permeability (6.8e-04) was high for a clay soil. Data from MW-17C were therefore used to determine soil parameters for the site. The bulk density measured for MW-17C was 1.67 gm. The fraction organic carbon (foc) and porosity were 0.024 and 0.38 g/ml, respectively.

θ_w was calculated using the following equation:

$$\theta_w = \eta \times \left(\frac{1}{Ks}\right)^{1/(2b+3)}$$

Values of 5 m/yr and 0.039 were selected for Ks and 1/(2b+3), respectively, from TACO, Appendix C, Table K. The values selected were for a clay soil.

The value used for Q/C, 97.78 (g/m-s)/(kg/m^3), was taken from TACO, Appendix C, Table H, and represents a ½-acre contaminated source area. In the *Final Corrective Measures Study*, the estimate of contaminated soil requiring remediation was approximately 0.2 acres each for the Shawnee Building and the wetlands. A ½-acre source is a conservative estimate of the probable contaminated area.

The particulate emission factor (PEF) was calculated using the following equation:

$$PEF = \frac{Q}{C} \times \frac{3{,}600 \ \frac{S}{hr}}{0.036 \times (1 - V) \times \left(\frac{U_m}{U_t}\right)^3 \times F_{(x)}}$$

Table 2-18

Chemical-Specific Parameter Values[1]

Chemical	S (mg/l)	Di (cm^2/s)	Dw (cm^2/s)	H′ (unitless)	K_{oc} (l/kg)
cis-Dichloroethene	3,500	0.0736	$1.13x10^{-5}$	0.167	35.5
trans-Dichloroethene	6,300	0.0707	$1.19x10^{-5}$	0.385	52.5
Tetrachloroethene	200	0.072	8.2×10^{-6}	0.754	155
Trichloroethene	1,100	0.079	9.1×10^{-6}	0.422	166
Vinyl Chloride	2,760	0.106	1.23×10^{-6}	1.11	18.6

[1]Values from TACO App. C, Table E

Prepared by: JJA1
Checked by: SJL1

Table 2-19

Site-Specific Parameter Values

Parameter	Value	Source or Rationale
η	0.38	Based on site data
f_{oc}	0.024	Based on site data
K_d	chemical and site specific	f_{oc} x K_{oc}
Q/C	97.78 $(g/m^2s)/(kg/m^3)$	0.5-acre source; TACO App. C, Table H
ρ_b	1.7 g/cm^3	Based on site data
T	7.9 x 10^8s (industrial/ commercial) 3.6x 10^6s (construction worker)	TACO App. C, Table B
θ_a	0.04	Based on site data; $\eta - \theta_w$
θ_w	0.34	Based on site data

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Checked by: SJL1

Site-specific values used for the parameters in the PEF equation are presented in Table 2-20. Default values from TACO Appendix C, Table B were used for all PEF equation parameters.

Table 2-20

Parameter Values for Particulate Emission Factor (PEF)

Parameter	Value	Source
$F_{(x)}$	0.194	TACO App. C, Table B
Q/C	85.81 $(g/m^2s)/(kg/m^3)$	TACO App. C, Table H
U_m	4.69 m/s	TACO App. C, Table B
U_t	11.32 m/s	TACO App. C, Table B
V	0.5	TACO App. C, Table B

Prepared by: JJA1
Checked by: SJL1

For each chemical which is a liquid at 30°C, the soil saturation limit (C_{sat}) was determined by the following equation:

$$C_{sat} = \frac{S}{\rho b} \times \left[(Kd \times \rho b) + \theta_w + (H' \times \theta_a)\right]$$

Site-specific parameters are presented in Table 2-19. Chemical-specific parameters are presented in Table 2-18.

Site-specific C_{sat} values are summarized in Table 2-21. If the C_{sat} value for a chemical was lower than the remedial objective for an inhalation pathway, the C_{sat} value was used as the remedial objective for that pathway according to 35 Ill. Adm. Code 742.220(a).

Table 2-21

Site-Specific Soil Saturation Limit (C_{sat}) Values

	Koc	Kd[1]	C_{sat}[2] (mg/kg)
cis-Dichloroethene	35.5	0.85	3,700
trans-Dichloroethene	52.5	1.26	9,300
Tetrachloroethene	155	3.72	790
Trichloroethene	166	3.98	4,600
Vinyl Chloride	18.6	0.45	1,900

[1]Kd = Koc x foc; foc = 0.024 (see Table 2-19)
[2]see text for equation

2.5.3 Remedial Objective for Lead

A methodology for assessing risks associated with non-residential adult exposures to lead in soil, which focuses on estimating fetal blood lead concentration in women exposed to lead-contaminated soils, was used for the Tier 3 lead objective development. This methodology is the product of extensive evaluations by the U.S. EPA Technical Review Workgroup for Lead (TRW).

The TRW-recommended methodology uses a simplified representation of lead biokinetics to predict quasi-steady state blood lead concentrations among adults who have relatively steady patterns of site exposures. This methodology is an interim approach that is recommended by the TRW for use pending further development and evaluation of integrated exposure biokinetic models for adults. The TRW is undertaking review of other models and will provide reviews on other approaches as appropriate.

The model is as follows:

$$\frac{Pb\ soil}{(mg/kg)} = \frac{(PbB_{adult,\ central\ goal} - PbB_{adult,\ D)}\ x\ AT}{(BKSF\ x\ IRs\ x\ AFs\ x\ EFs)}$$

$$where: \quad PbB_{adult,\ central\ goal} = \frac{PbB_{fetal,\ 0.95,\ goal}}{\frac{1.645}{GSD_{i,\ adult}}\ x\ R_{fetal/maternal}}$$

$$= \frac{10\ \mu g/dl}{2.1^{1.645}\ x\ 0.9} = 3.3\ \mu g/dl$$

$PbB_{adult,\ 0}$	=	2.0 μg/dl
AT	=	365 days/year
BKSF	=	0.4μg/dl per μg/day
IRs	=	0.05 g/day
AFs	=	0.12
EFs	=	219 days/year

a soil objective for lead of 900 mg/kg was developed using this model.

2.5.4 Remedial Volumes

Proposed Tier 2 soil remediation objectives for the Shawnee Building are summarized in Table 2-22. Proposed Tier 3 remediation objectives for the wetland soils are summarized in Table 2-23. Appendix J contains copies of the spreadsheets used to calculate remedial objectives.

Color contour maps for contaminants-of-concern at the wetlands area and Shawnee Building are presented in Appendix K. Based on the site data and the remedial objectives developed using the Part 742 procedures, the estimated soil remedial volume is estimated to be 30 yd^3. The Shawnee Building contributed the entire remedial volume. No contaminant exceeded a site-specific soil standard in the wetlands area.

Cadmium represents the principal chemical-of-concern at the site with respect to soil remediation. Remediation of cadmium to the site-specific soil cleanup objective of 200 mg/kg at the Shawnee Building will result in the removal of soil containing exceedances of cleanup standards for other site chemicals-of-concern. The remedial volume was based on cadmium soil

Table 2-22

Proposed Soil Remedial Objectives
Shawnee Building

	Pathway Remedial Objectives (mg/kg)												
	Industrial Worker (Tier 2)						Construction Worker (Tier 2)						
	Ingest.		Inhalation				Ingest.		Inhalation				Shawnee Remedial Objective (mg/kg)
			Volatilization		Fug. Dst				Volatilization		Fug. Dst		
	NC	C	NC	C	NC	C	NC	C	NC	C	NC	C	
Arsenic	613	4	--	--	--	1,300	61	83	--	--	--	28,000	4
Cadmium	2,000	--	--	--	--	3,200	200	--	--	--	--	67,000	200
Chromium (III)	10^6	--	--	--	--	--	200,000	--	--	--	--	--	200,000
Nickel	41,000	--	--	--	--	24,000	4,100	--	--	--	--	500,000	4,100
Zinc	610,000	--	--	--	--	--	61,000	--	--	--	--	--	61,000
Cyanide	41,000	--	--	--	--	--	4,100	--	--	--	--	--	4,100
cis-1,2-Dichloroethene	20,000	--	3,700[(1)]	--	--	--	20,000	--	3,700[(1)]	--	--	--	3,700[(1)]
trans-1,2-Dichloroethene	41,000	--	9,300[(1)]	--	--	--	4,100	--	9,300[(1)]	--	--	--	4,100
Tetrachloroethene	20,000	110	790[(1)]	790[(1)]	10^6	10^6	20,000	2,400	450	790[(1)]	10^6	10^6	110
Trichloroethene	12,000	520	4,600[(1)]	350	--	10^6	1,200	11,000	4,600[(1)]	500	--	10^6	350
Vinyl Chloride	--	3	1,900[(1)]	1.8	--	69,000	--	65	1,900[(1)]	2.5	--	10^6	1.8

[(1)]Soil saturation concentration (C_{sat})

Prepared by: JJA1
Checked by: RL1

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Table 2-23

Proposed Soil Remedial Objectives
Wetlands Area

	Pathway Remedial Objectives (mg/kg)						
	Industrial Worker (Tier 3)						
			Inhalation				
	Ingest.		Volatilization		Fug. Dst		Wetland Remedial
	NC	C	NC	C	NC	C	Objective (mg/kg)
Arsenic	13,000	80	--	--	--	28,000	80
Cadmium	43,000	--	--	--	--	67,000	43,000
Chromium (III)	10^6	--	--	--	--	--	10^6
Nickel	850,000	--	--	--	--	500,000	500,000
Zinc	10^6	--	--	--	--	--	10^6
Cyanide	850,000	--	--	--	--	--	850,000
cis-1,2-Dichloroethene	430,000	--	3,700[(1)]	--	--	--	3,700[(1)]
trans-1,2-Dichloroethene	850,000	--	9,300[(1)]	--	--	--	9,300[(1)]
Tetrachloroethene	430,000	2,300	790[(1)]	790[(1)]	10^6	10^6	790[(1)]
Trichloroethene	260,000	11,000	4,600[(1)]	4,600[(1)]	--	10^6	4,600[(1)]
Vinyl Chloride	--	63	1,900[(1)]	37	--	10^6	37

[(1)]Soil saturation concentration (C_{sat})

Prepared by: JJA1
Checked by: SJL1

standard exceedances detected in samples from the 1-ft to 2½-ft interval. Remedial volumes were calculated assuming a remedial depth of 3 ft. The cadmium contour maps for the Shawnee Building in Appendix J display cadmium in EP Tox units of μg/l. The site-specific soil standard for cadmium at the Shawnee Building of 200 mg/kg corresponds to an EP Tox value of 1,030 μg/l. The equation to transform total cadmium concentration to EP Tox concentration has been described in the *Final Corrective Measures Study - Compendium Report*, May 1995, Appendix G.

2.6 Proposed Remediation of Wastes in an On-Site CAMU Landfill

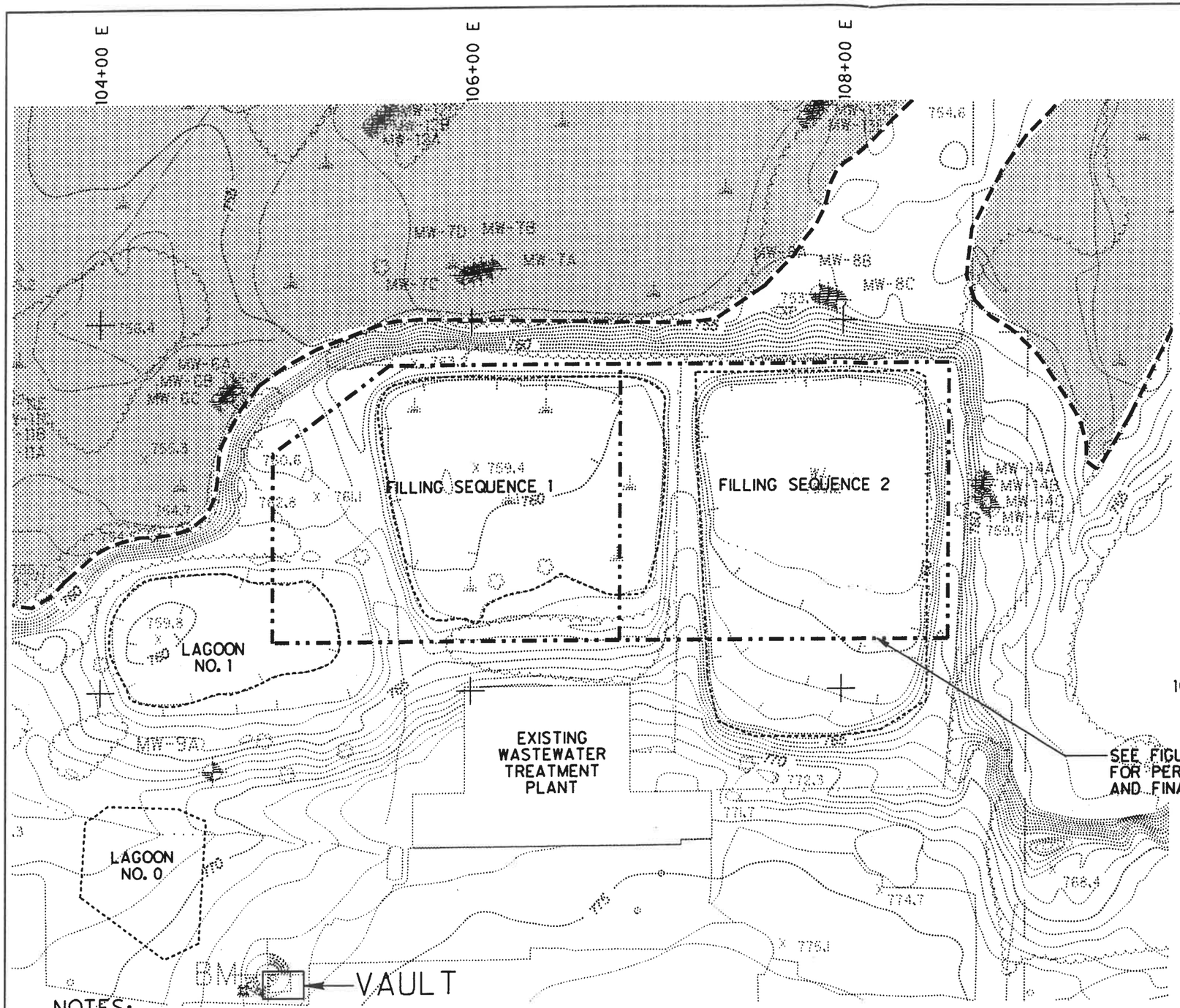
2.6.1 Designation of the Proposed Landfill as a CAMU

It is understood under IAC 35 Subpart s. 724.652 that the landfill proposed in this closure plan can be designated as a Corrective Action Management Unit (CAMU). The permit requirements for this CAMU, which are contained in this document, include the following:

- The areal configuration of the CAMU (i.e., the proposed on-site landfill is shown on Figure 2-15).
- The remediation option selected is for disposal in a landfill constructed on-site. The design, operation, and closure of the landfill are discussed in later sections of this report.
- The requirements for groundwater monitoring are described in Section 2.8.2 of this report.
- Potential leakage from the CAMU is monitored by a leak detection system as described in Section 2.6.3. In addition, the groundwater monitoring wells described in Section 2.7.2 of this report will monitor impacts on groundwater around and directly adjacent to the CAMU landfill.
- The CAMU as proposed has been designed to:
  - Minimize the need for further maintenance
  - Act as the repository for on-site waste from RCRA units and Solid Waste Management Units (SMUs).

  Therefore, post-closure release of hazardous constituents is generally eliminated as the landfill is designed as a containment facility.

In establishing the specific closure requirements for the MPC CAMU landfill, the following factors should be considered.



LEGEND

- EXISTING GROUND CONTOUR
- EXISTING SPOT ELEVATION
- DEPRESSION
- TREES AND / OR BRUSH
- EXISTING ROADWAY
- EXISTING TRAIL
- CONTROL MONUMENT
- APPROXIMATE PROPERTY LINE
- GROUNDWATER MONITORING WELL LOCATION AND NUMBER
- EXISTING BUILDING
- EXISTING FENCE
- APPROXIMATE LIMITS OF WETLAND
- INFERRED EXTENT OF WETLAND
- WETLANDS AREA
- WASTE LIMITS

NOTES:

1. SITE LOCATION: SE 1/4 OF SECTION 32, T27N, R8E, STEPHENSON COUNTY, ILLINOIS.
2. TOPOGRAPHICAL MAP PREPARED FROM AERIAL SURVEY PERFORMED BY AERO-METRIC ENGINEERING, SHEBOYGAN, WISCONSIN. DATE OF PHOTOGRAPHY: NOVEMBER 28, 1986.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTROL INTERVAL IS ONE FOOT. BENCH MARK IS LOCATED ON THE N.W. CORNER OF THE PUMP STATION CONCRETE SLAB, COORDINATES N 10046.1 E 10491.0, AT ELEVATION 773.82 FEET.
4. WETLAND DELINEATION FIELD WORK CONDUCTED ON MAY 29, 1992.

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FIGURE 2-15

CAMU LANDFILL LAYOUT

Scale: 0 30' 60' | Date: AUGUST, 1997

Prepared By: Foth & Van Dyke | By: JOW

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- The CAMU landfill is small, being approximately 1.2 acres and containing approximately 16,000 cy of waste.

- The CAMU landfill has been selected as the most effective, protective and reliable remedial alternative available for the MPC facility.

  - The CAMU landfill is effective because on-site sludge and contaminated soils will be disposed of in the CAMU landfill in one construction season. The off-site disposal alternative, as proposed in previous submittals, included phased implementation which required 7 years to complete.

  - The CAMU landfill is protective to human health and the environment since the landfill is designed with a double liner system and a composite final cover. The liner and cap are designed using technologies which have become industry standards and have successful performance records. The materials proposed for the landfill construction were selected for their superior performance, longevity, and success on RCRA Subtitle C landfills.

  - The CAMU landfill is the most cost-effective alternative. It has been estimated that the landfill proposed herein is approximately $1 million less expensive than the off-site alternative.

- The potential for a release from the CAMU is small, since the design as proposed in this report includes a double liner and a composite cap, which has been proven effective in protecting public health and the environment. Therefore, the potential for exposure to humans and environmental receptors is minimal.

- The waste proposed for disposal in the CAMU landfill includes electroplating sludges and soils contaminated with metals. A physical and chemical characterization of the sludge and the contaminated soils was provided in previous sections of this report. A brief summary of the sludge and soil characteristics based on site data follows.

  The sludge appears to behave as a very fine-grained inorganic silt and appears to be non-plastic. The sludge has a flocculated structure which results in water draining from it quite readily under load. The contaminated soils, which in general are surface soils, consist of organic clays and silty clay overlying an alluvial sand and gravel. The soil physical characteristics are those of organic clays and silty clays, and silty sand and gravels.

- The CAMU is not proposed to be located in an uncontaminated area of the site. Figure 2-15 shows that the CAMU will be located over Lagoons No. 2, No. 3, and a portion of Lagoon No. 1. Constructing the CAMU landfill over the existing lagoons as described above is the most cost-effective location for the landfill given the quantities of sludge involved.

- The mobility of the waste will be reduced by relocating the wastes into the double-lined CAMU landfill.

- The CAMU landfill has been designed with a reasonably small footprint to reduce the area on which contaminants will remain.

2.6.2 General Information - On-Site Landfill

On-site wastes from the following described units will be disposed of in the CAMU landfill constructed at MPC. The units from which solid or hazardous waste will be removed include the following:

- RCRA Closure Units
  - 3 (S04) - Impoundments
    Lagoon No. 1, Lagoon No. 2, and Lagoon No. 3
  - Shawnee Building Soils
- Solid Waste Management Unit including:
  - Cyanide Treatment Vault
  - Closed Lagoon No. 0
  - Closed Lagoon No. 1A

The types and quantities of waste to be disposed of are characterized in previous sections of this report. The estimated quantities of wastes to be disposed of in the landfill are as follows:

Sludge and overburden from Lagoons 0, 1A, 1, 2, and 3	15,100 cy
Shawnee Building, Contaminated Soil	30 cy
Underground Vault, Contaminated Concrete and Soil (Estimate in Appendix L)	200 cy
Total	15,330 cy

The proposed landfill is located as shown on Figure 2-15 and has inside dimensions of 150 ft by 365 ft with 3:1 (horizontal to vertical -- H to V) interior and exterior sideslopes (containment berms), a 10-ft wide berm top and bottom dimensions of 102 ft by 317 ft. The lowest point at the base of the landfill is at elevation 762 which is 2 ft above the 100-year flood elevation of the adjacent Pecatonica River.

2.6.3 Landfill Liner and Leachate Collection System

A landfill liner and leachate collection system meeting the requirements of IAC 35 s. 724.401 (Design and Operating Requirements [Landfills]) is proposed as shown on Figure 2-16. The liner and leachate collection system components include the following from top to bottom:

- 12 in of granular drainage material with a hydraulic conductivity of $1x10^{-2}$ cm/sec or greater (leachate collection system)
- 60 mil high density polyethylene (HDPE) geomembrane (top liner)
- GEONET drainage material with a transmissivity of $3x10^{-5}$ m^2/sec or more (leak detection system [LDS])
- 60 mil HDPE geomembrane (upper component of the bottom liner)
- Geosynthetic clay liner (GCL), (lower component of the bottom liner)
- Prepared subgrade

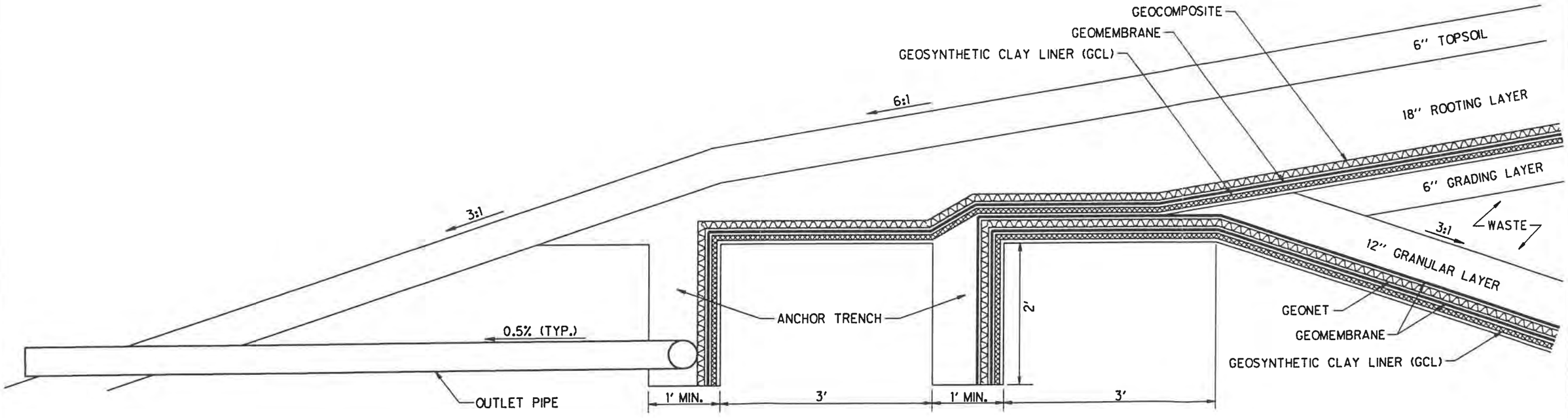
The configuration of the liner and Leachate Collection System (LCS) meeting the requirements of IAC 35 s. 724.401 is shown on Figure 2-17. The leachate collection system, besides the drainage layer described earlier, will consist of:

- Interior containment berm constructed with stone
- A collection sump to which the base slopes at 2%
- A sideslope riser (SSR) pipe at the sump located as shown on Figure 2-17
- Leachate transfer piping conveying leachate to the existing MPC wastewater pretreatment system

2.6.3.1 Liner and LCS Design and Specifications

The information which follows contains preliminary specifications for the materials (products) which could be used for construction of the liner and leachate collection system. For some materials (e.g., geosynthetics), examples of available products and their properties are provided in Appendix M and Appendix N. All of the materials are extensively used in landfill applications and have been proved reliable for such uses.

The CAMU landfill will be constructed in two phases as shown on Figure 2-15. This is necessary to allow sequencing of the landfill construction and lagoon excavation. Figure 2-18 shows the design of the interior berm where the two sections of liner will be joined after filling of



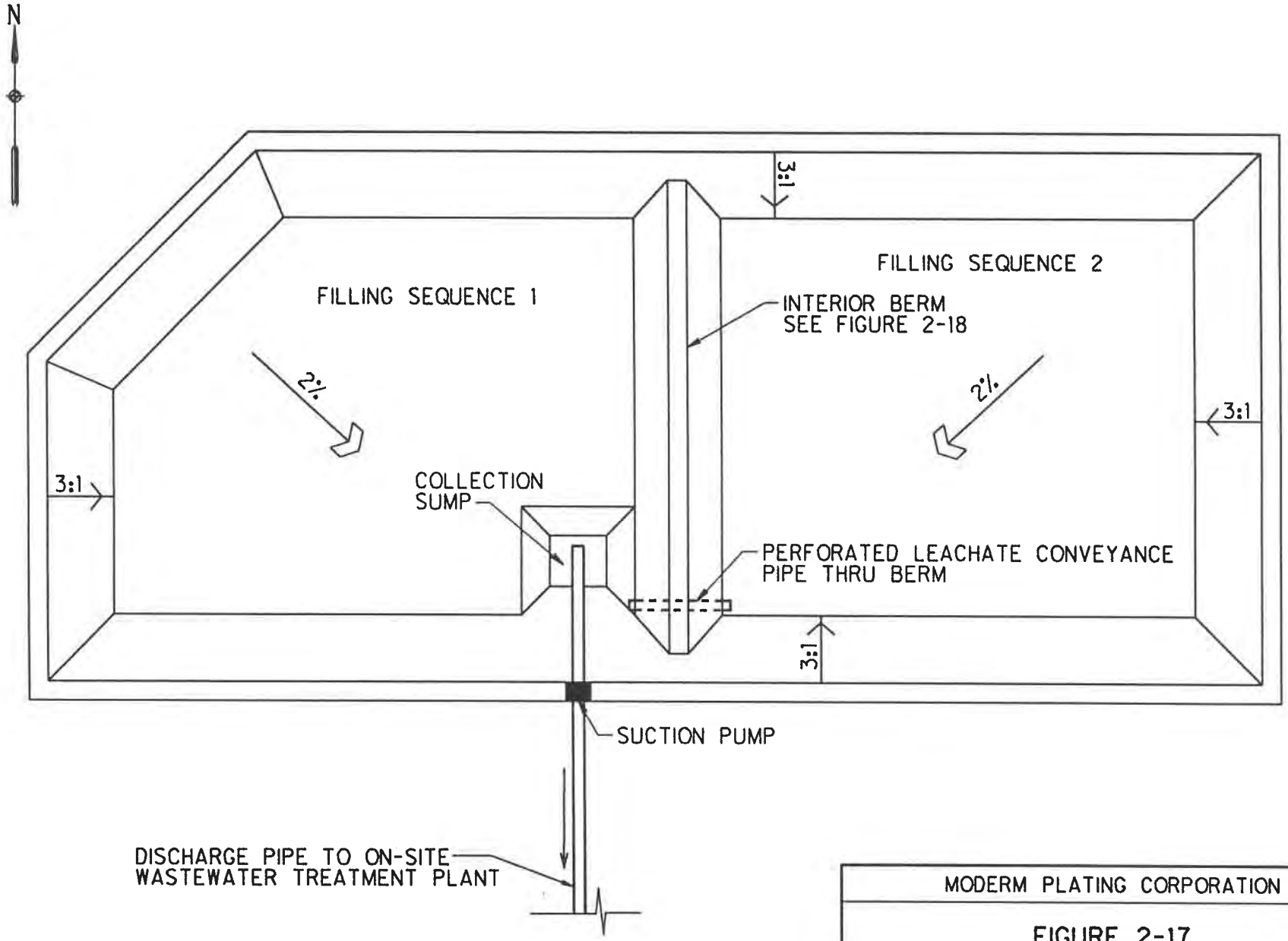
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FIGURE 2-16

CAMU BERM CONFIGURATION DETAIL

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Prepared By: Foth & Van Dyke	By: JRB2

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FIGURE 2-17

CONCEPTUAL CAMU BASE GRADE LAYOUT

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Prepared By:	Foth & Van Dyke	By:	JRB2

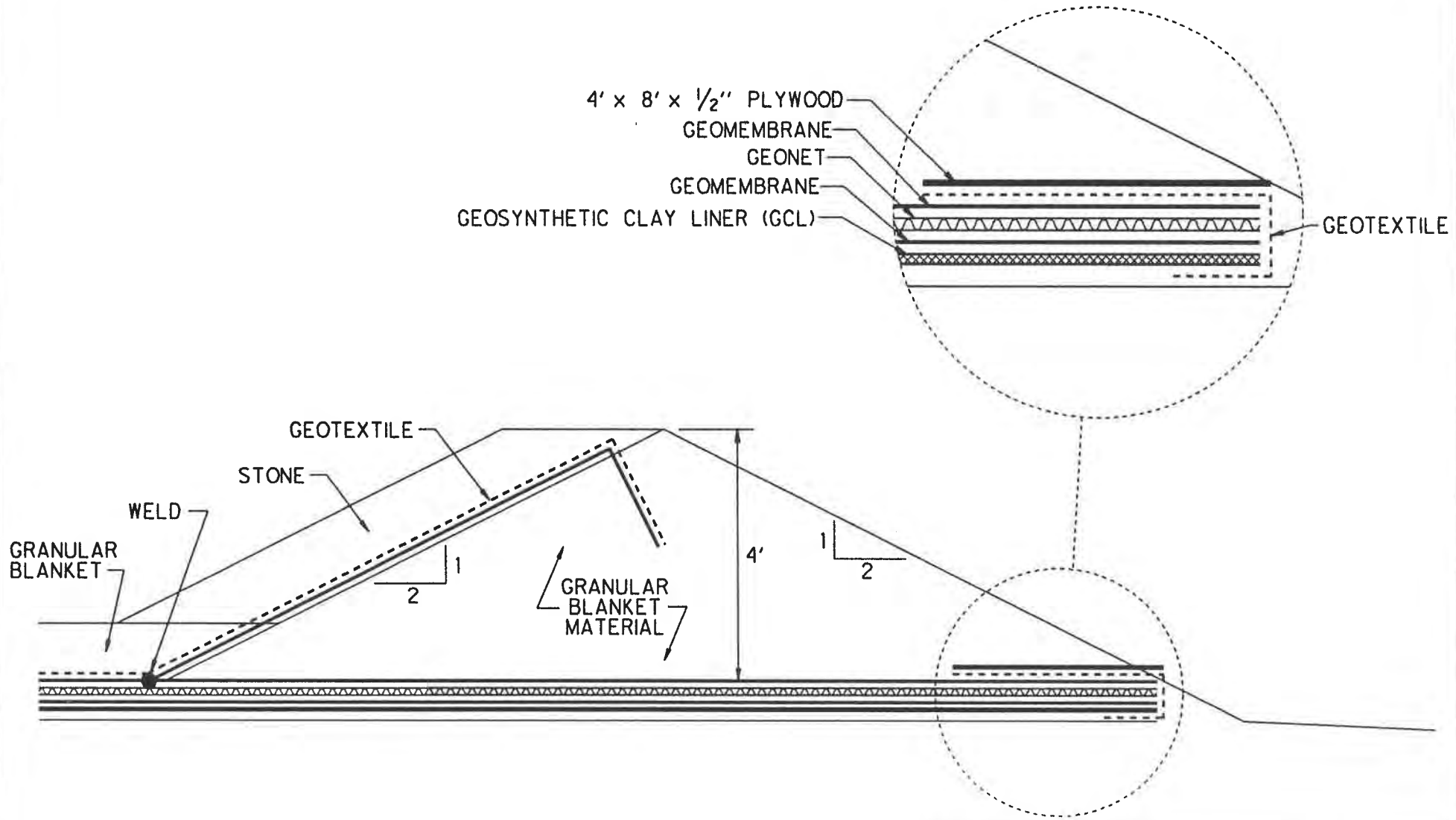
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FIGURE 2-18

INTERIOR BERM DETAIL

Scale: NOT TO SCALE	Date: AUGUST, 1997
Prepared By: Foth & Van Dyke	By: JRB2

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the west one-half of the landfill. Section 2.8 of this report provides details concerning the construction and sludge removal sequencing.

2.6.3.1.1 Granular Drainage Materials

The 12-in granular drainage layer will consist of hard, durable particles (i.e., sand) which have less than 5% passing the No. 200 sieve and a hydraulic conductivity of $1x10^{-2}$ cm/sec or more.

2.6.3.1.2 Geomembrane

HDPE is the resin most likely to be used for the geomembrane for the top liner and geomembrane component of the bottom composite liner. The reasons for this selection are:

- Compatibility with the anticipated waste and leachate from the facility, which has been documented in the literature.
- Longevity of the materials.
- Experience in the industry from the perspective of manufacture and installation including manufacturing quality control (MQC) and manufacturing quality assurance (MQA).
- Experience in the engineering community from the perspective of construction quality control (CQC) and construction quality assurance (CQA).
- Availability and competitive pricing of the liner.

Of the above reasons, the most compelling one for the HDPE selection is its superior chemical resistance. The primary purpose is to remain as an effective hydraulic barrier for a long period of time. This can be achieved only if the liner material is compatible with the materials it comes into contact with at anticipated field conditions and if the liner installation practices are conducive to a long service life. The superior chemical resistance of HDPE makes it the liner material of choice in containment applications. Coupled with this, the design and installation experience gained during the past five to ten years makes it possible to practically eliminate the potential for defects during the construction and operation of a containment facility. Quality control and quality assurance practices, monitoring of the constructed liner and sound engineering design methods to identify possible loading (stressing) conditions and providing an adequate factor of safety under those conditions make HDPE an excellent choice for the liner at this time.

Geomembranes are available in the marketplace from numerous vendors. Appendix M contains an excerpt from the "Geotechnical Fabris Report 1997 Specifier's Guide" for available geomembrane materials which could be used for the MPC Landfill. The potentially suitable geomembrane materials are identified in Appendix M with an asterisk (*).

2.6.3.1.3 Geocomposite (Drainage Material for LCS and LDS)

The geocomposite drainage material will consist of a geonet with non-woven geotextiles heat-bonded to its top and bottom surface. The transmissivity of the geocomposite will be $3x10^{-5}$ m^2/sec or more. Calculations will be performed during the final design to show that the LCS (i.e., drainage layer and geocomposite) will be effective in removing leakage if any occurs, and minimizing head on the liner during the post-closure care period. Appendix N contains an excerpt from the "Geotechnical Fabrics Report 1997 Specifier Guide" for available products which includes potentially suitable geocomposites which could be used on the proposed MPC landfill. These suitable products have been designated with an asterisk (*).

2.6.3.1.4 Geosynthetic Clay Liner (GCL)

IAC 35 s. 724.401(c)1)A)(ii) requires that the bottom liner consist of a composite liner consisting of an upper geomembrane component and a lower component consisting of at least 3 ft of compacted soil material with a hydraulic conductivity of no more than $1x10^{-7}$ cm/sec. In lieu of the 3 ft of compacted soil, we are proposing the use of a geosynthetic clay liner (GCL) which will be equivalent in performance to the specified clay components. The narrative which follows provides information concerning the equivalency of the GCL to the compacted soil liner and the reasons for which a GCL is preferable as the soil component of the composite liner at the MPC landfill. An additional reason a GCL was selected is because of the lack of a sufficient quantity of suitable clay on-site.

GCL Materials

Geosynthetic clay liners (GCLs) are manufactured liners typically consisting of a bentonite clay component encapsulated in woven or nonwoven geotextiles. The geotextiles are typically held together by needling, stitching or an adhesive. GCLs typically come in roll lengths ranging from 100 to 200 ft and widths ranging from 13 to 17½ ft.

GCLs have been used for many years as the primary or secondary means of containment for landfills, lagoons, tanks, etc. GCLs have also been used as the primary hydraulic barrier in landfill and other caps or as the clay component in a composite cap.

Available GCL Materials

Appendix O contains a summary of the properties of Commercially Available GCLs which was reproduced from Geotechnical Fabrics Report, December 1997.

Performance Assessment

Compacted clay liners (CCLs) in conjunction with geomembranes have historically been used for containment, primarily due to the considerable amount of experience gained with CCLs alone or as the soil component of composite liners. GCLs offer an attractive alternative where good

quality clay is not available in required quantities or the size of the structure, as in the case of the MPC landfill, make CCL construction difficult and costly.

The evaluation of GCLs and CCLs should focus on GCLs ability to meet the performance objectives of the liner and cover systems. David Daniel, professor of Civil Engineering formerly at the University of Texas at Austin, is one of the leading researchers on the performance and design of both GCLs and CCLs. In Chapter 7 of the *Report of Workshop on Geosynthetic Clay Liners* (USEPA, 1993), Dr. Daniel discusses the equivalency of GCLs and CCLs. Following is a list of advantages of GCLs related to performance, constructability and other technical issues based on Dr. Daniel's work and the specific site conditions for the MPC landfill.

- Installation advantages of GCLs (after USEPA, 1993)

  1. Installation of GCL is rapid and simple.

  2. GCL installation does not require heavy equipment, which is difficult to operate in small containment structures such as that proposed for the MPC landfill.

  3. Inclement weather delays which would typically halt soil liner construction have minimal impacts on GCL installation.

  4. GCLs are uniform and consistent since they are manufactured products.

  5. GCL material properties related to performance can be determined in the laboratory prior to installation, resulting in the minimization of construction delays related to Quality Assurance and Quality Control (QA/QC) activities.

  6. QA/QC is simpler and less costly with GCLs.

  7. GCLs are easier to construct on slopes than soil liners.

  8. GCLs are not vulnerable to desiccation during installation.

- Performance Advantages of GCLs (after USEPA, 1993)

  1. Most GCLs can be shown to be equivalent to soil liners with hydraulic conductivities in the 1×10^{-7} cm/sec range for steady-state water flux.

  2. GCLs produce less consolidation water than soil liners, which are typically placed wet of their plastic limit.

  3. GCLs appear to be superior to soil liners in the ability to withstand freeze/thaw and wet/dry cycles.

4. GCLs maintain low hydraulic conductivity, even when subjected to large differential settlements.

5. GCLs have the capability of self-sealing around certain types of punctures, e.g., penetration by a sharp object.

6. GCLs, when installed with a geomembrane, are equivalent to soil liners with respect to steady solute flux.

7. GCLs can be designed to be stable on slopes.

- Advantages of GCLs specific to the site conditions at the MPC landfill include:

1. Use of a GCL will eliminate the need for an off-site borrow area for native clay.

2. Use of a GCL reduces the environmental implications related to a soil borrow area.

3. Use of a GCL eliminates concerns regarding soil component desiccation due to drying (USEPA, 1993 p.89).

4. Use of a GCL eliminates concerns regarding soil component desiccation due to freeze-thaw (USEPA, 1993 p.89).

5. Use of a GCL will eliminate the difficulties encountered when constructing a clay liner in a small confined area (i.e., insufficient space for the movement of placement and compaction equipment).

Liner Hydraulic Equivalency

Hydraulic equivalency is achieved if the flow rate through the modified liner (with GCL) under an arbitrarily selected head of 1 ft (the maximum head on the liner in general will be less than this value) is the same or less compared to the liner specified in the regulations (geomembrane overlying a clay layer of 3-ft thickness and hydraulic conductivity of 10^{-7} cm/sec). Based on literature data and our own past experiences, the composite liner with GCL permits less percolation than a composite liner with a 3-ft clay liner of hydraulic conductivity of $1x10^{-7}$ cm/sec. Therefore, the proposed GCL liner will meet the intent of the regulations and exceed it in performance with respect to percolation.

2.6.3.1.5 Prepared Subgrade

The liner will be designed and constructed to comply with s. IAC 35 724.401(a)(i)(B) by placing the liner above the 100-year flood elevation and providing a prepared subgrade. The prepared subgrade will consist of native soil or fill soils compacted to a minimum of 95% of the standard

Proctor maximum dry density. Based on the numerous soil borings completed to-date (refer to Section 2.4 of this report) in the area of the proposed CAMU landfill, it is apparent that the subsoils have adequate strength to support the proposed landfill. A uniformly and thoroughly compacted subgrade placed on these subsoils will result in a stable subgrade on which to place the liner components.

2.6.4 Landfill Final Cover

2.6.4.1 General

The on-site wastes will be excavated, dewatered to the extent practicable, and placed and compacted in the on-site landfill. Section 2.8 of this report contains details concerning waste excavation, handling, placement and compaction in the MPC landfill. This section describes a final cover which conforms to the closure performance standard of IAC 35 s. 725.211 (Closure Performance Standards). The final cover proposed to conform with the applicable standard has components as follows from top to bottom:

- 6 in of topsoil (vegetative layer)
- 18 in of cover soil (rooting layer)
- geocomposite drainage (drainage layer)
- 40 mil linear LLDPE geomembrane (geomembrane layer)
- GCL (soil component of composite liner)
- 6-in soil layer (grading layer)

The configuration of the cap is shown on Figure 2-16. Based on the slope stability analysis presented in Section 3.1.1 of the CMS, (Foth & Van Dyke, May 1995), the sludge can be placed at a slope of 6:1 (H:V). The analysis presented shows that the lowest safety factor against slope failure exceeded 1.5 (the acceptable value) for the 6:1 H:V slope.

It is MPC's intent to excavate, dewater to the extent practicable, and dispose of the on-site waste in a single construction season. The sequence of landfill construction, excavation, treatment and disposal and final covering of the landfill is discussed in Section 2.8 of this report.

2.6.4.2 Final Cover Design and Construction (IAC 35 s. 725.410)

The final four components proposed above are designed to conform with the requirements of IAC 35 s. 725.410 in general as follows:

- A composite cap consisting of a geomembrane and GCL is provided to minimize the migration of liquids through the closed landfill. In addition, a geocomposite drainage layer is provided over the composite liner which will be specified and designed to effectively minimize head on the cap.

- The final cover includes providing an adequate thickness of topsoil and a rooting layer for establishment of a vegetative cover. The vegetation established during the initial closure construction is planned to minimize the maintenance in the future.

- The final cover has 6:1 (H:V) final slopes which promote surface water runoff.

- The composite cap components, i.e., GCL and geocomposite, because of their lighter weight when compared to thick soil components, needed to meet hydraulic conductivity and drainage requirements, will minimize the potential final cover settlement.

The components such as the geomembrane (LLDPE) and GCL, because of their ability to conform to settlements which may occur during the post-closure period, are also good choices for final cover applications.

A post-closure care program is proposed in Section 2.7.5 of this report to maintain the integrity and effectiveness of the final cover by maintaining and repairing the final cover to correct any adverse environmental or other effects.

2.6.4.3 Final Cover Design and Specifications

The information which follows contains preliminary specifications for the materials (products) which could be used for construction of the final cover. For geosynthetic materials, examples of available products are provided in the appendices. All of the materials proposed are used frequently in landfill closure applications and have become standards for waste containment design. The final cover components will be discussed in the sequence in which they will be constructed, that is, from bottom to the top of the final cover.

2.6.4.3.1 Grading Layer

The landfill filling will be sequenced (as discussed in Section 2.8) so that the contaminated soils from the Shawnee Building and the underground vault are used to buttress the final waste layers placed in the landfill. The contaminated concrete from the underground vault will be placed after sludge placement is completed and the grading layer soil placed on top of it. We are proposing to place 6 in of soil from an off-site source to serve as a grading layer for the final cover components. Placing and proof-rolling these soils as the grading layer soils will provide a stable base for placing the final cover system components. If necessary, a geotextile or geogrid will be incorporated into the final cover design if additional strength is needed to facilitate construction of the final cover components.

2.6.4.3.2 Geosynthetic Clay Liner

Section 2.6.3.14 of this report contains a listing of some of the advantages of a GCL related to installation, performance, and environmental protection as a part of the liner system. To a great

extent, these advantages are as reported by Dr. David Daniel in USEPA (1993) and University of Texas at Austin (1996). The advantages of using a GCL in the liner are similar to the advantages of using a GCL in the final cover. There are, however, other advantages including:

- Freeze/Thaw Resistance - Available laboratory data indicate that GCLs do not undergo increases in hydraulic conductivities as a result of freeze/thaw (USEPA, 1993).

- Wet/Dry Effects - Available laboratory data indicate that desiccation of wet GCL does not cause cracking and that GCLs do have self-healing properties, i.e., that they can swell around punctures or cracks (USEPA, 1993).

- Response to Differential Settlements - LaGatta (1992) and Boardman (1993) studied the effects of differential settlement on GCLs (Daniel, 1993). These tests showed that many GCLs can withstand large distortions (Δ/L up to 0.5, i.e., the ratio of the differential settlement (Δ) divided by the horizontal distance over which settlement occurs (L)) and tensile strains up to 10 to 15 percent without undergoing significant increases in hydraulic conductivity (Daniel, 1993). Available data indicate that GCLs can withstand much greater tensile deformation than compacted soils without cracking.

- Stability on Slopes - GCL interface shear strength is very dependent on the extent of hydration/water content and the type of GCL. The GCLs proposed for use in the MPC landfill cover have adequate strength to remain stable on the 6:1 (H:V) slopes proposed for the final cover.

2.6.4.3.3 Geomembrane

The material selected as the upper component of the composite-hydraulic barrier (the low permeability layer) is LLDPE, which was selected based on their low hydraulic conductivity and flexibility characteristics. The physical properties of available LLDPE geomembranes are provided in Appendix M. The geomembrane will be placed over the GCL. The final cover system will settle due to the consolidation of the sludges. To minimize settlement, sludges will be dewatered to the extent practicable and compacted in lifts to achieve maximum densities.

When estimating the effects of settlement of a final cover, a total settlement of the waste mass is inconsequential as this form of settlement tends to place the geomembrane and cover soils in compression of generally very small magnitude. A calculation of safe differential settlements which will not cause tensile strain in the geomembrane will be provided in the final design report.

2.6.4.3.4 Geocomposite

The geocomposite drainage material consists of a geonet with non-woven geotextiles heat-bonded to its top and bottom surface. The transmissivity of the geocomposite will be $3x10^{-5}$ m^2/sec or more.

The precipitation collected by the geocomposite is discharged to the surface as non-contact runoff water as shown on Figure 2-16. These discharges typically have riprapped outlets to protect the berms and cover soils from erosion during the long-term care period.

2.6.4.3.5 Cover Soil (Rooting Layer)

After placement of the geocomposite, a minimum of a 1½-ft thick cover soil layer (rooting layer) consisting of off-site subsoil or topsoil can be placed. This 1½-ft thick cover layer, when added to the ½ ft of topsoils, equals the 2 ft of soil recommended in the U.S. EPA (1991) for a RCRA cover. The soil will be obtained locally from off-site, and should be a loam, silt loam, or clay loam soil.

2.6.4.3.6 Topsoil

Topsoil is defined as the upper soil horizon consisting of a mineral soils of maximum humus (organic) accumulation. The purpose of this layer is to support vegetation which will stabilize the final cover system.

The topsoil will typically be loam, silt loam, or clay loam which provides for an adequate water availability. Topsoil tests will be performed on the selected topsoil prior to placement to determine if soil amendments such as lime or fertilizers are required. The appropriate fertilizer and application rate as determined by the topsoil tests will be applied to aid in establishing a vegetal cover. The cover soil layer and the topsoil layer have a combined thickness of 24 in which is adequate for root penetration for the type of vegetal cover proposed.

The seed mixture will be selected from standard seed mixtures found in the Illinois Department of Transportation (DOT) Section 624. The seed mixture will consist of diverse mix of native and introduced species which have root penetration less than 24 in and provide a vegetative growth which will minimize erosion by wind and water. The seed mixture will be selected in the final design report.

2.6.5 Surface Water Management

Calculations for the design of the surface water management system will be finalized in the final design report. This section presents a preliminary design for the surface water run-on and runoff controls. Since the landfill is proposed to be filled and covered in the same year, only final cover conditions are considered for during the runoff control system, since this is typically the worst-case condition.

Run-on control calculation and design is unnecessary since the landfill base is 2 ft above the 100-year flood and the containment berms which surround the base are approximately 10 ft above the 100-year flood and higher than the surrounding grades in most areas. Where surrounding grades are higher than the berms, a ditch is provided to prevent run-on.

Surface runoff systems have two purposes:

- To collect, route, and discharge stormwater runoff while minimizing ponding and subsequent infiltration into the landfill.
- To control erosion and sediment transport.

The components of the surface water management system include drainage diversion berms, perimeter ditching, culverts, and a sedimentation basin which discharges to the adjacent wetlands north of the landfill.

In the final design report, all drainageways and swales will be designed to safely accommodate the runoff from the 25-year, 24-hour precipitation event without scouring or eroding the bottom and sides of the receiving channel. Manning's equation and Soil Conservation Service (SCS) grassed swale design procedures will be used to develop ditch dimensions adequate for the design discharge. Factors included in this analysis are channel configuration, type of soil, channel vegetation, peak flow, longitudinal slope, and channel runoff velocity. Velocities are checked for erosion and sediment deposition problems. Various erosion control materials are specified for the channels to help stabilize the bare ground surface until vegetation is established. Culverts are designed to pass the peak runoff without overtop or erosion at the inlet or outlet points.

To minimize the risk of sediment transportation from the site, a treatment facility (sedimentation basin) will receive all runoff from the site. The facility will be designed with adequate capacity to settle out silt-sized particles (10 micron) during storm events of up to a 25-year, 24-hour storm. The TR-55 hydrology and POND2 (Haestad methods routing program) will be used to show the adequacy of the design. Detailed designs will be provided in the final design report.

2.6.6 Passive Gas Management System

In the unlikely event that gas is generated by the sludge and soil disposed of in the landfill, a passive gas management system is provided to vent any gases generated during the post-closure period. The passive gas management system will consist of a series of gravel-filled trenches spaced at approximate 100-ft intervals on the final cover. The gravel-filled trenches will contain a 6-in corrugated polyethylene (PE) pipe traversing the length of the trench. The trenches will be located such that a minimum 1% slope is achieved along the trench and gas vents consisting of PVC risers and 90° elbows will be installed at approximate 200-ft intervals along the gas collection trenches described above. The system described above will be designed to effectively vent any potential gas generated during the post-closure care period.

2.6.7 Site Security

The site will be secured by a 6-ft high chain-link fence installed after the landfill closure activities and site restoration are completed. The fence will provide security from unauthorized vehicle access and access from stray domestic animals or wildlife. The fence will be installed around the entire perimeter of the landfill as shown in Figure 2-24, presented later in this section, and have two gates to allow for access for maintenance and monitoring activities.

2.6.8 Cost Estimate for Closure (IAC 35 s. 725.242)

The written cost estimate required by IAC 35 s. 725.242 is provided in Table 2-24, which also includes the landfill construction cost, waste pile construction cost, and construction documentation costs for the landfill construction and closure. All the costs presented are in current dollars, and are based on the assumption that MPC would hire a third party to complete the closure work.

Upon the IEPA's approval of the remediation closure and post-closure care plan, MPC will establish financial assurance for closure using one of the methods specified in IAC 35 s. 725.243 (Financial Assurance for Closure).

2.6.9 Certification of Closure (IAC 35 s. 725.215)

Within 60 days of completion of the closure of the landfill described in this report, MPC will submit via registered mail, a certification by an independent professional engineer registered in the State of Illinois that the CAMU landfill is closed in accordance with the approved closure plan. In addition, the survey plat indicating the location and dimensions of the landfill with respect to permanently surveyed bench marks will be submitted to the county recorder and the IEPA. This plat will be prepared and surveyed by a professional land surveyor registered in the State of Illinois.

2.7 Post-Closure Care and Use of the Property (IAC 35 s. 725.217)

2.7.1 General

MPC will be responsible for post-closure care of the landfill for 30 years after the date of completion of closure of the facility. The post-closure care of the facility is described in a written plan provided in this section which in general, includes the following:

- Environmental monitoring and reporting in accordance with IAC 35 s. 725, Subparts F, K, L, M, and N
- Maintenance and monitoring of waste containment system (i.e., the facility liner and cover) in accordance with requirements of IAC 35 s. 725, Subparts F, K, L, M, and N

Table 2-24

CAMU Cost Estimate - Double Liner and Composite Cap
Modern Plating Corporation

Item Description	Units	Quantity	Unit Price ($)	Cost[1] ($)
Permit Costs				
Permit Review Fees	lump sum	1	5,000	5,000
Legal Fees	lump sum	1	5,000	5,000
Engineering	lump sum	1	175,000	175,000
Subtotal				$185,000
Waste Excavation Costs				
Sludge Excavation	cy	13,980	23	321,500
Shawnee Building Soil Excavation	cy	30	8	200
Vault Excavation/Disposal	cy	200	6	1,200
Hauling	cy	15,460	5	77,300
Soil Replacement	cy	1,480	25	37,000
Subtotal				$437,200
Temporary Waste Storage Pad				
Excavation (Cut/Fill to Grade)	cy	4,440	3	13,300
Geomembrane	sf	40,000	0.4	16,000
Geotextile (12 oz/yd - non-woven)	sy	4,440	0.8	3,600
18-in Clear Stone	cy	2,220	20	44,400
Geocomposite	sf	21,320	0.82	17,500
Leachate Pumping	lump sum	1	1,000	1,000
Sludge Excavation from Temporary Storage Area	cy	4,500	8	36,000
Regrading and Restoration	lump sum	1	8,660	8,600
Subtotal				$142,100

Table 2-24 *(Continued)*

Item Description	Units	Quantity	Unit Price ($)	Cost[1] ($)
Landfill Construction				
Clean Soil Procure and Place[2]	cy	17,000	10.00	170,000
Geosynthetic Clay Liner[3]	sf	60,000	.60	36,000
Secondary Geomembrane	sf	60,000	.60	36,000
Geonet	sf	60,000	.42	25,200
Primary Geomembrane	sf	60,000	.60	36,000
Granular Drainage Layer (1 ft)	cy	2,220	20.00	44,400
Leachate Collection System	lump sum	1	20,000	20,000
Sedimentation Basin	lump sum	1	5,000	5,000
Subtotal				$372,600
Landfill Closure				
6-in Grading Layer	cy	1,100	10.00	11,000
Geosynthetic Clay Liner	sf	59,300	.60	35,600
Geomembrane	sf	59,300	.60	35,600
Geocomposite	sf	59,300	.82	48,600
Rooting Layer (1½ ft)	cy	3,290	10.00	32,900
Topsoil (½ ft)	cy	1,100	14.00	15,400
Seed, Fertilize and Mulch	ac	2	2,500	5,000
Gas Venting (Passive)	lf	300	25.00	7,500
Replace Excavated Soils	ton	1,600	10.00	16,000
Fencing	lf	1,170	13.30	15,600
Subtotal				$223,200
Landfill Construction/Closure QA/QC and Documentation				
GCL Documentation	lump sum	1	1,500	1,500
Construction Documentation	lump sum	1	7,000	7,000
Documentation Surveying	per layer	5	2,000	10,000
Geomembrane QA/QC[4]	lump sum	1	6,000	6,000
Soils Testing	per acre	1.2	1,500	1,800

Table 2-24 *(Continued)*

Item Description	Units	Quantity	Unit Price ($)	Cost[1] ($)
GCL Documentation	lump sum	1	1,500	1,500
Geomembrane Doc. Report	lump sum	1	8,000	8,000
Geomembrane Testing[5]	per acre	4	1,200	4,800
Subtotal				$40,600
Long-Term Care				
Long-Term Care Cost per Year[6]	year	30	14,800	444,000
Subtotal				$444,000
TOTAL				$1,844,700

Prepared by: REM
Checked by: SJL1

1. All costs rounded to the nearest hundred dollars.
2. Berm and liner support soil material from an off-site source.
3. Geosynthetic clay liner (GCL) - bentonite sandwiched between two layers of non-woven geotextiles.
4. QA/QC - Quality Assurance and Quality Control
5. Includes two geomembranes in the landfill liner and one in the landfill cap.
6. Long-term care costs include a 10% contingency. Leachate treatment costs are not included since MPC has an operating pretreatment plant.

- Continuation of any site security measures required by rule or permit condition
- Maintain the integrity and effectiveness of the landfill cap and final cover in accordance with IAC 35 s. 725, Subparts K, L, M, and N
- Maintaining the function of the monitoring equipment in accordance with the requirements of IAC 35 s. 725, Subparts K, L, M, and N
- Detailed written estimate in current dollars of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in IAC 35 s. 725.217 through 725.220, and 725.410
- Prevent run-on and runoff from eroding or otherwise damaging the final cover
- Protect and maintain surveyed benchmarks used to comply with 35 IAC 725.409

2.7.2 Post-Closure Groundwater Monitoring (Subpart F)

The principal sources of contamination at the site have been identified to be the sludge lagoons and the abandoned vault (located immediately southwest of MW-22). The proposed monitoring plan (submitted to the IEPA on May 30, 1997) is designed to monitor the effectiveness of the CAMU and future contaminant concentration reductions in groundwater in the vicinity of the Modern Plating Corporation facility (site groundwater exceedances at MPC have been primarily for VOCs). Of note, at the time of the submittal of this report, a response had not yet been received on the proposed groundwater monitoring report submitted to the IEPA on May 30, 1997.

2.7.2.1 Metals

Current parameters monitored as part of the metals program include arsenic, cadmium, chromium, copper, lead, nickel, zinc, cyanide, pH, and specific conductance. Historical results of the metals analyzed for the current monitoring program are provided in Appendix D. All exceedances of the 35 Ill. Adm. 620 Class II groundwater standards are highlighted in the Attachment 1 tables. As seen, the concentrations of metals and cyanide in many wells have consistently been less than the Class II groundwater standards set forth in 35 Ill. Adm. Code 620. Cadmium, chromium, nickel and lead have been the primary metals that have historically been detected at concentrations that have exceeded the Class II groundwater standards. Appendix D also contains historical concentration plots for cadmium, chromium, lead, and nickel.

MW-21 and MW-22 were installed at the site per a USEPA request to characterize the potential for the abandoned underground vault to act as a source of contamination. Results of this work showed that the vault area is a potential source of contamination and is being addressed in this closure plan. Therefore, the sampling objective of these wells was met. Given the above, plus

the location of these wells, they will be removed from the monitoring program for both VOCs and metals.

Aside from the wells used to characterize the vault area, in the last 2 years of monitoring, the wells that have had groundwater exceedances of metal standards include:

- Cadmium - MW-9A and MW-14A
- Chromium - MW-9A, MW-5C, MW-5D, and MW-20C
- Lead - MW-14A
- Nickel - MW-5D

With the exception of MW-5C/5D, and MW-20C, bedrock wells at the site have consistently been below 35 Ill. Adm. Code 620 Class II groundwater standards for cadmium, lead, chromium, and nickel. The only other exception has been a one-time anomalous exceedance at MW-18D for lead (May 1990).

With respect to the perimeter wells MW-17A/17B/17C/17D, MW-18A/18B/18D, and MW-19A/19B/19C/19D, the metals data show the following:

- Cadmium has never exceeded the Class II groundwater standard.
- Chromium exceeded the groundwater standard only once. This occurred in well MW-18A in August of 1992.
- Lead exceeded the groundwater standard only once. This occurred in well MW-18D in May of 1990.

With respect to property boundary wells MW-10A, MW-11A/11C/11E, MW-12A/12B/12C/12E, MW-13A/13B/13C/13E, and MW-15A/15B/15C, cadmium, chromium, nickel and lead have never been detected at concentrations above the 35 Ill. Adm. Code Class II groundwater standards.

Based on the above, it is recommended that metals sampling (cadmium, lead, chromium, and nickel) be reduced to those wells screened in the unconsolidated aquifer that are located at the property boundary (MW-10A, MW-12A, MW-13A, MW-14A, and MW-15A). In addition, it is recommended that well MW-5D and well MW-20C be monitored for metals. Well MW-16C should be monitored for background conditions.

Since metals migrate slowly in groundwater and because trends at the site have shown decreases in metal concentrations over time, the proposed frequency of monitoring for metals will be annual.

If new exceedances of a class II groundwater standard are observed for a metal, the monitoring program can be expanded as necessary to include deeper wells, wells further down gradient, or increased sampling frequencies.

2.7.2.2 VOCs

Appendix D contains the historical monitoring results for VOCs as determined by method SW-846 8010. All exceedances of Class II groundwater standards are highlighted in black. The majority of groundwater exceedances for VOCs have been for four compounds: tetrachloroethene (PCE), trichloroethene (TCE), *cis*-1,2-dichloroethene (cis-1,2,DCE), and vinyl chloride (VC). Appendix D also contains historical concentration plots for these four compounds.

Groundwater Class II standard exceedances for VOCs have occurred in monitoring wells downgradient of the source area and within the vicinity of the building within the last year, and historically. However, there is a distinct pattern to the occurrence of standard exceedances.

First of all, bedrock perimeter wells MW-17C/17D, MW-18C, MW-19C/19D, and well MW-20C have never had VOC exceedances. These wells are screened below a thick deposit of lacustrine/fluvial clay and thus, do not need to be sampled for VOCs. In comparison, wells in the unconsolidated aquifer at these points, including MW-17A/17B, MW-18A/18B and MW-19A/19B have had exceedances of VOC standards. However, the exceedances have been limited primarily to the "B" series wells. There has not been an exceedance in the "A" series wells at MW-17, MW-18, and MW-19 since November of 1992 (nearly 5 years). Accordingly, it is recommended that of the perimeter wells, only MW-17B, MW-18B, and MW-19B be monitored for VOCs and that the VOC parameter list include only PCE, TCE, cis-1,2 DCE and vinyl chloride. Given that there is extensive data showing stable or decreasing trends in VOC concentrations, it is recommended that these wells also be monitored semi-annually for VOCs rather than quarterly.

Monitoring data within the property boundary and downgradient of the lagoons also show a pattern of stable or slowly decreasing concentrations of contaminants. Therefore, the objective of the proposed monitoring program with respect to VOC monitoring at these wells should be to monitor attenuation of contaminants horizontally near the property boundary and vertically at depth within the aquifer. Accordingly, to monitor horizontal attenuation at the compliance boundary, it is recommended that wells MW-14B, MW-13B, MW-12B, and MW-15B be sampled semi-annually for PCE, TCE, cis-1,2, DCE and VC. To monitor vertical attenuation of contaminants, it is recommended that wells MW-5C, MW-11C, MW-6C, MW-7D, MW-8C, and MW-14C be monitored semi-annually for PCE, TCE, cis-1,2 DCE and VC. In addition, well MW-16C should be monitored for background conditions.

Although the frequency of monitoring for VOCs will be semi-annually, VOC results will be reported annually. Thus, the results of two VOC monitoring events will be combined with the results of the annual metals sampling event into a single annual report.

If new exceedances of a class II groundwater standard are observed for VOCs, the monitoring program can be expanded as necessary to include deeper wells or increased sampling frequencies.

2.7.2.3 Monitoring Schedule and Parameters

Figures 2-19 (VOCs) and 2-20 (metals) display a summary of the proposed groundwater monitoring program submitted to the IEPA on May 30, 1997. Tables 2-25 and 2-26 show the wells and parameters in the current monitoroing program. As summarized in Table 2-27, those wells that are not included in the groundwater quality sampling program will be monitored for groundwater levels during each sampling event. VOCs will be monitored semi-annually in February and August. VOC analysis will be limited to PCE, TCE, cis-1,2 DCE and VC (metals will be monitored annually in August). Metal analysis will be limited to cadmium, chromium, lead, and nickel. All wells sampled for VOCs and metals will also be analyzed for field pH, field specific conductance, and field temperature.

With each sampling event, all site monitoring wells will be monitored for groundwater elevations in order to calculate the rate of contaminant movement as required under 35 Ill. Adm. Code 725.193 (d)(4). Groundwater elevation contours will thus be generated on a semi-annual cycle. Groundwater elevation contours, as well as the metal and VOC data, will be submitted in an annual report. Therefore, wells no longer part of the analytical monitoring program will not be abandoned at this time, but will be used for elevation data.

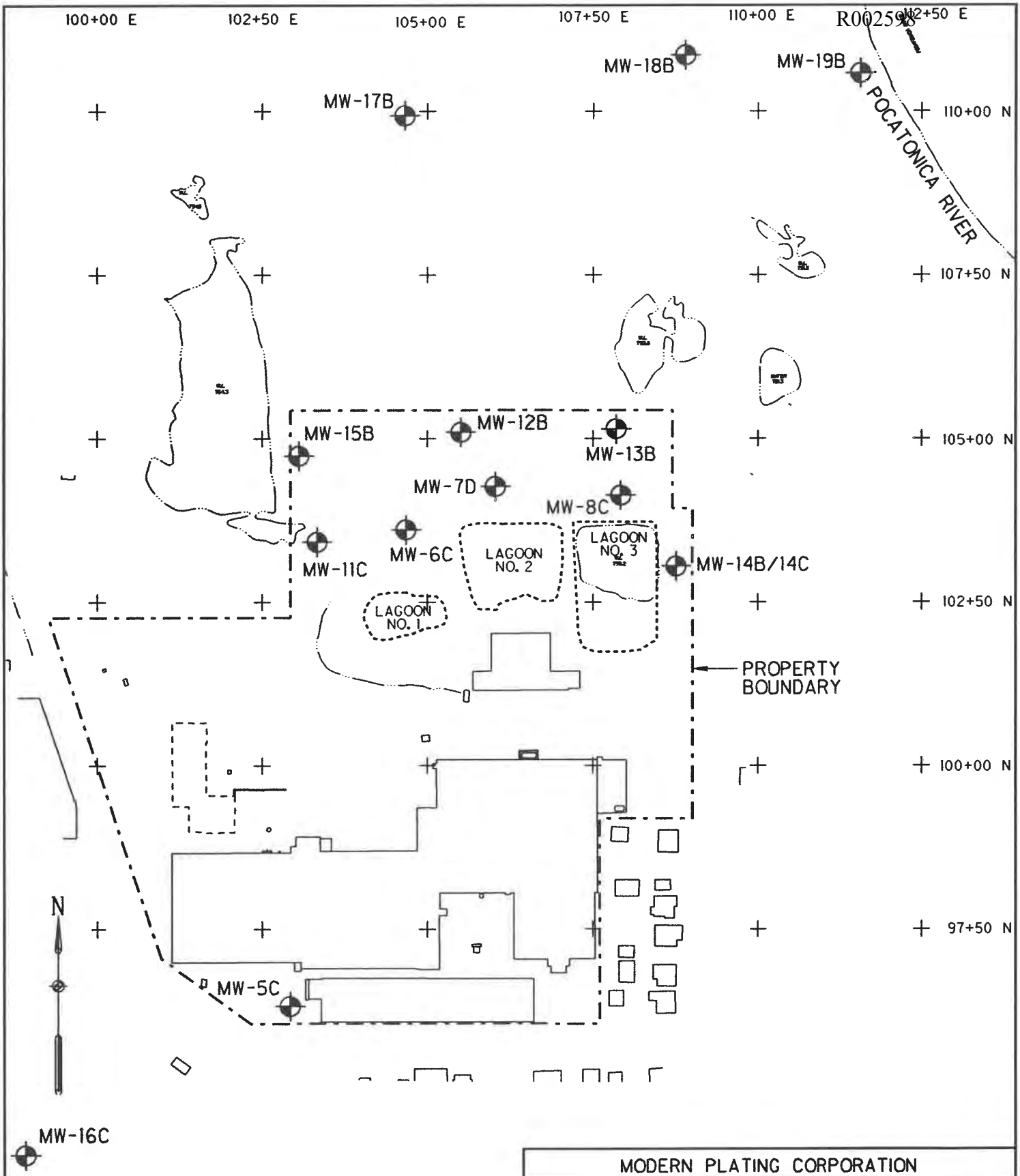
This proposed revised groundwater monitoring program provides a focused and cost-effective means of assessing remediation progress, and will facilitate compliance with 35 Ill. Adm. Code 725.190. The proposed program includes semi-annual VOC monitoring at 14 wells and annual metal monitoring at 8 wells.

2.7.3 Maintenance and Monitoring of Containment System (Subpart N)

2.7.3.1 Action Leakage Rate (IAC 35 s. 725.405)

MPC will propose an action leakage rate as required by IAC 35 s. 725.402 in the final engineering design report. The action leakage rate is the maximum design flow rate that the leakage detection system (LDS) can remove without the fluid head on the bottom liner exceeding 1 ft.

To determine if the action leakage rate has been exceeded, MPC will monitor the LDS monthly and determine an average daily flow rate (gallons per acre per day) for the single landfill sump proposed. This will be reported along with the other environmental monitoring results.



LEGEND

MW-7D — PROPOSED MONITORING WELL FOR SEMI-ANNUAL SAMPLING OF PCE, TCE, cis-1,2 DCE, AND VC

MODERN PLATING CORPORATION

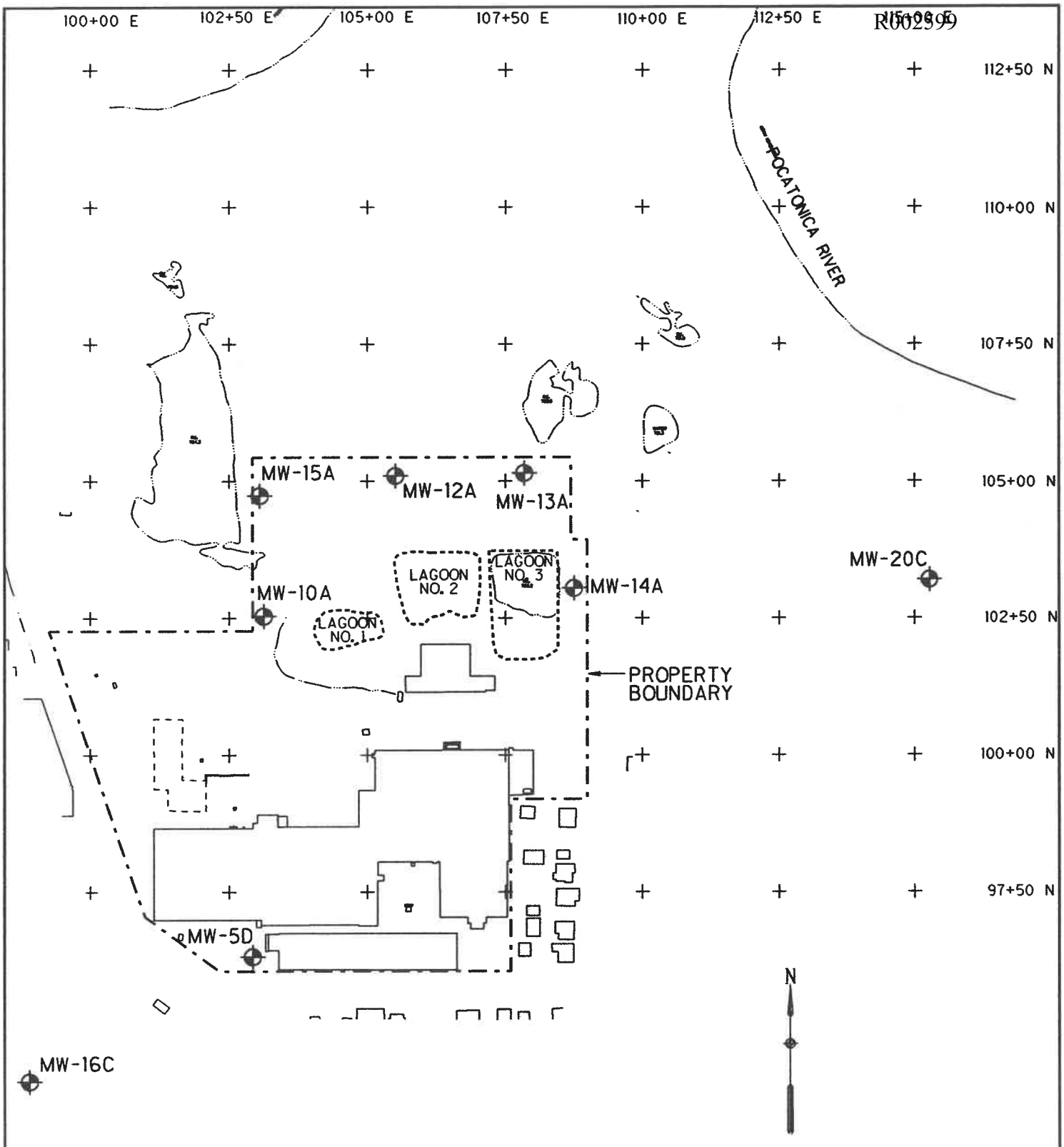
FIGURE 2-19

PROPOSED MONITORING WELLS FOR SEMI-ANNUAL VOC MONITORING

Scale: 0 100' 200'		Date: AUGUST, 1997	
Prepared By: Foth & Van Dyke			By: JRB2

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97M015 93



LEGEND

MW-10 — PROPOSED MONITORING WELL FOR SEMI-ANNUAL SAMPLING OF Cd, Cr, Pb, & Ni

MODERN PLATING CORPORATION

FIGURE 2-20

PROPOSED MONITORING WELLS FOR ANNUAL METALS MONITORING

Scale: 0 125' 250' | Date: AUGUST, 1997

Prepared By: Foth & Van Dyke | By: JRB2

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97M015