



IOWA DEPARTMENT OF NATURAL RESOURCES

Appliance Demanufacturer



PERMIT APPLICATION FORM 50D

☐ New Permit ☒ Permit Renewal # 77 -ADP- 11 - 20 ☐ Permit Amendment

Application for an appliance demanufacturer must be accompanied by the plans, specifications and additional information required by the applicable solid waste rules under Iowa Administrative Code 567 Chapter 118.

Send completed applications with attached information to:

Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste and Contaminated Sites Section
6200 Park Ave Ste 200
Des Moines, IA 50321

For questions concerning this application please contact the Department at (515) 217-0872.

SECTION 1. FACILITY CONTACT INFORMATION

Facility Name: Metro Park East Sanitary Landfill

Address: 12181 NE University Avenue, Mitchellville, IA50169-9571

Phone: (515)-967-2076 **Fax:** (515)-967-7965 **Email:** MMO@MWATODAY.COM

Name of Responsible Official: Michael McCoy

Address: 300 East Locust Street, Suite #100, Des Moines, IA 50309

Phone: (515)-323-6535 **Fax:** (515)-244-9477 **Email:** MMC@MWATODAY.COM

Name of Facility Operator: Colby Reid

Phone: (515)-423-5321 **Fax:** (515)-967-7965 **Email:** CRE@MWATODAY.COM

Site Legal Description: Sanitary Landfill

County Polk

 ¼ or ¼ of ¼ Sec Twp 78 N Range 22 ☒ E ☐ W

Facility Owner: Michael McCoy

Address: 300 East Locust Street, Suite #100, Des Moines, IA 50309

Phone: (515)-323-6535 **Fax:** (515)-244-9477 **Email:** MMC@MWATODAY.COM

Name of Design Engineer (P.E.), if any: OPN Architects

License #: 05219

Address: 100 Court Avenue, Suite #100, Des Moines, IA 50309

Phone: (515)-309-0722 **Fax:** (515)-309-0725 **Email:** tgebard@opnarchitects.com

SECTION 2. SITE INFORMATION

Days and hours of operation of the facility: M-F 6:30AM-4:30PM; Sat. 7AM-2PM (Apr. - Oct.); Sat. 8AM-1PM (Nov. - Mar.)

Open to the public? ☒ Yes ☐ No

Service area of the facility and final disposal destination of components:

Service Area: Polk County

Disposal Facility: Metro Park East Landfill

Type, source and number or weight of appliances to be handled per day, week and year at the facility:

Refrigerators, Freezers, Commercial Coolers, Air-conditioning Units, Dehumidifiers, Gas Water Heaters, Furnaces, Clothes washers and driers, Dishwashers, Microwave ovens, Stoves/Ovens

20 per day

119 per week

6154 per year

Description of the appliance handling and demanufacturing process to be used:

Please reference "Site Operations Plan"

SECTION 3. PERMIT APPLICATION CHECKLIST

Checking the appropriate boxes below certifies that the documents submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. While some of the documents below may have been submitted previously, updated copies of each is required to be provided with each permit renewal application. One (1) copy of each document shall be submitted. If an application is found by the department to be incomplete, it may be denied and returned to the applicant.


Required Documents			Attached
Section A.	Executive Summary (<i>permit renewals only</i>) <ul style="list-style-type: none">Summary of modifications, if any, to the facility that occurred during the current permit cycle.Summary of each special provision of the current permit to determine if it is to remain the same, be revised or be removed.Summary of each permit amendment, if any, that occurred during the current permit cycle to determine if it shall be included with the renewed permit, be revised or be removed.Provide documentation and certification as required for new permit amendment requests and new variance requests from Iowa Administrative Code, if any.		<input checked="" type="checkbox"/>
Section B.	Site Map or Aerial Photograph	IAC 567 118.6(6)	<input checked="" type="checkbox"/>
Section C.	Proof of Ownership/Local Zoning Requirements/100 yr. flood elevation	IAC 567 118.6(15) IAC 567 118.7(3)	<input checked="" type="checkbox"/>
Section D.	Organizational Chart	IAC 567 102.12(5)	<input checked="" type="checkbox"/>
Section E.	Operator Certification	IAC 567 118.6(13)	<input checked="" type="checkbox"/>
Section F.	EPA Refrigerant Recovery Device Certification	IAC 567 118.6(8)	<input checked="" type="checkbox"/>
Section G.	EPA Notification of PCB Activity	IAC 567 118.6(12)	<input checked="" type="checkbox"/>
Section H.	Unique Marking System	IAC 567 118.6(14)	<input checked="" type="checkbox"/>
Section I.	Site Operation Plan	IAC 567 118.6(9)	<input checked="" type="checkbox"/>
Section J.	Contingency Plan	IAC 567 118.6(10)	<input checked="" type="checkbox"/>
Section K.	Site Closure Plan	IAC 567 102.12(10)	<input checked="" type="checkbox"/>
Section L.	Proof of Financial Assurance and Closure Cost Estimate	IAC 567 118.16	<input checked="" type="checkbox"/>

SECTION 4. APPLICANT CERTIFICATION

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I further certify that the construction and operation of the above described facility will be in accordance with the plans, specifications, reports and related communications accepted by the Iowa Department of Natural Resources and on file in its office; and in accordance with conditions imposed in the permit issued by the Iowa Department of Natural Resources.

Signature:  Date: Aug. 8th, 2025
Printed Name: Matthew J. Morris Title: Compliance Coordinator

Section A:

Executive Summary

Executive Summary

2025 Permit Renewal Application – Appliance Demanufacturing Facility

Metro Park East Landfill – 77-ADP-11-20

Metro Waste Authority is submitting this permit renewal application for continued operation of the Appliance Demanufacturing Facility located at Metro Park East Landfill. This submittal includes several updates and organizational improvements to reflect current operations and streamline review.

Key revisions in this application include:

- **Updated Appliance Handling Estimates:** Section 2 of Permit Application Form 50D has been revised to reflect updated quantities of appliances managed per day, week, and year based on operational data.
- **Revised Organizational Chart:** The agency's organizational chart has been updated to reflect current roles and responsibilities.
- **Improved Structure and Formatting:** The permit package has been reorganized to follow the section order of Form 50D for clarity and consistency.
- **Updated Site Map and Aerial Photos:** Visual documentation of the facility has been revised to reflect current site layout and infrastructure.
- **Updated Equipment Certification:** Section F includes updated EPA Refrigerant Recovery Device Certifications and accompanying equipment manuals.
- **Combined Sections H and I:** To remain consistent with the original permit structure, Section H (Unique Marking System) and Section I (Site Operation Plan) are presented as a combined section.
- **Ownership and Zoning Documentation:** Ownership and zoning information from Metro Park East's Solid Waste Disposal Permit (#77-SDP-01-72) has been included to demonstrate compliance with applicable requirements.
- **Financial Assurance and Closure:** As the facility is co-located with a permitted sanitary landfill subject to financial assurance requirements, Section L (Proof of Financial Assurance and Closure Cost Estimate) is not included in this application.

Metro Waste Authority remains committed to safe and compliant operation of its Appliance Demanufacturing Facility. This updated permit package reflects our efforts to maintain accurate records and align with current Iowa DNR expectations.

Section B:
Site Map or Aerial Photograph



East Landfill Site Metro Waste Authority

April 25, 2019





DEMANUFACTURING
BUILDING
DROP-OFF/STAGING
AREA

METRO PARK EAST
SCALE HOUSE

Section C:
Proof of Ownership/Local Zoning
Requirements/100 year flood elevation

CONDITIONAL USE BOUNDARY DESCRIPTION

METRO WASTE AUTHORITY

DES MOINES, IOWA

July 6, 2005

That part of Government Lots 1, 2, 3, 4, 5, 6, 7, & 8 and that part of the Northwest Quarter of the Southeast Quarter (NW ¼ - SE ¼) and that part of the Northeast Quarter of the Southeast Quarter (NE ¼ - SE ¼) all in Section One (1), Township 78 North, Range 22 West of the Fifth P.M., Polk County, Iowa;

described as COMMENCING at the Southwest Corner of the Northwest Quarter of the Southeast Quarter (NW ¼ - SE ¼) of said Section One (1), monumented by a ½ inch reinforcing steel bar with a yellow cap # 15980;

thence North 0°-32'-40" East 1316.91 feet along the west side of the Northwest Quarter of the Southeast Quarter (NW ¼ - SE ¼) of said Section One (1) to the Northwest Corner of said Northwest Quarter of the Southeast Quarter (NW ¼ - SE ¼);

thence North 77°-18'-08" East 147.85 feet to the POINT OF BEGINNING;

thence South 86°-40'-05" West 1,489.80 feet;

thence North 00°-48'-12" East 767.70 feet;

thence North 47°-01'-50" West 519.58 feet;

thence North 02°-14'-23" East 66.54 feet;

thence North 13°-02'-28" East 572.82 feet;

thence North 02°-06'-52" East 555.11 feet;

thence North 10°-26'-46" West 1,135.90 feet;

thence North 77°-47'-57" East 455.90 feet;

thence South 80°-18'-18" East 1,283.46 feet;

thence North 00°-34'-32" East 94.75 feet;

thence North 90°-00'-00" East 1,796.53 feet;

thence South 00°-00'-00" East 4,300.00 feet;

thence North 90°-00'-00" West 1,500.00 feet;

thence North 00°-00'-00" West 191.49 feet;

thence North 27°-48'-57" West 277.02 feet to the POINT OF BEGINNING;

said parcel contains approximately 314.38 Acres and is subject to easements of record.

The west line of the East One-Half (E ½) of said Section One (1) was assumed to bear North 00°-32'-40" East.

END OF DESCRIPTION

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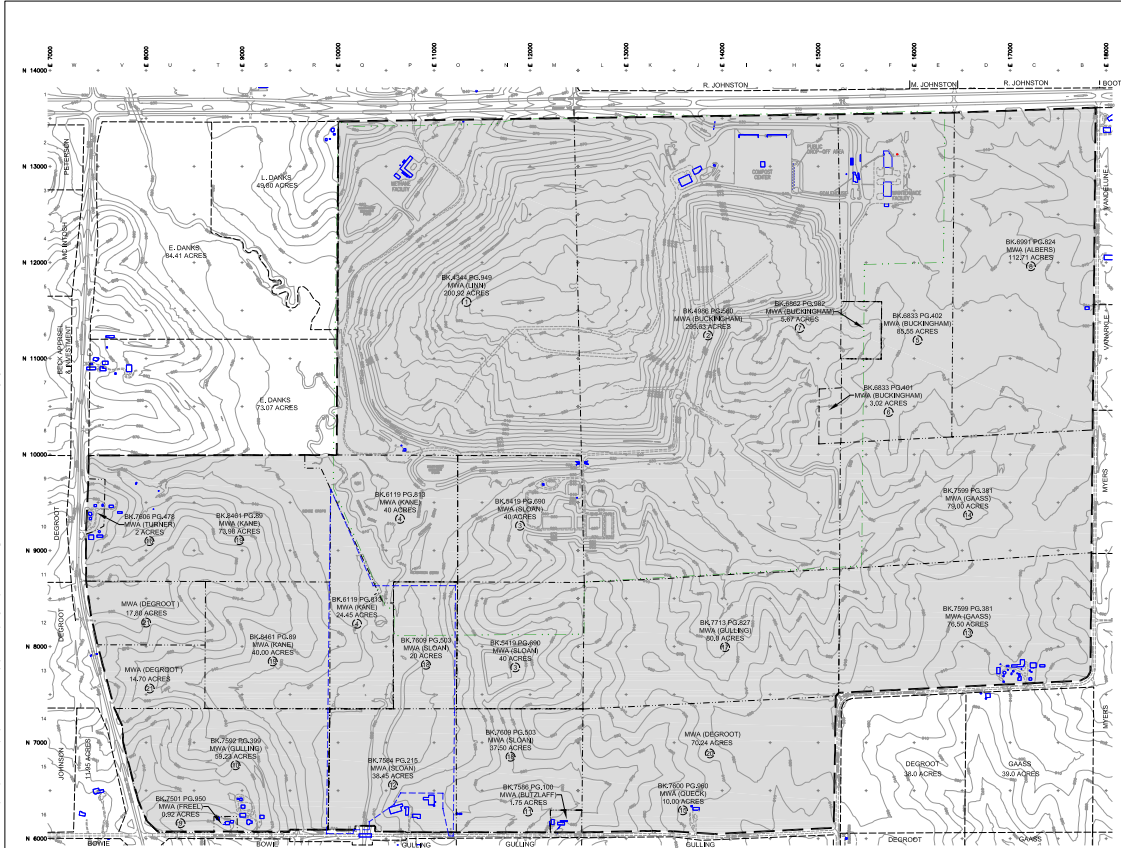
MPE LANDFILL PROPERTY DESCRIPTION

GOVERNMENT LOTS 5, 6, 7 AND 8, A PART OF GOVERNMENT LOTS 1, 2, 3, AND 4, THE NORTH 1/2 OF THE SOUTHEAST 1/4 AND A PART OF THE SOUTHWEST 1/4, BEING IN SECTION 1 AND GOVERNMENT LOTS 6 AND 7, A PART OF GOVERNMENT LOTS 1, 2, AND 8, THE SOUTHEAST 1/4 AND A PART OF THE SOUTHWEST 1/4, BEING IN SECTION 2 AND A PART OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 12, ALL BEING IN TOWNSHIP 78 NORTH, RANGE 22 WEST OF THE 5TH P.M., POLK COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID SECTION 2; THENCE NORTH 89°56'22" WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 OF SECTION 2, A DISTANCE OF 1831.33 FEET; THENCE NORTH 0°03'38" EAST, 40.00 FEET TO THE NORTHERLY RIGHT OF WAY LINE OF SE 6TH AVENUE; THENCE NORTH 89°56'22" WEST ALONG SAID NORTHERLY RIGHT OF WAY LINE, 321.00 FEET; THENCE NORTH 0°03'38" EAST CONTINUING ALONG SAID NORTHERLY RIGHT OF WAY LINE, 60.00 FEET; THENCE NORTH 89°56'22" WEST CONTINUING ALONG SAID NORTHERLY RIGHT OF WAY LINE, 210.00 FEET; THENCE SOUTH 0°03'38" WEST CONTINUING ALONG SAID NORTHERLY RIGHT OF WAY LINE, 40.00 FEET; THENCE NORTH 89°56'22" WEST CONTINUING ALONG SAID NORTHERLY RIGHT OF WAY LINE, 280.00 FEET TO THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SOUTHWEST 1/4 OF SECTION 2; THENCE NORTH 89°54'50" WEST CONTINUING ALONG SAID NORTHERLY RIGHT OF WAY LINE, 400.84 FEET; THENCE SOUTH 0°05'10" WEST, 60.00 FEET TO THE SOUTH LINE OF SAID SOUTHWEST 1/4; THENCE NORTH 89°54'50" WEST ALONG SAID SOUTH LINE, 545.94 FEET; THENCE NORTH 0°05'10" EAST, 33.00 FEET TO SAID NORTHERLY RIGHT OF WAY LINE OF SE 6TH AVENUE; THENCE NORTH 89°54'50" WEST ALONG SAID NORTHERLY RIGHT OF WAY LINE, 241.98 FEET; THENCE SOUTH 0°05'10" WEST, 33.00 FEET TO SAID SOUTH LINE OF THE SOUTHWEST 1/4; THENCE NORTH 89°54'50" WEST ALONG SAID SOUTH LINE, 582.23 FEET TO THE EASTERLY RIGHT OF WAY LINE OF SE CAMP DRIVE; THENCE NORTH 0°05'10" EAST ALONG SAID EASTERLY RIGHT OF WAY LINE, 33.00; THENCE NORTH 45°49'30" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 161.37 FEET; THENCE NORTH 22°40'40" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 247.94 FEET; THENCE NORTH 14°18'29" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 620.46 FEET; THENCE NORTH 1°33'50" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 153.87 FEET; THENCE NORTH 24°23'09" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 209.88; THENCE NORTH 11°31'48" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 491.55; THENCE NORTH 18°41'33" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 410.79; THENCE NORTH 7°14'06" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 452.94 FEET TO THE NORTH LINE OF SAID SOUTHWEST 1/4; THENCE NORTH 3°25'58" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 302.73 FEET; THENCE NORTH 10°17'15" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 152.97 FEET; THENCE NORTH 1°01'20" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 168.00 FEET; THENCE NORTH 0°33'05" WEST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 182.07 FEET; THENCE NORTH 4°35'55" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 400.78 FEET; THENCE NORTH 1°01'20" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 50.00 FEET; THENCE SOUTH 88°58'40" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 30.00 FEET; THENCE NORTH 1°01'20" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 63.41 FEET TO THE NORTH LINE OF SAID GOVERNMENT LOT 8 OF SAID SECTION 8; THENCE NORTH 89°58'03" EAST ALONG SAID NORTH LINE, 2516.43 FEET TO THE NORTHEAST CORNER OF SAID GOVERNMENT LOT 8; THENCE NORTH 0°44'45" EAST ALONG THE WEST LINES OF SAID GOVERNMENT LOTS 6 AND 2, A DISTANCE OF 3472.53 FEET TO THE SOUTHERLY RIGHT OF WAY LINE NE UNIVERSITY AVENUE; THENCE SOUTH 72°54'35" EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 169.67 FEET; THENCE NORTH 89°20'26" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE 1459.59 FEET; THENCE NORTH 75°41'35" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY

LINE, 223.45 FEET; THENCE NORTH 88°48'01" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 768.48 FEET; THENCE NORTH 88°48'01" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 357.23 FEET; THENCE NORTH 82°38'17" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 201.51 FEET; THENCE NORTH 89°45'46" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 400.38 FEET; THENCE SOUTH 79°00'09" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 101.13 FEET; THENCE SOUTH 89°58'29" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 100.58 FEET; THENCE NORTH 88°08'52" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 700.28 FEET; THENCE SOUTH 87°21'33" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.41 FEET; THENCE NORTH 87°32'35" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 509.06 FEET; THENCE NORTH 88°41'03" EAST CONTINUING ALONG SAID EASTERLY RIGHT OF WAY LINE, 1149.98 FEET; THENCE NORTH 89°26'46" EAST, 1502.93 FEET TO THE EAST LINE OF GOVERNMENT LOT 1 OF SAID SECTION 1; THENCE SOUTH 0°30'54" WEST ALONG SAID EAST LINE AND THE EAST LINE OF SAID GOVERNMENT LOT 6 OF SECTION 1, A DISTANCE OF 3337.66 FEET TO THE NORTHEAST CORNER OF SAID GOVERNMENT LOT 7 OF SECTION 1; THENCE SOUTH 0°31'22" WEST ALONG THE EAST LINE OF SAID GOVERNMENT LOT 7, A DISTANCE OF 1320.21 FEET TO THE EAST 1/4 CORNER OF SAID SECTION 1; THENCE SOUTH 0°21'06" WEST ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 OF SECTION 1, A DISTANCE OF 1323.51 FEET TO THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SAID SOUTHEAST 1/4 OF SECTION 1; THENCE SOUTH 87°20'09" WEST ALONG THE SOUTH LINE OF SAID NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 1, A DISTANCE OF 262.87 FEET; THENCE SOUTH 87°06'29" WEST ALONG THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SOUTHWEST 1/4, A DISTANCE OF 27.30 FEET TO THE NORTHEAST CORNER OF PARCEL B OF THE SOUTHWEST 1/4 AS SHOWN ON THE PLAT OF SURVEY RECORDED IN BOOK 10484, PAGE 829; THENCE SOUTH 0°45'40" WEST ALONG THE EAST LINE OF SAID PARCEL B, 1409.81 TO THE SOUTHEAST CORNER OF SAID PARCEL B; THENCE SOUTH 87°22'10" WEST ALONG THE SOUTHERLY LINE OF SAID PARCEL B, 1250.73 FEET; THENCE NORTH 89°55'40" WEST CONTINUING ALONG SAID SOUTHERLY LINE, 49.86 FEET; THENCE NORTH 86°47'29" WEST CONTINUING ALONG SAID SOUTHERLY LINE, 424.96 FEET; THENCE NORTH 89°41'30" WEST CONTINUING ALONG SAID SOUTHERLY LINE, 173.97 FEET; THENCE SOUTH 89°06'10" WEST, CONTINUING ALONG SAID SOUTHERLY LINE, 733.32 FEET TO THE POINT OF BEGINNING AND CONTAINING 1481.32 ACRES (64,526,455 S.F.).

PROPERTY SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.



LEGEND

- GROUND SURFACE CONTOUR
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING
- CONDITIONAL USE BOUNDARY
- APPROXIMATE PERMIT BOUNDARY
- APPROXIMATE PARCEL BOUNDARY
- APPROXIMATE ADJACENT PROPERTY BOUNDARY
- ② PROPERTY ID
- PROPERTY OWNED BY METRO WASTE AUTHORITY
- USDA EASEMENT

METRO WASTE AUTHORITY PROPERTY TABLE

ID	NAME	YEAR PURCHASED	ACRES
1	LINN	1973	200.92
2	BUCKINGHAM	1980	295.63
3	SLOAN	1985	80.0
4	KANE	1989	64.45
5	BUCKINGHAM	1992	88.55
6	BUCKINGHAM	1993	3.02
7	BUCKINGHAM	1993	5.67
8	ALBERS	1994	112.71
9	FREEL	1996	0.92
10	GULLING	1996	59.23
11	BUTZLAFF	1996	1.75
12	SLOAN	1997	38.45
13	GAASS	1997	76.5
14	GAASS	1997	79.0
15	QUECK	1997	10.0
16	TURNER	1997	2.0
17	GULLING	1997	80.0
18	SLOAN	1997	57.5
19	KANE	2000	113.98
20	DEGROOT	2003	70.24
21	DEGROOT	2003	32.50
	TOTAL		1473.02

NOTES:
GROUND SURFACE TOPOGRAPHY SHOWN IS A COMPILATION OF THE 1997 AERIAL SURVEY AND VARIOUS GROUND SURVEYS PERFORMED IN 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, AND 2005.

THE COORDINATE SYSTEM USED FOR THIS MAP IS THE ESTABLISHED METRO PARK EAST COORDINATE SYSTEM.

REFERENCE:
AERIAL SURVEY, M.J. HARDEN ASSOCIATES, INC., SPRING 1997
DATE OF AERIAL PHOTO: 3/6/97
VARIOUS GROUND SURVEYS, BARKER LEMAR & ASSOCIATES, INC., 1997-2005.

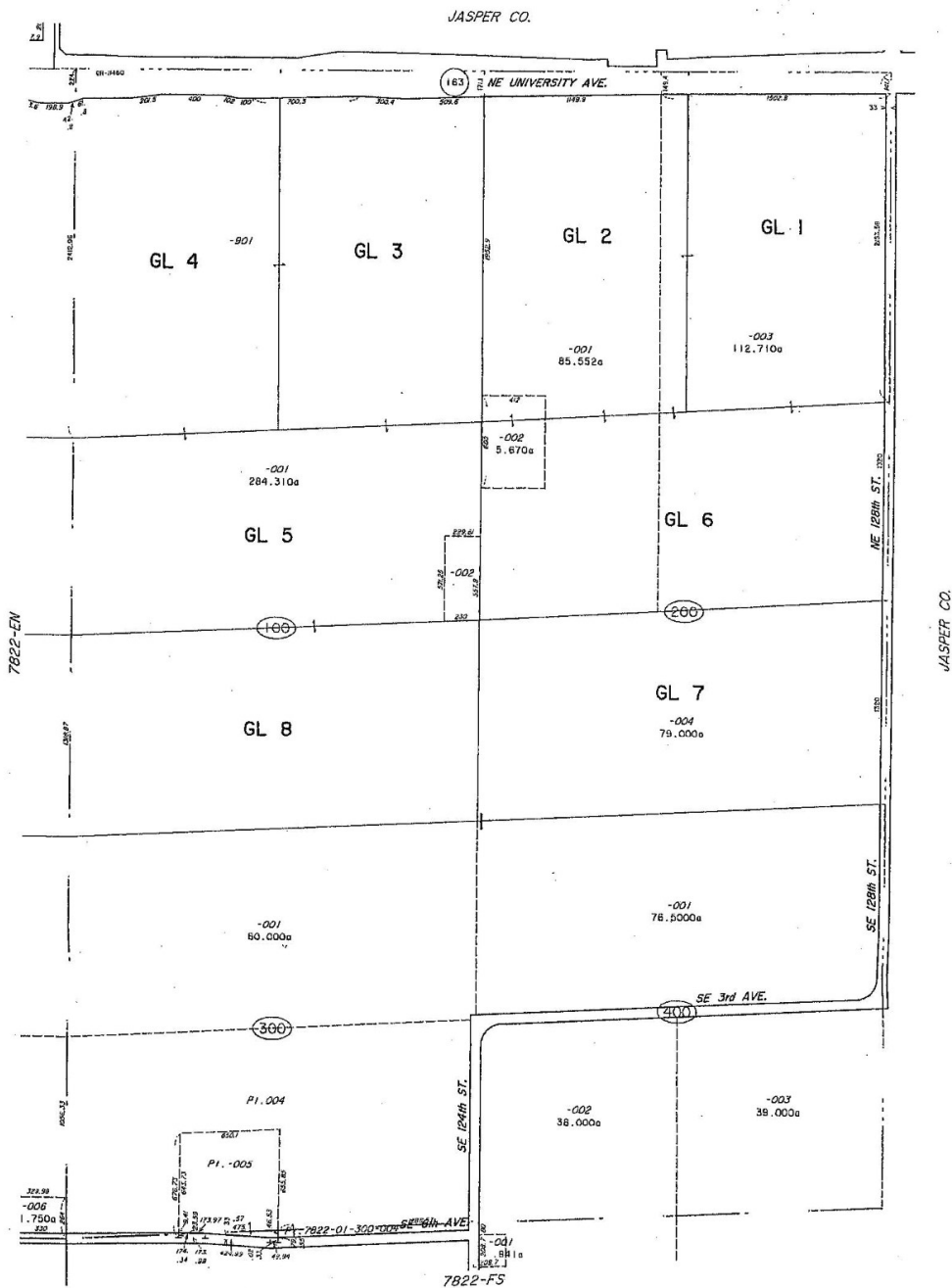
BARKER LEMAR
ENGINEERING CONSULTANTS

HDR

MPE FEATURES MAP
(JANUARY 2006)

M
Metro Waste Authority

DATE
01/24/06
FIGURE
1



GOVERNMENT SURVEY
 TOWNSHIP OR RANGE
 SECTION
 SECTION NUMBER 36
 POLITICAL BOUNDARIES
 COUNTY
 TOWNSHIP
 CORPORATE
 SUBDIVISION
 BOUNDARY
 LOT LINE
 BLOCK NUMBER
 LOT NUMBER
 REFERENCE LETTER
 WATER

TRACT
 PARCEL
 LINE
 BLOCK NUMBER
 NUMBER
 ALIENAGE
 RIGHTS
 RIGHT OF WAY
 HIGHWAY SYMBOLS
 INTERSTATE
 STATE
 COUNTY
 ADJOINING PAGE FEATURES
 MATCH LINE
 DETAIL PAGE NUMBER 7825-139

CAMP TWP.
 SECTION I T.78N. R.22W.
 POLK COUNTY, IOWA

PLOT DATE
 14-MAY-2002

Scale: 1"=800'



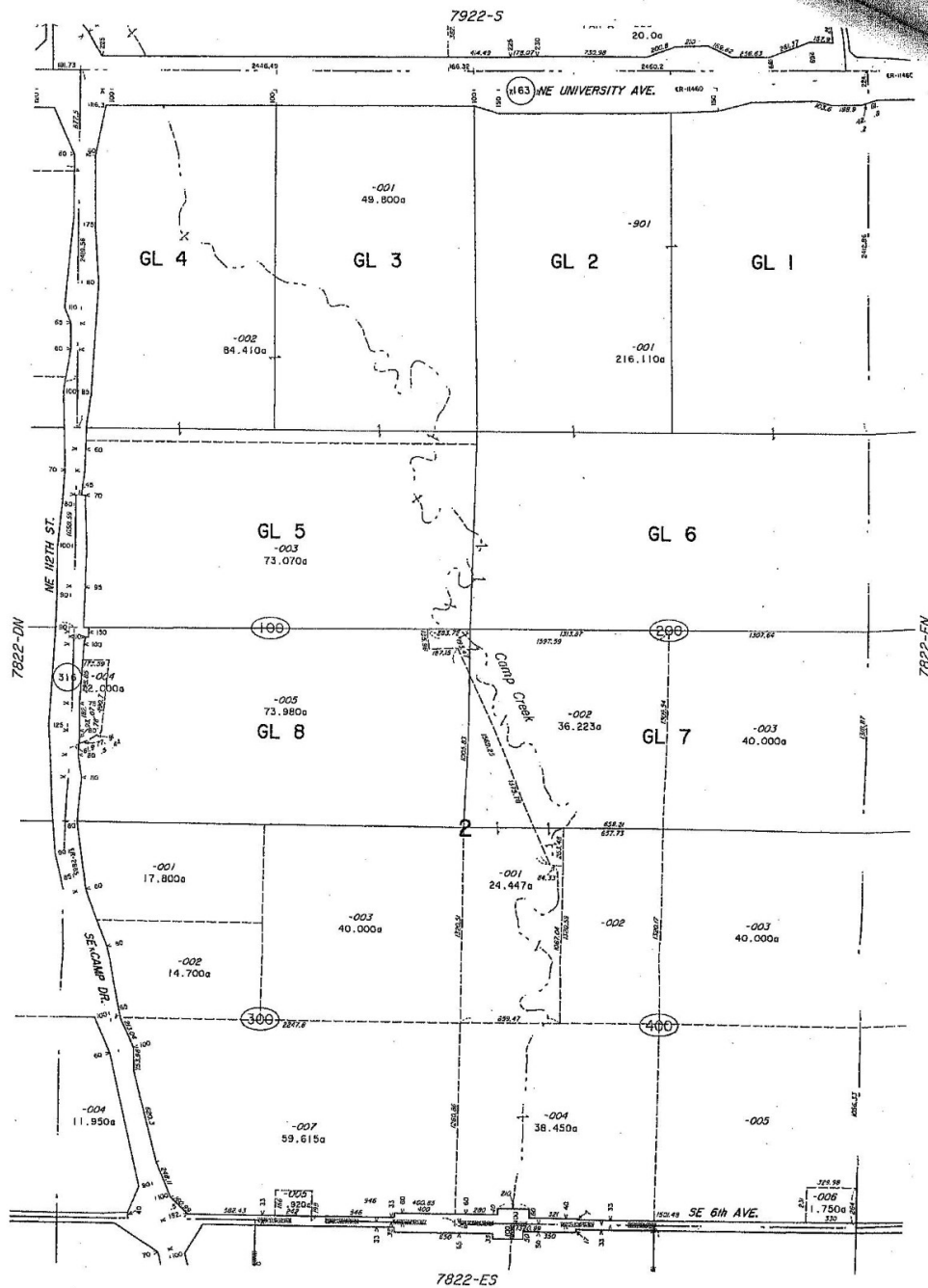
Prepared by:
SIDWELL
 THE SIDWELL COMPANY
 8000 N. 10TH AVE., P.O. BOX 100
 NEW ORLEANS, LA 70133
 Tel: (504) 585-1000 Fax: (504) 585-1001

MAP PAGE LOCATOR

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	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	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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7822-FN

THIS MAP DOES NOT REPRESENT A PROFESSIONAL SURVEY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA DELINEATED HEREIN, EITHER EXPRESSED OR IMPLIED BY POLK COUNTY, THE POLK COUNTY ASSESSOR, OR THEIR EMPLOYEES. THIS MAP IS COMPILED FROM OFFICIAL RECORDS, INCLUDING PLATS, SURVEYS AND RECORDED DEEDS, BUT ONLY CONTAINS THE INFORMATION REQUIRED FOR LOCAL GOVERNMENT PURPOSES. SEE THE RECORDED DOCUMENTS FOR MORE DETAILED LEGAL INFORMATION.



<p>SIDWELL</p> <p>Prepared by: THE SIDWELL COMPANY ENGINEERS, SURVEYORS, & LAND BROKERS 1001 E. 10th St., Des Moines, IA 50319 TEL: (515) 281-1100 FAX: (515) 281-1101</p> <p>MAP PAGE LOCATOR</p> <p>ING W. 23 24 25 26 S. 27 28 29 30 R. 31 32 33 34 T. 35 36 37 38</p> <p>7822-EN</p>	<p>PLOT DATE: 14-MAY-2002</p> <p>Scale: 1"=800'</p> <p>NORTH</p>	<p>CAMP TWP. SECTION 2 T.78N. R.22W. POLK COUNTY, IOWA</p>	<table border="1"> <tr> <td>GOVERNMENT SURVEY</td> <td>TRACT</td> </tr> <tr> <td>TOWNSHIP OR RANGE</td> <td>PARCEL</td> </tr> <tr> <td>SECTION</td> <td>LINE</td> </tr> <tr> <td>SECTION NUMBER</td> <td>BLOCK NUMBER</td> </tr> <tr> <td>POLITICAL BOUNDARIES</td> <td>NUMBER</td> </tr> <tr> <td>COUNTY</td> <td>ACREAGE</td> </tr> <tr> <td>TOWNSHIP</td> <td>RANGE</td> </tr> <tr> <td>CORPORATE</td> <td>RIGHT OF WAY</td> </tr> <tr> <td>SUBDIVISION</td> <td>INTEREST</td> </tr> <tr> <td>BOUNDARY</td> <td>STATE</td> </tr> <tr> <td>LOT LINE</td> <td>COUNTY</td> </tr> <tr> <td>BLOCK NUMBER</td> <td>STATE</td> </tr> <tr> <td>LOT NUMBER</td> <td>COUNTY</td> </tr> <tr> <td>REFERENCE LETTER</td> <td>STATE</td> </tr> <tr> <td>NOTES</td> <td>COUNTY</td> </tr> </table> <p>7822-138</p>	GOVERNMENT SURVEY	TRACT	TOWNSHIP OR RANGE	PARCEL	SECTION	LINE	SECTION NUMBER	BLOCK NUMBER	POLITICAL BOUNDARIES	NUMBER	COUNTY	ACREAGE	TOWNSHIP	RANGE	CORPORATE	RIGHT OF WAY	SUBDIVISION	INTEREST	BOUNDARY	STATE	LOT LINE	COUNTY	BLOCK NUMBER	STATE	LOT NUMBER	COUNTY	REFERENCE LETTER	STATE	NOTES	COUNTY
GOVERNMENT SURVEY	TRACT																																
TOWNSHIP OR RANGE	PARCEL																																
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TOWNSHIP	RANGE																																
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LOT LINE	COUNTY																																
BLOCK NUMBER	STATE																																
LOT NUMBER	COUNTY																																
REFERENCE LETTER	STATE																																
NOTES	COUNTY																																

WARRANTY DEED (CORPORATE)

Know All Men by These Presents:

That Marble Hill Realty Co.

having its principal place of business at Des Moines

County and State of IOWA

lawfully do hereby

offer a valuable Iowa description

in consideration

of the sum of ONE THOUSANT TWO HUNDRED AND NO/100 DOLLARS

in hand paid does hereby CONVEY unto

DES MOINES AND COUNCIL BLUFFS AREA HOUSING AUTHORITY

Grantees Address:

The following described real estate situated in Polk County, Iowa to-wit:

lots 34, 35 and the West 1/2 of lot five (5) in Section 2, Township 78 North, Range 22, West of R. 15th P. M., Iowa, containing 160.00 acres and Government Lots 1, 2 and 3 in the Northeast 1/4 of Section 2, Township 78 North, Range 22, West of R. 15th P. M., Iowa (except public highways)

And to record, indexed and delivered to

Said Grantee for 350

orders and amounts

in cash

in cash

in cash

in cash

POLK COUNTY, IOWA
FILED FOR RECORD

AT 3:40 PM JAN 31 1973

KENNETH W. TENDON, RECORDER

in cash

in cash

in cash

in cash

And said Corporation hereby covenants with said grantees, and its heirs, assigns, and assigns, that it holds and conveys the above described premises to said grantees, and its heirs, assigns, and assigns, free and clear of all liens and encumbrances, whether or not the same are shown on the plat or map, and it covenants to defend the said premises against the lawful claims of all persons claiming an interest therein.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the English language, unless otherwise indicated.

IN WITNESS WHEREOF said corporation has caused this instrument to be signed and sealed this 22 day of January, 1973.

The undersigned, a duly qualified and sworn notary public in and for the State of Iowa, do hereby certify that the foregoing instrument was duly executed and acknowledged before me on the day and date therein expressed.

State of Iowa, Polk County, Iowa
Entered upon transfer books and for taxes
on this 22 day of January, 1973
Attest: in cash
Notary Public, County Auditor

STATE OF IOWA, COUNTY OF POLK

On this 22 day of January, 1973

the State of Iowa, personally appeared Marble Hill Realty Co.

to me personally known, who being sworn duly sworn, did say that they are the President

Secretary

and

and

and

and

and

and

and

and

and

and

WARRANTY DEED

Know All Men by These Presents: That Marjorie Mae Buckingham, a widow
and not remarried, a/k/a Margie Mae Buckingham

of the sum of One Dollar and other valuable consideration in consideration

in hand paid do hereby Convey unto

Des Moines Metropolitan Area Solid Waste Agency

Grantees' Address:

the following described real estate, situated in Polk

County, Iowa, to-wit:

Commencing at the North 1/4 Corner of said Section 1, thence S0°00'E,
along the West Line of the N.E. Fractional 1/4 of said Section 1, and
along the West Line of said Government Lot 2, 2124.0 feet, to the
POINT OF BEGINNING, thence N90°00'E, 412.0 feet, thence S0°00'E,
600.0 feet, thence N90°00'W, 412.0 feet, to a point on the West Line
of the N.E. Fractional 1/4 of said Section 1, said point also being
on the West Line of said Government Lot 6, thence N0°00'E, along the
West Line of the N.E. Fractional 1/4 of said Section 1, and along the
West Line of said Government Lot 6 and the West Line of said Government
Lot 2, 600.0 feet, to the POINT OF BEGINNING, containing 5.67 Acres, more
or less.

AND

All of Government Lot 8 and the East 1/2 of Government Lot 5 in the N.W.
Fractional 1/4 of Section 1T78NR22 West of the 5th P.M. Polk County, Iowa,
EXCEPT a portion of said Government Lot 5 which is described as follows:
Beginning at the S.E. Corner of said Lot 5, thence S86°38'49"W, along
the South Line of said Government Lot 5, 230.0 feet, thence N0°00'E,
571.25 feet, thence N90°00'E, 229.61 feet, to a point that is on the
East Line of said Government Lot 5, thence S0°00'E, along the East
Line of said Government Lot 5, and along the East Line of the N.W.
Fractional 1/4 of said Section 1, 557.8 feet, to the POINT OF BEGINNING,
containing 118.1 acres, more or less.

And the grantors do Hereby Covenant with the said grantees, and successors in interest, that said grantees hold
said real estate by title in fee simple; that they have good and lawful authority to sell and convey the same; that
said premises are Free and Clear of all Liens and Encumbrances Whatsoever except as may be above stated; and
said grantors Covenant to Warrant and Defend the said premises against the lawful claims of all persons whomsoever,
except as may be above stated.

Each of the undersigned hereby relinquishes all rights of dower, homestead and distribution share in and to the
described premises.

Words and phrases herein including acknowledgment hereof shall be construed as in the singular or plural
or feminine gender, according to the context.

Signed this 18 day of January, 19 80.

STATE OF IOWA.

COUNTY OF POLK

ss.

Margie M. Buckingham
Marjorie Mae Buckingham
a/k/a Margie Mae Buckingham

On this 18th day of January, 19 80, before
me, the undersigned, a Notary Public in and for said County and
State, personally appeared Marjorie Mae Buckingham,
a widow and not remarried,
a/k/a/ Margie Mae Buckingham

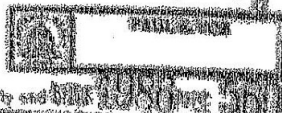
is not known to be the identical persons named in and who
executed the foregoing instrument and acknowledged that they
executed the same as their voluntary act and deed.

Paul E. Ross

Notary Public in and for said County and State

INST. NO. 34810
POLK COUNTY, IOWA
FILED FOR RECORD 200

8:20 JAN 22 1980 AM.
AT DES MOINES
NOTARY PUBLIC
By M. J. [Signature] Deputy



WARRANTY DEED (CORPORATE)

5/8 c
Land

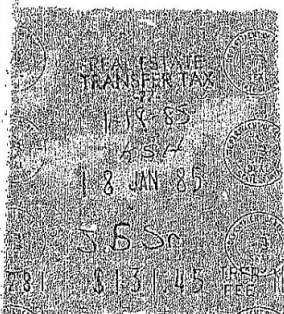
Know All Men by These Presents:

That Sloan Corporation
having its principal place of business at Runnells in Polk
County and State of Iowa, a corporation organized and existing under the
laws of Iowa, in consideration of the sum of One Dollar and other
valuable consideration

in hand paid does hereby CONVEY unto
Des Moines Metropolitan Area Solid Waste Agency

Grantees' Address:
the following described real estate situated in Polk County, Iowa, to-wit:

The East one-half (1/2) of the Government Lot Seven (7)
in Section Two (2) and the Northeast Quarter of the
Southeast Quarter (NE 1/4, SE 1/4) of Section Two (2) all
in Township Seventy-Eight (78) North, Range Twenty-Two
(22) West of the 5th P.M., containing eighty (80) acres.



21 Jan 85
Mary Jussi

Filed to record and returned to County
Auditor this 18 day of Jan 1985
at Polk County, Iowa
Recorder's and Auditor's fee paid
[Signature]
Deputy Recorder

And said Corporation hereby covenants with said grantees, and successors in interest, that it holds said real estate by title in fee simple; that it has good and lawful authority to sell and convey the same; that said premises are free and clear of all liens and encumbrances whatsoever, except as may be above stated; and it covenants to Warrant and Defend the said premises against the lawful claims of all persons whomsoever, except as may be above stated.

Words and phrases herein, including acknowledgement hereof, shall be construed as in the singular or plural number, according to the context.

IN WITNESS WHEREOF said corporation has caused this instrument to be duly executed this 24th
day of October, 1984.

INST. NO. **030595**
POLK COUNTY, IOWA
FILED FOR RECORD
JAN 18 1985
AT 9:55 A.M.
KATIE SUNSHINE-HOLSHORN, Recorder
By *[Signature]* Deputy

SLOAN CORPORATION
By *[Signature]* **James Sloan, Sr.** President
By *[Signature]* **Jack L. Sloan** Sec. Treas.
Title
Title

Runnells, Iowa
(Grantors' Address)

STATE OF Iowa Warren COUNTY, ss
I, Jeana M. Smith, Notary Public in and for said State of Iowa,
do hereby certify that on the 24th day of October, A.D. 1984, before me the undersigned, a Notary Public in and for said State of Iowa, appeared James Sloan, Sr. and Jack L. Sloan, both of whom I personally know, who, being by me duly sworn, did say that they are the President and Secretary-Treasurer respectively of said corporation; that (no seal has been procured by the said corporation; that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors; and that the said James Sloan, Sr. and Jack L. Sloan as such officers, acknowledged the execution of said instrument to be the voluntary act and deed of said corporation, by it and by them voluntarily executed.

Jeana M. Smith Notary Public in and for said State of Iowa.

BOOK 5419 PAGE 630

I. CORPORATE DEED
The Printing Company, 1984

3

INST. NO. **069166**
POLK COUNTY, IOWA
FILED FOR RECORD

AT **JUN 30 1989** A.M.
3:06
TIMOTHY J. BRIEN, Recorder
By **[Signature]** Deputy

Filed to record and delivered to County
Auditor this **26** day of **June**, 1989
at **3:06** o'clock
Recorder's and Auditor's for **26** day of **June**, 1989
[Signature]
Deputy Recorder

WARRANTY DEED

SPACE ABOVE THIS LINE
FOR RECORDER

For the consideration of **Forty-Nine Thousand Three Hundred Sixty-Eight and 50/100**
Dollar(s) and other valuable consideration,
Jerry Ray Kane, a single person,

do hereby Convey to **Des Moines Metropolitan Area Solid Waste Agency**

the following described real estate in **Polk** County, Iowa:

Real estate described on Exhibit "A", both Parcel A and Parcel B,
regarding plats attached.

TRANSFER TAX

TJB

30 JUN 89

1037 \$053.90 A B

Entered upon grantee books and or
taxes on this **30** day of **June**,
1989 My fee **\$5.00** collected by
recorder **[Signature]**

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF **IOWA** SS:
JASPER COUNTY,

Dated: **June 30, 1989**

On this **30th** day of **June**,
19 **89**, before me, the undersigned, a Notary
Public in and for said State, personally appeared
Jerry Ray Kane, a single person,

JERRY RAY KANE **[Signature]** (Grantor)

to me known to be the identical persons named in and who
executed the foregoing instrument and acknowledged
that they executed the same as their voluntary act and
deed.

[Signature]
(Nathan B. Updegraff) Notary Public
(This form of acknowledgment for individual grantor(s) only)

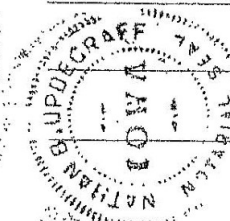


EXHIBIT "A"

Comp 22
7-3-87

Parcel A

An irregular parcel located in part of Government Lot 8, West One Half of Lot 7 and the West One Half of the Northwest Quarter of the Southeast Quarter all in Section 2, in T78N, R22W of the Fifth P.M., Polk County, Iowa (as recorded in Book 5273, Page 378), and more particularly described as follows:

Commencing at the East Quarter corner of Section 2, T78N, R22W:

Thence North 00°26'16" East for a distance of 1318.87 feet along the East line of Government Lot 7 within said Section 2;

Thence South 89°35'03" West a distance of 1307.64 feet along the North line of Government Lot 7 within said Section 2 to the point of beginning;

Thence South 00°49'36" West a distance of 1309.54 feet;

Thence South 89°59'51" West for a distance of 658.21 feet along the South line of Government Lot 7 within said Section 2;

Thence South 00°41'55" West for a distance of 253.48 feet;

Thence South 89°59'56" West for a distance of 84.33 feet;

Thence North 23°45'52" West for a distance of 1569.25 feet;

Thence South 89°54'05" West for a distance of 187.15 feet;

Thence North 5°42'06" West for a distance of 135.96 feet;

Thence North 89°47'14" East for a distance of 283.72 feet to the Northwest corner of Government Lot 7 within said Section 2;

Thence South 89°35'37" East for a distance of 1313.87 feet along the North line of Government Lot 7 within said Section 2 to the point of beginning.

Together with and subject to covenants, easements and restrictions of record. Said property contains 36.223 acres more or less. (See Exhibit A-1 for a survey plat of this property).

15610506

4892

SMALL PROPERTY CONTAINING 30-666 ACRES MORE OR LESS.

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

John H. Farnes, S.E., P.E., L.S.

BOOK 6119 PAGE 814



SHIVE HATTERY ENGINEERS

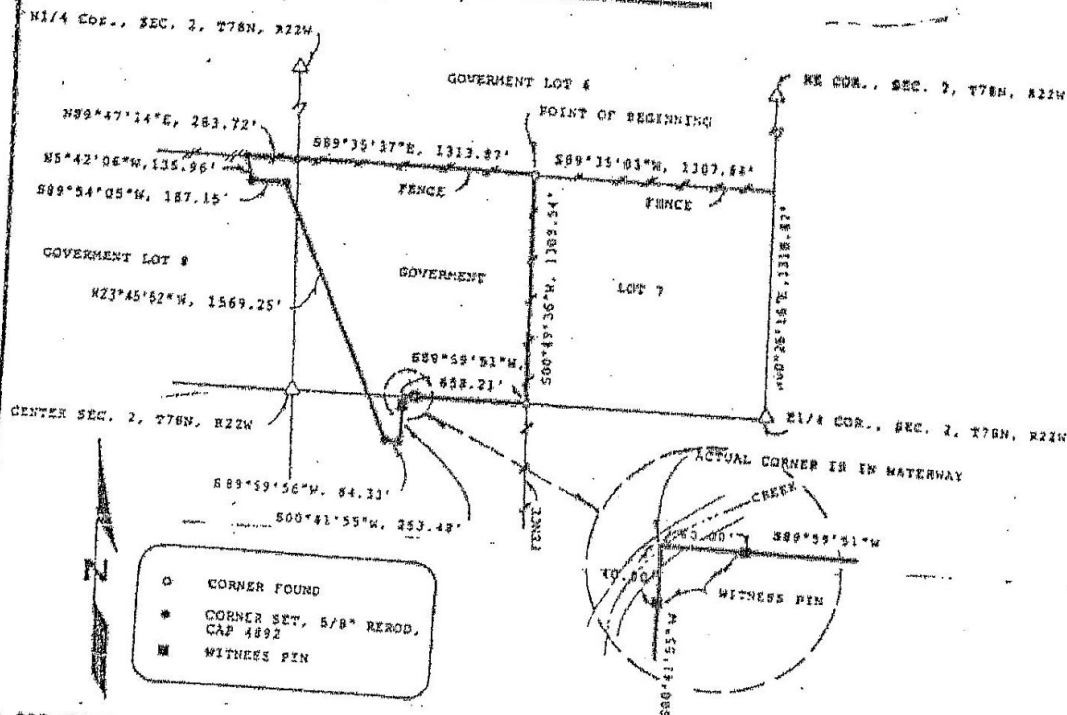
Cedar Rapids • Iowa City • Davenport
Des Moines • Dubuque • Rock Island

Title DES MOINES METRO PARK EAST 36 ACRE SURVEY		Sheet 1 of 1
Date 2-22-87	Scale 1"=500'	Drawing No 457109
Drawn EJS	Field Book 2127	
Reviewed MDF	Revision 3/11/87	

15610507

Survey Plat

EXHIBIT "A-1"



0 200 400 600 1000
SCALE: 1" = 800'

LEGAL DESCRIPTION

AN IRREGULAR PARCEL LOCATED IN PART OF GOVERNMENT LOT 8, WEST ONE HALF OF LOT 7 AND THE WEST ONE HALF OF THE NORTH-EAST QUARTER OF THE SOUTHEAST QUARTER ALL IN SECTION 2, IN T78N, R22W OF THE FIRST & 4TH, POLK COUNTY, IOWA (AS RECORDED IN BOOK 5273, PAGE 378), AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SECTION 2, T78N, R22W;
THENCE NORTH 00°25'15" EAST FOR A DISTANCE OF 1318.87 FEET ALONG THE EAST LINE OF GOVERNMENT LOT 7 WITHIN SAID SECTION 2;
THENCE SOUTH 89°35'03" WEST A DISTANCE OF 1307.64 FEET ALONG THE NORTH LINE OF GOVERNMENT LOT 7 WITHIN SAID SECTION 2 TO THE POINT OF BEGINNING;
THENCE SOUTH 00°19'36" WEST A DISTANCE OF 1309.54 FEET;
THENCE SOUTH 89°59'51" WEST FOR A DISTANCE OF 458.21 FEET ALONG THE SOUTH LINE OF GOVERNMENT LOT 7 WITHIN SAID SECTION 2;
THENCE SOUTH 00°41'55" WEST FOR A DISTANCE OF 253.48 FEET;
THENCE SOUTH 89°59'56" WEST FOR A DISTANCE OF 84.33 FEET;
THENCE NORTH 23°45'52" WEST FOR A DISTANCE OF 1569.25 FEET;
THENCE SOUTH 89°54'05" WEST FOR A DISTANCE OF 187.15 FEET;
THENCE NORTH 5°42'06" WEST FOR A DISTANCE OF 135.96 FEET;
THENCE NORTH 89°47'14" EAST FOR A DISTANCE OF 283.72 FEET TO THE NORTHWEST CORNER OF GOVERNMENT LOT 7 WITHIN SAID SECTION 2;
THENCE SOUTH 89°35'37" EAST FOR A DISTANCE OF 1313.87 FEET ALONG THE NORTH LINE OF GOVERNMENT LOT 7 WITHIN SAID SECTION 2 TO THE POINT OF BEGINNING.

TOGETHER WITH AND SUBJECT TO COVENANTS, EASEMENTS AND RESTRICTIONS OF RECORD.
SAID PROPERTY CONTAINS 36.223 ACRES MORE OR LESS.

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

JOHN M. FANDE SUEB, P.E. & L.S.

DATE

BOOK 6119 PAGE 815



SHIVE HATTERY ENGINEERS

Cedar Rapids • Iowa City • Des Moines
Des Moines • Dubuque • Rock Island

Title			Sheet
DES MOINES METRO PARK EAST 36 ACRE SURVEY			1
Date	2-20-87	Scale	1" = 800'
Drawn	EVG	Field Book	10127
Reviewed	MDR	Revision	3/11/87
Drawing No.			487109

15610507

EXHIBIT "A"

Parcel B

Comp 23.89

An irregular parcel located in part of Government Lot 7 and the West One Half of the Northwest Quarter of the Southeast Quarter all in Section 2, in T78N, R22W of the Fifth P.M., Polk County, Iowa (as recorded in Book 5273, Page 378), and more particularly described as follows:

Commencing at the Center Section 2, T78N, R22W:

Thence North 00°55'59" East for a distance of 1005.83 feet along the West line of Government Lot 7 within said Section 2;

Thence South 23°45'52" East a distance of 1375.78 feet;

Thence North 89°59'56" East for a distance of 84.33 feet;

Thence South 00°41'55" West for a distance of 1067.04 feet;

Thence South 89°59'56" West for a distance of 659.47 feet along the South line of the Northwest Quarter of the Southeast Quarter of said Section 2;

Thence North 00°45'11" East for a distance of 1320.51 feet along the West line of the Southeast Quarter of said Section 2 to the Point of Beginning.

Together with and subject to covenants, easements and restrictions of record. Said property contains 24.447 acres more or less. (See Exhibit "A-2" for a survey plat of this property).

15610508

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

J. M. VANDE STEED, P.E. & C.S.

DATE

BOOK 6119 PAGE 816

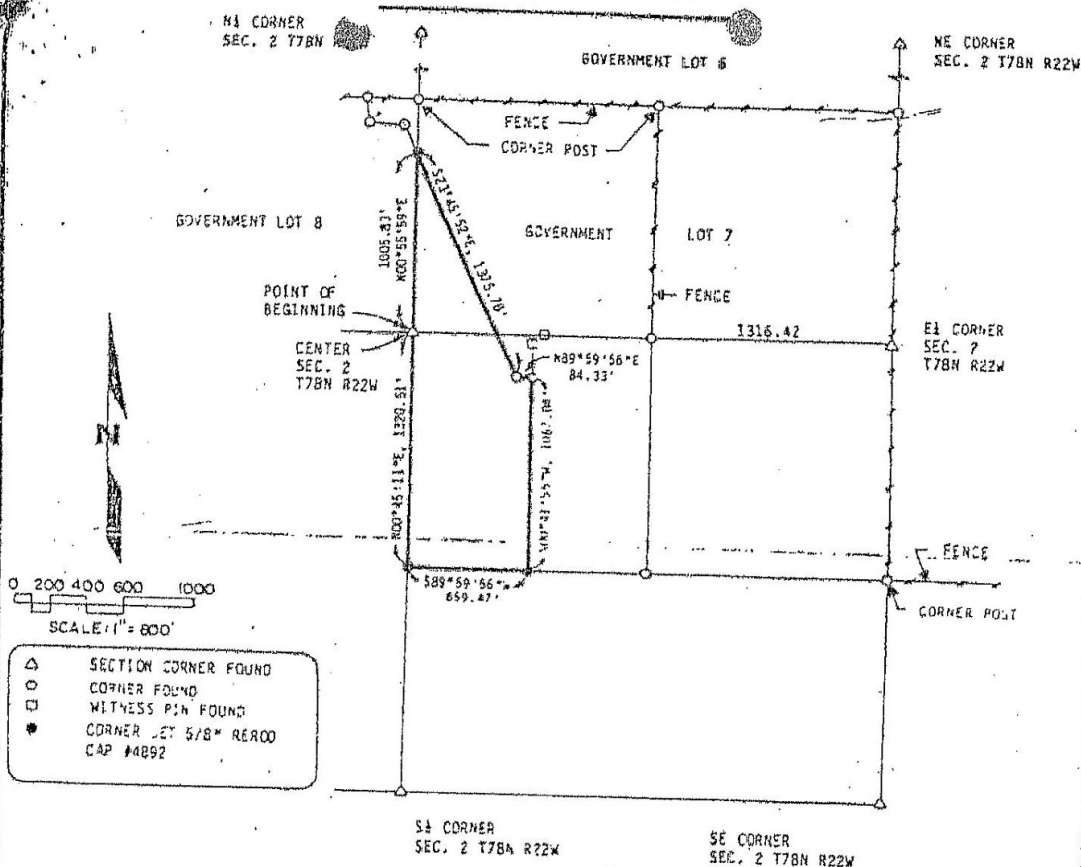


SHIVE HATTERY ENGINEERS

Cedar Rapids • Iowa City • Davenport
Des Moines • Dubuque • Rock Island

Title DES MOINES METRO PARK EAST		Sheet 1 of 1
Date 3/12/87	Scale AS NOTED	Drawing No. 487109-0
Drawn PB	Field Book 40167	
Reviewed MS	Revision	

15610509



LEGAL DESCRIPTION

AN IRREGULAR PARCE, LOCATED IN PART OF GOVERNMENT LOT 7 AND THE WEST ONE HALF OF THE NORTH-WEST QUARTER OF THE SOUTHEAST QUARTER ALL IN SECTION 2, IN T78N, R22W OF THE FIFTY-P.M., POLK COUNTY IOWA (AS RECORDED IN BOOK 371, PAGE 378), AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CENTER SECTION 2, T78N, R22W;

THENCE NORTH 00°55'59" EAST FOR A DISTANCE OF 1005.83 FEET ALONG THE WEST LINE OF GOVERNMENT LOT 7 WITHIN SAID SECTION 2;

THENCE SOUTH 23°45'52" EAST A DISTANCE OF 1375.78 FEET;

THENCE NORTH 89°59'56" EAST FOR A DISTANCE OF 84.33 FEET;

THENCE SOUTH 00°41'55" WEST FOR A DISTANCE OF 1067.04 FEET;

THENCE SOUTH 28°59'56" WEST FOR A DISTANCE OF 659.47 FEET ALONG THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 2;

THENCE NORTH 00°45'11" EAST FOR A DISTANCE OF 1320.51 FEET ALONG THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 2 TO THE POINT OF BEGINNING.

TOGETHER WITH AND SUBJECT TO COVENANTS, EASEMENTS AND RESTRICTIONS OF RECORD.

SAID PROPERTY CONTAINS 24.447 ACRES MORE OR LESS.

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS IN THE STATE OF IOWA.

JOHN M. VANDE STEED, P.E. & L.S.

DATE



SHIVE HATTERY ENGINEERS

Cedar Rapids • Iowa City • Des Moines
Des Moines • Dubuque • Rock Island

Title DES MOINES METRO PARK EAST		Sheet 1 of 1
Date 3/12/87	Scale AS NOTED	Drawing No. 487109-0
Drawn DB	Field Book 48167	Revision
Reviewed MF	Revision	

BOOK 6119 PAGE 817

15610509

THE IOWA STATE BAR ASSOCIATION
Official Form No. 351FOR THE LEGAL EFFECT OF THE USE
OF THIS FORM, CONSULT YOUR LAWYERBRICK, GENTRY, BOWERS, SWARTZ,
STOLIZE, SCHULING & LEVIE, P.C.
DES MOINES, IA 50312FILED FOR RECORD
POLK COUNTY, IOWA

INST # 009502

93 AUG 11 P 2:31

RECORDING FEE 6.00

TIMOTHY J. BRIEN
RECORDER

AUDITOR FEE 5.00

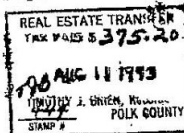
DECLARATION
FILEDPOOR COPY AT
TIME OF RECORDING

WARRANTY DEED

SPACE ABOVE THIS LINE
FOR RECORDERFor the consideration of One (\$1,001)
Dollar(s) and other valuable consideration, Ralph Eugene Buckingham and Adrienne Buckingham,
husband and wifedo hereby convey to Des Moines Metropolitan Area Solid Waste Agencythe following described real estate in Polk County, Iowa:

Government Lots 1, 2 and 6 (except the East 120 acres of said Lots; and also except commencing at the North 1/4 corner of said Section 1, thence S 0°00' E, along the West line of the N.E. Fractional 1/4 of said Section 1, and along the West line of said Government Lot 2, 2124.0 feet, to the Point of Beginning, thence N 90°00' E, 412.0 feet, thence S 0°00' E, 600.0 feet; thence N 90°00' W, 412.0 feet, to a point on the West line of the N.E. Fractional 1/4 of said Section 1, said point also being on the West line of said Government Lot 6, thence N 0°00' E, along the West line of the N.E. Fractional 1/4 of said Section 1, and along the West line of said Government Lot 6 and the West line of said Government Lot 2, 600.0 feet, to the point of Beginning, containing 5.67 acres, more or less, all in Section 1, Township 78 North, Range 52, West of the 5th P.M., Polk County, Iowa; subject to Highways; and

EXCEPT a parcel beginning at the True N 1/4 Corner of said Sec. 1, thence S89°46' 1/2" E, 1149.4 ft. along the north line of Government Lot 2 in the NE 1/4 of Sec. 1; thence S00°39' W, 149.4 ft.; thence S89°08' 1/2" W, 1149.9 ft. to the west line of said Government Lot 2; thence N00°58' E, 171.1 ft. along said west line to the Point of Beginning, containing 4.23 acres of which 0.87 acre is within existing road right of way.



Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgement hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IllinoisDATED: November 10, 1992County, ss: Lake

On this 10th day of November,
19 92, before me, the undersigned, a Notary Public
in and for said State, personally appeared
Ralph Eugene Buckingham and Adrienne
Buckingham, husband and wife

to me known to be the identical persons named in and
who executed the foregoing instrument and acknow-
ledged that they executed the same as their voluntary
act and deed.

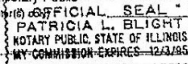
Patricia L. Blight
Patricia L. Blight

(This form of acknowledgement for individual grantors)

Ralph Eugene Buckingham
Ralph Eugene Buckingham (Grantor)

Adrienne Buckingham
Adrienne Buckingham (Grantor)

Witness my hand and the seal of my office this 12 day of Nov,
19 92, at Des Moines, Iowa.
Timothy J. Brien (Grantor)



50376833 PAGE 402

©The Iowa State Bar Association
This Printing April, 1992101 WARRANTY DEED
Revised April, 1989

5

IOWA STATE BAR ASSOCIATION
Official Form No. 106

FOR THE LEGAL EFFECT OF THE USE
OF THIS FORM, CONSULT YOUR LAWYER

NG
BRICK, GENTRY, BOWERS, SWARTZ,
STOLTZ, SCHULING & LEVIE, P.C.
650 36th St.
DES MOINES, IA 50312

FILED FOR RECORD
POLK COUNTY, IOWA

93 AUG 11 P 2:33 R

TIMOTHY J. BRIEN
RECORDER

INST # 009501

RECORDING FEE 6.00

AUDITOR FEE 5.00

QUIT CLAIM DEED

SPACE ABOVE THIS LINE
FOR RECORDER

For the consideration of One (1.00)
Dollar(s) and other valuable consideration,
Ralph Eugene Buckingham and Adrienne Buckingham, husband and wife

do hereby Quit Claim to Des Moines Metropolitan Area Solid Waste Agency

all our right, title, interest, estate, claim and demand in the following described real estate in
Polk County, Iowa:

Commencing at the Southeast corner of Lot 5, thence West 230 feet; thence North
571.25 feet; thence East 229.61 feet; thence South 557.8 feet to the point of
beginning all in Lot 5 of United States Survey Northwest Fractional Quarter of
Section 1, Township 78 North, Range 22 West of the 5th P.M.

Exemption #10.

Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

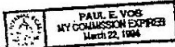
Dated: August 6th, 1993

STATE OF IOWA COUNTY, POLK SS:

On this 6th day of August, 1993, before me the undersigned, a Notary Public in and for said State, personally appeared
Ralph Eugene Buckingham and
Adrienne Buckingham,
husband and wife

to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Paul E. Vos Notary Public
(This form of acknowledgment for individual grantor(s) only)



Ralph Eugene Buckingham (Grantor)

Adrienne Buckingham (Grantor)

(Grantor)

(Grantor)

(Grantor)

(Grantor)

(Grantor)

BOOK 6833 PAGE 401

6

6-5 #9361
 IDWA STATE BAR ASSOCIATION
 Official Form No. 106

RETURN TO:
 VOS LAW FIRM
 BOX 760
 MITCHELLVILLE, IA 50169

INST # 022979
 RECORDING FEE 600
 AUDITOR FEE 500

FOR THE LEGAL EFFECT OF THE USE
 OF THIS FORM, CONSULT YOUR LAWYER

FILED FOR RECORD
 POLK COUNTY, IOWA

93 SEP 27 P 2:51 B

JOSEPH J. BRIEN
 RECORDER

QUIT CLAIM DEED

SPACE ABOVE THIS LINE
 FOR RECORDER

For the consideration of One (\$1.00)
 Dollar(s) and other valuable consideration, Ralph Eugene Buckingham and Adrienne Buckingham,
husband and wife

do hereby Quit Claim to Des Moines Metropolitan Area Solid Waste Agency

all our right, title, interest, estate, claim and demand in the following described real estate in
Polk County, Iowa:

South 600 feet of the North 2724 feet of the West 412 Feet of Lots 2 and 6
 United States Survey of the Northeast Fractional Quarter of Section 1,
 Township 78 North Range 22 West of the 5th P.M., Polk County, Iowa.

This deed is given in correction and confirmation of the deed given by Margie M.
 Buckingham recorded January 22, 1980 but which title was later clouded by an
 erroneous change of title filed December 1, 1987 at Book 5795 Page 957 and this
 deed is intended to clarify and confirm the ownership in the above grantee.

Revenue Stamps Required: None less than \$500.00 consideration

Entered upon transfer books and for
 taxation this 28 day of Sept
 1993 by fee \$-302 collected
 by recorder
Tom Parker
 Auditor

Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

Dated: Sept 21, 1993

STATE OF Illinois SS: State COUNTY,

On this 21 day of Sept, 1993, before me the undersigned, a Notary

Public in and for said State, personally appeared
Ralph Eugene Buckingham and Adrienne
Buckingham, husband and wife

to me known to be the identical persons named in and who
 executed the foregoing instrument and acknowledged
 that they executed the same as their voluntary act and
 deed.

Mary C. Meyer

Notary Public

(This form of acknowledgment for individual grantor(s) only)

Ralph Eugene Buckingham
 Ralph Eugene Buckingham (Grantor)

Adrienne Buckingham
 Adrienne Buckingham (Grantor)

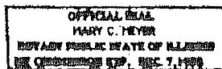
(Grantor)

(Grantor)

(Grantor)

(Grantor)

(Grantor)



6862-982

106 QUIT CLAIM DEED
 Revised September 1988

7

RETURN: JIM BRICK, ATTY. ATTN: SHERRY 550 39TH ST DES MOINES, IA 50312

FILED FOR RECORD
POLK COUNTY, IOWA

94 APR -4 PM 12:28

TIMOTHY J. BRIEN
RECORDER

INST # **080501**
RECORDING FEE 6.00
AUDITOR FEE 5.00

When recorded return to:
Jeffrey E. Lamson
2000 Financial Center
Des Moines, IA 50309

SPACE ABOVE THIS LINE FOR RECORDER

DECLARATION
FILED

WARRANTY DEED
(CORPORATE GRANTOR)

For the consideration of One Dollar (\$1) and other valuable consideration, Nineteen-Sixty Corporation, a corporation organized and existing under the laws of Iowa, does hereby Convey to Metro Waste Authority the following described real estate in Polk County, Iowa:

The East 120 acres of Government Lots One (1), Two (2) and Six (6) in Section 1, Township 78 North, Range 22, West of the 5th P.M., Polk County, Iowa except that part which was condemned by the State of Iowa as reflected in Book 6444, Page 388, in the Record Book of the Polk County Recorder's Office.

REAL ESTATE TRANSFER
TAX PAID \$ 486.40
APR 04 1994
TIMOTHY J. BRIEN, Recorder
POLK COUNTY
STAMP #

The Corporation hereby covenants with grantees, and successors in interest, that it holds the real estate by title in fee simple; that it has good and lawful authority to sell and convey the real estate; that the real estate is free and clear of all liens and encumbrances, except as may be above stated; and it covenants to Warrant and Defend the real estate against the lawful claims of all persons, except as may be above stated.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number; according to the context.

DATED: 30 March 94

NINETEEN-SIXTY CORPORATION

Entered upon transfer books and for
taxation this 4 day of April
1994, for 500 collected
by comptroller
Auditor

By Harold F. Albers
Harold F. Albers, President

By Harold F. Albers
Harold F. Albers, Secretary

STATE OF FLORIDA.

COUNTY OF Pinellas } SS:

On this 30 day of March, 1994, before me a Notary Public in and for said county, personally appeared Harold F. Albers, to me personally known, who being by me duly sworn did say that that person is President and Secretary of said Nineteen-Sixty Corporation, that (the seal affixed to said instrument is the seal of said or no seal has been procured by the said) corporation and that said instrument was signed and sealed on behalf of the said corporation by authority of its board of directors and the said Harold F. Albers acknowledged the execution of said instrument to be the voluntary act and deed of said corporation by it voluntarily executed.

Mary F. Carpenter
Notary Public in the State of Florida
MARY F. CARPENTER

BOOK 6991 PAGE 824

8

THE IOWA STATE BAR ASSOCIATION
Official Form No. 101

FOR THE LEGAL EFFECT OF THE USE OF
THIS FORM, CONSULT YOUR LAWYER

FILED FOR RECORD
POLK COUNTY, IOWA

RETURN TO
CLIFFORD SWARTZ
550 39th Street
Des Moines, IA 50312

96 OCT 11 P 2:39 INST # 026269
TIMOTHY J. BRIEN
RECORDING FEE 600
AUDITOR FEE 500

Preparer Information Clifford S. Swartz 550 - 39th St., No. 200 Des Moines, IA 50312 515-274-1450
Individual's Name Street Address City Phone

SPACE ABOVE THIS LINE
FOR RECORDER

WARRANTY DEED

For the consideration of One and no/100 (\$1.00)
Dollars) and other valuable consideration,
James Donald Freel and Madaline J. Freel, husband and wife,

do hereby Convey to
Metro Waste Authority, an Iowa corporation

the following described real estate in Polk County, Iowa:

A tract of ground described as beginning at a point 946 feet West and 33 feet North of the Southeast corner of the Southeast 1/4 of the Southwest 1/4 of Section 2, Township 78 North, Range 22, West of the 5th P.M., Polk County, Iowa, thence due North 166 feet, thence West 242 feet, thence South 166 feet, thence East 242 feet to the point of beginning.

2-76 32
10-14-16

DECLARATION
FILED

REAL ESTATE TRAH 279.20
POLK CO 1
TAX PD 279.20
TIM 279.20
BRIEN... RECORDER 5 CLK 005
0329 0000-000 1:15PM 10/11/96

14 Oct
1996
1:15 PM
Timothy J. Brien
Recorder

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA Dated: Oct. 11, 1996

On this 11th day of OCTOBER 19 96, before me, the undersigned, a Notary Public in and for said State, personally appeared James Donald Freel (Grantor)

James Donald Freel and Madaline J. Freel, husband and wife, (Grantor)

to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed. (Grantor)

Clifford S. Swartz Notary Public (Grantor)

(This form of acknowledgment for individual grantors only)

IOWA STATE BAR ASSOCIATION
 Official Form No. 101 14765

FOR THE LEGAL EFFECT OF THE USE OF THIS FORM, CONSULT YOUR LAWYER.

FILED FOR RECORD
 POLK COUNTY, IOWA
 97 MAR 14 P 3:12
 TIMOTHY J. BRIEN
 RECORDER

FILED FOR RECORD
 POLK COUNTY, IOWA
 96 DEC 23 P 2:38
 TIMOTHY J. BRIEN
 RECORDER

INST # 044424
 RECORDING FEE 11.00
 AUDITOR FEE 5.00

RETURN TO:
 Information Clifford S. Swartz
 Individual's Name 550 39th Street Suite 200 Des Moines, IA 50312 515-274-1450
 Street Address City Phone

WARRANTY DEED

For the consideration of One and no/100 (\$1.00)
 Dollar(s) and other valuable consideration,
Lyle L. Gulling and Marlene J. Gulling, husband and wife,
 do hereby Convey to
Metro Waste Authority, an Iowa Corporation
 the following described real estate in POLK County, Iowa:

INST # 061989 See attached Exhibit "A"
 RECORDING FEE 16.00
 AUDITOR FEE 5.00

INST # 053669
 RECORDING FEE 16.00
 AUDITOR FEE 5.00

REAL ESTATE TRAN
 POLK CO
 TAX PD 19
 TIM
 BRIEN... RECORDER 5
 0627 0000-000 CLK 000
 1:14PM 12/23/96

This Corrected Warranty Deed is refiled and corrected to show an additional description that should have been included in the legal description. No additional consideration given. Correction is underlined in first paragraph of Exhibit "A".

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA Dated: 12-23-96
 COUNTY, POLK SS:
 On this 23 day of December, 1996, before me, the undersigned, a Notary Public in and for said State, personally appeared
Lyle L. Gulling and
Marlene J. Gulling, husband and wife
 to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Clifford S. Swartz
 Notary Public
 (This form of acknowledgment for individual grantors only)

Entered upon transfer books and for location this 12 day of December, 1996, My fee \$16.00 collected by recorder,
 MICHAEL A. MAURO
 Auditor

1180
 1377
 148
 500.00
 2nd. Refile
 17C
 317961

FILED FOR RECORD
 POLK COUNTY, IOWA
 97 MAR 14 P 3:12
 TIMOTHY J. BRIEN
 RECORDER

BK7592PG399

Exhibit "A"

The East One-Half (E1/2) of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) and the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) Except the North One Hundred Sixty-six (N 166) feet of the South One Hundred Ninety-nine (S 199) feet of the West Two Hundred Forty-two (W 242) feet of the East One Thousand One Hundred Eighty-eight (E 1,188) feet and Except North Twenty-seven (N 27) feet of the South Sixty (S 60) feet of the East Four Hundred (E 400) feet of the South One-Half (S1/2) of the Southwest Quarter (SW1/4) East of Highway less public highways. Section 2, Township Seventy-eight (78), Range Twenty-two (22), West of the 5th P.M., Polk County Iowa; and

A parcel of land in the Southwest Quarter (SW1/4) of Section 2, Township 78 North, Range Twenty-two (22) West of the 5th P.M., Polk County, Iowa lying on the northeasterly side of part of the following described centerline of Primary Road No. 316, as shown on Right-of-Way Plat Exhibit "A-1" attached hereto which by this reference is made a part hereof.

The centerline of Primary Road No. 316, designated by station points One Hundred (100) feet apart, numbered consecutively from southeast to northwest is described as follows: Beginning at Sta. 277+60.1, a point 692.9 feet east of the Southwest (SW) Corner of said Section Two (2) on the south line of the Southwest Quarter (SW1/4) thereof; thence North Fourteen Degrees (14°) Twenty-nine (29) minutes West, 1439.9 feet to Sta. 292+00.

Said parcel is described as follows: All that part of the West One-Half (W1/2) of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4) of said Section Two (2) lying easterly of a line beginning at a point 65.5 feet normally distant northeasterly from said centerline on the east line of said West One-Half (W1/2) of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4); thence northwesterly parallel to said centerline to a point normal to Sta. 287+50; thence to a point One Hundred (100) feet normally distant northeasterly from Sta. 289+00; thence to a point Sixty-five (65) feet normally distant northeasterly from said centerline on the north line of said West One-Half (W1/2) of the Southwest Quarter (SW1/4) of the Southwest Quarter (SW1/4).

2-78-22
3-17-47

BK7592PG400

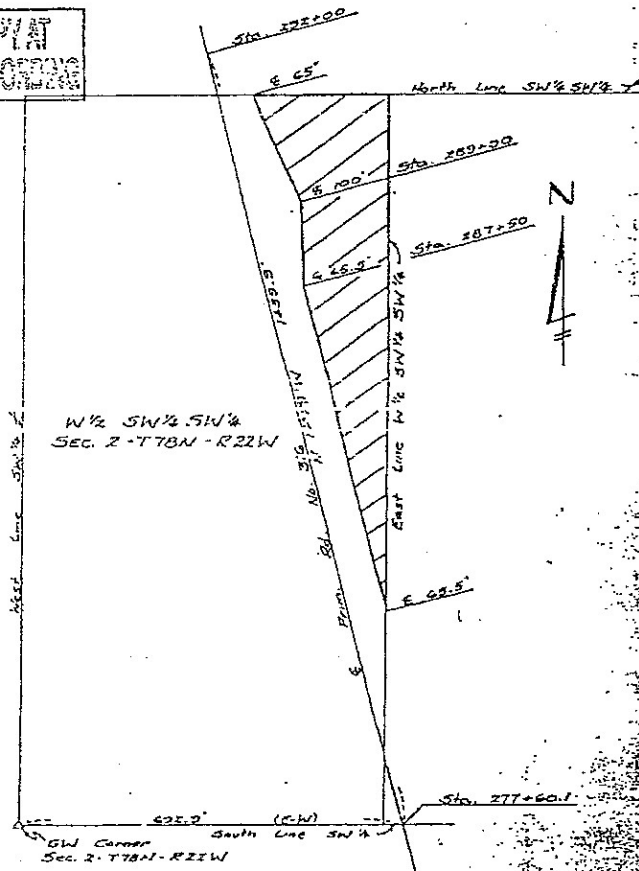
EXHIBIT A-1

IOWA STATE HIGHWAY COMMISSION
RIGHT OF WAY PLAT

COUNTY POLK STATE CONTROL NO. _____
PROJECT NO. P-1051 & FN-316-1(2)-21-77 PARCEL NO. _____
SECTION 2 TOWNSHIP 78 N RANGE 22 W
ROW-FEE AC, EASE AC, EXCESS-FEE 2.6 AC
ACQUIRED FROM MARY MURROW NEVEN

SOLD TO: Lyle L. Gulling and Marlene Joy Gulling as joint tenants with full rights of survivorship and not as tenants in common

FOUR QUARTERS
TIME OF RECORDING



4311

DATED MAY 12, 1977

BK7592PG401

BK7566PG104

IOWA STATE BAR ASSOCIATION 14765
FOR THE LEGAL EFFECT OF THE USE OF THIS FORM, CONSULT YOUR LAWYER

5-11378

REV 379.20

FILED FOR RECORD
POLK COUNTY, IOWA

96 DEC 23 P 1:10 P

TIMOTHY J. BRIEN
RECORDER

INST # 044340

RECORDING FEE 11.00

AUDITOR FEE 5.00

RETURN TO:

Preparer Information Clifford S. Swartz 550 - 39th St. Des Moines, IA 50312 515-274-1450
Individual's Name Street Address City Phone

CORRECTED 1077

SPACE ABOVE THIS LINE FOR RECORDER

WARRANTY DEED

For the consideration of One and no/100 (\$1.00)
Dollar(s) and other valuable consideration,
John H. Butzlaff, a single person,

do hereby Convey to
Metro Waste Authority, an Iowa corporation,

the following described real estate in Polk County, Iowa:

See attached Exhibit "A".

FILED FOR RECORD
POLK COUNTY, IOWA
96 MAR 5 A 11:27 A
TIMOTHY J. BRIEN
RECORDER

INST # 059668
RECORDING FEE 11.00
AUDITOR FEE 5.00

Entered upon register books and for
taxation this 23rd day of Dec
1996. My fee \$5.00 collected
by recorder
Timothy J. Brien

6.00
92 My fee \$5.00 collected
by recorder
Timothy J. Brien

REAL ESTATE TRAN
POLK CO
TAX PD JB
TIM
BRIEN, RECORDER 7
0606 0000-000

279.20
1
\$279.20
279.20

This Corrected Warranty Deed is refilled and corrected to show an additional description that should have been included in the legal description. No additional consideration given.

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA Dated: 12-23-96

On this 23 day of December, 1996, before me, the undersigned, a Notary Public in and for said State, personally appeared John H. Butzlaff, a single person,

John H. Butzlaff (Grantor)

to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Clifford S. Swartz
Notary Public

(This form of acknowledgment for individual grantor(s) only)

(Grantor)
(Grantor)
(Grantor)

11

IOWA STATE BAR ASSOCIATION
Form No. 101 14765

FOR THE LEGAL EFFECT OF THE USE OF
THIS FORM, CONSULT YOUR LAWYER

FILED FOR RECORD
POLK COUNTY, IOWA

96 DEC 23 P 1:10

INST # 044340

TIMOTHY J. BRIEN
RECORDER

RECORDING FEE 11.00

AUDITOR FEE 5.00

RETURN TO:

Preparer
Information Clifford S. Swartz

550 - 39th St.

Des Moines, IA 50312 515-274-1450

CORRECTED 1077

SPACE ABOVE THIS LINE
FOR RECORDER

WARRANTY DEED

For the consideration of One and no/100 (\$1.00)
Dollar(s) and other valuable consideration,

John H. Butzlaff, a single person,

do hereby Convey to

Metra Waste Authority, an Iowa corporation,

the following described real estate in Polk County, Iowa:

See attached Exhibit "A".

INST #

059668

RECORDING FEE 11.00

AUDITOR FEE 5.00

Entered upon recorder books and for
taxation this 23rd day of Dec
1996. My fee \$16.00 collected
by recorder

96 DEC 23 P 1:10
T. J. Brien
Recorder

REAL ESTATE TRAN
POLK CO
TAX PD
TJB
BRIEN, RECORDER 7
0606 0000-000

279.20

\$279.20
279.20

CLK 007

12/23/96

This Corrected Warranty Deed is refiled and corrected to show an additional description
that should have been included in the legal description. No additional consideration
given.

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real
estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate;
that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and
grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as
may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and
distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or
plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA

Dated: 12-23-96

SS:

POLK COUNTY

On this 23 day of December,
19 96, before me, the undersigned, a Notary
Public in and for said State, personally appeared
John H. Butzlaff, a single person,

John H. Butzlaff

(Grantor)

to me known to be the identical persons named in
and who executed the foregoing instrument and
acknowledged that they executed the same as their
voluntary act and deed.

Clifford S. Swartz
1-15-98

Notary Public

(Grantor)

(Grantor)

(This form of acknowledgment for individual grantor(s) only)

THE IOWA STATE BAR ASSOCIATION
Official Form No. 101 14765

FOR THE LEGAL EFFECT OF THE USE OF
THIS FORM, CONSULT YOUR LAWYER

FILED FOR RECORD
POLK COUNTY, IOWA

97FEB 28 P 3:01.9

TIMOTHY J. BRIEN
RECORDER

INST # 058943
RECORDING FEE 6.00
AUDITOR FEE 5.00

Preparer Information RETURN TO: S. Swartz 550 39th St., No. 200 Des Moines, IA 50312 274-1450
Individual's Name Street Address City Phone



WARRANTY DEED

SPACE ABOVE THIS LINE
FOR RECORDER

For the consideration of One and no/100 (\$1.00)
Dollar(s) and other valuable consideration,

Frank F. Sloan and Bonnie L. Sloan, husband and wife,

do hereby Convey to

Metro Waste Authority

the following described real estate in Polk County, Iowa:

The Southwest 1/4 of the Southeast 1/4 of Section 2, Township 78, Range 22 West of the 5th P.M., Polk County, Iowa, less 0.75 acres, more or less for a road; except beginning 33 feet North of the South 1/4 corner; thence North 27 feet; thence East 280 feet; thence North 40 feet thence East 210 feet; thence South 60 feet; thence East 321 feet; thence South 7 feet; thence West 811 feet to the point of beginning, containing 0.55 acres more or less exclusive of present established highways.

Entered upon transfer books and for
taxation this 2 day of Feb 1997
1st day of Feb 1997 collected
by recorder
Timothy J. Brien

REAL ESTATE TRAN 1621.40
POLK CO 1
TAX PD 1621.40
TIM 1621.40
BRIEN... RECORDER 2 CLK 002
0675 0000-000 1:48PM 2/28/97

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA Dated: February 28, 1997

On this 28th day of February 19 97, before me, the undersigned, a Notary Public in and for said State, personally appeared Frank F. Sloan and Bonnie L. Sloan, husband and wife.

to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Notary Public (Grantor)

(This form of acknowledgment for individual grantor(s) only)

THE IOWA STATE BAR ASSOCIATION
Official Form No. 101

14785

FOR THE LEGAL EFFECT OF THE USE OF
THIS FORM, CONSULT YOUR LAWYERFILED FOR RECORD
POLK COUNTY, IOWA

97 MAR 26 P 1:57

TIMOTHY J. BRIEN
RECORDERINST # 064592
RECORDING FEE 6.00
AUDITOR FEE 5.00

Preparer
Information Clifford S. Swartz 550 39th, No. 200 DSM, IA 50312 515-274-1450
Individual's Name Street Address City Phone



WARRANTY DEED

SPACE ABOVE THIS LINE
FOR RECORDER

For the consideration of One and no/100 (\$1.00)
Dollar(s) and other valuable consideration,
Harry Edward Gaass, single,

do hereby Convey to

Metro Waste Authority, an Iowa corporation,the following described real estate in Polk County, Iowa:

Lot 7 of the United States Survey and the North Half of the Southeast
Quarter all in Section 1, Township 78 North, Range 22, West of the 5th
P.M., in Polk County, Iowa, subject to legally established highways.

Entered upon transfer books and for
taxation this 27 day of March,
1997, by me Clifford S. Swartz
Recorder.

MICHAEL A. MAURO
Auditor

REAL ESTATE TRAN
POLK CO
TAX PD TSB
TIN
BRIEN... RECORDER 2
0659 0000-000

1159.20
1
\$1159.20
1159.20
CLK 002
1:22PM 3/26/97

DOCUMENT
FILED

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IowaDated: 3-26-97

SS:

On this 26 day of March,
19 97, before me, the undersigned, a Notary
Public in and for said State, personally appeared
Harry Edward Gaass, single

Harry Edward Gaass
Harry Edward Gaass (Grantor)

(Grantor)

to me known to be the identical persons named in
and who executed the foregoing instrument, and
acknowledged that they executed the same as their
voluntary act and deed.

(Grantor)

Clifford S. Swartz
March 1-15-97
Notary Public

(Grantor)

(This form of acknowledgment for individual grantor(s) only)

13

THE IOWA STATE BAR ASSOCIATION
Official Form No. 101

14765

FOR THE LEGAL EFFECT OF THE USE OF
THIS FORM, CONSULT YOUR LAWYERFILED FOR RECORD
POLK COUNTY, IOWA

97 MAR 26 P 1:57P

TIMOTHY J. BRIEN
RECORDERINST # 064592
RECORDING FEE 6.00
AUDITOR FEE 5.00Preparer
Information Clifford S. Swartz
Individual's Name550 39th. No. 200
Street AddressDSM, IA 50312
City515-274-1450
PhoneSPACE ABOVE THIS LINE
FOR RECORDER

WARRANTY DEED

For the consideration of One and no/100 (\$1.00)
Dollar(s) and other valuable consideration,Harry Edward Gaass, single,

do hereby Convey to

Metro Waste Authority, an Iowa corporation,the following described real estate in Polk County, Iowa:Lot 7 of the United States Survey and the North Half of the Southeast
Quarter all in Section 1, Township 78 North, Range 22, West of the 5th
P.M., in Polk County, Iowa, subject to legally established highways.Entered upon transfer books and for
location the 27 day of March 1997
Tax by fee \$500 collected
by recorderMICHAEL A. MAURO
AuditorREAL ESTATE TRAN
POLK CO
TAX PD
TIM
BRIEN... RECORDER 2
0659 0000-0001159.20
11
\$1159.20
1159.20
CLK 002
1:22PM 3/26/97RECORDED
FILED

1159.20

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IowaDated: 3-26-97

SS:

On this 26 day of March,
19 97, before me, the undersigned, a Notary
Public in and for said State, personally appeared
Harry Edward Gaass, singleHarry Edward Gaass
(Grantor)

(Grantor)

to me known to be the identical persons named in
and who executed the foregoing instrument, and
acknowledged that they executed the same as their
voluntary act and deed.

(Grantor)

Clifford S. Swartz
Notary Public

(Grantor)

(This form of acknowledgment for individual grantor(s) only)



THE IOWA STATE BAR ASSOCIATION
Official Form No. 101 14765

FOR THE LEGAL EFFECT OF THE USE OF
THIS FORM, CONSULT YOUR LAWYER

DECLARATION
FILED

INST # 065220
RECORDING FEE 6.00
AUDITOR FEE 10.00

FILED FOR RECORD
POLK COUNTY, IOWA

97 MAR 28 P 2:10 PM

TIMOTHY J. BRIEN
RECORDER

RETURN TO:
Preparer Information Clifford S. Swartz 550 39th, No. 200 DSM, IA 50312 515-274-1450
Individual's Name Street Address City Phone



WARRANTY DEED

For the consideration of One and no/100 (\$1.00)
Dollar(s) and other valuable consideration,
Steven D. Queck and Dara J. Queck, husband and wife.

do hereby Convey to
Metro Waste Authority, an Iowa corporation,

the following described real estate in Polk County, Iowa:

That part of the Southwest Quarter (SW1/4) of Section 1 and the Northwest Quarter (NW1/4) of Section 12, all in Township 78 North, Range 22, West of the 5th P.M., Polk County, Iowa, described as follows: Commencing at the South Quarter (S1/4) corner of said Section 1; thence S 90°00'W, along the South line of the Southwest Quarter (SW1/4) of said Section 1, 1286.57 feet, to the point of beginning; thence S 03°48'30"W, 79.55 feet, to the centerline of County Road; thence N 88°59'34"W, along the centerline of County Road, 49.94 feet; thence N 83°50'51"W, along the centerline of County Road, 424.99 feet; thence N 86°54'25"W, along the centerline of County Road, 173.98 feet; thence N 03°48'30"E, 676.73 feet; thence N 89°45'40"E, 650.10 feet; thence S 03°48'30"W, 655.85 feet, to the point of beginning.

REAL ESTATE TRANSFER
TAX PD
TIMOTHY J. BRIEN... RECORDER 5
0746 0000-000
MICHAEL A. MAURO
Auditor

375.20
\$375.20
CLK 005 3/28/97
12:37PM

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA Dated: March 28, 1997
POLK COUNTY, ss: Steven D. Queck (Grantor)
On this 28th day of March 19 97, before me, the undersigned, a Notary Public in and for said State, personally appeared Steven D. Queck and Dara J. Queck (Grantor)

to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Clifford S. Swartz
Expires 1-15-99 Notary Public (Grantor)

(This form of acknowledgment for individual grantors only)

THE IOWA STATE BAR ASSOCIATION Official Form No. 101		14765	FOR THE LEGAL EFFECT OF THE USE OF THIS FORM, CONSULT YOUR LAWYER	
---	--	-------	--	--

FILED FOR RECORD
POLK COUNTY, IOWA

97 APR -4 P 2:04 2

TIMOTHY J. BRIEN
RECORDER

INST # 067119

RECORDING FEE 11.00

AUDITOR FEE 3.00

RETURN TO:

Preparer Information: Clifford S. Swartz 550 39th St., No. 200 Des Moines, IA 50312 515-274-1450

Individual's Name Street Address City Phone

WARRANTY DEED

For the consideration of One and no/100 (\$1.00)

Dollar(s) and other valuable consideration,

Michael W. Turner and Karole L. Turner, husband and wife,

do hereby Convey to

Metro Waste Authority, an Iowa corporation,

the following described real estate in Polk County, Iowa:

See attached Exhibit "A".

SPACE ABOVE THIS LINE
FOR RECORDER

Entered upon transfer books and for
taxation this 7 day of April
1997. My fee \$ 2.00 collected
by recorder:
MICHAEL A. MAURO
Auditor

RECORDED
(FILE)

REAL ESTATE TRAN
POLK CO
TAX PD 43
TIM
BRIEN... RECORDER 2
0116 0000-000

279.20
\$279.20
279.20
CLK 002
1:30PM 4/4/97

279.20

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA, Dated: 4-3-97

SS:

POLK COUNTY,

On this 3rd day of April,
19 97, before me, the undersigned, a Notary Public in and for said State, personally appeared
Michael W. Turner and Karole L. Turner, husband and wife,

Michael W. Turner
(Grantor)

Karole L. Turner
(Grantor)

to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Clifford S. Swartz
Notary Public

(This form of acknowledgment for individual grantor(s) only)

(Grantor)

(Grantor)

BK7606PG47B

16

EXHIBIT "A"

2-78-
R22
4-7-97

Commencing at the West 1/4 corner of Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa. (Said corner also being the SW corner of Government Lot 8 of the fractional NW 1/4 of said Section 2); thence N 0°00' E., along the West line of said Section 2, 499.28 ft.; thence N 65°00' E., 61.90 ft., to the East ROW line of Iowa Highway 316 and the point of beginning; thence N 0°03'57" E., along said East ROW line 93.78 ft.; thence N 01°30'28" W., along said East ROW line 182.07 ft.; thence N 03°38'42" E., along said East ROW line, 298.85 ft.; thence N 90°00' E., 173.59 ft.; thence S 5°00' W., 490.70 ft.; thence S 55°00' West, 91.44 ft.; thence S 65°00' W., 77.50 ft.; to the point of beginning. All of the above now being in and forming a part of Government Lot 8 of the Fractional NW 1/4 of Section 2, Township 78 North, Range 22, West of the 5th P.M., Polk County, Iowa. Subject to any easements of record.

8K7606PG479

INST # 017206
 RECORDING FEE 6.00
 AUDITOR FEE 5.00

FILED FOR RECORD
 POLK COUNTY, IOWA

97 AUG 29 P 4:23

TIMOTHY J. BRIEN
 RECORDER

RETURN TO:

Prepared by: CLIFFORD S. SWARTZ, Attorney at Law, 550 - 39th Street, Suite 200 Des Moines, IA 50312 515-274-1450

DECLARATION

WARRANTY DEED

For the consideration of One and no/100 (\$1.00) Dollar and other valuable consideration, **Blanche E. Gulling, a single individual**, does hereby convey to **Metro Waste Authority, an Iowa corporation**, the following described real estate in Polk County, Iowa:

The North Half of the Southwest Quarter (N1/2SW1/4) of Section 1, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine, feminine or neuter gender, according to the context.

REAL ESTATE TRANSFER
 POLK CO
 TAX PD
 TIM
 BRIEN... RECORDER B
 1122 0000-0000
 511.20
 1
 \$511.20
 511.20
 CLK 008
 2:03PM 8/29/97

Dated: 8-29-97

Blanche E. Gulling
 Blanche E. Gulling, Grantor

Entered upon transfer books and by recording the day of Sept 1997 by Notary Clifford S. Swartz collected by recorder
 MICHAEL A. MAURER
 RECORDER

STATE OF IOWA, POLK COUNTY, ss:

On this 29th day of August, 1997, before me the undersigned, a Notary Public in and for said State, personally appeared **Blanche E. Gulling**, to me known to be the identical person named in and who executed the foregoing instrument and acknowledged that she executed the same as her voluntary act and deed.

Clifford S. Swartz
 Notary Public in and for said State



BK7713PG827

17

11/02

CK

FILED FOR RECORD
POLK COUNTY, IOWA

97 APR 19 P 1:52

TIMOTHY J. BRIEN
RECORDER

INST # 068341
RECORDING FEE 600
AUDITOR FEE 500

Return to: Clifford S. Swartz, 550 Thirty-Ninth Street, Suite 300, Des Moines, IA 50312

SPACE ABOVE THIS LINE
FOR RECORDER

DECLARATION

WARRANTY DEED

For the consideration of ten Dollar(s) and other valuable consideration, HAWS, Inc., an Iowa Corporation does hereby Convey to METRO WASTE AUTHORITY the following described real estate in Polk County, Iowa:

The Southeast 1/4 of the Southeast 1/4 (except the South 264 feet of the East 330 feet) and the East 1/2 of the Northwest 1/4 of the Southeast 1/4 in Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, less roads

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

Dated: April 10, 1997

HAWS, Inc.

by Frank F. Sloan - Pres.
Frank F. Sloan, President

by Bonnie L. Sloan - Vice Pres.
Bonnie L. Sloan, Vice President

Entered upon transfer books and for location this 11 day of April 1997 My fee is \$2.00 collected by recorder.
MICHAEL A. MAURO
Auditor

REAL ESTATE TRAN
POLK CO
TAX PD
TIM
BRIEN... RECORDER 2
0229 0009-0000

536.80
\$536.80
336.80
CLK 002
12:52PM 4/10/97

STATE OF IOWA)

)ss

COUNTY OF POLK)

On this 10 day of April, 1997, before me, the undersigned, a Notary Public in and for the State of Iowa personally appeared Frank F. Sloan and Bonnie L. Sloan, to me personally known, who being by me duly sworn, did say that he is president and she is vice president of HAWS, Inc., an Iowa corporation, the cooperation executing the within and foregoing instrument, that no seal has been procured by the corporation; that the instrument was signed on behalf of the corporation by authority of its Board of Directors; and that Frank F. Sloan and Bonnie L. Sloan as officers acknowledged the execution of the foregoing instrument to be the voluntary act and deed of the corporation, by it and by him(her) voluntarily executed.

MICHAEL J. CUNNINGHAM
MY COMMISSION EXPIRES
10-6-98

Michael J. Cunningham
Notary Public in and for said State

BK 76096503

18

**DECLARATION
FILED**

FILES FOR RECORD
POLK COUNTY, IOWA

00 MAR 31 P 3:03.0

TIMOTHY J. BRIEN
RECORDER

INST# 074883

RECORDING FEE 112.00

AUDITOR FEE 5.00

RETURN TO:

Prepared By:

Herbert S. Selby
SELBY, UPDEGRAFF, SMITH & HOLWERDA
Attorneys at Law
101 First Avenue West
Newton, Iowa 50208
Telephone: 515-792-4141
Fax Number: 515 792-5650

Please Send Tax Statements To:

Metro Waste Authority
521 East Locust Street
Des Moines, Iowa 50309

Entered upon transfer books and for
taxation this 3 day of April
2000. My fee \$5.00 collected
by recorder.
MICHAEL A. MAURO
Auditor

REAL ESTATE TRAN
POLK CO
TAX PR TAB
TIN
BRIEN... RECORDER
1187 0000-000

799.20
1
\$799.20
799.20
CLK 004
2:46PM 3/31/00

WARRANTY DEED

For the consideration of Five Hundred Thousand and no/100
(\$500,000.00) Dollars and other valuable consideration, Jerry Ray
Kane and Marjorie Louise Bass, his wife, do hereby convey to

**METRO WASTE AUTHORITY,
AN IOWA CORPORATION,**

the following described real estate in Polk County, Iowa:

The West Half of Lot 7 of the United States
Survey of the Northeast Fractional Quarter;
Lot 8 of the United States Survey of the
Northwest Quarter;
The Northeast Quarter of the Southwest Quarter;
and

The West Half of the Northwest Quarter of the
Southeast Quarter;

EXCEPT that portion of the described property
conveyed to the Iowa State Highway Commission
described in the Warranty Deed dated March 27,
1958, filed April 7, 1958, in Book 3028 at
Page 603, Polk County Recorder, being 2 acres,
more or less;

EXCEPT that portion of the described property
commencing at the West Quarter corner of
Section 2, Township 78 North, Range 22 West
of the 5th P.M., Polk County, Iowa (said corner
also being the Southwest Corner of Government
Lot 8 of the Fractional Northwest Quarter of
said Section 2); thence North 0° 00' East, along
the West line of said Section 2, 499.28 feet,
thence South 65° 00' East, 61.90 feet to the
East right-of-way line of Iowa Highway 316, and
the point of beginning; thence North 0° 03' 57"
East along said East right-of-way line, 93.78
feet, thence North 1° 30' 28" West along said East

BK8461PG089

-2-

right-of-way line, 182.07 feet, thence North 3° 38' 42" East along said East right-of-way line, 298.85 feet; thence North 90° 00" East, 173.59 feet, thence South 5° 00' West, 490.70 feet South 55° 00' West, 91.44 feet, thence South 65° 00' West, 77.50 feet, to the point of beginning;

All of the above now being in and forming a part of Government Lot 8 of the fractional Northwest Quarter of Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa;

EXCEPT an irregular parcel located in part of Government Lot 8, the West One-half of Lot 7 and the West One-Half of the Northwest Quarter of the Southeast Quarter, all in Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, (as recorded in Book 5273, Page 378, and more particularly described as follows: Commencing at the East Quarter corner of Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, thence North 00° 26' 16" East for a distance of 1,318.87 feet along the East line of Government Lot 7 within said Section 2; thence South 89° 35' 03" West a distance of 1,307.64 feet along the North line of Government Lot 7 within said Section 2 to the point of beginning; thence South 00° 49' 36" West a distance of 1,309.54 feet, thence South 89° 59' 51" West for a distance of 658.21 feet along the South line of Government Lot 7 within said Section 2, thence South 00° 41' 55" West for a distance of 253.48 feet, thence South 89° 59' 56" West for a distance of 84.33 feet, thence North 23° 45' 52" West for a distance of 1,569.25 feet, thence South 89° 54' 05" West for a distance of 187.15 feet, thence North 5° 42' 06" West for a distance of 135.96 feet, thence North 89° 47' 14" East for a distance of 283.72 feet to the Northwest Corner of Government Lot 7 within said Section 2, thence South 89° 35' 37" East for a distance of 1,313.87 feet along the North line of Government Lot 7 within said Section 2 to the point of beginning; and

EXCEPT an irregular parcel located in part of Government Lot 7 and the West One-Half of the Northwest Quarter of the Southeast Quarter;

All in Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, (as recorded in Book 5273, Page 378, and more particularly described as follows:

Commencing at the center of Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, thence North 00° 55' 59" East for a distance of 1,005.83 feet along the West line of Government Lot 7 within said Section 2, thence South 23° 45' 52" East a distance of 1,375.78 feet, thence North 89° 59' 56" East for a distance of 84.33 feet, thence South 00° 41' 55" West for a distance of 1,067.04 feet, thence South 89° 59' 56" West for a distance of 659.47 feet along the South line

BK 5273 PG 378

-3-

of the Northwest Quarter of the Southeast Quarter of said Section 2, thence North 00° 45' 11" East for a distance of 1,320.51 feet along the West line of the Southeast Quarter of said Section 2 to the point of beginning;

Subject to easements and restrictions of record and in use or both of such;

Grantors do hereby covenant with Grantee, and successors in interest, that Grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is free and clear of all liens and encumbrances except as may be above stated; and Grantors covenant to warrant and defend the real estate against the lawful claims of all persons except as may be above stated.

Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Dated this 3rd day of March, 2000.

Jerry Ray Kane
(Jerry Ray Kane)
Marjorie Louise Bass
(Marjorie Louise Bass)

STATE OF IOWA:

SS:

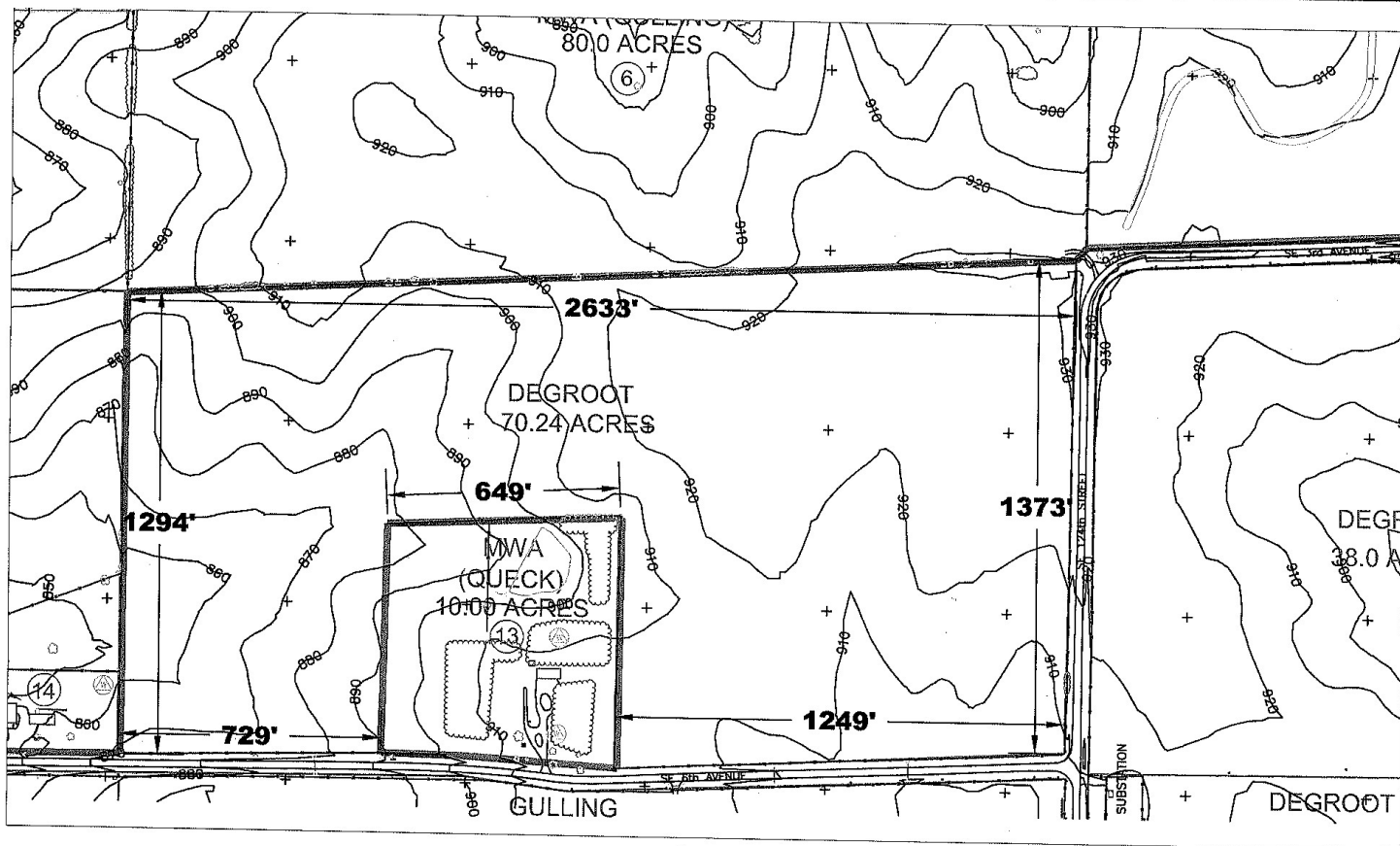
JASPER COUNTY:

On this 3rd day of March, 2000, before me, the undersigned, a Notary Public within and for the State of Iowa, personally appeared Jerry Ray Kane and Marjorie Louise Bass, his wife, to me known to be the identical persons named in and who executed the within and foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

Herbert S. Selby
(Herbert S. Selby)
Notary Public within and for
the State of Iowa.



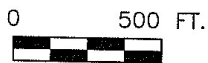
BK8461P091



PROPERTY BOUNDARY



SCALE



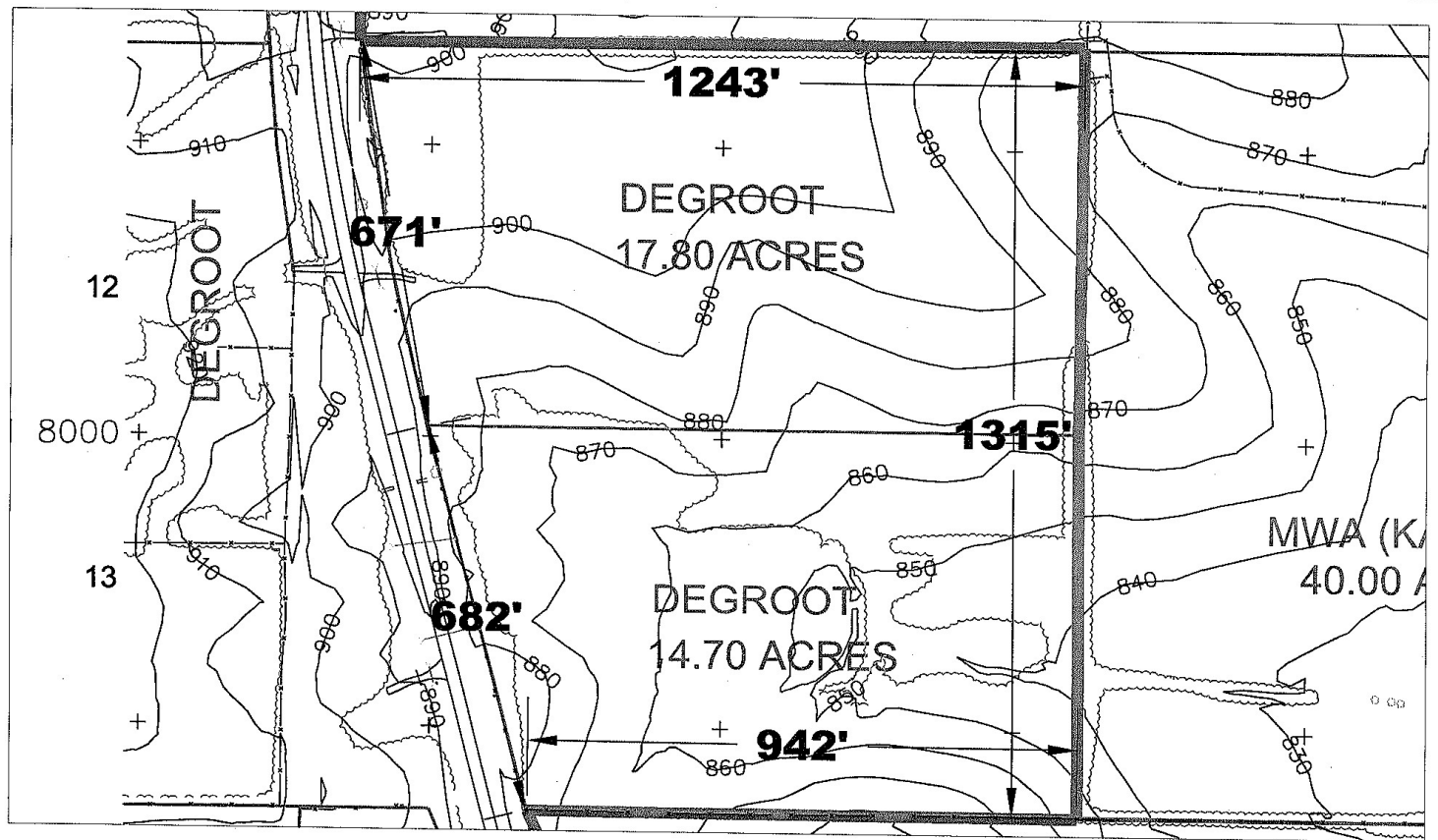
DEGROOT PROPERTY
DEGROOT
SOUTH OF METRO PARK EAST LANDFILL
PROJECT NO. 00000
DRAWING DATE: DECEMBER, 2002

BARKERLEMAR
ENGINEERING CONSULTANTS

1300 Cummins Road, Suite 201 - Des Moines, Iowa - 50315
Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerleamar.com

APPENDIX

1



PROPERTY BOUNDARY



SCALE



DEGROOT 30 ACRES
 DEGROOT
 WEST OF METRO PARK EAST LANDFILL
 PROJECT NO. 00000
 DRAWING DATE: DECEMBER, 2002

BARKER LEMAR
 ENGINEERING CONSULTANTS

1300 Cummins Road, Suite 201 - Des Moines, Iowa - 50315
 Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerleamar.com

APPENDIX

2

COPY

**DECLARATION
FILED**

Doc ID: 015078490002 Type: GEN
Recorded: 06/09/2004 at 08:54:57 AM
Fee Amt: \$1,219.80 Page 1 of 2
Revenue Tax: \$1,188.80
Polk County Iowa
TIMOTHY J. BRIEN RECORDER
File# 2004-00138056

BK **10582** Pg **485-486**

RETURN TO:

Preparer
Information Orville W. Bloethe,
Individual's Name

702 Third Street,
Street Address

Victor, IA 52347,
City

(319) 647-3121
Phone



Address Tax Statement: Metro Waste Authority, 300 East Locust Street,
Suite 100, Des Moines, IA 50309

SPACE ABOVE THIS LINE
FOR RECORDER

WARRANTY DEED

For the consideration of One (\$1.00)
Dollar(s) and other valuable consideration,
Frederick DeGroot, a/k/a Fredrick DeGroot, a/k/a Fred DeGroot, and Jeanetta DeGroot, a/k/a Jeanetta DeGroot,
husband and wife, Jeanetta DeGroot signs by Frederick DeGroot, holder of Power of Attorney for Jeanetta DeGroot.

do hereby Convey to
Metro Waste Authority

the following described real estate in POLK County, Iowa:

See legal description in Exhibit "A" attached hereto and incorporated by this reference herein.

1188⁸⁰

Entered upon transfer books and for
taxation this 10 day of June
2004. My fee \$ 5.00 collected
by recorder.
MICHAEL A. MAURO
Auditor

Grantors do Hereby Covenant with grantees, and successors in interest, that grantors hold the real estate by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Clear of all Liens and Encumbrances except as may be above stated; and grantors Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be above stated. Each of the undersigned hereby relinquishes all rights of dower, homestead and distributive share in and to the real estate.

Words and phrases herein, including acknowledgment hereof, shall be construed as in the singular or plural number, and as masculine or feminine gender, according to the context.

STATE OF IOWA

Dated: May 13, 2004

IOWA COUNTY,

ss:

On this 13th day of May,
2004, before me, the undersigned, a Notary Public in and for said State, personally appeared Frederick DeGroot and Jeanetta DeGroot, husband and wife, Jeanetta DeGroot by Frederick DeGroot, holder of Power of Attorney to me known to be the identical persons named in and who executed the foregoing instrument and acknowledged that they executed the same as their voluntary act and deed.

X Frederick De Groot
Frederick DeGroot (Grantor)

X Frederick De Groot
Jeanetta DeGroot by Frederick DeGroot as (Grantor)
Holder of Power of Attorney

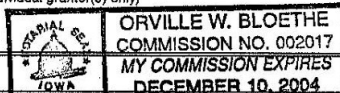
(Grantor)

Orville W. Bloethe

Notary Public

(Grantor)

(This form of acknowledgment for individual grantor(s) only)



STATE OF _____, COUNTY, ss:

On this _____ day of _____, _____ before me, the undersigned, a
Notary Public in and for said State, personally appeared

to me known to be the identical persons named in and who executed the foregoing instrument, and
acknowledged that they executed the same as their voluntary act and deed.

Notary Public

STATE OF _____, COUNTY, ss:

On this _____ day of _____, _____ before me, the undersigned, a
Notary Public in and for said State, personally appeared

to me known to be the identical persons named in and who executed the foregoing instrument, and
acknowledged that they executed the same as their voluntary act and deed.

Notary Public

REAL ESTATE TRANSFER - GROUNDWATER HAZARD STATEMENT

Please read the filing instructions on the reverse side BEFORE completing this form.

PART I - TO BE COMPLETED BY TRANSFEROR

(Please Type or Print Legibly)

TRANSFEROR Name Frederick DeGroot and Jeanetta DeGroot, husband and wife

Address 14782 S. 68th Avenue West, Mitchellville, IA 50169

Number and Street or RR

City, Town or P.O.

State

Zip

TRANSFeree Name Metro Waste Authority

Address 300 East Locust Street, Suite 100, Des Moines, IA 50309

Number and Street or RR

City, Town or P.O.

State

Zip

Address of Property Transferred Rural Polk County, IA

Number and Street or RR

City, Town, or P.O.

State

Zip

Legal Description of Property See Exhibit A attached hereto

1. Wells (check one)

- ☒ There are no known wells situated on this property.
☐ There is a well or wells situated on this property. The type(s), location(s) and legal status are stated below.

2. Solid Waste Disposal (check one)

- ☒ There is no known solid waste disposal site on this property.
☐ There is a solid waste disposal site on this property, but no notice has been received from the Department of Natural Resources that the site is deemed to be potentially hazardous.
☐ There is a solid waste disposal site on this property which has been deemed to be potentially hazardous by the Department of Natural Resources. The location(s) of the site(s) is stated below.

3. Hazardous Wastes (check one)

- ☒ There is no known hazardous waste on this property.
☐ There is hazardous waste on this property and it is being managed in accordance with Department of Natural Resources rules.

4. Underground Storage Tanks (check one)

- ☒ There are no known underground storage tanks on this property. (Note exclusions such as small farm and residential motor fuel tanks, most heating oil tanks, cisterns and septic tanks, in instructions.)
☐ There is an underground storage tank or tanks on this property. The type(s), size(s) and any known substance(s) contained are described below.

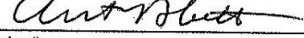
5. Private Burial Site (check one)

- ☒ There are no known private burial sites on this property.
☐ There is a private burial site on this property. The location(s) of the site(s) is stated below. The known identifying information of the decedent is stated below.

Information, if any, required by statements checked above:

Attachment for Additional Information ☒ Y/N If so, number of pages 1

I HEREBY DECLARE THAT THE INFORMATION CONTAINED IN PART 1 OF THIS STATEMENT IS TRUE AND CORRECT

Signature:  Telephone Number: 319 647 3124

(Transferor or Agent)

PART 11 - TO BE COMPLETED BY RECORDER

Date of Instrument _____ Book/I.D. _____ Page/I.D. _____

Date of Recording _____ City or Township _____

Deed ☐ Contract ☐ County _____

DNR form (July 99)

FILE WITH RECORDER
(See Instruction #6)

542-0960

INSTRUCTIONS FOR COMPLETING GROUNDWATER HAZARD STATEMENT

The transferor of real property is required to complete Part I of this form. The purpose of the statement is to satisfy legal requirements for filing instruments of conveyance of real property with the county recorder (Iowa Code Section 558.69). The Department of Natural Resources does not approve or disapprove of property transfers based on these statements. The statement must be signed by one of the persons transferring the property interest or that person's agent. An agent signing this form represents the information from transferor to be correct.

For the most part the information requested is clear (name, address, etc.). One statement under each of the numbered items (1, 2, 3, 4 and 5) must be checked, and if one or more of the statements checked requires the transferor to provide additional information, that information is to be provided in part I. Relate the additional information to the specific category of facility (well, etc.) by numbering it with the corresponding number (1, 2, 3, 4, 5). If additional space is needed, type or print it legibly on a separate sheet or sheets, complete the statements at the end of Part I and attach the additional information to all copies of the form. When describing the location of a facility on the property, be reasonably precise, such as a specific distance and general direction from a landmark or corner of the property. A professional survey is not necessary. The following definitions are for use in completing the form.

1. Wells - A "well" is any excavation that is drilled, cored, bored, augered, washed, driven, dug, jetted or otherwise constructed for accessing groundwater or for diverting surface water into the ground, including abandoned wells. "Well" does not include an open ditch or drainage tiles which discharge to the surface.

If a well is an "abandoned well" or an "agricultural drainage well," this must be identified and the status of the well with respect to Iowa Code sections 455B.190 and 159.29, respectively, must be stated. An "abandoned well" is a well no longer in use or in such state of disrepair that continued use is unsafe or impracticable. Abandoned wells are to be properly plugged in accordance with chapter 39 of the rules of the Department of Natural Resources. (567 Iowa Administrative Code, Chapter 39)

An "agricultural drainage well" is a well constructed for the purpose of draining, or which drains, water from agricultural land to an aquifer (underground), excluding drainage tile intakes which outlet to the surface. Agricultural drainage wells are required to be registered with the department by September 30, 1988, and the owner of the well and of the land drained by the well are to develop a plan proposing alternatives to the use of the well by July 1, 1998 (See Iowa Code Section 159.29.)

2. Solid Waste - "Solid waste" means garbage, refuse, rubbish and other similar discarded solid or semisolid material. It does not include dirt, stone, brick, or similar inorganic material used for fill, as long as no other solid waste is included. See 567--100.2(455B), Iowa Administrative Code (I.A.C.) for further definitions. A "disposal site" is any area on the property on, in, or under which solid waste has been disposed, whether or not the disposal is or was regulated by the department.

If the transferor or agent has not received notice from the Department of Natural Resources that the disposal site has been deemed to be potentially hazardous, there is no duty to inquire to the department.

***Note** The land application of sludges or soils resulting from the remediation of underground storage tank releases accomplished in compliance with Department of Natural Resources rules without a permit is not required to be reported as the disposal of solid waste or hazardous waste. (See Iowa Code Section 558.69)

3. Hazardous Wastes - "Hazardous waste" is defined in Iowa Code section 455B.411, 567--141.2 (455B), I.A.C., and federal regulations referenced therein. It is generally defined as waste that poses a threat to human health or the environment. It includes wastes which are ignitable, corrosive, toxic, explosive, violently reactive, or specifically listed as hazardous in the Code of Federal Regulations (40 CFR 261). EXCLUDED are household wastes, agricultural wastes returned to the soil as fertilizers or soil conditioners, agricultural chemicals applied or disposed of by a farmer in accordance with the manufacturer's instructions, triple-rinsed agricultural chemical containers disposed of by farmers (where the rinsate is used as makeup water in the tankmix and applied at appropriate rates), and other specific materials. Persons are legally required to be aware of hazardous waste laws.

4. Underground Storage Tanks - "Underground storage tank" means one or a combination of tanks, including underground piping connected to the tanks, used to contain an accumulation of regulated substances, and the volume of which is 10 percent or more beneath the surface of the ground. "Regulated substances" include petroleum products and hazardous or toxic materials identified in 567--135.2(455B), I.A.C. Underground storage tank does not include:

- Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes. But See 455B.473(4)
- Tanks used for storing heating oil for consumptive use on the premises where stored.
- Residential septic tanks.
- Pipeline facilities regulated by state or federal law.
- A surface impoundment, pit pond, or lagoon.
- A storm water or wastewater collection system.
- A flow-through process tank.
- A liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.
- A tank in an underground area such as a basement or mine, if the tank is on or above the surface of the floor,
- Pipes connected to the above exclusions.

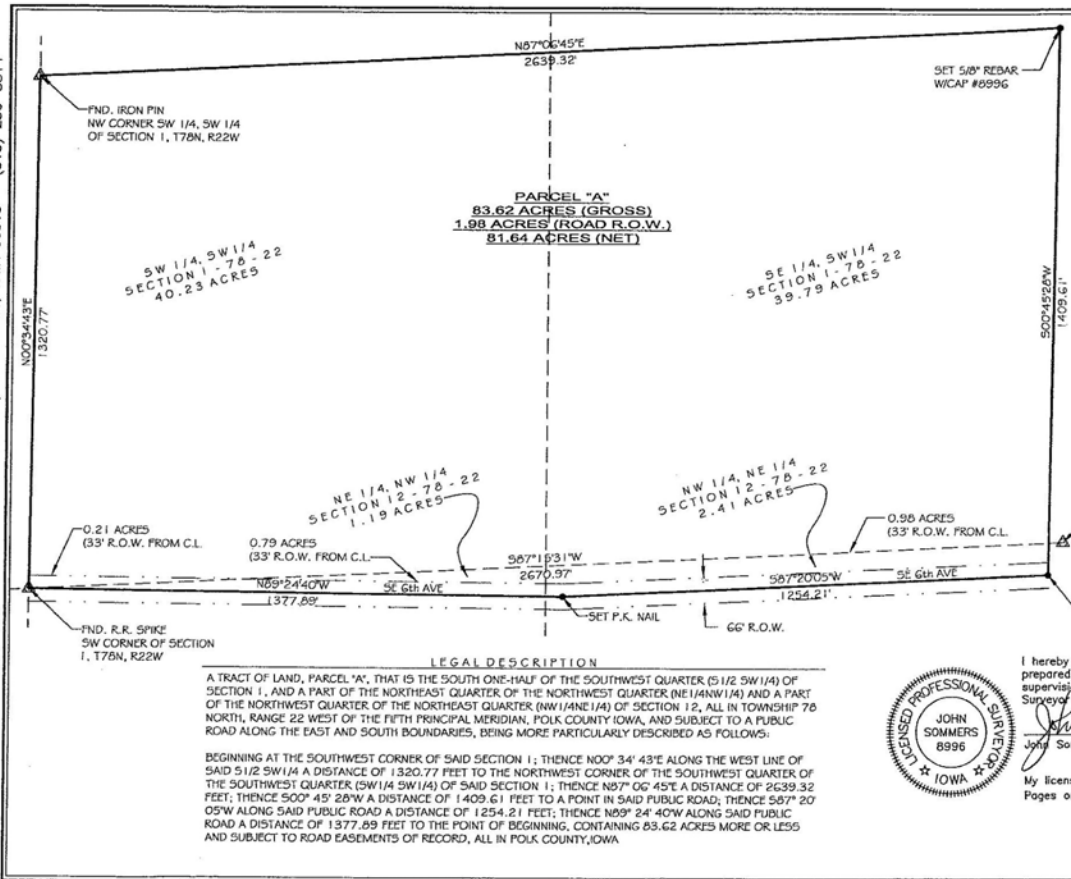
"Tank type" means the material of construction (steel, fiberglass reinforced plastic [FRP], or other [specify]), and any internal or external protection such as a protective coating or wrapping, or cathodic protection.

Identify the capacity in gallons and the substance stored in each tank.

5. Private Burial Sites - "Private Burial Site" means one or more graves containing human remains. For each site the transferor shall state the location of the site. For each decedent buried on the property the transferor shall state all known identifying information of that decedent including name, date of death, and date of birth.

6. Filing - The original of this form must be presented to the county recorder when the document to be recorded is filed. The Recorder shall forward the original to the transferee when the recorded instrument is returned. The recorder is not required to keep any copies.

PREPARED BY: BARKER LEMAR - 1300 CUMMINS ROAD, SUITE 201, DES MOINES, IOWA 50315 - (515) 256-8814



SCALE
0 150 300 FT.
Copyright © 2003 - Barker Lemar Engineering Consultants

LEGEND
— PROPERTY BOUNDARY
— SECTION LINE
— R.O.W. LINE
Δ SECTION CORNER
• SET PROPERTY CORNER

REFERENCES/NOTES:
TITLEHOLDER:
- METRO WASTE AUTHORITY
SURVEY NOTE:
- BEARINGS ON PLAT ARE ON AN ASSUMED BEARING.

PT OF SEC. 1-78-22 & SEC. 12-78-22
POLK COUNTY, IOWA
PROJECT NO. METRO 04004
DRAWING DATE: FEBRUARY, 2004

PLAT OF SURVEY

SHEET 1

LEGAL DESCRIPTION

A TRACT OF LAND, PARCEL 'A', THAT IS THE SOUTH ONE-HALF OF THE SOUTHWEST QUARTER (S 1/2 SW 1/4) OF SECTION 1, AND A PART OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER (NE 1/4 NW 1/4) AND A PART OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER (NW 1/4 NE 1/4) OF SECTION 12, ALL IN TOWNSHIP 78 NORTH, RANGE 22 WEST OF THE FIFTH PRINCIPAL MERIDIAN, POLK COUNTY IOWA, AND SUBJECT TO A PUBLIC ROAD ALONG THE EAST AND SOUTH BOUNDARIES, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID SECTION 1; THENCE N00° 34' 43"E ALONG THE WEST LINE OF SAID S 1/2 SW 1/4 A DISTANCE OF 1320.77 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER (SW 1/4 SW 1/4) OF SAID SECTION 1; THENCE N87° 06' 45"E A DISTANCE OF 2639.32 FEET; THENCE S00° 45' 28"W A DISTANCE OF 1409.61 FEET TO A POINT IN SAID PUBLIC ROAD; THENCE S67° 20' 05"W ALONG SAID PUBLIC ROAD A DISTANCE OF 1254.21 FEET; THENCE N89° 24' 40"W ALONG SAID PUBLIC ROAD A DISTANCE OF 1377.89 FEET TO THE POINT OF BEGINNING, CONTAINING 83.62 ACRES MORE OR LESS AND SUBJECT TO ROAD EASEMENTS OF RECORD, ALL IN POLK COUNTY, IOWA



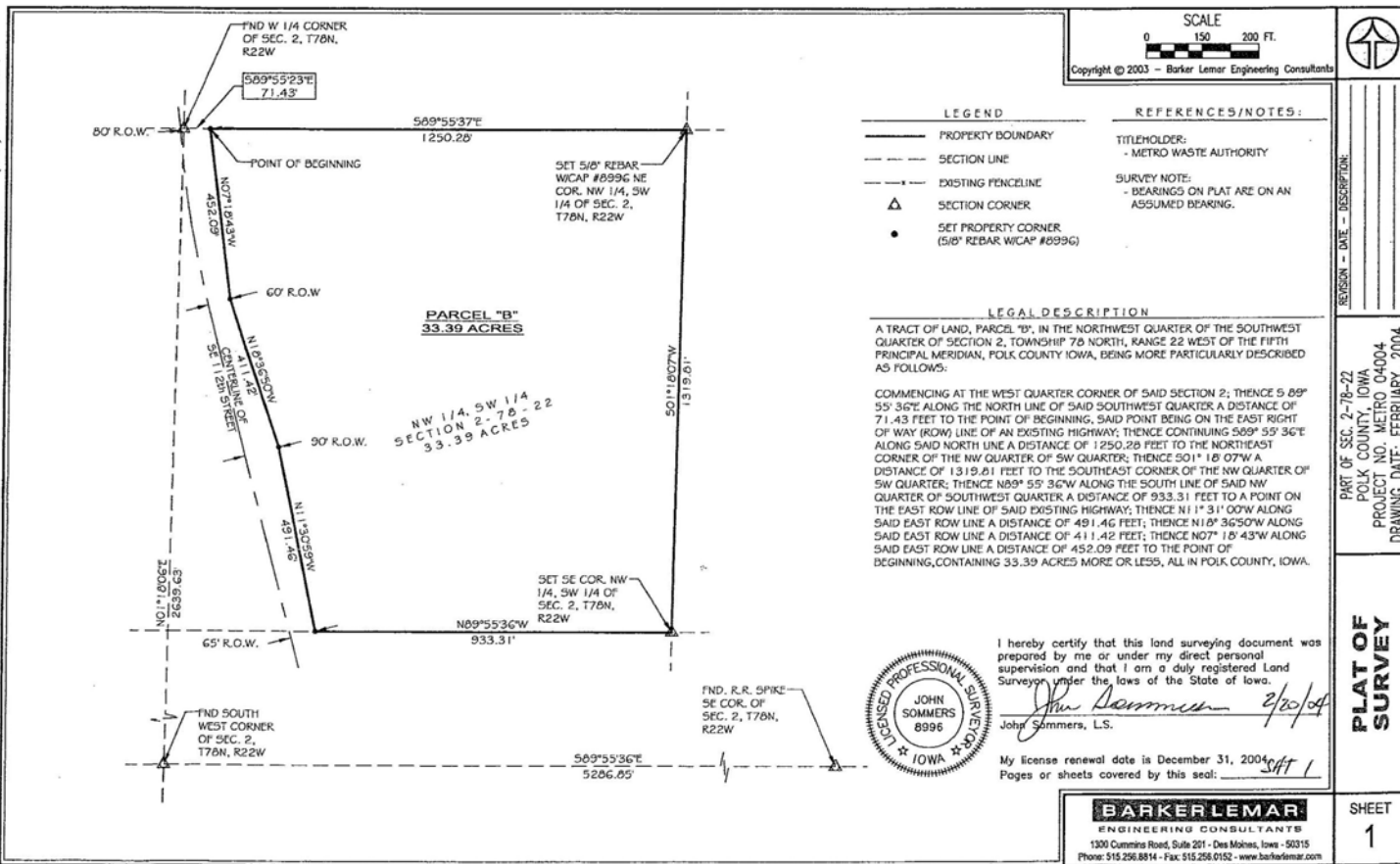
I hereby certify that this land surveying document was prepared by me or under my direct personal supervision and that I am a duly registered Land Surveyor under the laws of the State of Iowa.

John Sommers 2/20/04
John Sommers, L.S.

My license renewal date is December 31, 2004.

Pages or sheets covered by this seal: 1 of 1

BARKER LEMAR
ENGINEERING CONSULTANTS
1300 Cummins Road, Suite 201 - Des Moines, Iowa - 50315
Phone: 515.256.8814 - Fax: 515.256.0152 - www.barkerlemar.com



R22
6.10.04

EXHIBIT "A"
LEGAL DESCRIPTION

Parcel "B" of Plat of Survey recorded in Book 10423 Page 640 being part of the Northwest $\frac{1}{4}$ of the Southwest $\frac{1}{4}$ of Section 2, Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, being more particularly described as follows:

Commencing at the West $\frac{1}{4}$ corner of said Section 2; thence S89°55'36"E along the North line of said Southwest $\frac{1}{4}$ a distance of 71.43 feet to the point of beginning, said point being on the East Right-of-Way line of an existing highway; thence continuing S89°55'36"E along said North line a distance of 1250.28 feet to the Northeast corner of the Northwest $\frac{1}{4}$ of Southwest $\frac{1}{4}$; thence S01°18'07"W a distance of 1319.81 feet to the Southeast corner of the Northwest $\frac{1}{4}$ of Southwest $\frac{1}{4}$; thence S89°55'36"W along the South line of said Northwest $\frac{1}{4}$ of Southwest $\frac{1}{4}$ a distance of 933.31 feet to a point on the East Right-of-Way line of said existing highway; thence N11°31'00"W along said East Right-of-Way line a distance of 491.46 feet; thence N18°36'50"W along said East Right-of-Way line a distance of 411.42 feet; thence N 07°18'43"W along said East Right-of-Way line a distance of 452.09 feet to the point of beginning, containing 33.39 acres more or less, all in Polk County, Iowa.

AND

Parcel "B" of Plat of Survey recorded in Book 10484 Page 829 being part of the Southwest $\frac{1}{4}$ of Section 1 and the Northwest $\frac{1}{4}$ of Section 12, all in Township 78 North, Range 22 West of the 5th P.M., Polk County, Iowa, being more particularly described as follows:

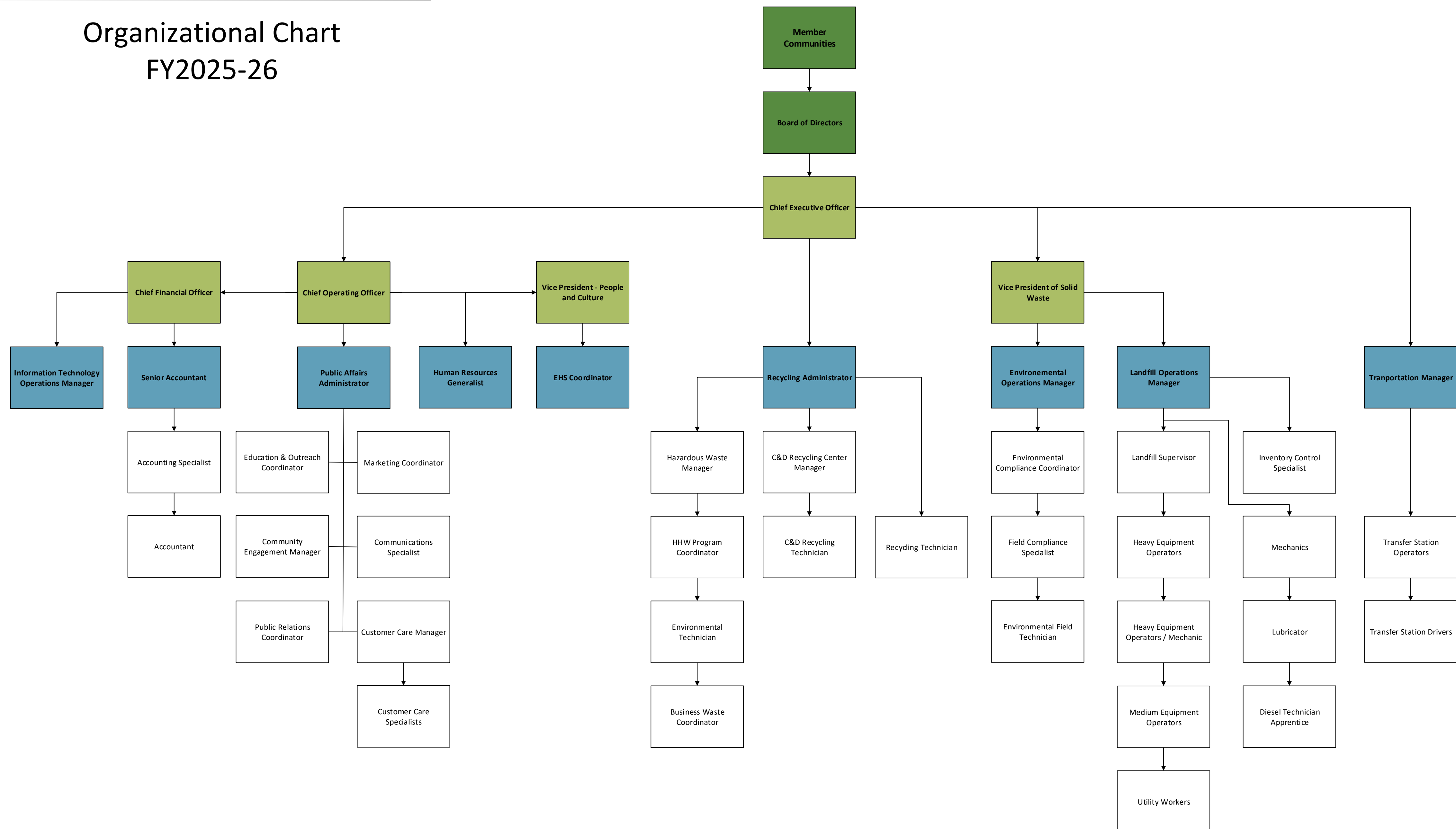
Commencing at the South quarter corner of said Section 1; thence S87°14'36"W along the South line of the Southwest $\frac{1}{4}$ of said Section 1, 1290.67 feet (M) 1286.57 feet (D) to the point of beginning; thence N01°03'36"E a distance of 655.83 feet (M) 655.75 feet (D); thence S87°03'59"W a distance of 649.33 FEET (M) 650.10 feet (D); thence S01°03'36"W a distance of 676.73 feet to the centerline of County Road; thence S89°05'59"W along the centerline of County Road a distance of 729.95 feet to the Southwest corner of said Section 1; thence N00°34'43"E a distance of 1320.77 feet to the Northwest corner of the Southwest $\frac{1}{4}$ of the Southwest $\frac{1}{4}$ of said Section 1; thence N87°06'45"E a distance of 2639.32 feet; thence S00°45'28"W a distance of 1409.61 feet to the centerline of County Road; thence S87°21'02"W a distance of 1254.75 feet; thence N01°03'36"E a distance of 79.53 feet to the point of beginning containing 72.82 acres more or less and subject to existing road easements of record, all in Polk County, Iowa.

Subject to coveants, easements and restrictions of record, if any.

Section D: Organizational Chart



Organizational Chart FY2025-26



Section E:


Operator Certification

Certificate of Completion

presented to

COLBY REID

*For successful completion of the
IDNR approved Appliance Demanufacturing training course
conducted by Barker Lemar on Friday, March 8, 2019
in West Des Moines, Iowa.*



Kevin Jensen
Environmental Compliance Specialist

BARKER LEMAR
ENGINEERING CONSULTANTS

1801 INDUSTRIAL CIRCLE | WEST DES MOINES, IOWA 50265 | 515.256.8814 | www.barkerlemar.com

Certificate of Completion

presented to

BLAKE MCWILLIAMS

*For successful completion of the
IDNR approved Appliance Demanufacturing training course
conducted by Evora Consulting on Tuesday, September 14, 2021
in West Des Moines, Iowa.*



Kevin Jensen
Environmental Compliance Specialist



EVORA
CONSULTING

Section F:
EPA Refrigerant Recovery Device
Certification

HVAC and Refrigeration > Air Conditioners and Accessories >
Air Conditioning Chemicals, Tools and Accessories >
Air Conditioning and Refrigeration Tools > Refrigerant Recovery Systems >
Refrigerant Recovery Machine, 1/2 HP, 115V >

 Print  Email

Refrigerant Recovery Machine, 1/2 HP, 115V

Item # 29AU04 Mfr. Model # 95762 Catalog Page # 3007 UNSPSC # 23111507



Categories based on your search



HVAC and
Refrigeration



Air Conditioners
and Accessories



Air Conditioning
Chemicals, Tools
and Accessories



Air Conditioning
and Refrigeration
Tools

Web Price ⓘ
\$1,060.90 / each

☒ Shipping ☐ Pickup

Expected to arrive **Wed. Jun 05.**

Ship To **50301** ([Change](#))

Qty
1

[Add to Cart](#)



Refrigerant
Recovery Systems

Item	Refrigerant Recovery Machine
Type	2-Port
Height (In.)	15
Depth (In.)	13-1/2
Width (In.)	21-1/4
Electrical Connections	NEMA 5-15p Male Plug
Hose Connection	1/4" Male
Motor HP	1/2
Voltage	115

Other products based on your search

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Operating Temp. Range (F) 35 Degrees to 120 Degrees

Compressor Oilless

For Use With Refrigeration Equipment

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YELLOW JACKET

Refrigerant
Recovery Machine,
1/2 HP, 115V

[VIEW](#)

Web Price ⓘ
\$1,186.56 / each



YELLOW JACKET

Refrigerant
Recovery Machine,
1/2 HP, 115V

[VIEW](#)

Web Price ⓘ
\$967.17 / each



ROBINAIR

Refrigerant
Recovery Machine

[VIEW](#)

Web Price ⓘ
\$751.47 / each



ROBINAIR

Refrigerant
Recovery Machine,
40 lb.

[VIEW](#)

Web Price ⓘ
\$2,262.58 / each

[VIEW](#)[Chat with an Agent](#)



RecoverXLT™ Oil-Less Universal Refrigerant Recovery System



Operation and Maintenance Manual

(For serial numbers 181195 and higher)

(English and Spanish. French and German available at www.yellowjacket.com)

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General Safety Instructions

- 1) **Know your equipment.** Read and understand the operation manual and the labels affixed to this unit. Learn the applications and limitations, as well as the specific potential hazards of the **RecoverXLT**.

2) **Use the correct hoses.** Use only hoses designed for handling of refrigerants. The hose should be the minimum length required for each job and equipped with a shut-off device (such as the compact ball valve) at the end to reduce the likelihood of refrigerant leaks to the atmosphere. For best performance we recommend using 3/8” hoses. *YELLOW JACKET hoses are made for almost every type of refrigerant. See your local distributor for more information.*

3) **Ground all equipment.** Plug the **RecoverXLT** into a properly grounded receptacle using the appropriate plug.

4) **If the detachable power cord is damaged,** it must be replaced by a cord assembly available from the manufacturer or distributor where purchased.

5) **If the attached power socket is damaged,** it must be replaced by the manufacturer or its authorized service center in order to avoid hazard.

6) **Do not pressure test with compressed air.** Some mixtures of air and refrigerant have been shown to be combustible at elevated pressures.

7) **Avoid dangerous environments.** To keep operator exposure to a minimum, use the
- RecoverXLT** only in areas with sufficient ventilation.

Recovery should always be performed in well ventilated areas. Use the **RecoverXLT** only in locations where mechanical ventilation which provides at least four air changes per hour is present, or place the unit 18” above the floor during use.

The **RecoverXLT** should not be used near open containers of gasoline or any other flammable liquid. Do not allow refrigerants to come in contact with open flame. Refrigerant decomposition in flame results in phosgene gas. Breathing phosgene gas can be fatal.
- 8) **Always wear safety goggles and gloves.** Personal protective equipment should be worn to protect operator from frostbite.

9) **Use caution when connecting or disconnecting.** Improper usage may result in refrigerant burns (frostbite). If a major leak occurs, proceed immediately to a well ventilated area.

10) **Disconnect recovery machine from power before servicing.** An electrical shock hazard is present when the unit is disassembled.

11) **Repair damaged parts.** Do not operate the **RecoverXLT** if there is a defective part. Repair the unit to proper operating conditions before further use.
- To keep operator exposure to a minimum, use the

RecoverXLT only in areas with sufficient ventilation.

- 12) **Use recommended accessories.** Follow the instructions that accompany all accessories. Improper use may damage equipment or create a hazard.
- 13) **Use the *RecoverXLT* only with the proper refrigerants.** (See specifications for a complete list of compatible refrigerants.)
- 14) **Operate the *RecoverXLT* within the design parameters only.** The *RecoverXLT* was designed to operate within a temperature range of 40° (4° C) to 120°F (49°C). Do not operate in a wet location.

Caution: All refrigerant hoses, recovery tanks, refrigerant lines, other vessels containing refrigerants

and the *RecoverXLT* should be handled as if under high pressure. When opening a tank containing refrigerant, open valves slowly to prevent release of refrigerant, especially if the valves might be damaged.

To prevent the risk of fire DO NOT use an extension cord longer than 25' (7.6 m) and a minimum of 16 AWG (1.276 mm²).

Care and Maintenance

Auto Purge Instructions

Purging or evacuating the *RecoverXLT* is one of the simplest and most important functions. Reduce the risk of cross contamination and prolong the life of the *RecoverXLT* by purging after *every* service.

Note: The purge process must be done before disconnecting the discharge hose from the *RecoverXLT*.

- 1) The **Low Pressure Switch** will shut the unit off and the lamp will indicate **Recovery Complete** when the unit reaches appropriate vacuum levels. After the unit shuts down, turn

the system switch to off, then rotate the selector valve clockwise to OFF to equalize then to PURGE. Turn the system switch on.

Note: The low side gauge should read an increase in suction pressure, indicating the refrigerant that was trapped in the machine.

- 2) Wait until the **Low Pressure Switch** again shuts the unit off at the appropriate vacuum.
- 3) Close the valve on the recovery tank and turn off the *RecoverXLT*

Restart Procedure

If the recovery unit was stopped during operation, it may be necessary to balance the internal pressures before the unit will start.

To balance the internal pressure:

- 1) Turn the system switch off.

- 2) Rotate selector clockwise to the OFF position. Allow pressures to balance.
- 3) Turn the recovery machine ON.
- 4) Turn the selector valve counter-clockwise to the previous RECOVER position.

Suction Filter

The *RecoverXLT* is equipped with a built-in particulate strainer located behind the suction port. Unscrew the suction port by using a 11/16 wrench to unscrew the hex head port to remove. This prevents contaminants, copper shavings, carbon, and other foreign objects from making their way to the *RecoverXLT* compressor and causing permanent damage.

Like a filter drier, this strainer **MUST** be cleaned or replaced often. Failure to do this can cause the strainer to become too clogged for refrigerant to flow freely. A sure sign that the straining device is

clogged is the freezing of the suction port and the filter cover.

Before replacing, check the condition of the o-ring. Replace if necessary.

Note: Make sure to use a strainer in the *RecoverXLT* for every job! Filter strainers and o-rings are available from your supplier.

Filter Strainer and O-Ring - Part #95457

RecoverXLT Operating Guide

Direct Liquid/Vapor Recovery

The **RecoverXLT** is used to pull liquid or vapor refrigerant directly out of the system and transfer it into a recovery cylinder.

Liquid recovery is accomplished by connecting to the high pressure system discharge service port (Liquid Port) side of the system being serviced.

Vapor recovery can be done by connecting to the system suction service port (low pressure) side of the system.

Because the **RecoverXLT** is capable of recovering direct liquid, it is best to first recover all of the liquid, followed by the vapor. This will make your job easier and faster. Refer to the following instructions and the above diagram:

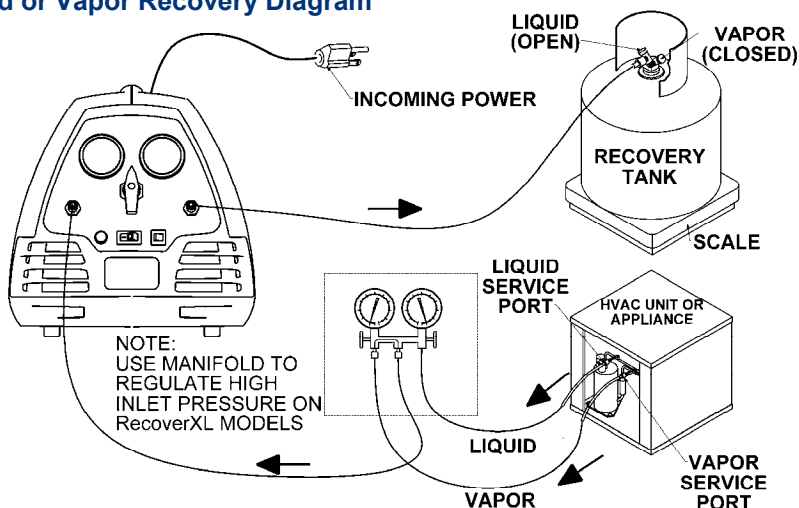
1. Know the type and quantity of refrigerant present before servicing any system.
2. Turn off power to the system being serviced. Turn the selector knob to off.
3. Connect your manifold to the system being serviced. High Side to liquid port and Low Side to vapor port as shown in diagram on page 4.
4. Connect the Utility port of your manifold to the 1/4" SUCTION port of the **RecoverXLT**.
5. Connect one hose from the recovery cylinder (liquid side) to the 1/4" DISCHARGE port of the **RecoverXLT**.

Note: Be sure to connect hose ends with shut-off to suction and discharge ports of recovery machine (for best performance use 3/8" hoses.)

6. Purge all hoses of non-condensables before recovering refrigerant into recovery cylinder.
7. Open the liquid valve on the recovery tank.
8. Turn the **RecoverXLT** on.
9. Turn the selector VALVE on the **RecoverXLT** to either the LIQUID or VAPOR position.
10. Open the Utility and either High Side or Low Side valves on the manifold. Remember it is more efficient to recover the liquid refrigerant first. **Caution: do not over-pressure low side gauge.**
11. The **RecoverXLT** will continue to recover until it reaches and sustains the appropriate vacuum at which point the LOW PRESSURE SWITCH shuts down the unit and the lamp indicates **Recovery Complete**.
12. Turn the system switch off. Turn the selector valve clockwise to OFF. Turn the system switch on. Turn selector valve to PURGE position.
13. When the unit again shuts down and the lamp indicates **Recovery Complete**, the recovery and purge cycles are complete.

Note: If the machine is not recovering, refer to the troubleshooting guide on page 9. Restart procedures are on the side of the machine and below.

Liquid or Vapor Recovery Diagram



Push-Pull Liquid Recovery

The **Push-Pull Liquid Recovery** mode is used for transferring large volumes of liquid refrigerant. The **RecoverXLT** “pulls” vapor from the recovery cylinder and produces high pressure discharge gas that “pushes” liquid out of the HVAC system and into the recovery cylinder. The auto purge feature makes the reconfiguration to vapor recovery easier and faster to do.

Some HVAC systems will not allow for the push-pull recovery method. If any of the following conditions apply, do not use push-pull method, but follow the instructions page 4 for **RecoverXLT**.

- System contains less than 10 pounds of refrigerant.
- System is a heat pump or other unit with a reversing valve.
- System has an accumulator between the service ports used in liquid recovery.
- The refrigerant system does not allow for the formation of a solid column of liquid.

For push-pull recovery, a sight glass is monitored during recovery. When liquid is no longer visible, stop recovery and finish recovering using the VAPOR recovery process for **RecoverXLT** as described on page 4.

When push-pull recovery is complete, a small amount of refrigerant remains in the system. For complete recovery, the system must be pulled into a vacuum as required by EPA standards. This process requires the following equipment:

- 1) An extra hose for the push-pull recovery.
- 2) A recovery cylinder with about 5 lbs. of refrigerant.
- 3) A sight glass (**Note: Make sure sight glass is**

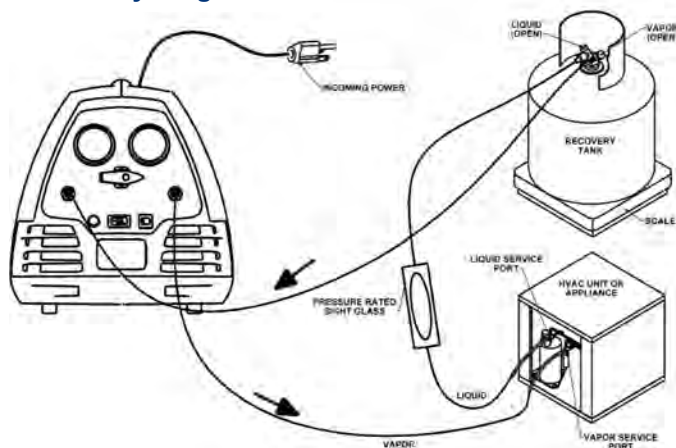
rated for the pressure of the refrigerant being recovered).

Follow these steps:

- 1) Turn off power to the system to be serviced.
- 2) Hook up the **RecoverXLT**, the system to be recovered, and the recovery tank as shown in the diagram above.
- 3) **Purge all hoses** of non-condensables before recovering refrigerant into recovery cylinder.
- 4) Open valves on the recovery tank.
- 5) Turn the selector valve to VAPOR position.
- 6) Turn the **RecoverXLT** on.
- 7) Monitor the sight glass. When the passing liquid is no longer visible through the sight glass, the push-pull method of recovery is complete.
- 8) Close the VAPOR valve on the recovery tank and let the recovery continue.
- 9) Turn the selector valve clockwise to the PURGE position and follow procedures for purging the **RecoverXLT**.
- 10) Turn the **RecoverXLT** off.
- 11) Close LIQUID valve on recovery tank.
- 12) Reconnect the hoses per the procedure for the **RecoverXLT** vapor recovery instructions.
- 13) Rotate the selector valve to the VAPOR position.
- 14) Continue recovery until the unit shuts off or reaches the appropriate level of vacuum.

Note: See page 4 for a detailed set of instructions on Vapor Recovery.

Push-Pull Recovery Diagram



RECOVERY TIPS AND TECHNIQUES

- 1) To assure the fastest and quickest recovery possible, use the shortest hoses possible and avoid hoses with Schrader depressors.
- 2) Know what kind and the amount of refrigerant that is going to be recovered. This is critical to avoid contamination and know how much refrigerant will be recovered. The first job of the day usually means a fresh, empty tank and no cause for worry about over-filling. However, the last job of the day means there is already liquid in the tank and over-filling can be a concern. Over-filling a recovery cylinder can have disastrous results.
- 3) Refrigerant responds to heat. Therefore, a significant increase in the speed of the recovery process will be obtained if a heat gun is used, specifically to any spots where liquid may have accumulated.
- 4) Always try to recover liquid first. This is the preferred method of recovery for the **RecoverXLT**, which pumps liquid 5 to 7 times faster in standard liquid mode than vapor.
- 5) If recovering large amounts of refrigerant (20 lbs or more), the push-pull method is recommended. (**Note: This process requires the hoses to be switched before recovery of the remaining vapor.**)
- 6) Recovery can often be speeded up by simultaneous recovery from both the high and low side of the system. Attach short hoses to both the high and low side of the system and join them with a BRUTE™ II Manifold or Y connector to the hose going to the Suction Port of the **RecoverXLT**.
- 7) Protect the **RecoverXLT** by keeping the built-in suction filter IN THE MACHINE. Failure to use the suction filter in the **RecoverXLT** will void the warranty.
- 8) Recovery machines are not vacuum pumps. For proper evacuation, use a YELLOW JACKET SuperEvac™ vacuum pump. To speed up the evacuation process, use the SuperEvac vacuum pump and a core removal tool (Part #18975). For more information contact your YELLOW JACKET wholesaler.

Recovering R-410A High Pressure Gas

IMPORTANT!!! Some equipment should not be used with this refrigerant. Take time to read the safety instructions that came with the device you are servicing as well as any material that came with your refrigerant.

WARNING!!! USE ONLY D.O.T. RECOVERY CYLINDERS APPROVED FOR R-410A.
Overfilling the tank may cause it to rupture!

The **RecoverXLT** will recover R-410A provided the following instructions are followed:

- 1) Set-up for recovery as per diagram on page 4 for normal recovery or page 5 for push-pull recovery.
- 2) Follow the operating procedures for your model.

- 3) Continue recovery until the **Low Pressure Switch** has shut the unit off and lamp indicates **Recovery Complete**.
- 4) Turn system switch off.
- 5) Purge the machine (see page 3 for more details).

Technical Support: Call 800-769-8370 for additional information.

Troubleshooting Guide

Condition	Possible Problem	Possible Solution
No power to unit	Power cord not plugged in	Plug power cord in
	Outlet not energized	Reset breaker
Compressor will not start	Compressor under unequalled conditions	See restart procedure
	Compressor thermal overload is tripped	Thermal overload will reset in approx. 15-30 minutes
	Unit is shut down on Recovery Complete.	Low pressure switch resets at atmospheric pressure, rotate selector valve to either the Vapor or Liquid Recovery position.
	Unit is shut down on tank full or high pressure.	Check tank pressure, check for restrictions, check shorting cap or umbilical connection, and check high gauge pressure to see if unit is under high pressure.
Unit runs but shuts off after short time	Restriction on discharge side tripping the high pressure switch	Check for restrictions 1) Tank valves 2) Schrader cores
		Selector valve in correct position
Unit trips breaker upon start up	Compressor is under unequalled conditions	See restart procedure
Unit runs but does not recover refrigerant	Suction filter clogged	Clean or replace suction filter
	Selector valve in wrong position	Put selector valve in liquid or vapor recovery position
Unit will not pull a vacuum	Hoses are not tight	Tighten hoses
	Leak in HVAC/R system	Find and repair leak in system
Unit running sluggish	Low voltage to unit	Check power supply
Vacuum switch won't reset	Switch needs to reset	Pressurize inlet port

***If the attached power cord or socket is damaged (95215 or 95459), it must be replaced by the manufacturer or its authorized service center in order to avoid hazard.**

TECHNICAL DATA

**UL Certified Rates to ARI Standard 740-98*

RecoverXLT	R-12	R-134a	R-22	R-500	R-502	R-410A
Vapor lbs./min	.37	.37	.37	.37	.66	.42
Liquid lbs./min	1.98	1.98	1.98	1.98	2.65	1.68
Push-Pull lbs./min	12.81	12.81	12.81	12.81	12.9	11.6
Vacuum Level	15 inHg	15 inHg	15 inHg	15 inHg	15 inHg	15 inHg

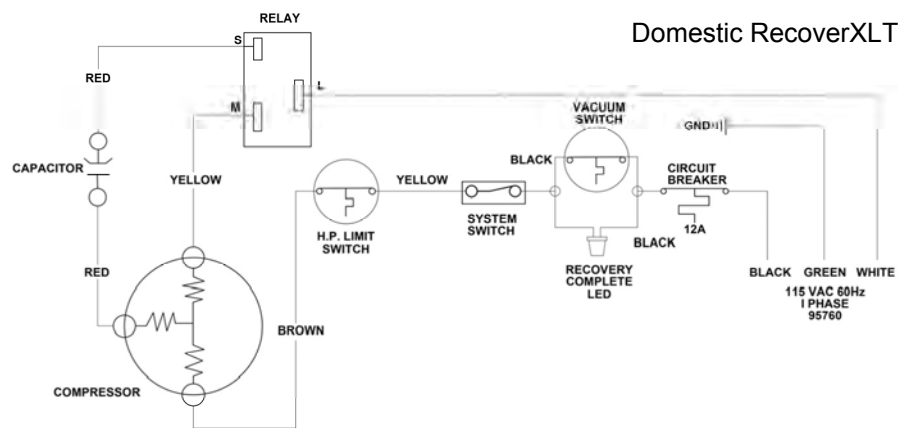
Other Refrigerants - The **RecoverXLT** is approved for use with the following refrigerants which have not been certified for a particular recovery rate: R12, R-401A, R401B, R-402A, R-402B, R-404A, R-406A, R-407A, R-407B, R-407C, R-407D, R-408A, R-409A, R-411A, R-411B, R-500 and R-502.

Technical Data, cont.

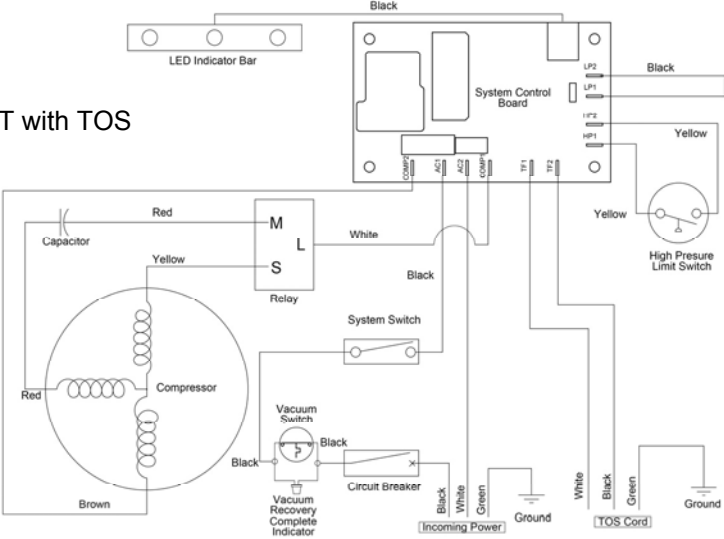
Compressor:	1/2 HP Reciprocating Oil-Less
Power Source:	115V AC 60 Hz 1 Phase
Amperage:	
Full Load Amps:	11.0
Locked Rotor Amps:	25.2
Size:	
Height:	7.5"
Width:	7.5"
Depth:	9.25"
Weight:	29.90"

Wiring Diagrams

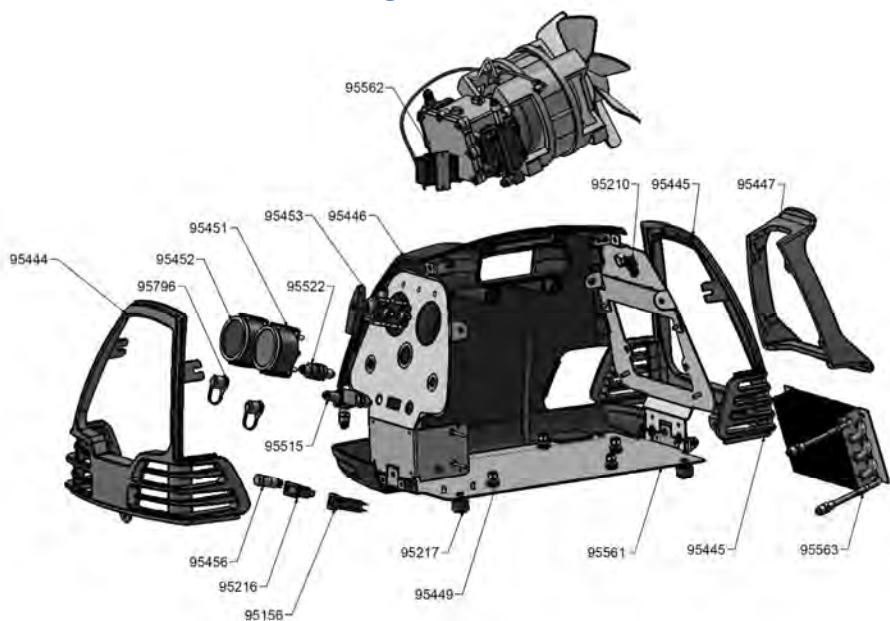
Domestic RecoverXLT



RecoverXLT with TOS



REPLACEMENT PARTS



RecoverXLT Parts

Part#	Description	Part#	Description
95156	12A Breaker	95452	Gauge Low
95210	Strain Relief	95453	Manifold Assembly
95216	Rocker Switch	95456	Complete Light
95217	Rubber Feet	95515	Discharge Port
95444	Case Front	95522	Suction Port
95445	Case Back	95561	Sheet Metal Base
95446	Case Half	95562	Compressor
95447	Cord Wrap	95563	Condenser Assembly
95449	Grommet	95796	Cap
95451	Gauge High		

RecoverXLT w/TOS Parts Only

Part#	Description
95477	TOS LED Strip Assembly
95478	TOS LED Connection Cable
95527	TOS Board for RecoverXLT (board, LED strip and cable)
95248	Umbilical Cord Overfill Sensor
95188	Shorting Cap for Umbilical Cord



IMPORTANT NOTICE TO PURCHASER

Check for damage immediately. Prior to shipment, all YELLOW JACKET *RecoverXLT* Refrigerant Recovery Systems are completely tested and inspected to assure compliance with Ritchie Engineering factory specifications.

If the recovery system carton is damaged, check contents immediately. Note damage on shipper's Bill of Lading and have shipper sign statement. Notify carrier immediately of the damage to arrange inspection of the recovery system and packaging. The CARRIER ALONE is responsible for handling and settling your claim. Ritchie Engineering will cooperate in assessing damage if

the recovery system is returned to the factory prepaid.

Carton contents include:

- *RecoverXLT* Refrigerant Recovery System
- Owner's manual
- Warranty registration card

To validate warranty, mail registration card within 10 days.

WARRANTY INFORMATION

Ritchie Engineering guarantees YELLOW JACKET products to be free of defective material and workmanship which could affect the life of the product when used for the purpose for which it was designed. Warranty does not cover items that have been altered, abused or returned solely in need of field service maintenance.

YELLOW JACKET recovery products (UPC 957xx) are covered by a one year warranty for parts and labor. The 115V recovery products (UPC 95760 and 95762) have an extended three year compressor warranty if the warranty card is returned and on file. The warranty also allows for a one year over-the-counter exchange, when applicable. To receive this over-the-counter exchange, call Ritchie Engineering Customer Service at (800)769-8370 and get the required authorization number. Failure to get the required authorization number could result in a denial of the over-the-counter exchange.

The following exceptions will not be covered under this warranty: Recovery products that have been altered, misused, or improperly maintained.

The following must be done before returning unit:

- 1) Call our technical service personnel at (800) 769-8370 to assess if the problem can be resolved over the phone.
- 2) Obtain an RGA number from Ritchie Engineering for the return of the product.
- 3) Fax a copy of the original invoice to (800) 322-8684.

Note: All units must be shipped to the Bloomington, MN plant for repair. If at any time after the warranty period you have problems with your YELLOW JACKET recovery unit, call

our technical service department for help in selecting the correct replacement parts, or to arrange for its repair at reasonable costs.

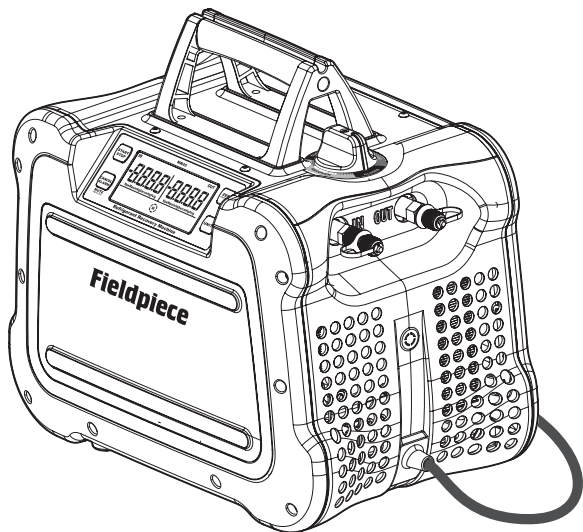


YELLOW JACKET Products Division
Ritchie Engineering Co., Inc.
10950 Hampshire Avenue South
Bloomington, MN 55438
e-mail: custserv@yellowjacket.com
Web Site: www.yellowjacket.com
Phone: 800-769-8370
Int'l Phone: 952-943-1333
Fax: 800-322-8684
Int'l Fax: 952-943-1605

Fieldpiece

Refrigerant Recovery Machine **OPERATOR'S MANUAL**

Model MR45



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Important Notice

This is not a consumer machine. Only qualified personnel trained in the recovery or pumping of refrigerant may operate this machine.

Read and understand this operator's manual in its entirety before using MR45 to prevent injury or damage to you or equipment.

What's Included

- MR45 Refrigerant Recovery Machine
- 10 Extra Mesh Screens for Input Port
- 3 Extra O-ring for Input Port
- Operator's Manual
- 1 Year Warranty



WARNINGS

Do not use to pump hydrocarbons, explosion risk.

Do not use to pump flammable media, explosion risk.

Inhalation of high concentrations of refrigerant vapor can block oxygen to the brain causing injury or death.

Refrigerant liquid can cause frostbite.

Certifications



WEEE

Do not dispose through typical waste streams.



IN ACCORDANCE WITH SECTION 608 OF THE CLEAN AIR ACT:

THIS EQUIPMENT HAS BEEN CERTIFIED BY UNDERWRITERS LABORATORIES INC. TO MEET EPA'S MINIMUM REQUIREMENTS FOR RECOVERY EQUIPMENT INTENDED FOR USE WITH REFRIGERANTS LISTED IN TABLE 4, AHRI 740-98

Description

The MR45 is the first variable speed DC motor recovery machine with a digital display. Pump refrigerant easier and quieter than ever before. Connect your hoses without navigating around dark tight spaces or picking the pump off the ground. View status messages and pressures directly on the big bright display.

Carry the machine to and from the job site easily and well protected from environmental hazards. Turn the single rubberized control valve to route refrigerant through MR45, and use the self-purge function to pump the last traces into the recovery cylinder instead of being left in the machine or released into the environment.

Features

- **Lightweight (22 lbs)**
- **Smooth and Fast Operation (1 HP DC Motor)**
- **Digital Display with Status Messages**
- **Reliable Rubberized Construction**
- **Easy to Access Port Design**
- **Hex Nut Secures Input Port During Hose Removal**
- **Power Cord Storage**
- **Ceramic Cylinders**
- **Self Purge**
- **Operation in the Rain (IP24)**
- **Wide Operating Voltage (95 to 130 VAC)**
- **UL Verified to Section 608 of EPA Clean Air Act**
- **UL Verified to AHRI Standard 740**

Specifications

Display: 2 x 10000 count LCD with status messages

Backlight: Blue color

Measurement rate: 3.3 times per second, nominal

Input Port Pressure Sensor Range: -30" Hg to 600 psig

Output Port Pressure Sensor Range: -30" Hg to 600 psig

High Pressure Cutoff: 558 psig, nominal

Resolution and Units: 1 psig (1" Hg), 0.05 bar (2 cmHg),
0.01 Mpa (2 cmHg), 5 Kpa (2 cmHg)

Pressure Sensor Accuracy:

± 0.5" Hg (Vacuum)

± (0.6% of reading +2 psig)

Final Recovery Vacuum: 14.9" Hg

Compressor: Twin cylinder reciprocating (oil-less)

DC Motor: 1 HP (variable smart speed)

Power Source: 95 to 130 VAC @ 60 Hz 1 phase

Max Current Draw: 12.0 AAC

Valve: Single dual-route ball valve

Input Port Filtration: 9 mm mesh screen, stainless

Dimensions: 14.8" x 9.8" x 13.5"
376 mm x 250 mm x 344 mm

Weight: 22 lbs

Operating Environment: 32°F to 122°F (0°C to 50°C)

Storage Environment: -4°F to 140°F (-20°C to 60°C)

Approved Refrigerants: R12, R134A, R22, R401A (MP39),
R401B, R401C, R402A, R402B, R404A, R406A, R407A, R407B,
R407C, R407D, R408A, R409A, R410A, R411A, R411B, R412A,
R500, R502, R507, R509.

Safety Information

First Aid for Refrigerant Exposure

Inhaled: Move to fresh air immediately.

Eye: Immediately flush eye with water. Seek medical attention.

Skin: Immediately flush skin with water. Seek medical attention.

General

1. This is not a consumer machine. Only qualified personnel trained in the recovery or pumping of refrigerant may operate this machine.
2. Read and understand this operator's manual in its entirety before using MR45 to prevent injury or damage to you or equipment.

Environmental

1. Use only within operating conditions (32-122°F)
2. Ensure fan opening is clear of debris.
3. Explosion and fire risks:
Do not use near sewer lines.
Do not use in poorly ventilated enclosed areas.
Do not use near gasoline, acetylene, or other flammable gases.
Do not use to pump hydrocarbons.
Do not use near flames or sparks.
Assume all components are pressurized.

Personal Protection

1. Frostbite danger. Be careful using hoses.
2. Use personal protective equipment:
Wear safety goggles.
Wear earplugs if using for long durations.
Wear protective gloves.

MR45 Protection

1. Use only on approved list of refrigerants (page 9).
2. Do not use with hydrocarbons.
3. Ensure mesh screen filter is installed and clean (page 30).

Setup

1. Repair any damaged parts before using.
2. Disconnect power and allow fan to stop before opening or servicing MR45.
3. Perform self test periodically (page 22).
4. Ensure power cord is not damaged.
5. Ensure all equipment is grounded.
6. Extension cord options:
14 AWG or thicker, up to 50 feet (15 m)
12 AWG or thicker, up to 100 feet (30 m)
7. Ensure extension cord is grounded, 3 conductor grounded.

Operational

1. Use correct refrigerant hoses with ball valve shutoffs.
2. Keep track of the current amount of refrigerant in the cylinder. Refrigerant scales are a good way to do this.
3. Overfilling a cylinder past 80% can cause an explosion and violates DOT laws.
4. Close cylinder off from refrigerant if it reaches 80% of its capacity.
5. Use only DOT CFR 49 or UL-approved refrigerant cylinders for the refrigerant being recovered.
6. Use recommended accessories.
7. Use a small filter drier on the input port and change it often to protect machine from contaminated refrigerants.
8. Monitor pressures and temperatures.
9. Self purge MR45 after each use. No refrigerant should remain in the machine.

Tech Tips

General

1. Store in the self purge or recover position. Do not store in the CLOSED position as trapped air and refrigerant can expand and damage components.
2. For extended storage, purge with nitrogen, set to RECOVER, and screw non-sealing caps onto the ports.
3. Recovery machines are not vacuum pumps and should not be used for deep evacuations.
4. Do not run the machine without the mesh screen filter (page 30). Doing so will void the warranty and damage the machine.
5. Understand the refrigerant safety data sheet (SDS).

Setup

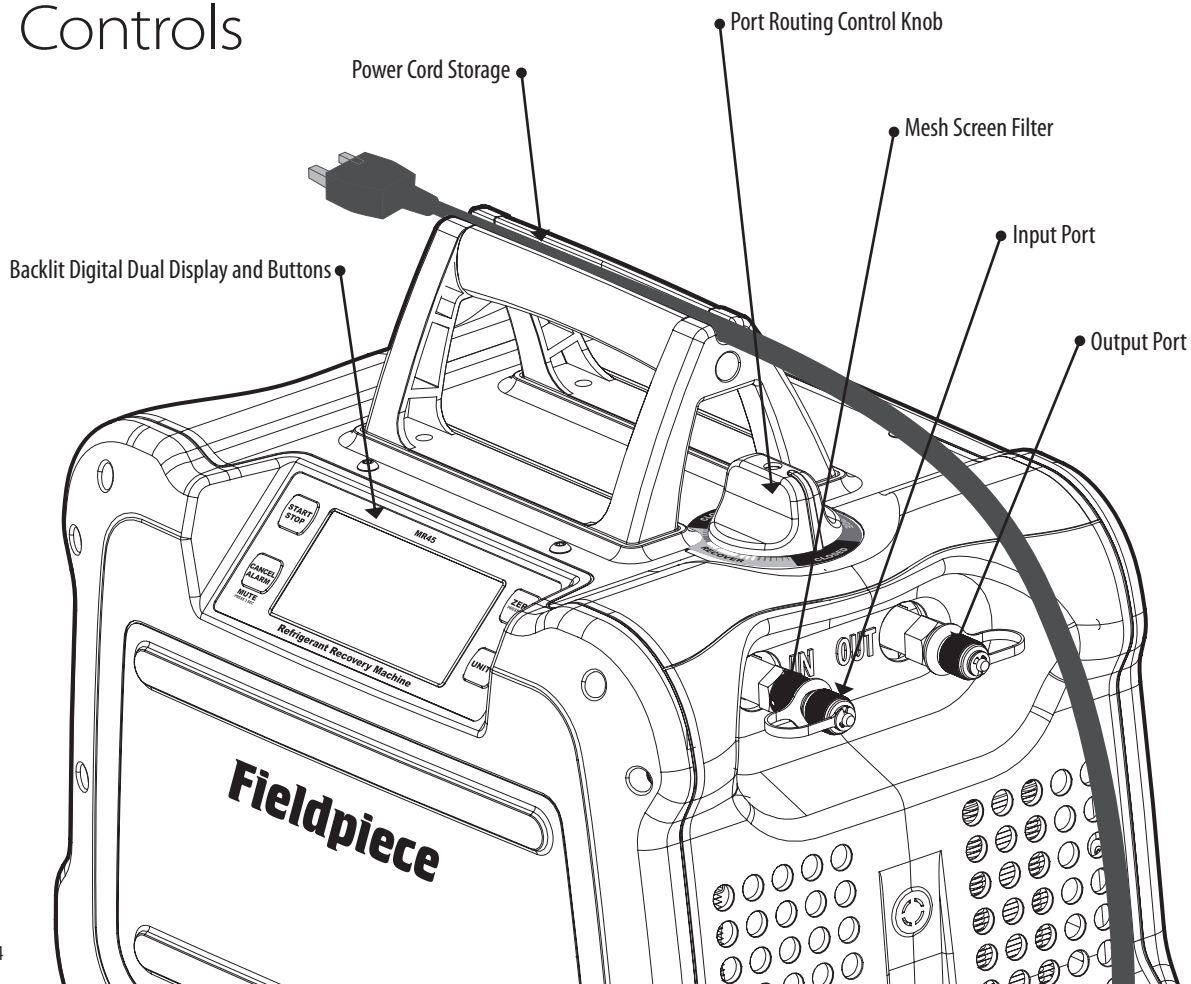
1. Know the refrigerant of the system and make sure your recovery cylinder matches that type.
2. Hoses:
Short as possible (3/8" hose with 1/4" fitting).
Core depressors removed.
Ball valve shutoffs instead of low loss fittings.
Replace if worn.
3. Manifold gauges are not necessary for recovery but can make it more convenient and increase speed by having 2 system hook ups.
4. Use a Schrader valve core removal tool to temporarily remove valve cores from service valves.
5. Use the push-pull method if recovering over 30 lbs.
6. Evacuate your empty recovery cylinders to 29.6" Hg before use.

7. Know how much refrigerant you expect to recover before starting.
8. Ensure there's enough room in the recovery cylinder to not exceed 80% filled during the job, or monitor and have a second cylinder ready.
9. Always purge hoses before recovery. If cylinder is too hot, use an ice bath to reduce the temperature and pressure of the cylinder.
10. If cylinder pressure is higher than expected, you can purge non-condensables into another cylinder (page 23).

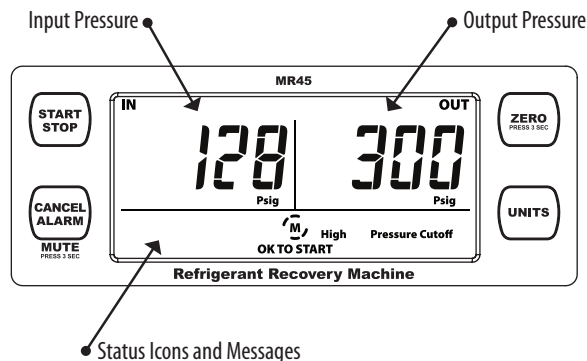
Operational

1. Recover as much liquid as possible before recovering vapor.
2. Recovery is faster when the recovery cylinder is cooler.
3. You can use a heat gun to warm refrigerant lines to boil trapped refrigerant.
4. Recover from both suction and liquid lines at the same time for faster vapor recovery.

Controls



Display and Buttons



START/STOP

Start or Stop the motor.

ZERO (press 3 seconds)

Zero pressure sensors. Ports must be open to atmosphere.

CANCEL ALARM

Cancel alarm currently sounding (temporarily mute).

MUTE (press 3 seconds)

Toggle mute for all sounds (setting is saved).

UNITS

Select pressure/vacuum units.

Status Icons and Messages

The icon rotates when the motor is running.

The icon is shown when MR45 is set to MUTE.

OK TO START

Motor stopped. Temperatures, voltages, and pressures are currently safe to start the motor again.

COMPLETE

Motor stopped. Purge or recovery has reached 10"Hg or 20"Hg vacuum for 10 sec.

Input Closed

Cannot zero pressures. Open input port.

Output Closed

Cannot zero pressures. Open output port.

High Voltage Warning

Motor stopped. Voltage was above 130 VAC.

Low Voltage Warning

Motor stopped. Voltage was below 95 VAC.

High Pressure Cutoff

Motor stopped. Output (cylinder) approached dangerous pressure.

Low Pressure Cutoff

Motor stopped. Input reached 10"Hg or 20"Hg vacuum for 10 sec.

Motor Fault 1

Motor stopped. Motor temp. measured above operating range.

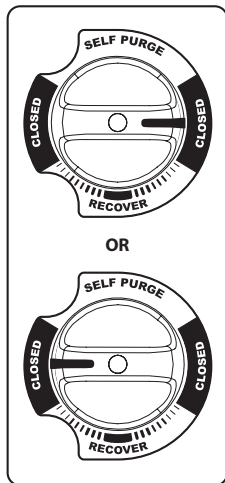
Motor Fault 2 ("throttle" shows on display)

Motor stopped. Motor current (amps) rose above operating range. Throttle RECOVERY to reduce cylinder pressure (page 19).

Motor Fault 3

Motor stopped for unknown reason.

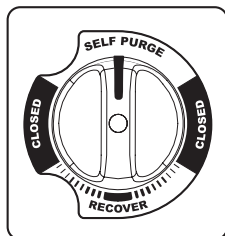
Port Routing Control



OR

CLOSED

- Input and Output closed.
- Set to either closed position to close off both ports during setup.



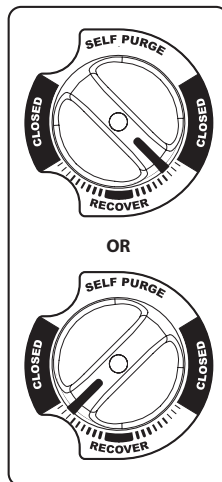
SELF PURGE

- Input closed, Output open.
- After recovery is complete, set to this position to close the IN port before you START the purge.



RECOVER

- Input and Output fully open.
- Set to this fully open position for most of the recovery process.



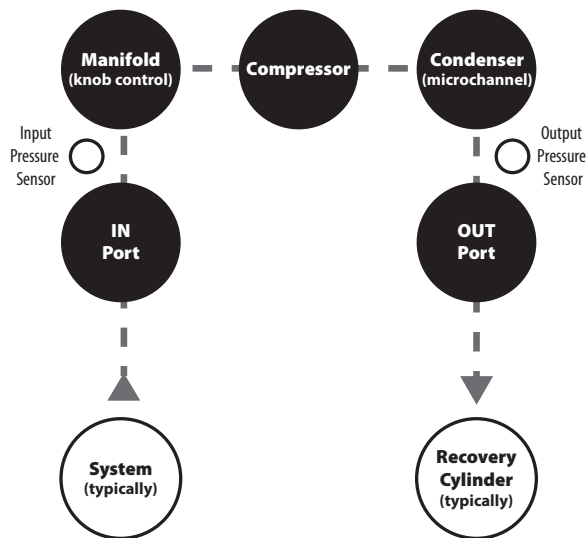
OR

RECOVER (throttled)

- Input and Output partially open.
- Rotate away from RECOVER in either direction to reduce liquid slugging if knocking occurs. This slows the flow of refrigerant so the machine operates more smoothly.
- Only throttle as much as needed for smooth operation.

MR45 Refrigerant Flow

Refrigerant liquid and vapor are pulled through the machine by the pressure difference created by the compressor. For maximum performance, increase the IN pressure and reduce the OUT pressure. See Tech Tips (page 12).



Dynamic Pressure Measurement

MR45 pressure readings are designed only for monitoring pressures. Do not use MR45 for diagnostic pressure measurements.

If a system's pressure is stable, MR45 pressure readings will be close to your other pressure gauges.

If a system's pressure is changing, pressure measurements at different locations within that system will be different. For every 3 feet of 1/4" hose, the pressure may have a difference of approximately ± 20 psig.

Functions

Self Test

Perform this test to ensure the high pressure cutoff and pump are operational.

1. Set knob to RECOVERY.
2. Open IN port to air.
3. Connect a ball valve to OUT port. (Included caps are not sealed.)
4. Close the ball valve.
5. Press START to create a pressure at the OUT port.
6. MR45 is working well if High Pressure Cutoff occurs around 550 psig within 45 seconds. Cutoff time can increase if a hose is placed in front of your ball valve.

Self Purge

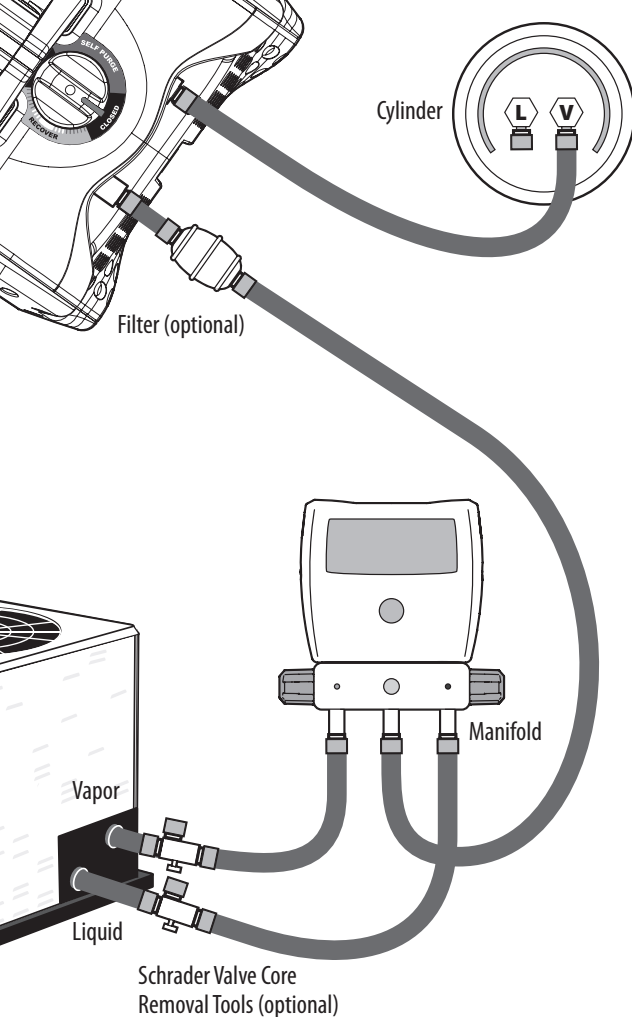
Use the SELF PURGE feature at the end of every recovery to pump the last bit of refrigerant out of MR45. Benefits include increased machine life, reduced environmental impact, and most importantly to prevent refrigerant mixing.

1. After recovery is complete, set knob to SELF PURGE. This closes the IN port and routes the MR45 condenser to the intake of the MR45 compressor.
2. Press START to empty MR45 into the recovery cylinder.
3. Once 10"Hg is reached for 10 seconds, the motor stops automatically.

Purging a Recovery Cylinder

When the cylinder pressure is higher than expected you may have non-condensables at the top of the cylinder. Use a second deeply evacuated cylinder to pull out the non-condensables.

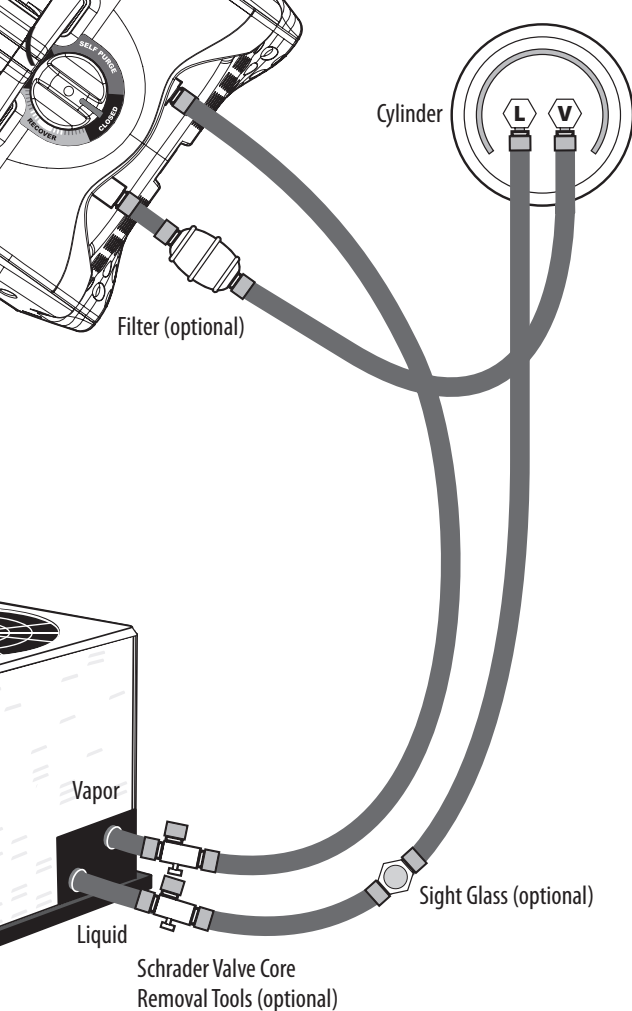
1. Leave pressurized cylinder undisturbed overnight.
2. Use a vacuum pump to evacuate another cylinder.
3. Use your manifold gauges to connect the closed vapor ports of the two cylinders.
4. Measure the vapor temperature of the pressurized refrigerant cylinder.
5. Use a P/T chart or digital manifold to find specified pressure.
6. Open the evacuated vapor port.
7. Open (purge) the pressurized vapor port until pressure is reduced to 5 psi above specified pressure.
8. Close valves.
9. If desired, repeat in 15 minutes to allow the tank to settle again.



Direct Liquid/Vapor Recovery

This is the typical recovery method. Vapor and liquid lines are routed through your manifold, into MR45, and out to the recovery cylinder.

1. Close valves of recovery cylinder, MR45, and manifold.
2. Set up as shown in the diagram.
3. Open valves of hoses and removal tools.
4. Set MR45 to RECOVER.
5. Open high side of manifold for liquid recovery.
6. To purge air from hoses, briefly unseat hose fitting at cylinder until vapor is seen. Unseat hose fitting at low side of manifold to purge low side hose.
7. Fully open vapor valve of recovery cylinder.
8. Press START to begin recovery.
9. Adjust the knob as needed to throttle refrigerant flow if liquid slugging (knocking) occurs.
10. When liquid recovery is complete, open low side of manifold for vapor recovery.
11. MR45 stops automatically after vacuum reaches 10"Hg for 10 seconds. For a deeper vacuum, press START to continue recovery. MR45 stops again after vacuum reaches 20"Hg for 10 seconds. Press STOP to manually halt recovery at any time.
12. Set knob to SELF PURGE and press START to empty MR45. MR45 stops automatically after vacuum reaches 10"Hg for 10 seconds.
13. Close manifold and cylinder valves after self purge is complete.
14. Remove hoses from MR45, set knob to RECOVER, and cap ports.



Push/Pull Recovery

This method is only for larger systems with at least 30 lbs of liquid refrigerant. It's used to recover liquid before recovering vapor.

1. Close valves of recovery cylinder and MR45.
2. Set up as shown in the diagram.
3. Open valves of liquid hose and removal tool at liquid system port.
4. To purge air from system liquid hose, briefly unseat hose fitting at cylinder's liquid port until vapor is seen.
5. Fully open liquid valve of recovery cylinder and allow to pressurize.
6. Set MR45 to RECOVER.
7. Press START to begin recovery.
8. Fully open vapor valve of recovery cylinder.
9. To purge air from hoses briefly unseat hose fitting at vapor system port until vapor is seen.
10. Open valves of vapor hose and removal tool at vapor system port.
11. When liquid recovery is complete, press STOP to stop motor.
12. Close all valves and proceed to Direct Vapor Recovery (page 25).

Troubleshooting

Status Messages

Input Closed

Cannot zero the displayed pressure because pressure sensor not open to atmosphere. Open input port.

Output Closed

Cannot zero the displayed pressure because pressure sensor not open to atmosphere. Open output port.

High Voltage Warning

Voltage was above 130 VAC. Motor stopped. Ensure power network voltage is between 95 and 130 VAC @ 60 Hz.

Low Voltage Warning

Voltage was below 95 VAC. Motor stopped. Check power network to ensure voltage is between 95 and 130 VAC @ 60 Hz.

High Pressure Cutoff

Output (cylinder) reached dangerous pressure. Motor stopped. Ensure all valves after the output port are open. The cylinder may need to be cooled or replaced to reduce pressure.

Low Pressure Cutoff

Input reached final recovery vacuum. Motor stopped. It's normal to see this after RECOVERY or SELF PURGE is complete. If unexpected, ensure valves before the input port are open and the knob is not set to CLOSED.

Motor Fault 1

Motor temperature measured above operating range. Motor stopped. Extremely high ambient temperature, extended liquid recovery time, or high cylinder pressure can be the cause. Allow time for the motor to cool down before resuming, and throttle the RECOVERY (page 19).

Motor Fault 2

Motor current (amps) rose above operating range. Motor stopped. Extremely high ambient temperature, harsh liquid slugging, extended recovery time, or high cylinder pressure can be the cause. Throttle RECOVERY and start the motor. If fault occurs again, throttle even more and start the motor (page 19).

Motor Fault 3

Motor stopped for unknown reason. If this occurs repeatedly, there may be something wrong with MR45.

Other Symptoms

MR45 never reaches 10"Hg or 20"Hg vacuum during recovery or self purge.

Check for a leakage before the input port.

For 10"Hg vacuum, the recovery cylinder should be below 475psig.

For 20"Hg vacuum, the recovery cylinder should be below 230psig.

Input port shows frost or signs of leakage.

Ensure the grooved input fitting is hand tight before tightening the hex nut (page 30).

Recovery is slower than normal.

There could be an input blockage. Check mesh screen filter for blockage. Ensure knob is set to RECOVER.

Display does not turn on when plugged in.

Ensure power cord and outlet are okay.

Excessive noise during liquid recovery.

MR45 is experiencing a high load. Rotate the knob of MR45 to throttle the refrigerant flow.

Maintenance

General

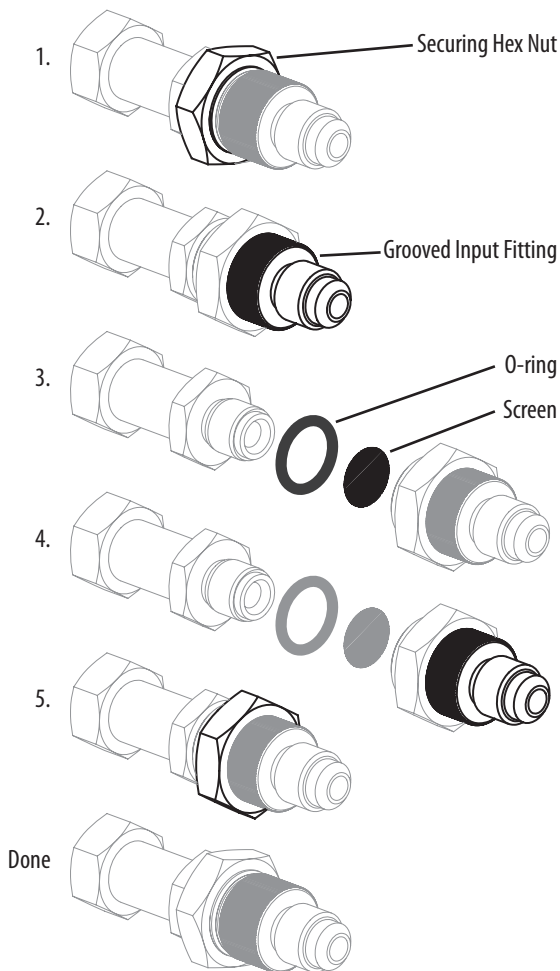
Wipe with damp cloth to clean the exterior.
Do not use solvents.

To extend the life of internal seals, occasionally pump a teaspoon of mineral oil through MR45.

Mesh Screen Filter

When the mesh screen filter becomes dirty and clogged, it means it's working to keep your MR45 working well for a long time. You need to clean or replace this screen often. Visit our website for information on obtaining extra mesh screens.

1. Loosen (counter clockwise) the securing hex nut on the IN port.
2. Unscrew (counter clockwise) the grooved input fitting.
3. Clean or replace the mesh screen.
4. Hand tighten (clockwise) the grooved input fitting.
5. Tighten (clockwise) the securing hex nut with 1/8 turn with a wrench.



Limited Warranty

This machine is warranted against defects in material or workmanship for one year from date of purchase from an authorized Fieldpiece dealer. Fieldpiece will replace or repair the defective unit, at its option, subject to verification of the defect.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the machine.

Any implied warranties arising from the sale of a Fieldpiece product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. Fieldpiece shall not be liable for loss of use of the machine or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss.

State laws vary. The above limitations or exclusions may not apply to you.

Obtaining Service

Visit www.fieldpiece.com/rma for the latest information on how to obtain service.

MR45



ENVIRONMENTAL PROTECTION AGENCY
REFRIGERANT RECOVERY OR RECYCLING DEVICE
ACQUISITION CERTIFICATION FORM

EPA regulations require establishments that service or dispose of refrigeration or air-conditioning equipment to certify that they have acquired recovery or recycling devices that meet EPA standards for such devices. To certify that you have acquired equipment, please complete this form according to the instructions and **mail it to the appropriate EPA Regional Office. BOTH THE INSTRUCTIONS AND MAILING ADDRESSES CAN BE FOUND ON THE REVERSE SIDE OF THIS FORM.**

PART 1: ESTABLISHMENT INFORMATION

Name of Establishment

Metro Park East ADM Facility - Metro Waste Authority

Street

12181 NE University Avenue

(Area Code) Telephone Number

(515)-333-4450

City

State

Zip Code

Mitchellville

Iowa

50169

Number of Service Equipment Based at Establishment

Four (4)

Country

United States of America

PART 2: REGULATORY CLASSIFICATION

Identify the type of work performed by the establishment. **Check all boxes that apply.**

☒ Type A - Service small appliances

☒ Type B - Service refrigeration or air-conditioning equipment other than small appliances

☐ Type C - Dispose of small appliances


☐ Type D - Dispose of refrigeration or air-conditioning equipment other than small appliances

PART 3: DEVICE IDENTIFICATION

	Name of Device(s) Manufacturer	Model Number	Year	Serial Number (if any)	Check Box if Self-Contained
1.	Field Piece Instruments, Inc.	MR45	2024		<input type="checkbox"/>
2.	Yellow Jacket	95760	2020	20390179	<input type="checkbox"/>
3.	Yellow Jacket	95760	2019	19400068	<input type="checkbox"/>
4.	Yellow Jacket	95760	2019	19180066	<input type="checkbox"/>
5.					<input type="checkbox"/>

PART 4: CERTIFICATION SIGNATURE

I certify that the establishment in Part 1 has acquired the refrigerant recovery or recycling device(s) listed in Part 2, that the establishment is complying with Section 608 regulations, and that the information given is true and correct.

 8/8/25 MATTHEW J. MOORE Comp. Coord.
Signature of Owner/Responsible Officer Date Name (Please Print) Title

Section G:
EPA Notification of PCB Activity



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF LAND AND
EMERGENCY MANAGEMENT

September 24, 2019

ARTHUR KERN
12181 NE UNIVERSITY AVE
MITCHELLVILLE, IA 50169

Subject: Notification of PCB Activity

Thank you for filing the Notification of PCB Activity form for the facility location listed below:

Received: September 24 2019
TSCA ID Number: IATSCA105205
Handler Name: METRO PARK EAST LANDFILL
Location Address: 12181 NE UNIVERSITY AVE
MITCHELLVILLE, IA 50169

EPA's Office of Resource Conservation and Recovery (ORCR) is issuing the above TSCA identification number to the listed facility. This number may only be used for PCB-related activities and may not be used for any other regulated hazardous waste activities.

If you have also applied for a Regulated (Hazardous) Waste EPA ID number under RCRA, you may request a consolidation of your RCRA identification number and TSCA identification number upon receipt of your RCRA EPA ID number. To do so, ORCR would require confirmation of the RCRA identification number that has been assigned to your facility. A copy of the RCRA ID Assignment Form (8700-12A(6-90)) for your facility would be an example of acceptable documentation.

If you have any questions regarding the PCB waste handlers database, please contact Karen Swetland-Johnson at ORCRPCBs@epa.gov or (703)308-8421.

Sincerely,

A handwritten signature in blue ink, appearing to read "Amanda Kohler", is located below the "Sincerely," text.

Amanda Kohler, ORCR
Permits Branch Chief

Section H: Unique Marking System

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Section I: Site Operation Plan

Appliances

1. Introduction

One of the goals of Metro Waste Authority is to provide environmentally sound and economically feasible solid waste management for Metro Waste Authority's service area. To help meet this goal Metro Waste Authority has established a white goods collection and demanufacturing program in which the program receives appliances, removes all hazardous components from appliances and recycles metal, refrigerants and other components from demanufactured appliances.

Metro Waste Authority's commitment to recycling conserves natural resources, energy and usable landfill space. A major concern in an appliance recycling effort is to prevent the release of harmful and hazardous components into the environment. Properly detailed operational procedures will eliminate contamination of soils, air, surface and ground water, as well as minimizing potential environmental, public health and Metro Waste Authority employee exposure.

This Chapter of the Appliance Demanufacturing Operation Procedures will outline all phases; from appliance acceptance, to handling, inspection, component removal, storage, and disposal of regulated materials. This Chapter ensures that proper training and regulatory procedures are implemented and enforced. This Chapter intends to comply with the Environmental Protection Agency, Iowa Department of Natural Resources, Department of Transportation/United Nations packing, labeling, storage, and shipping regulations, Workers-Right-To-Know Training and Uniform Fire Codes.

2. Program Administrator

The Program Administrator has the responsibility of administrating the Appliance Demanufacturing Program. Duties include:

- Implementing the plan.
- Reviewing and updating the written plan.
- Monitoring the workplace for compliance of the plan.
- Arranging for or conducting training.
- Performing hazard assessments.

The Program Administrator may assign other employees to oversee parts of the Appliance Demanufacturing Program. The Program Administrator will perform periodic checks to ensure the employees who have been assigned tasks in the Appliance Demanufacturing Program are fulfilling their responsibility. The Program Administrator for Metro Waste Authority's Appliance Demanufacturing Program is the Compliance Coordinator.

3. Training

The Program Administrator oversees training new and current employees. The following training must be completed prior to an employee dismantling an appliance.

- Identification of PCB and NONPCB ballast and capacitors.
- Acceptance procedures for receiving, offloading and handling practices.
- Identification and location of hazardous components within an appliance.
- Proper removal procedures of ballast, capacitor, freon, sodium chromate and mercury components.
- Refrigerant type identification and removal procedures.
- Safety hazards associated with dismantling appliances including chemical hazards and Job Safety Analysis.
- Personal Protective Equipment.
- Disposal.
- Proper unloading procedures.
- Review of the Operations Plan.
- Emergencies.
- Marking System.

4. Personal Protective Equipment

Employee safety is important while removing a hazardous component of an appliance. To protect an employee during this process the following equipment should be worn.

- Mercury, Capacitor and Ballast removal – work gloves, steel-toed boots and safety glasses.
- Freon removal – nitrile gloves, work gloves, steel-toed boots and safety goggles.
- Sodium chromate removal – nitrile gloves, steel-toed boots, safety goggles, face shield and tyvek suit.

5. Acceptance of Appliances

Metro Park East Landfill accepts unusable appliances intended for recycling only. Sources include, but not limited to; households, businesses, municipalities and private haulers. Periodically or upon request, Landfill staff will conduct training to the above entities outlining procedures for proper handling and storage of appliances to help meet acceptance standards at the landfill. Landfill employees will also be trained on proper storage and handling procedures prior to demanufacturing.

- a. All appliances arriving at the Metro Park East Landfill must be handled in a manner that prevents any release of hazardous or regulated components into the environment. No method of handling shall allow for:
 1. Damage to the case that prevents appliance disassembly.

2. Cuts or ruptures to refrigerant, evaporator or condenser lines allowing for refrigerant or sodium chromate to be released.
 3. Crushed or removed compressors.
 4. Damage to a capacitor allowing for a release of PCB's
 5. Damage to Mercury containing components allowing release.
- b. Any vehicle carrying appliances in an unprotected manner will be rejected.
 - c. All vehicles delivering an appliance to the landfill must stop at the landfill scale house.
 - d. Scale attendant will direct vehicle to appliance recycling staging area for off-loading.
 - e. Once unloaded, all appliances should be staged in their normal operating position or in such a manner as to prevent rupture of lines or leaking of hazardous components until inspection and dismantling.
 1. When moving appliances to the staging area care must be taken not to rupture lines or capacitors.

6. Hazardous Component Removal

Only landfill employees that have received training as outlined in the Section entitled Training are certified to perform hazardous component removal. During the inspection and removal process it is important to remember that appliances have different intended purposes, hence different hazardous components. Differences may also occur in conjunction with "heavy-duty" or commercial appliances. As a general guideline, Table 1 includes each type of appliance and what hazardous components may be present. However, it is Metro Waste Authority's policy that the only feasible method to identify all hazardous components is inspection of each appliance.

TABLE 1 – Hazardous/Regulated Components

Appliance	Electrolyte Capacitor	Oil Filled Capacitor	Ballast	Mercury Switch	Mercury Thermo Couple	Sodium Chromate	Refrigerant	Circuit Hazard	Asbestos	Mercury Lamp
Air Conditioner	•	•					•			
Microwave		•						•		
Washer/Dryer	•			•	•					•
Refrigerator/Freezer	•	•		•		•	•		•	•
Fluorescent Light Fixture			•							•
Hot Water Heater					•					
Furnace		•			•				•	
Dishwasher	•			•						
Dehumidifier	•			•			•			
Humidifier										
Range/Oven					•				•	•
Trash Compactor	•									
Cooling Unit				•	•		•		•	

a. Capacitor and Ballast Removal

1. Regardless of PCB presence, Metro Waste Authority's policy is to remove all capacitors and ballasts to assure the recycling vendor a PCB free appliance.
2. There are two types of capacitors found in appliances:
 - Oil filled
 - Dry electrolyte
3. Appliances that may contain an oil filled capacitor(s):
 - Air conditioner (1 or more capacitors)
 - Microwave oven
 - Fluorescent light ballast
 - Copy machine
 - Furnace
4. Appliances predominantly containing dry capacitors:
 - Clothes dryer
 - Washing machine
 - Refrigerator
 - Dehumidifier
 - Water cooler
5. Appliances, which typically do not contain a capacitor:

- Oven/Range
 - Water heater
 - Humidifier
 - Dishwasher
6. Identification
 - a. Starting Capacitors
A black casing (bakelite) or outer shell easily identifies starting capacitors. For a dry capacitor, the case is not hermetically sealed or totally enclosed. Dry capacitors have never been known to contain PCB's. Thus, they do not have to be handled as such.
 - b. Running capacitors
Running capacitors are identified as having rectangular or oval metal casings.
 7. Oil filled capacitors and ballasts manufactured after 1979 have "no PCB's" stamped on the casing and may be treated as an electrolyte capacitor or ballast for disposal purposes.
 8. Removal of capacitor
 - a. Upon locating the capacitor within a unit, always remember to discharge the capacitor prior to removal.

Caution

A high-quality capacitor can hold a charge for long periods of time.

To prevent a painful shock, the terminals of a capacitor should be shorted out before its removal.

- b. Air conditioners may have one or two oil filled capacitors. The outer cover of the unit must be removed to access the capacitor(s). One capacitor will be wired to the fan motor, the other to the compressor.
 - c. Microwaves have one capacitor located directly behind the control panel and wired to the transformer. Access the capacitor by removing the outer cover next to the control panel.
 - d. Always remove the screws to the clamp, which hold the capacitor in place. Never pry against the metal casing or pull on the wires from the capacitor leads. Failure to follow removal procedures may result in the rupture of the capacitor.
9. Fluorescent light ballasts are located in the housing of the light fixture. You must remove the lamps and unscrew the back panel to access the ballast.
10. Dry capacitors are typically attached to the housing of the compressor or motor. A protective casing must be removed to access the capacitor.
11. Once a ballast or capacitor is removed check for the "no PCBs" stamp and for a date. If the date is prior to 1979 and the label does not indicate "no PCBs" then place the ballast in the PCB

ballast bin or place the capacitor in the PCB capacitor bin. If there is no label or no date the capacitor or ballast will be treated as if it were PCB containing. If the date is after 1979 or "no PCBs" is stamped on the label, then place the ballast in the NONPCB ballast bin and the capacitor in the NONPCB capacitor bin.

12. Record Keeping

a. All activities performed will be recorded on the log sheet, Appendix A. Weights and counts of the ballasts and capacitors will be recorded. Once weighed and counted NONPCB capacitors can be placed in the regular waste stream, NONPCB ballast should be placed in the NONPCB ballast drum, PCB capacitor in the PCB capacitor drum and PCB ballast in the PCB ballast drum.

1) Any PCB spill or leaking capacitor or ballast will be reported and cleanup measures initiated. Only employees trained on how to properly response to a PCB spill should follow the procedures outlined in the Section entitled Emergencies.

13. Mark all sides of the appliance with the appropriate mark as outlined in the Section Marking System.

b. Freon Removal

1. Before the removal process begins the technician must first identify the type of freon in the refrigerant unit to prevent cross contamination of refrigerants. The type of refrigerant can be found on the compressor of the refrigerant unit. Appendix B contains a reference chart when chemicals names are given.
2. All equipment fittings, manifold gauges, hoses and piercing tools will be inspected for holes, cracks and a proper seal to prevent leaks.
3. Prior to processing, recovery cylinders will be weighed to determine how much capacity remains. Close monitoring is necessary as the recovery cylinder approaches maximum capacity.
4. For safety reasons, gross cylinder weight is determined by adding tare weight plus 80% net capacity weight. Tare weights and water capacity (WC) weights are stamped on each approved cylinder.
5. Evacuation process
 - a. All evacuations shall be done with the units in their normal operating position or with the face of the unit on the ground. See Appendix C for visual reference of unit positioning.
 - b. All freon containing units will be directed to the Demanufacturing building and allowed to warm to ambient temperature when the outside temperature drops to 45°F or less.
 - c. Once the unit is in place locate the low-pressure line on the compressor. Typically, the low-pressure line is the largest diameter line on the compressor.

- d. Acquire the appropriate size piercing tool based on the size of the low-pressure line.
 - e. Secure the piercing tool to the line and attach the appropriate hose to the piercing tool. Once secured pierce the line and turn the recovery equipment on to extract the freon. The evacuation process is completed when the manifold gauge maintains a negative 10 inches of mercury vacuum.
 - f. Record the number of units inspected and the number extracted on the log sheet.
6. Mark all sides with the appropriate mark as outlined in the Section Marking System.

c. Sodium Chromate Removal

1. Some refrigerant units have a mixture of sodium chromate and ammonia gas as the refrigerant. Use the following procedures to remove the sodium chromate. See Appendix D for a diagram of a sodium chromate system.
2. Place the unit in its operating position. This will allow the sodium chromate, which is a liquid, to settle to the bottom.
3. Secure the unit to prevent tipping over.
4. Attach a piercing tool high on the unit's vent tube.
5. Attach hose to piercing tool and vent ammonia gas into a pan or bucket of water usually 3-4 gallons.
6. Once the gas has escaped and the system is depressurized the sodium chromate can be removed. Do this by piercing the liquid heat exchanger tube and draining the sodium chromate into a sealable container.
7. Once drained, attach the hose on the vent tube to the air compressor. Pressurize the system to 4-8 psi.
8. Allow the system to drain and repressurize. Rotate the system to free any trapped sodium chromate.
9. The removal process is complete once there is no more sodium chromate draining from the hose attached to the heat exchanger tube.
10. Mark the outside of the container with the appropriate mark as outlined in the Section Marking System.
11. Record the volume, weight and the number of units the sodium chromate was removed from.
12. The sodium chromate will be placed inside a 30 or 55-gallon drum and disposed of as hazardous waste through the contracted Disposal Facility.

d. Mercury Component Removal

1. Mercury containing components are typically found in white goods in one of six ways:

- As a safety device used in pilot light thermocouples for gas appliances.
 - Chest freezer lid light switches.
 - Fluorescent light bulbs.
 - Some washing machines prior to 1972 (lid stop switch or dynamic balancing switch).
 - Mercury containing thermostats.
 - Mercury containing relays in commercial appliances.
2. Employees will be shown the location of these areas on the appliances and what the mercury devices look like during their training.
 3. Locate and remove the mercury component taking care not to break the device.
 4. Mark the sides of the appliance with the appropriate mark as outlined in the Section Marking System.
 5. Record the number of devices, weight and the number of units inspected on the log sheet.
 6. Place the mercury devices in the proper labeled plastic drum located in ADP Storage Area

e. Asbestos Identification and Removal

1. Asbestos can be found in appliances. For example, a furnace or oven may have asbestos in wrapping or insulation.
 - a. Employees during training will be shown the type of appliances that contain asbestos and where on the appliance the asbestos can be found.
 - b. Employees will also learn what asbestos and asbestos like material looks like.
2. Each high temperature appliance will be inspected for the presence of asbestos material taking care not to damage the appliance, which could allow for the release of asbestos.
3. If an appliance with asbestos or asbestos like material is identified, mark the sides of the appliance with the appropriate mark as outlined in the Section Marking System.
 - a. No samples will be taken. Assume the material to be asbestos.
4. Remove any other hazardous components that may be present.
5. Any appliance that is identified as asbestos containing cannot be recycled and must be landfilled. Care must be taken not to damage the appliance.
6. Dispose of asbestos containing unit in accordance with IDNR permit and Metro Waste Authority's asbestos policy.
 - a. Paper work must be completed including grid and elevation. All paper work should be given to the Special Waste Coordinator to be filed.

7. Marking System

Upon completion of inspection and processing, all units will be marked with one or more colored SC's on all four sides of the appliance. Marks will be a minimum of 12 inches in size on main body of appliance. This code system assures the metal recycler all units have been inspected and processed. Color code the units according to the following:

- Green SC indicates unit has been inspected but no further process was performed.
- Blue SC indicates unit has been inspected and freon was removed.
- Red SC indicates unit has been inspected and either a capacitor or ballast was removed.
- Silver SC indicates a mercury component was removed.
- Yellow SC indicates sodium chromate was removed.
- Black SC indicates asbestos was identified.
- Orange SC indicates all refrigerants, PCB-containing articles, and Mercury-containing components have been removed.

Units are then loaded into the designated roll-off box or designated storage area for vendor pickup. It is the technician's responsibility to notify the office staff when the roll-off box or semi trailer is ready for pickup.

8. Handling of Demanufactured Appliances

Once an appliance has had all hazardous components removed and has received the unique identification mark, that appliance is considered to be scrap metal or non-hazardous solid waste.

- a. Move the material to the demanufactured appliances scrap metal pile.
- b. When a semi trailer is available load the demanufactured appliances onto the trailer.
 1. If any oil spill does occur stop loading the trailer and follow non-emergency response procedures for a small liquid spill.
 2. All spill material must be taken to the Household Hazardous Material Facility for proper handling and disposal.

9. Storage

All hazardous components removed from appliances will be stored according to the Operational Procedures storage requirements as indicated in Chapter IV. Hazardous components from appliances are stored in the following area of the Facility:

- Mercury components – 20 gallon lab packer boxes or 55 gallon POLY Fiber Drum in ADP Demanufactured storage building.
- PCB capacitors and ballast – 55 gallon drums in ADP Demanufactured storage building.
- Freon – cylinders in the ADP Demanufactured storage building.
- Sodium Chromate – 30 gallon drum in the ADP Demanufactured storage building.

While stored at the Facility all containers will be labeled with a drum number, DOT hazard class label and orientation arrows following the procedures outlined in the Operational Procedures.

Containers to dispose of hazardous components removed from appliances are obtained from the following businesses and/or agency:

- Drums – Metro Hazardous Material Drop Off Facility in Bondurant, IA
- Plastic Buckets – Metro Hazardous Material Drop Off Facility in Bondurant, IA
- Freon Containers – Republic located in Davenport, IA

10. Disposal

All hazardous waste, PCBs and freon will be disposed of through the contracted disposal vendor. A list of PCB Contractors can be found in Appendix E and a list of Refrigerant Buyers can be found in Appendix F

11. Emergencies

All chemical and physical emergencies will follow the Emergency Action Plan as outlined in the Operational Procedures.

a. Equipment failure

In the event of equipment failure the recovery device should be shut down and if possible the piercing tool should remain attached to prevent freon leaking to the environment. The appliance staging area is capable of storing several days worth of appliance accumulation. All appliances should be staged in their normal operating position or in such a manner as to prevent rupture of lines or leaking of hazardous components.

Notify the Program Administrator of the break down so that parts can be ordered to fix the recovery unit or a new unit can be purchased. Coordination with the equipment provider allows for "loaner equipment" upon request.

All spills will be reported immediately to the Program Administrator and an Incident Report/CPAR form. The Program Administrator will make the determination if the spill is a reportable spill and if necessary notify Iowa DNR and EPA.

If a PCB spill occurs clean up and sampling to ensure adequate clean up has occurred will follow the steps in 40 CFR Part 761.130. All records of such spills will be maintained according to 40 CFR Part 761.180.

Operational Plan-White Goods Appendix A Daily Log Sheet

APPLIANCE DEMANUFACTURING TALLY SHEET

Tech. Name: _____ Start Date _____ End Date _____ Time Spent _____

<u>Appliance Type</u>	<u>Count</u>	<u>Type of Refrigerant</u>
Refrig/Freezer inspected		
Containing Refrigerant		R12 R22 R134A Other: _____
Commerical Cooler inspected		
Containing Refrigerant		R12 R22 R134A Other: _____
Air Conditioners inspected		
Containing Refrigerant		R12 R22 R134A Other: _____
Dehumidifiers inspected		
Containing Refrigerant		R12 R22 R134A Other: _____
Gas Water Heaters		
Furnaces		
Clothes Washer/Dryer		
Dishwasher		
Microwave Ovens		
Stoves		
Mercury Switches removed		
Mercury Thermocouples removed		
Fluorescent tubes removed		
Ammonia/Sodium Chromate inspected		<u>Weight</u>
# inspected/Volume of A/SC removed		
PCB Capacitors Removed		
Non-PCB Capacitors Removed		
PCB Ballasts Removed		
Non-PCB Ballasts Removed		
Other containing HG,CFC,PCB: _____		

Operational Plan

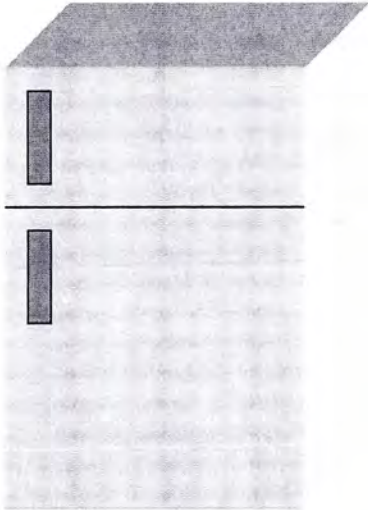
White Goods

Appendix B

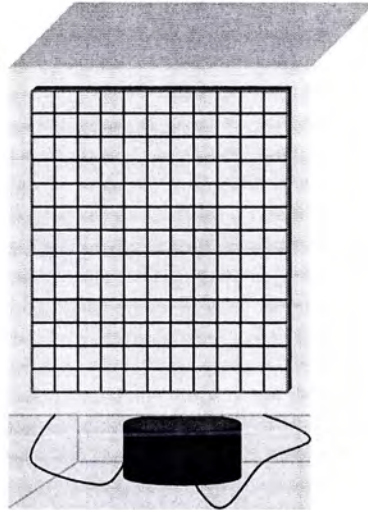
	Chlorofluorocarbons (CFC)	
R11	Trichlorofluoromethane	CCl_3F
R12	Dichlorodifluoromethane	CCl_2F_2
R113	Trichlorotrifluoroethane	$\text{CCl}_2\text{FCClF}_2$
R114	Dichlorotetrafluoroethane	$\text{CClF}_2\text{CClF}_2$
R115	Chloropentafluoroethane	CClF_2CF_3
	Hydrochlorofluorocarbons (HCFC)	
R22	Chlorodifluoromethane	CHClF_2
R123	Dichlorotrifluoroethane	CHCl_2CF_3
	Hydrofluorocarbons (HFC)	
R134A	1,1,1,2,-Tetrafluoroethane	$\text{CF}_3\text{CH}_2\text{F}$

Operational Plan White Goods Appendix C

Normal Operating Position for a Refrigeration Unit.



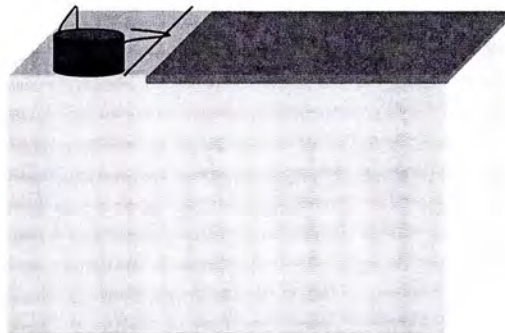
Front of Unit



Back of Unit

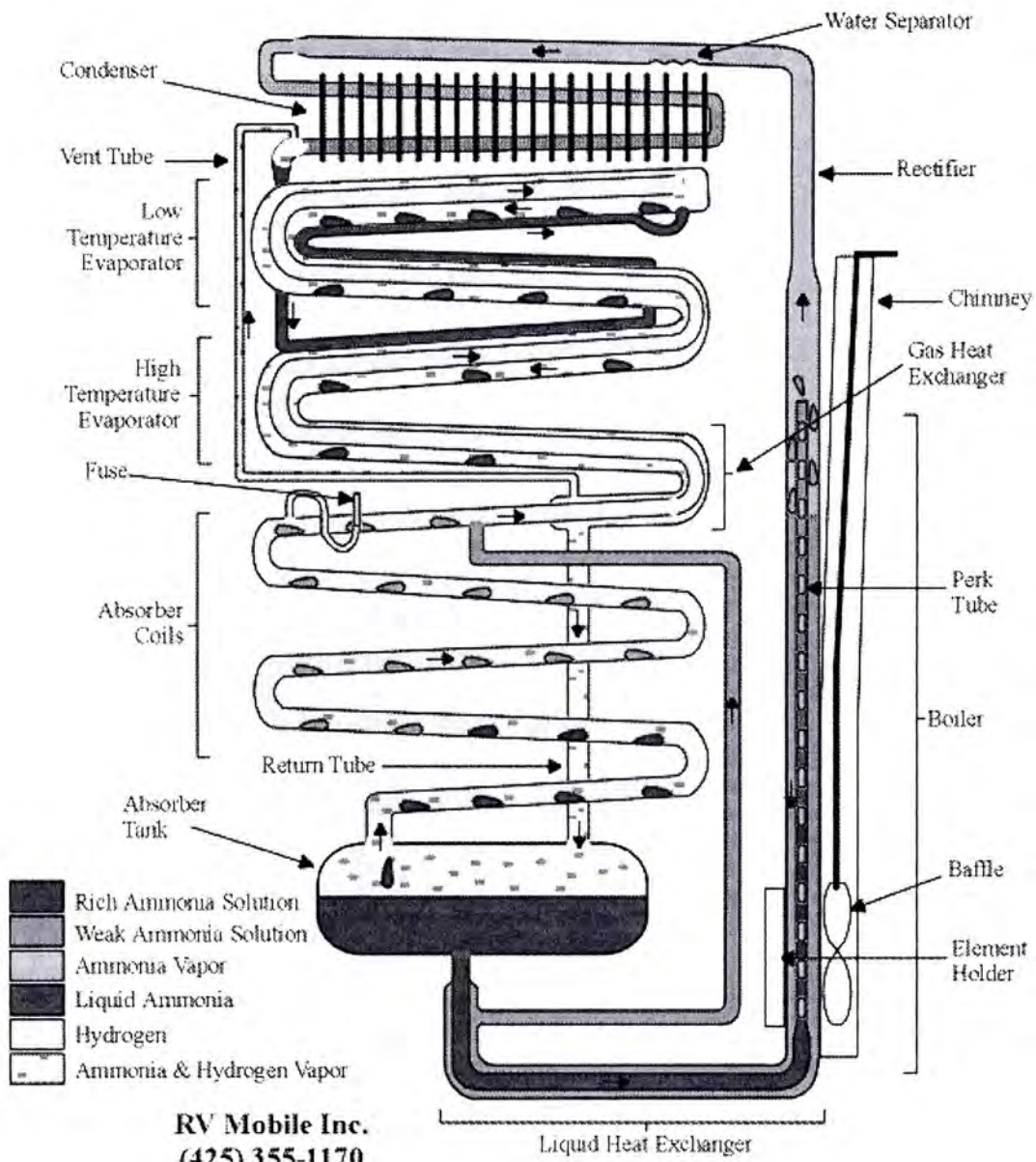
Freon Extraction Position

Back of Unit



Front of Unit on
ground

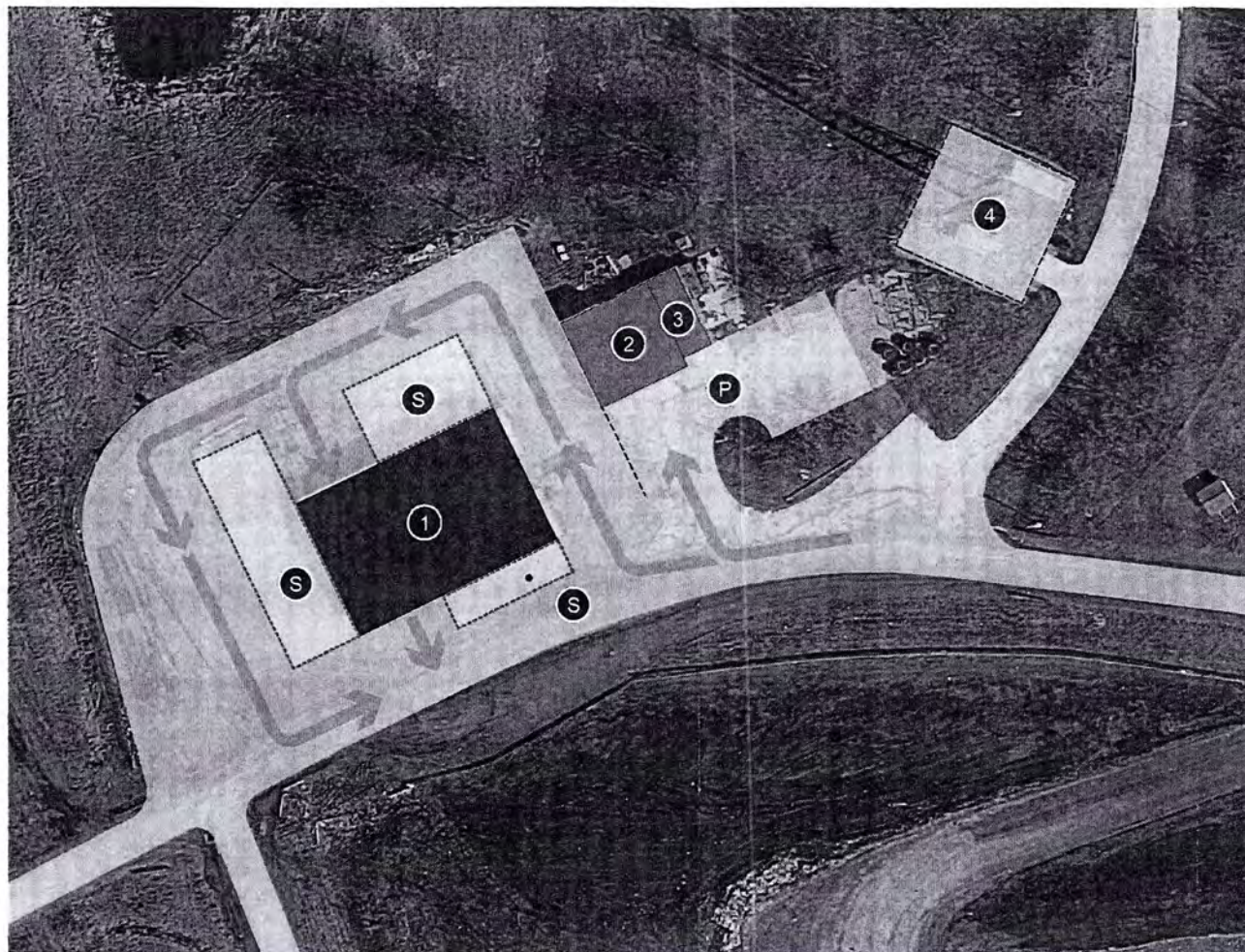
Operational Plan White Goods Appendix D



**PCB Contractors
White Goods
Appendix E**

A-Tec Recycling Inc
5745 NE 17th St.
Des Moines, IA 50313
515.263.3707

ATTACHMENT 1 – B
Location of Appliance Demanufacturing



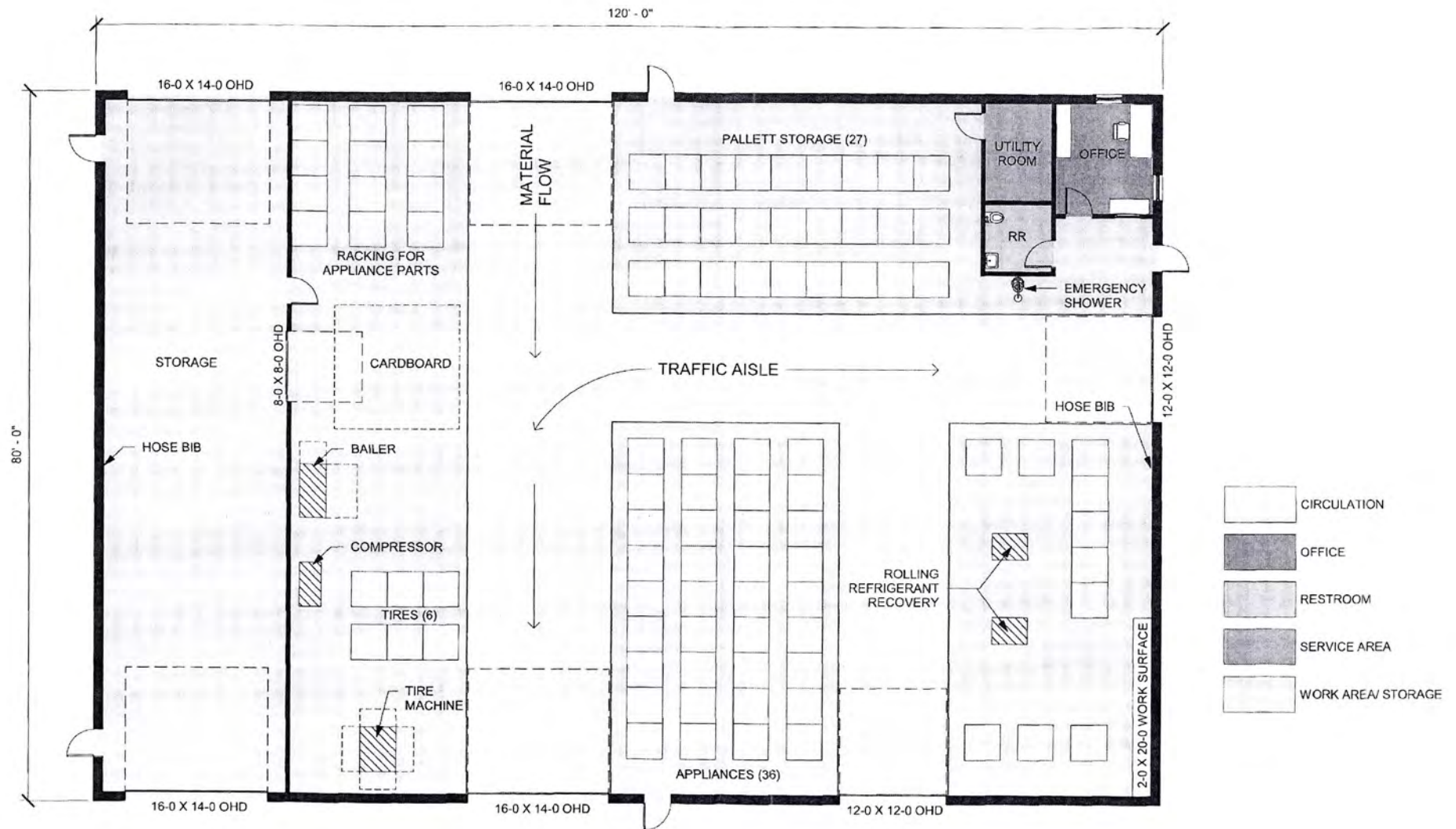
- 1 Proposed Demanufactured Building
- 2 ADP Demanufactured Storage Area
- 3 Office
- 4 COMM
- P PARKING
- S STAGING AREA

MPE SITE PLAN

1/64" = 1'-0"

OPN
ARCHITECTS

ATTACHMENT 1 – C
Storage Location of Hazardous Components



Proposed Demanufacturing Building-Completion ETA 2020/2021

MPE CONVERSION PLAN

3/16" = 1'-0"

OPN
ARCHITECTS

Section J:

Contingency Plan

12.

Contingency Plan
Metro Waste Authority
Metro Park East Landfill
Appliance Demanufacturing

In the event the Metro Waste Authority is unable to operate their Appliance Demanufacturer process due to unforeseen conditions. Metro Waste Authority would revert to the requirements of SDP Permit No. 77SDP-01-72P section 22 and continue to use a third party Demanufacturer.

SDP Permit No. 77SDP-01-72P section 22.

The permit holder is authorized to temporarily store white goods and scrap metal in an area designated by the operator. No discarded appliance may be stored for more than 270 days without being demanufactured. No scrap metal or discarded appliance may be stored for more than a total of twelve (12) months, including demanufacturing processing, prior to being recycled/salvaged. The operator and salvaging contractor shall comply with applicable provisions of 567 - Chapter 118 and the General Provisions of this permit. No scavenging shall be allowed.

Resources Available to MWA as Third Party Demanufacturing Facilities include but are not limited to:

Pickett Salvage LLC

70 C Avenue

Paton, Iowa 50217

A-Line Iron-Metals Waterloo Inc

1500 David St.

Waterloo, Iowa 50703

Section K: Site Closure Plan

**Metro Waste Authority
Metro Park East Landfill
Appliance Demanufacturing
Closure Plan**

Facility Identification:

The Metro Park East Landfill is located on the eastern portion of the MPE site. The MPE site is located on the south side of Highway 163 and is bordered by NE 112th Street, NE 128th Street, SE 3rd Avenue, and SE 6th Avenue.

Facility Name: Metro Park East Landfill

SDP Permit No.: 77-SDP-1-72P

Owner: Metro Waste Authority

General Legal: Part of Sections 1 and 2, Township 78 North, Range 22 West, in eastern, Towa, containing 1,481 acres more or less

Closure Plan:

In accordance with 567—118.14(455B,455D) Appliance demanufacturing facility closure requirements. Metro Waste Authority shall submit to the Iowa Department of Natural Resources central office and the Iowa Department of Natural Resources field office with jurisdiction over the appliance demanufacturing facility written notice of intent to permanently close the facility at least 90 days before closure. To meet the closure requirements Metro Waste Authority will complete the following task and submit the supporting documents and information below:

- 1. Removal of all appliances that have not been demanufactured.*
- 2. Proper disposal of all refrigerant, PCBs, mercury and all hazardous materials.*
- 3. Submission of an annual report covering January through the last disposal of hazardous materials, PCBs and refrigerant.*

Closure Contact Information:

Executive Director
Metro Waste Authority
300 East Locust Street, Suite 100
Des Moines, IA 50309
(515) 244-0021

Section L:
Proof of Financial Assurance and .
Closure Cost Estimate

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