CON: 12-15
Doc # 33674

# Iowa Department of Natural Resources

| CASHIERS USE ONLY |
|---|
| 0221-542-221A-0570 |
| Organization |
| Contact Name |

# LAND RECYCLING PROGRAM ENROLLMENT APPLICATION

Please read the department rule in **Chapter 567 Iowa Administrative Code 137** and read the instructions in **Iowa Land Recycling Program Guidance Document #1** before completing this form.



## PART A: Participant Information

| | |
|---|---|
| Organization:<br>Dyersville Die Cast | Title:<br>EVP |
| Contact Name:<br>Jane Ertl | Telephone Number:<br>563-875-2436, x105 |
| Address:<br>502 5th St NW, PO Box 327 | Fax Number: |
| City, State, Zip:<br>Dyersville, Iowa 52040-0327 | E-mail Address:<br>janeertl@dyersvilledicast.com |

**Attachment A1 - Nature of Participation:** Pertaining to the participant identified above, describe the reason(s) for participation in this program, legal relationship to the property being enrolled, and the expected role and scope of participation. Include this information as **Attachment A1**.

**Attachment A2 - Additional Participants:** If there is more than one participant, please attach the above information for each participant and label it as **Attachment A2.**

**Attachment A3 - Interested Parties:** If there are other interested parties, please identify them and describe their relationship to this project. Include this information and label it as **Attachment A3.**

## PART B: Property/Affected Area and Access Information

| |
|---|
| Property Name:<br>Ertl Foundry |
| Address/Location:<br>1077 South 3rd St |
| City and Zip:<br>Manchester, IA 52057 |
| County:<br>Delaware |
| Property Owner (fee title holder):<br>JDJ2 Operations, LLC |
| Property Owner Mailing Address:<br>PO Box 327, Dyersville, IA 52040 |
| **I, the fee title holder of the property identified in Part B, grant access/control to that property for the purpose of participating in the Iowa Land Recycling Program.**<br>Signature: Jane Ertl Date: 09·05·2017 |

**Attachment B1 -Property Access:** If access has not been obtained for the property/affected area identified in **Part B,** please attach an explanation of the efforts taken to obtain access and, if appropriate, the reasons given for refusal. Please label it as **Attachment B1 - Property Access.**

**Attachment B2 - Additional Property to be Enrolled:** If the affected area is known to extend to properties other than the one identified in **Part** B, then please attach all the information requested under **Part B** for those additional properties as **Attachment B2 - Additional Property to be Enrolled.**

## **PART C:** Hazardous Substance Information

**Attachment C1 - Condition to be Addressed:** Please attach information documenting the environmental condition which is the subject of this enrollment. Please label it as **Attachment C1 - Condition to be Addressed.** For information regarding the contents of this attachment, please consult **Iowa Land Recycling Program Guidance Document #1.**

**Attachment C2 - Other Known Contamination:** For contamination other than that covered in **Attachment C1,** which is known and reportable, please attach relevant information as **Attachment C2 - Other Known Contamination.** See the **Iowa Land Recycling Program Guidance Document #1** for further details.

## **PART D:** Historical Information

**Attachment D - Historical Information:** Please give a general description of the current and historical uses of the property or properties identified in **Part B,** based on a reasonable and diligent inquiry. Identify known or probable sources and locations of hazardous materials which could reasonably be associated with past land use. Please attach this as **Attachment D - Historical Information.**

## **PART E:** Project Objectives

**Attachment E:** Please attach a statement of project objectives as **Attachment E.** This should include the following information, insofar as it is known:

**E1 - Current Setting:** A general description of the property and its vicinity, including: current zoning and type of land use (e.g., commercial, industrial, residential).
**E2 - Future Setting:** Planned or probable future uses of the property or its vicinity.
**E3 - Time Table:** Expected time frame for activities reflected in item **E2.**
**E4 - Estimate of Project Magnitude:** A general description of the nature and magnitude of the environmental contamination to be addressed and the probable means of addressing it.
**E5 - Anticipated Obstacles to Completion:** A description of any foreseeable barriers to achieving project objectives, such as: access to property; financing uncertainties; legal actions; allocation of responsibility among parties; etc.

## **PART F:** Other attachments (Attachments **F1** through **F3** are required only if applicable.)

**Attachment F1 - General Environmental Regulatory Actions and Permits:** Attach a list of all known permits or regulatory actions and directives associated with environmental conditions at the site as **Attachment F1 – General Environmental Regulatory Actions and Permits.**

**Attachment F2 - Federal Environmental Regulatory Actions:** Attach an explanation of any federal regulatory corrective action directives, administrative orders or judicial actions associated with environmental conditions at the site as **Attachment F2 - Federal Environmental Regulatory Actions.**

**Attachment F3 - Proof of Federal Notification:** Submit written proof that the federal regulatory agency, associated with responses to **F1** or **F2**, has been notified regarding the intent to enroll the site in the Iowa Land Recycling Program.

**Attach the $750 application fee payable to the Iowa Department of Natural Resources and main along with the form to:**

Department of Natural Resources
Contaminated Sites
502 E 9th St
Des Moines, IA 50319

**Applicant signature:** Jane Erth **Date:** 09·05·2017

For DNR office use:

Reviewed by: _____ Date: _____

Review Action: ☐ Approved ☐ Denied ☐ Withdrawn

Explanation attached if denied or withdrawn

## PART A: Participant Information

### Attachment A1 - Nature of Participation:

Ms. Jane Ertl is the individual representing the property owner seeking enrollment of the site at 1077 South 3rd Street, Manchester, Iowa into the Land Recycling Program (LRP). Ms. Ertl is the Vice President of Dyersville Die Cast and the President of Jdj2 Holdings, LLC, the property owner. Dyersville Die Cast will provide the application fee and support other costs associated with participation in the LRP.

### Attachment A2 - Additional Participants:

No other participants at this time.

### Attachment A3 - Interested Parties:

| | |
|---|---|
| **Organization:** Henderson Products, Inc. | **Title:** President |
| **Contact Name:** Jon Sievert | **Telephone Number:** (563) 927-7131 |
| **Address:** 1085 South 3rd Street | **Fax Number:** |
| **City, State, Zip:** Manchester, IA 52057 | **E-mail Address:** jsievert@hendersonproducts.com |

Henderson Products, Inc. has tendered an offer to purchase the site seeking enrollment in the LRP. The company is located at 1085 South 3rd Street, adjacent to the affected site. Mr. Jon Sievert is the individual representing Henderson Products and is providing information for the planned or probable future uses of the property.

## PART B: Property/Affected Area and Access Information

### Attachment B1 -Property Access:

The property owner is the participant in this effort. There are no barriers to property access.

### Attachment B2 - Additional Property to be Enrolled:

The affected area is limited to the property identified in Part B.

## PART C: Hazardous Substance Information

### Attachment C1 - Condition to be Addressed:

Information documenting the environmental condition which is the subject of this enrollment: Foundry sand disposed on site, mixed with soil. There are two locations at which total lead in soil is known to exceed the current Statewide Standard of 400 mg/kg. Although there is no case in which a measured concentration of phenols or metals in ground water exceeds a Statewide Standard, there are three locations at which the analytical method detection limit (MDL) for arsenic and selenium in groundwater exceeds the current Statewide Standard for a Protected Groundwater Source.

RCRA Closure Report VII 97 H 0008
Hawkeye Castings IAD 984599589
From **Table 7 Sample Location S-11 - Lead Concentrations**

| Sample | Date | Description | Media | Lead mg/kg | RCRA Closure Standard mg/kg | 2017 Statewide Standard mg/kg |
|---|---|---|---|---|---|---|
| **S-11-1** | **8/31/99** | **Subsurface soil 12-18 inches** | **Soil (removed)** | **900** | **500** | |
| C-11-1 | 5/3/00 | S-11 confirming sample (wall) | soil | 110 | 500 | |
| C-11-2 | 5/3/00 | S-11 confirming sample (wall) | soil | 380 | 500 | |
| C-11-3 | 5/3/00 | S-11 confirming sample (wall) | soil | 420 | 500 | 400 |
| **C-11-3** | **5/3/00** | **S-11 confirming sample (wall)** | **Soil (removed)** | **5.5 mg/L** | **5 mg/L** | |
| C-11-4 | 5/3/00 | S-11 confirming sample (floor) | soil | 10 | 500 | |
| S-11-3 | 5/3/00 | Composite of excavated soil | composite | 4.3 mg/L | 5 mg/L | |

RCRA Closure Report VII 97 H 0008
Hawkeye Castings IAD 984599589
From **Table 9 Sample Location B-2 - Lead Concentrations**

| Sample | Date | Description | Media | Lead mg/kg | Standard mg/kg | 2017 Statewide Standard mg/kg |
|---|---|---|---|---|---|---|
| **B-2** | **1996** | **Subsurface soil** | **Soil (removed)** | **7.3 mg/L** | **5 mg/L** | |
| B-2-1 | 10/17/00 | Excavation wall 13-19 inches | soil | 170 | 500 | |
| B-2-2 | 10/17/00 | Excavation wall 10-15 inches | soil | 61 | 500 | |
| B-2-3 | 10/17/00 | Excavation wall 13-18 inches | soil | 220 | 500 | |
| B-2-3-D | 10/17/00 | Excavation wall 13-18 inches | duplicate soil | 420 | 500 | 400 |
| B-2-3 | 10/17/00 | Excavation wall 13-18 inches | soil | 1.38 mg/L | 5 mg/L | |
| **B-2-4** | **10/17/00** | **Excavation wall 14-19 inches** | **Soil (removed)** | **540** | **500** | |
| B-2-5 | 10/17/00 | Excavation floor 18-20 inches | soil | 220 | 500 | |
| B-2-6 | 10/17/00 | Excavation floor 18-20 inches | soil | 51 | 500 | |
| B-2-7 | 10/17/00 | Excavated soil composite | soil | 4.3 mg/L | 5 mg/L | |

TestAmerica
INCORPORATED

# ANALYTICAL REPORT

Carol Wilson
CHEM-ECO ENGINEERS, INC.
P.O. Box 367
Anamosa, IA 52205

05/24/2000

PROJECT #98-022

Date Received: 05/05/2000
Job Number: 00.05525

| | Result | Units | Date Taken | Date Analyzed | Analyst | Analysis Method |
|---|---|---|---|---|---|---|
| 563156 C-7-4 | | | | | | |
| ICP Metals Prep (Solid) | 1.023 | g | 05/03/2000 | 05/05/2000 | tlz | |
| ICP Metals-Solid | Complete | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| Lead, ICP | 210 | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| 563157 C-11-1 | | | | | | |
| ICP Metals Prep (Solid) | 1.030 | g | 05/03/2000 | 05/05/2000 | tlz | |
| ICP Metals-Solid | Complete | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| Lead, ICP | 110 | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| 563158 C-11-2 | | | | | | |
| ICP Metals Prep (Solid) | 1.007 | g | 05/03/2000 | 05/05/2000 | tlz | |
| ICP Metals-Solid | Complete | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| Lead, ICP | 380 | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| 563159 C-11-3 | | | | | | |
| ICP Metals Prep (Solid) | 1.029 | g | 05/03/2000 | 05/05/2000 | tlz | |
| ICP Metals-Solid | Complete | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |
| Lead, ICP | 420 | mg/kg | 05/03/2000 | 05/09/2000 | llw | SW 6010B |

Kristin M. Clay
Operations Manager
Iowa Lab Certification - 7

TestAmerica
INCORPORATED

# ANALYTICAL REPORT

Carol Wilson
CHEM-ECO ENGINEERS, INC.
P.O. Box 367
Anamosa, IA 52205

11/01/2000

Date Received: 10/19/2000
Job Number: 00.13418

| | Result | Units | Date Taken | Date Analyzed | Analyst | Analysis Method |
|---|---|---|---|---|---|---|
| 589852 B-2-1 13-19" Project #98022 | | | | | | |
| ICP Metals Prep (Solid) | 1.011 | g | 10/17/2000 | 10/23/2000 | rmp | |
| ICP Metals-Solid | Complete | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| Lead, ICP | 170 | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| 589853 B-2-2 10-15" Project #98022 | | | | | | |
| ICP Metals Prep (Solid) | 1.004 | g | 10/17/2000 | 10/23/2000 | rmp | |
| ICP Metals-Solid | Complete | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| Lead, ICP | 61 | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| 589854 B-2-3 13-18" Project #98022 | | | | | | |
| ICP Metals Prep (Solid) | 1.023 | g | 10/17/2000 | 10/23/2000 | rmp | |
| ICP Metals-Solid | Complete | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| Lead, ICP | 220 | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| 589855 B-2-3D 13-18" Project #98022 | | | | | | |
| ICP Metals Prep (Solid) | 1.012 | g | 10/17/2000 | 10/23/2000 | rmp | |
| ICP Metals-Solid | Complete | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |
| Lead, ICP | 420 | mg/kg | 10/17/2000 | 10/24/2000 | llw | SW 6010B |

Kristin Clay
Kristin M. Clay
Operations Manager
Iowa Lab Certification - 7

| August 1996 Phase II Environmental Site Assessment Analytical Results for Groundwater and Surface Water Samples | | | | | 2017 Statewide Standard | |
|---|---|---|---|---|---|---|
| **Boring** | **1** | **4** | **6** | **Unnamed Creek** | **PGWS** | **NPGWS** |
| **Phenols, mg/L** | <0.020 | <0.020 | <0.020 | <0.020 | 2* | 10* |
| **Arsenic, mg/L** | **<0.080** | **<0.080** | **<0.080** | **<0.080** | **0.01**** | **0.05**** |
| **Barium, mg/L** | 0.068 | 0.047 | 0.198 | 0.076 | 2.0 | 10.0 |
| **Cadmium, mg/L** | <0.020 | <0.020 | <0.020 | <0.020 | 0.005 | --- |
| **Chromium, mg/L** | <0.020 | <0.020 | <0.020 | <0.020 | 0.1 | 0.5 |
| **Copper, mg/L** | <0.020 | <0.020 | 0.024 | 0.020 | 1.3 | 6.6 |
| **Lead, mg/L** | <0.10 | <0.10 | <0.10 | <0.10 | 0.015 | 0.075 |
| **Mercury, mg/L** | <0.00020 | <0.00020 | <0.00020 | <0.00020 | 0.002 | 0.010 |
| **Nickel, mg/L** | <0.05 | <0.05 | <0.05 | <0.05 | 0.1 | 0.7 |
| **Selenium, mg/L** | **<0.15** | **<0.15** | **<0.15** | **<0.15** | **0.05*** | 0.25 |
| **Silver, mg/L** | <0.010 | <0.010 | <0.010 | <0.010 | 0.1 | 0.5 |
| **Zinc, mg/L** | <0.020 | 0.030 | <0.020 | <0.020 | 2 | 10 |

*There is no statewide standard set for the category "phenols." The standard shown is for the specific compound, phenol.
**The analytical method detection limit (MDL) exceeds the standard(s). It is not possible to determine that the result is less than the standard(s).

**Attachment C2 - Other Known Contamination:**

No other known contamination at this site.

NATIONAL ENVIRONMENTAL TESTING, INC.

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

## ANALYTICAL REPORT

Scott Byram
STANLEY ENVIRONMENTAL
U of I Oakdale Res. Park
2656 Cross Park Road
Coralville, IA 52241

08/29/1996

NET Job Number: 96.10636

NET Sample Number: 362478

Sample ID: B-4 Hawkeye Castings

Date Taken: 08/23/1996

Date Received: 08/24/1996

| Analyte | Result | Units | Result Flag | Analyst | Date Analyzed | Method | Reporting Limit |
|---|---|---|---|---|---|---|---|
| Phenols, Total | <0.020 | mg/L | | cjh | 08/28/1996 | E-420.1 | 0.020 |
| Arsenic, Dissolved (ICP) | <0.080 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.080 |
| Barium, Dissolved (ICP) | 0.047 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.010 |
| Cadmium, Dissolved (ICP) | <0.020 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Chromium, Dissolved (ICP) | <0.020 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Copper, Dissolved (ICP) | <0.020 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Lead, Dissolved (ICP) | <0.10 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.10 |
| Nickel, Dissolved (ICP) | <0.050 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.050 |
| Selenium, Dissolved (ICP) | <0.15 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.15 |
| Silver, Dissolved (ICP) | <0.010 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.010 |
| Zinc, Dissolved (ICP) | 0.030 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Mercury, diss. Cold Vapor | <0.00020 | mg/L | | kyd | 08/28/1996 | E-245.1 | 0.0002 |

Key to flags:

Kristin Voigts for
Cheryl L. Wilson
Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

## ANALYTICAL REPORT

Scott Byram
STANLEY ENVIRONMENTAL
U of I Oakdale Res. Park
2656 Cross Park Road
Coralville, IA 52241

08/29/1996

NET Job Number: 96.10636

NET Sample Number: 362479

Sample ID: B-6 Hawkeye Castings

Date Taken: 08/23/1996

Date Received: 08/24/1996

| Analyte | Result | Units | Result Flag | Analyst | Date Analyzed | Method | Reporting Limit |
|---|---|---|---|---|---|---|---|
| Phenols, Total | <0.020 | mg/L | | cjh | 08/28/1996 | E-420.1 | 0.020 |
| Arsenic, Dissolved (ICP) | <0.080 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.080 |
| Barium, Dissolved (ICP) | 0.198 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.010 |
| Cadmium, Dissolved (ICP) | <0.020 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Chromium, Dissolved (ICP) | <0.020 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Copper, Dissolved (ICP) | 0.024 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.020 |
| Lead, Dissolved (ICP) | <0.10 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.10 |
| Nickel, Dissolved (ICP) | <0.050 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.050 |
| Selenium, Dissolved (ICP) | <0.15 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.15 |
| Silver, Dissolved (ICP) | <0.010 | mg/L | | lmc | 08/27/1996 | S-6010A | 0.010 |
| Zinc, Dissolved (ICP) | <0.020 | mg/L | W | lmc | 08/27/1996 | S-6010A | 0.020 |
| Mercury, diss. Cold Vapor | <0.00020 | mg/L | | kyd | 08/28/1996 | E-245.1 | 0.0002 |

Key to flags:

W - Post digestion spike is out of control limits for this analyte

Kristin Voigts for
Cheryl L. Wilson
Operations Manager

NATIONAL ENVIRONMENTAL TESTING, INC.

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: (319) 277-2401
Fax: (319) 277-2425

## ANALYTICAL REPORT

Scott Byram
STANLEY ENVIRONMENTAL
U of I Oakdale Res. Park
2656 Cross Park Road
Coralville, IA 52241

08/29/1996

NET Job Number: 96.10636

NET Sample Number: 362480

Sample ID: Creek Hawkeye Castings

Date Taken: 08/23/1996

Date Received: 08/24/1996

| Analyte | Result | Units | Result Flag | Analyst | Date Analyzed | Method | Reporting Limit |
|---|---|---|---|---|---|---|---|
| Phenols, Total | <0.020 | mg/L | | cjh | 08/28/1996 | E-420.1 | 0.020 |
| ICP Metals - E 200.7 | COMPLETE | mg/L | | lmc | 08/28/1996 | | |
| Arsenic, ICP | <0.080 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.080 |
| Barium, ICP | 0.076 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.010 |
| Cadmium, ICP | <0.020 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.020 |
| Chromium, ICP | <0.020 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.020 |
| Copper, ICP | 0.020 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.020 |
| Lead, ICP | <0.10 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.10 |
| Nickel, ICP | <0.050 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.050 |
| Selenium, ICP | <0.15 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.15 |
| Silver, ICP | <0.010 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.010 |
| Zinc, ICP | <0.020 | mg/L | | lmc | 08/28/1996 | E-200.7 | 0.020 |
| Mercury,Cold Vapor | <0.00020 | mg/L | | kyd | 08/28/1996 | E-245.1 | 0.0002 |

Key to flags:

Kristin Voigts for
Cheryl L. Wilson
Operations Manager

## PART D: Historical Information

### Attachment D - Historical Information:

**Current and historical uses of the property**

The property which is the subject of this investigation was part of a larger parcel first deeded in 1852 to a private individual. The property then remained in the hands of private individuals, passing by sale and inheritance until 1958, when purchased by Manchester Enterprises, a group of local investors planning the development of an industrial park on the south side of Manchester. The property was used agriculturally until around 1950, when a grass air strip located on this site and on adjoining parcels served as the Manchester Airport. A farmhouse converted for use as the airport terminal was located north of this property.

The historic record shows no building or site improvement other than the air strip until construction of the Cory Aluminum and Brass Foundry in 1961. The business was renamed Hawkeye Castings in 1964, later became Hawkeye Foundry, and most recently has operated as Ertl Foundry. An extensive site chronology is included in a Phase I Environmental Site Assessment (ESA) Report completed 31 May 2012.

The current development consists of the original concrete-block foundry building with additions on the east side in 1965 and 1967. An elevated sand silo is installed north of the building. Gravel has been placed on the entrance drive from South 3rd Street and on portions of the property east and south of the foundry building. A concrete pad is located at the southwest corner of the building. During the entire period this business has operated at this site, the foundry has produced aluminum, brass, and bronze castings.

Processes at the business included core mixing, core baking, mold making, metal melting in crucible-type furnaces, metal pouring, mold breaking and shake-out, abrasive blasting, and casting finishing. Wastes generated include core sand, mold sand, metal scrap, slag, wood scrap, empty containers, and discarded packaging. Hazardous materials used in production include certain metal alloys, resin-coated sand, resins and catalysts, and isopropyl alcohol.

**Known or probable sources and locations of hazardous materials associated with past land use**

**Airport Grass Strip Runway**

Past land use as a grass strip runway for a small airport is not viewed as a source of hazardous materials. If the airport stored aviation fuels, it is expected that these would be located near the airport terminal, a converted farmhouse north of this property.

**Foundry Processes – Metals in Foundry Sand**

Waste foundry sand from aluminum, brass, and bronze casting was disposed over a known area west of the building at this site from 1961 to 1990. A sample of the waste sand was shown to have failed an Extraction Procedure Toxicity test (EP Tox) for lead prior to disposal and a subsequent Phase II site investigation in 1996 found locations at which disposed sand failed the Toxic Characteristic Leaching Procedure test (TCLP) for lead. These circumstances prompted a requirement for Resource Conservation and Recovery Act (RCRA) Closure of the site, an effort overseen by the U.S. Environmental Protection Agency (EPA), Region 7, from 1999 through 2003, when the closure was certified. Closure activities included soil and groundwater sampling and analysis, soil excavation, stockpiling, testing and disposal. Clean fill was brought from off-site to replace excavated soil.

A second Phase II site investigation was completed in August 2012 to address the findings of the May 2012 Phase I ESA. Soil samples were collected from the known foundry sand disposal area from locations not previously sampled, as well as from under the melting, pouring, and grinding areas of the building.

All demonstrated total lead at concentrations less than the Statewide Standard. Analysis of core sand and mold sand for beneficial use consideration was also conducted, including total metals, TCLP metals, and SPLP metals. Core sand was shown to qualify for beneficial use as deep fill. Mold sand was shown to have elevated total chromium, lead, and nickel compared to Statewide Standards, but could be managed for disposal as non-hazardous waste. At the time of the Phase II, mold sand was not generated as a waste, but was reclaimed and re-used for production.

In addition to lead, a composite sample of waste sand collected from six borings during the 1996 Phase II ESA had concentrations of other metals, as shown below, all less than the current Statewide Standards in soil.

RCRA Closure Report VII 97 H 0008
Hawkeye Castings IAD 984599589
**From Table 1 - Analytical Results for Soil Composite from Six Borings**

| Analyte | TCLP mg/L | Total, mg/kg | Statewide Standard, soil mg/kg | Analyte | TCLP mg/L | Total, mg/kg | Statewide Standard, soil mg/kg |
|---|---|---|---|---|---|---|---|
| **Phenols** | --- | 0.58 | * | **Lead** | 4.2 | 600 | 400 |
| **Arsenic** | <0.080 | <16 | 17 | **Mercury** | <0.002 | 0.038 | 23 |
| **Barium** | 0.464 | 9.5 | 15,000 | **Nickel** | 0.241 | 360 | 1,500 |
| **Cadmium** | <0.020 | <4 | 70 | **Selenium** | <0.15 | <30 | 390 |
| **Chromium** | <0.020 | 31 | 190 | **Silver** | <0.010 | <4 | 370 |
| **Copper** | 56 | 4,400 | 15,000 | **Zinc** | 13 | 1,100 | 23,000 |

*There is no standard for the category "phenols." The standard for the compound, phenol, in soil is 18,000 mg/kg.

**Foundry Processes – Organic Compounds in Foundry Sand**

The potential for contamination from the organic components of binders used to form molds and cores from sand has not been examined at this site, other than the analysis for phenols in soil shown above (0.58 ppm) and phenols in groundwater described in Attachment C1 (not detected).

Beneficial use studies relating to foundry sand examined both metals and organic compounds (Beneficial Reuse of Foundry Sand: A Review of State Practices and Regulations, Office of Policy, Economics, and Innovation, U.S. Environmental Protection Agency, December 2002). In the review, concern was expressed regarding alteration of organic binder constituents during curing and pouring to other compounds, particularly in the case of incomplete combustion. However, the report goes on to note that "of the 45,000 compounds tested in the ground water in the vicinity of foundry landfills in Wisconsin, none was found to be above 1 µg/L (ppb)"citing E.S. Winkler and A.A. Bolshakov. 2000. "Characterization of Foundry Sand Waste." Chelsea Center for Recycling and Economic Development, University of Massachusetts at Lowell.

In Iowa, certain materials have been evaluated by the Iowa Department of Natural Resources (IDNR) and have been included in Chapter 108.4 under *Universally approved beneficial use determinations.* Foundry sand is universally approved for multiple uses, including as fill material pursuant to 108.6(1). If used as fill, the sand must comply with limits on contaminant concentration and pH and on placement, but otherwise the use does not require further approval from IDNR. The required testing does not include organic compounds, an indication that such are not generally considered to be an issue with this by-product.

**Petroleum Underground Storage Tank**

A 575-gallon tank used to store gasoline was installed underground at this site from 1967 to 1989. A soil sample collected when the tank was removed was negative for hydrocarbon contamination. No further investigation of the tank site has been done.

# **PART E:** Project Objectives

**Attachment E1 - Current Setting:**

The site is located at 1077 South 3rd Street in Manchester, Delaware County, Iowa in an area zoned as an industrial park. The approximate coordinates centered on the building are 42.4708° N and -91.4602° W.

The property is legally described as the North twenty-seven and two-tenths (27.2) feet of that part of Lot 13 lying East of the Railroad Right-of-Way and the South two hundred twenty-two and eight-tenths (222.8) feet of that part of Lot 12 lying east of the Railroad Right-of-way, all of the subdivision of the East 3/4 of the South ½ of Section 32, Township 89 North, Range 5 West of the 5th Principle Meridian according to the plat recorded in Book A Plats, Page 5 except Parcel P, in the SW 1/4 of the SE 1/4 Section 32, Township 89 North, Range 5 West, City of Manchester, Delaware County, Iowa according to the plat recorded in Book 2004, Page 4504.

This six-acre parcel is bounded on the east by South 3rd Street (formerly known as the Delhi-Independence State Road and Old Airport Road), on the south by commercial property owned by Henderson Products at 1085 South 3rd Street, on the west by Illinois Central Railroad right-of-way and on the north by commercial properties owned by Shirley Mangold (1049 South 3rd Street) and Harbach Properties (1057 South 3rd Street). 1078 South 3rd Street, located east across the street, is a residence owned by Cindy Moyer. A second house owned by Monica Chapman at 1078 South 3rd Street is just north of the Moyer property. Also across South 3rd Street to the southeast is a large industrial property owned by Wall Leasing where XL Specialized Trailers is located.

The surface elevation of the site is approximately 930 feet Mean Sea Level (msl). Surface run-off is directed generally south toward drainage ditches that run along the northern and southern site boundaries. Both ditches flow east under South 3rd Street and discharge to the Maquoketa River located 1500 feet east of this property. This property is not located within the 100-year flood plain of the Maquoketa River.

**E2 - Future Setting:** Planned or probable future uses of the property or its vicinity.

A potential buyer, Henderson Products, located adjacent to this property on the south, is interested in the site due to its proximity, with the intent to remove the existing building to allow unfettered utilization of the full six acre area. The acquisition of this site would relieve current congestion around the Henderson Products manufacturing plant, allow for safer and more efficient truck traffic patterns, and provide additional room for parking and materials storage, improving supply chain management. A portion of the site would be covered with gravel for these purposes. As is currently the policy at Henderson Products, the acquired property would be fenced to exclude the public. Any future development while under the ownership of Henderson Products would be consistent with the industrial park zoning.

**E3 - Time Table:**

If the property is acquired, Henderson Products would initiate building demolition as soon as possible and otherwise begin transforming and using the property to meet the needs described above. It is desired that this process begin no later than April 2018, but sooner if at all possible. Fencing and the placement of gravel would follow.

**E4 - Estimate of Project Magnitude:** A general description of the nature and magnitude of the environmental contamination to be addressed and the probable means of addressing it.

The nature and extent of the contamination at this property has been well-characterized under the RCRA Closure rules for a land disposal unit. The corrective action carried out at the direction of the U.S. EPA removed soil containing lead at concentrations greater than the Closure Performance Standards and demonstrated by confirmation sampling that the lead remaining at the excavated areas does not exceed the performance standards. The majority of locations tested did not require excavation. Of the 98 separate soil samples analyzed during closure activities, four had lead concentrations exceeding the current statewide standard for lead in soil. In spite of the long term placement of waste foundry sand at this site and a relatively high water table, no groundwater contamination has been discovered. Based on the known site conditions, it is believed that the environmental contamination at this site has been addressed through the RCRA Closure process.

A records review will be carried out to describe the facility operations and waste disposal practices since the Phase I and Phase II ESA in 2012. A site inspection will be carried out to verify previous observations.

If necessary, the locations noted in Attachment C-1 (B-2-3 and C-11-3) at which total lead in soil slightly exceeded the current Statewide Standard could be excavated and the soil disposed elsewhere. If necessary, additional surface and subsurface soil sampling could be carried out as was done in the 2012 Phase II investigation to verify concentrations of contaminants of concern are acceptable. It is not anticipated that additional groundwater monitoring will be needed.

**E5 - Anticipated Obstacles to Completion:**

No obstacles to completing the project have been identified.

## PART F: Other attachments:

### Attachment F1 - General Environmental Regulatory Actions and Permits:

**Air Quality:** Facility ID 28-01-001 Foundry processes at this site (Hawkeye Castings, Hawkeye Foundry, Ertl Foundry) produced emissions to the air. Because the equipment was installed prior to 1970, no construction permits have been issued by the Iowa Department of Natural Resources. Inspected by the agency periodically, no Notice of Noncompliance or Notice of Violation has ever been issued to this site with respect to air quality regulations.

**Storm Water:** The business obtained coverage (IA704-517) under the General Permit No. 1 for storm water discharges from an industrial facility.

**Waste Water:** Except for restrooms and an employee shower, no waste water was generated by facility processes.

**Underground Storage Tank:** Registration 198600728. A 575-gallon steel tank for gasoline storage was installed underground at the northeast corner of the building from 1967 to 1989. The tank removal included collection and analysis of a soil sample for petroleum hydrocarbons, none of which were detected.

### Attachment F2 - Federal Environmental Regulatory Actions:

**EPCRA Toxics Release Inventory:** FID 52057HWKYC1077S. Hawkeye Castings filed Form R for copper from 1987 through 1995. Form A for copper was filed for 1996, 1997, and 1998. No further reporting since 1998.

**RCRA Corrective Action Profile:** ID IAD984599589

| Action | Date/Status |
|---|---|
| 1. Site Assessed | 4/28/1997 |
| 2. Solution for Cleanup Selected | 6/30/1998 |
| 3. Solution Cleanup is Implemented | 8/31/1999 |
| 4. Consent Order Terminated | 10/22/2003 |
| 5. Corrective Action Process Terminated (Cleanup Complete) | 10/22/2003 |

**Government Performance & Results Act:**

| Milestone | Status | Date Assessed | Responsible Agency |
|---|---|---|---|
| Human Exposure Under Control | YES | 8/24/2012 | EPA Region 07 |
| Contaminated Groundwater migration Under Control | YES | 8/24/2012 | EPA Region 07 |

### Attachment F3 - Proof of Federal Notification:

The U.S. Environmental Protection Agency has been notified of the application to enroll this property in the Iowa LRP. A copy of the letter submitted to the agency is attached.

Dyersville DIE CAST

*Dyersville Die Cast (1970)*
*Scale Models (1978)*
*Moultrie Die Cast (2009)*
*Ertl Foundry (2012)*

502 Fifth Street NW • PO Box 327 • Dyersville, IA 52040 • 563-875-2436 • www.dyersvillediecast.com

6 October 2017

Don Lininger, CHMM
Chief, Waste Remediation & Permitting
US EPA Region VII
11201 Renner Blvd
Lenexa, KS 66219

Re: Ertl Foundry, 1077 South 3rd Street, Manchester. IA 52057
(formerly known as Hawkeye Castings)
IAD 984599589, RCRA Docket VII 97 H 0008

Dear Mr. Lininger:

The purpose of this letter is to notify the U.S. Environmental Protection Agency (EPA) that the landowner of the referenced site has filed an application to enroll the property in the Iowa Land Recycling Program (LRP).

Corrective action was carried out at this property to address on-site disposal of foundry sand. RCRA Closure was certified 8 May 2003. It is our understanding that EPA terminated the consent order and terminated the corrective action process associated with this site 22 October 2003.

Sincerely,

JDJ2 Holdings, LLC
d/b/a Ertl Foundry

Jane Ertl

Jane Ertl, President

Cc: Iowa Department of Natural Resources, Contaminated Sites
502 E 9th Street, Des Moines, IA 50319

**SCALE MODELS DYERSVILLE DIE CAST**

53649

Supplier: IOWA-DNR

| | | | | |
|---|---|---|---|---|
| 9/5/2017 | Application Fee | 750.00 | 0.00 | 750.00 |
| 53649 9/7/2017 | | 750.00 | 0.00 | 750.00 |