May 15, 2024
File No. 27224153.00

Mr. Mick Leat
Iowa Department of Natural Resources
Land Quality Bureau
Solid Waste Section
6200 Park Avenue
Des Moines, Iowa 50321

Subject: Industrial Monofill Landfill Permit Renewal
Climax Molybdenum Company Industrial Landfill
Fort Madison, IA 52627
Permit No. 56-SDP-06-80

Dear Mick:

On behalf of the Climax Molybdenum Company, SCS Engineers (SCS) is pleased to submit this Industrial Monofill Permit Renewal Application Form for the Climax Molybdenum Company Industrial Landfill (Landfill).

In accordance with the Iowa Administrative Code (IAC) 567-115.3(1) a., the application for renewal is due to the Iowa Department of Natural Resources (DNR) at least 90 days before the expiration date of the existing permit. Following standard practice, the permittee/SCS has reviewed the current permit and planning documents. If updates are needed to account for changes in facility operations, Section 2 of the permit application form (Form 50) identifies those planning documents that must be submitted. If these documents remain current and require no revision, they should be identified by the DocDNA number in the Form 50 and Sections 1, 2, and 3 of the Form 50 should be completed. Please feel free to contact us if you have any questions, require additional information, or need any further clarification.

Sincerely,

Isaac Creech

Isaac Creech, E.I.T.
Technical Associate
SCS Engineers

Christine L. Collier

Christine L. Collier, P.E.
Project Manager
SCS Engineers

IAC/CLC

cc: David Caskey – Climax Molybdenum Company

# 2024 Permit Renewal Application
# Climax Molybdenum Company
# Industrial Landfill


I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the state of Iowa.

Christine L Collier

Digitally signed by Christine L. Collier
Date: 2024.05.14 15:16:12 -05'00'

Christine L. Collier Date

My license renewal date is: December 31, 2025

Pages or sheets covered by this seal:

All Except Appendix F

Climax Molybdenum Company
2598 Highway 61
Fort Madison, IA 52627
(319) 463-7151

SCS ENGINEERS

Project No. 27224153.00 | May 2024

1690 All-State Court, Suite 100
West Des Moines, IA 50265
515-631-6160

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# 1.0 IOWA DEPARTMENT OF NATURAL RESOURCES FORM 50

# IOWA DEPARTMENT OF NATURAL RESOURCES

# INDUSTRIAL MONOFILL

## PERMIT APPLICATION FORM 50

☐ **New Permit**

☒ **Permit Renewal (permit number)** 56 **-SDP-** 06 **-** 80P

☐ **Closure Permit**

**SECTION 1: PERMIT APPLICATION REQUIREMENTS**

**Owner of site**

Name: Climax Molybdenum Company Industrial Landfill Phone: 319-463-2201

Address: 2598 Highway 61 Fax: 319-463-7646

City, State, Zip: Fort Madison, Iowa 52627 E-mail:

**Certified Operator Responsible for Operation at Facility**

Name: Javier Guevara Phone: 319-463-2201

Address: 2598 Highway 61 Fax: 319-463-7640

City, State, Zip: Fort Madison, IA 52627 E-mail:

**Permit Applicant**

Name: Climax Molybdenum Company Phone: 319-463-2201

Address: 2598 Highway 61 Fax: 319-463-7640

City, State, Zip: Fort Madision, Iowa E-mail:

**Design Engineer (PE)**

Name: Christine L. Collier Phone: 515-631-6160

Address: 1690 All-State Court, Suite 100 Fax: 913-681-0012

City, State, Zip: West Des Moines, IA 50265 E-mail: ccollier@scsengineers.com

Iowa Engineer License #: P17963 Expiration Date: 12/31/2025

**Responsible Official for the Facility**

Name: David Caskey Phone: 319-463-2245

Address: 2598 Highway 61 Fax: 319-463-7640

City, State, Zip: Fort Madison, IA 52627 E-mail: dcaskey@fmi.com

**Agency and Responsible Official of Agency Served (if any)**

Name: Phone:

Address: Fax:

City, State, Zip: E-mail:

**Facility**

Name: Climax Molybdenum Company Industrial Landfill

Address: 2598 Highway 61 City, State, Zip: Fort Madison, Iowa 52627

Legal Description:

NW¼ and W½ of the NE¼ and S 150 feet of the E½ of the NE¼ of Section 32, Township 67 N, Range 6 W, 244 Acres, Lee County, IA

Type, source, and expected volume or weight of waste to be handled per day, per week, or year.

Gypsum sludge, Climax Molybdenum - Fort Madison Chemical Plant 5,500 dry tons over 2 years with deposition over a 12-week period

## SECTION 2: PERMIT APPLICATION SUPPORTING DOCUMENTATION

### PLANS AND SPECIFICATIONS

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 are required to be provided with each permit renewal application, unless a prior document remains current and is identified by Doc ID#, Section, and Page.

**Required Plans and Specifications**

☒ Executive Summary

An executive summary shall address the following:

- Summary of modifications, if any, to the approved plans and specifications 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.
- Provide documentation and certification as required for new permit amendment requests, if any.
- Provide documentation and certification as required for new waiver requests from Iowa Administrative Code requirements, if any.

☒ A map or aerial photograph locating boundaries and other environs in accordance with Iowa Administrative Code 567 paragraphs 115.13(3)"a-f".

**No Revision Required** - See Doc ID#, Section, and Page: _____

☒ An organizational chart in accordance with subrule 115.13(5).

**No Revision Required** - See Doc ID#, Section, and Page: _____

☒ A detailed description of the disposal process to be used in accordance with subrule 115.13(6).

**No Revision Required** - See Doc ID#, Section, and Page: _____

☒ A table listing the equipment to be used, its design capacities and expected loads in accordance with subrule 115.13(7).

**No Revision Required** - See Doc ID#, Section, and Page: _____

☒ A contingency plan detailing specific procedures to be followed in case of equipment breakdown, or fire in equipment or vehicles, including methods to be used to remove or dispose of accumulated waste in accordance with subrule 115.13(8).

**No Revision Required** - See Doc ID#, Section, and Page: _____

☒ Proof of the applicant's ownership of the site or legal entitlement to use the site for the disposal of solid waste for the term of the permit for which application is made in accordance with subrule 115.13(9).

**No Revision Required** - See Doc ID#, Section, and Page: _____

☐ A hydrogeologic investigation Report and a hydrologic monitoring system plan in accordance with subrules 115.14(455B) through 115.24(455B) and subrules 115.26(3) through 115.26(9).

**No Revision Required** - See Doc ID#, Section, and Page: HIR 70589, HMSP 100699

☐ Design and operational plans and specifications for the facility, including quality control and assurance, in accordance with subrules 115.26(1) through 115.26(2); subrules 115.26(11) through 115.26(12); and rules 115.27(455B) through 115.29(455B).

**No Revision Required** - See Doc ID#, Section, and Page: 70589

☐ A closure and postclosure plan in accordance with subrules 115.13(10); 115.26(10); and 115.26(13) through 115.26(14).

**No Revision Required** - See Doc ID#, Section, and Page: 70589

☐ An explosive gas control plan in accordance with subrule 115.26(15).

**No Revision Required** - See Doc ID#, Section, and Page: Not Required

☒ An emergency response and remedial action plan in accordance with rule 115.30(455B).

**No Revision Required** - See Doc ID#, Section, and Page: _____

If the department finds the permit application information to be incomplete, the department shall notify the applicant of that fact and of the specific deficiencies. If the applicant fails to correct the noted deficiencies within 30 days, the department may reject the application and return the application materials to the applicant. The applicant may reapply without prejudice.

**SECTION 3: APPLICANT SIGNATURE**

**Signature of Permit Applicant:** _____ **Date:** 5/14/24

**Printed Name:** David Caskey **Title:** Environmental Manager

Applications for sanitary disposal projects must be accompanied by the plans, specifications and additional information required by the applicable solid waste rules under Iowa Administrative Code.

Send completed applications with attached information to the DNR project officer via email or file sharing platform.

For questions concerning this application contact Brian Rath at 515-537-4051, brian.rath@dnr.iowa.gov

# 2.0 EXECUTIVE SUMMARY

## 2.1 INTRODUCTION

The information required in the Executive Summary is listed on the Permit Application Form 50 and includes a summary of modifications, special provisions, permit amendments, and documentation and certification as required for new permit amendment requests and new waiver requests.

## 2.2 SUMMARY OF MODIFICATIONS

No modifications to the approved plans and specifications have occurred during the current permit cycle (June 18, 2021 to present).

## 2.3 SPECIAL PROVISIONS OF CURRENT PERMIT

Following is a summary of each special provision (Section X. Special Provisions) of the current permit in addition to a brief discussion if it is to remain the same, be revised, or be removed.

### Special Provision #1.

*The permit holder is authorized to accept synthetic gypsum sludge for disposal. Wastes disposed at this site shall not exhibit free liquids, toxic or hazardous properties. No hazardous wastes as defined by Iowa Code section 455B.411 may be disposed at this landfill.*

There are no changes required or requested to Special Provision #1.

### Special Provision #2.

*The permit holder shall develop and operate the site in accordance with the 2021 Application for Permit Renewal (doc #100699), dated June 18, 2021, as prepared by Evora Consulting, and the following:*

a. *Waste disposal is limited to Phases 1, 2, and 3 of the expansion unit. The site vertical height shall not exceed a maximum waste elevation of 704 feet in the vicinity of N 4400 and E 2650. Any expansion beyond these phases shall require prior DNR approval.*

b. *The permit holder shall collect leachate from the leachate control system and properly dispose of the leachate either by treatment at the Climax Molybdenum Company's wastewater treatment facility under their NPDES permit; or by discharge to a publicly owned treatment works (POTW). If the discharge is to a POTW with a pretreatment program approved by the DNR, the discharge must comply with the terms and conditions of a local permit issued for the discharge by the POTW. If the discharge is to a POTW without an approved pretreatment program a completed treatment agreement form shall be submitted to the DNR's Wastewater Section. Copies of the local permit or treatment agreement shall be provided to the DNR's Solid Waste Section and the local Field office. The treatment agreement must be on DNR Form 31 (542-3221) and must comply with the requirements of subrule 64.3(5).*

   *In addition, the permit holder shall semiannually measure leachate head levels and elevations at the closed cell piezometers LPZ-1 through LPZ-4, and at frequency of no less than monthly at the open cell piezometer LPZ-5. Records of leachate contaminants testing*

*required by the treatment works and any NPDES permit for on-site treated leachate discharges shall be maintained.*

*The leachate control system shall be operated and maintained in accordance with the approved permit documents. After implementation of the leachate control system, the permit holder shall routinely collect the necessary information and evaluate the effectiveness of the system in controlling the leachate. All documentation shall be summarized in a Leachate Control System Performance Evaluation (LCSPE) Report. Effective control shall be considered as maintaining compliance with maximum leachate head as defined in 567 IAC 115.26(11)"a"(1), achieving the lowest possible leachate head as required in 567 IAC 115.26(12)"b"(2), and maintaining surface and groundwater quality standards at compliance monitoring points.*

*The permit holder shall routinely measure the thickness of liquids in the leak detection riser and include these measurements in the LCSPER.*

*The permit holder shall annually submit the LCSPE Report, including record data, as a supplement to the facility Annual Water Quality Report, as defined in 567 IAC 115.26(8)"d". The LCSPE Report shall include proposed additional leachate control measures and an implementation schedule in the event that the constructed system is not performing effectively.*

c. *Solid waste deposited at the site shall be covered with six inches of compacted soil by the end of the last working day of each week. If an area is not going to be used for disposal of solid waste for more than two months, then a minimum of two feet of intermediate cover shall be applied and sloped to drain.*

d. *Surface water shall be diverted around the fill area and surface drainage shall be provided at the toe of the working face.*

e. *An all-weather fill area accessible during all weather conditions under which solid waste is received and disposed at the site shall be provided at all times.*

f. *The review comments (doc #43162), dated May 13, 1996 from the DNR's Conservation and Recreation Division relative to the comprehensive listing of plant and animal species for all development and soil borrow areas, is incorporated into the permit.*

g. *The review comments (doc #43162), dated May 29, 1996 from the State Historical Society relative to the determination of the presence of and assessment of the impact on any archaeological, historical, or architecturally significant properties for all development and soil borrow areas on the proposed site is incorporated into the permit.*

h. *The Emergency Response and Remedial Action Plan (ERRAP) as contained in Appendix 12 of the 2021 Application for Permit Renewal (doc #100699), dated June 18, 2021, in compliance with 567 IAC 115.30(455B) is incorporated into the permit. An updated ERRAP shall be submitted at the time of each permit renewal application. An updated ERRAP shall be included with any request for permit modification to incorporate a facility expansion or significant changes in facility operation that require modification of the currently approved ERRAP.*

Please update the permit renewal application to reflect the date of this application and #2h to the updated ERRAP included in Appendix F of this permit renewal application. There are no other changes required or requested to Special Provision #2.

Special Provision #3.

*The permit holder shall construct future liner and leachate collection systems in accordance with the following:*

a. *Any construction beyond Phases 1, 2, and 3 shall require prior DNR approval.*

b. *The leachate collection system design for future cells shall include a composite liner consisting of a clay layer overlain by a geomembrane, and a more efficient leachate collection layer. This design shall be submitted to the DNR by December 31, 2024 unless an alternative date is approved.*

c. *In accordance with 567 IAC 115.26(11)"d", the DNR shall be notified and the site inspected when the initial construction of each phase of the leachate control system has been completed. Prior to the inspection, construction certification reports shall be submitted to the DNR's Main and local Field offices. No waste disposal shall commence in any newly constructed unit or portion thereof until it has been inspected and approved by the DNR.*

d. *The permit holder is responsible for providing adequate freeze-protection for all areas of each constructed liner unit. If any unit area is suspected of being impacted by freezing temperatures, then post-freeze permeability soil test results (one test per acre per liner lift) and an Iowa-licensed engineer re-certification of post-freeze permeability meeting criteria (1x10-7 cm/sec or less) shall be submitted to the DNR for review.*

e. *The Phase 1 Lateral Expansion Construction Documentation and Certification Report (docs #43142 and #43143), dated January 7, 1997, as submitted by Howard R. Green Company and approved on May 29, 1997, is incorporated into the permit.*

f. *The Phase 1 Liner re-Certification Report (doc #43106), dated July 20, 1999, as submitted by Howard R. Green Company and approved on September 22, 1999, is incorporated into the permit.*

g. *The Construction Certification Report for the Phase 2 and 3 Cell Construction (doc #38111), dated February 13, 2009, as submitted by Barker Lemar Environmental Consultants and approved on April 3, 2009, is incorporated into the permit. The Phase 2 and 3 Cell construction consists of a 4-foot compacted clay liner and leachate collection piping system.*

h. *The permit holder is conditionally authorized to deviate from the 5-foot separation requirement in 567 IAC 115.26(1)"m"(2) based on the rationale presented in the Revised Development Plan drawings (docs #43168-43175), dated May 18 and 19, 1993, respectively, and approved on April 11, 1995. The DNR may require the establishment of a 5-foot separation in the future, if deemed necessary based on hydrologic monitoring results and leachate control performance.*

i. *The Construction Observation Report for the Leachate Lagoon and Forcemain Construction (doc #93668), dated November 5, 2018 and approved on November 8, 2018, is incorporated into the permit.*

j. *Repairs to the closed area and active area receiving sumps were documented in the Documentation of Groundwater Assessment Work Plan Activities (doc #101625), dated November 9, 2021, as submitted by Evora is incorporated into the permit. These actions were required by DNR in doc# 99527, dated January 15, 2021, in response to groundwater contamination identified in MW-21.*

As discussed in the meeting between Climax Molybdenum Company (Climax), Iowa Department of Natural Resources (DNR), and SCS Engineers (SCS) staff on Thursday, May 2, 2024, Climax intends to continue use of the industrial landfill. Due to the nature of operations, the amount of needed disposal space can vary depending on future decisions made. Climax therefore has engaged SCS to meet the requirements under Special Provision #3b. The redesign of the remaining cells is anticipated to be complete for submittal to the DNR by the DNR's December 31, 2024 deadline. These modifications will be submitted under separate cover. There are no other changes required or requested to Special Provision #3.

Special Provision #4.

*Hydrologic monitoring at the site shall be conducted in accordance with the Hydrologic Monitoring System Plan (HMSP) referenced in Appendix 8 of the 2021 Application for Permit Renewal (doc #100699), dated June 18, 2021, as prepared by Evora Consulting; and the following provisions:*

a. *The HMSP shall include upgradient groundwater monitoring points MW-7 and MW-18R; downgradient groundwater monitoring points MW-11, MW-15, MW-16, MW-17, MW-21, and TW-2.*

   *Monitoring wells TW-3 and MW-19 shall be used in sequence as the waste boundary expands southward. The start of quarterly sampling at monitoring well MW-19 shall be scheduled to commence prior to disposal of waste in Phase 10 of the expansion area and abandonment of TW-3.*

b. *Monitoring points MW-8, MW-9, MW-10, MW-12, MW-13, MW-14, MW-19, MW-20, MW-22, MW-23, and MW-24 shall be retained as water level measuring points used to prepare groundwater contour maps and calculate vertical gradients. These wells shall also be maintained in the case that DNR requires future sampling.*

c. *DNR construction documentation form 542-1277 and boring logs for all monitoring wells and piezometers shall be submitted within 30 days of installation. DNR documentation form 542-1323 shall be submitted within 30 days of establishing surface water monitoring points.*

   *The MW-18 well abandonment documentation and the MW-18R, MW-25, MW-26, and MW-27 well construction documentation (doc #81903), as submitted by Barker Lemar Engineering Consultants, dated November 24, 2014, are incorporated into the permit.*

   *The boring log and well construction documentation for MW-28 (doc #84964), dated December 16, 2015, is incorporated into the permit.*

d. *First year quarterly samples shall be collected from any designated new monitoring well, dewatering system, and any monitoring point which lacks four quarterly samplings and analyzed for the parameters listed in permit Special Provision #4e, except that dissolved iron analyses is not required in accordance with the approved variance dated April 30, 2019. Due to the composition of the waste and lack of detection of organic constituents during baseline quarterly testing, quarterly volatile organic compound and metals analyses in accordance with 567 IAC 115.26(4)d has been replaced with the #4e list; and annual monitoring for total organic halogens and phenols in accordance with 567 IAC 115.26(4)"f" is not required. All statistical evaluations shall include the updated baseline and subsequent sampling documentation.*

e. *Continued routine semiannual sampling shall take place each year and samples shall be analyzed for the parameters listed in 567 IAC 115.26(4)"e", except that dissolved iron analysis is not required in accordance with the variance (doc #94810) dated April 1, 2019 and approved on April 30, 2019.*

   *Supplemental semiannual sampling and analysis for total arsenic, cadmium, iron, lithium, manganese, molybdenum, selenium, sodium, strontium, and sulfate shall be conducted in addition to the routine test parameters. All supplemental metal/metalloid analyses shall not be filtered and the analytical results must be reported as totals. The supplemental testing for any parameter may be discontinued upon all of the following: 1) A minimum of 4 sampling events have taken place that support discontinuation of sampling; 2) a request for elimination of the additional sampling are submitted to the DNR; and 3) the DNR approves discontinuation of the additional sampling.*

f. *The elevation of water in each monitoring well shall be measured and recorded during each sampling event.*

g. *The Method Detection Limit (MDL) for the test parameters shall not exceed action levels as defined in 567 IAC Chapter 133 or Statewide Standards for a protected groundwater source as listed in 567 IAC 137. If the action levels cannot be feasibly achieved using procedures described in 567 IAC 115.26(5), then the MDL shall not exceed the lowest feasible level.*

h. *Samples collected for total analyses shall not be filtered prior to laboratory analysis. Samples collected for dissolved metals analysis shall be field filtered, preserved, and promptly transferred to a certified laboratory for analysis.*

i. *In accordance with the February 25, 1999 variance approval (doc #43111), the permit holder is authorized to reduce the frequency of groundwater level measurements from monthly, as required by 567 IAC 115.26(4)b IAC, to semiannual. The measurements shall be submitted in the corresponding semiannual monitoring reports.*

j. *An Annual Water Quality Report (AWQR) summarizing the effects the facility is having on groundwater and surface water quality shall be submitted to the DNR by November 30 each year. The AWQR shall include the results of the routine groundwater measurements conducted at the monitoring points and all groundwater sampling analysis and the associated DNR sampling forms 542-1322 and 542-1324.*

k. *Based on documented sulfate exceedances at monitoring points MW-12, MW-16, and MW-17, a Groundwater Quality Assessment Plan (GWQAP) was required in the DNR letter dated*

*January 24, 2007 (doc #43077). As a result of the resultant assessment, monitoring wells MW-20, MW-23, and MW-24 were included in the routine monitoring program.*

*In the DNR letter dated January 29, 2015 (doc #82324), another Groundwater Quality Assessment was required to determine if routine groundwater monitoring of the east side of the lined area was necessary. The Groundwater Quality Assessment Report (doc #85358), dated January 28, 2016 and prepared by Barker Lemar Engineering Consultants, and data submitted subsequently, documented that elevated concentrations of sulfate, sodium, and other constituents in deeper site strata are likely naturally-occurring.*

l. *Standard Operating Procedures for low-flow groundwater sampling of monitoring wells, submitted as Attachment 1 in the letter dated April 24, 2017 from the permit holder (doc #89255), was approved by the DNR on July 3, 2017 and is incorporated into the permit.*

m. *In accordance with the variance approved on April 30, 2019 (doc #95000), the facility's monitoring well maintenance and performance reevaluation plan is modified such that the permit holder shall perform biennial evaluations of well recharge rates and chemistry to determine if well deterioration is occurring, in lieu of in situ permeability testing described in 567 IAC 115.21(2)"d".*

Cell construction that will require the removal of TW-2 is planned to occur within this permit period. We therefore request language stating that upon construction activities requiring the removal of TW-2, TW-3 will become the new HMSP well. The start of quarterly sampling at TW-3 will commence once TW-2 has been removed. There are no other changes required or requested to Special Provision #4.

Special Provision #5.

*In accordance with the variance approval dated December 21, 1994 (under cover letter dated December 19, 1994 (doc #43124)), the permit holder is exempt from the monitoring and reporting of site methane concentrations as required by 567 IAC 115.26(15)"b". The variance was granted based on the waste stream consisting exclusively of inorganic industrial waste materials. The approved variance is applicable as long as the justification for the request remains the same.*

There are no changes required or requested to Special Provision #5.

Special Provision #6.

*The permit holder shall close the landfill site in accordance with the Closure/Postclosure Plan as contained in Appendix 9 in the 2012 Application for Permit Renewal (doc #70589), dated June 15, 2018, as prepared by Barker Lemar Engineering Consultants, and the following:*

a. *The review comments (doc #43168), dated December 9, 1992 from the Lee County Soil & Water Conservation District relative to compliance with wind and soil loss limit regulations, in accordance with 567 IAC 115.26(1)"j" for all development areas, is incorporated into the permit.*

b. *The Completion Notification – 2013 Landfill Cap Remediation Plan (doc #78081), dated September 4, 2013, as submitted by Barker Lemar Engineering Consultants is incorporated into the permit. This information contained in this report and the report dated February 18, 2013 (doc #75966), as submitted by Barker Lemar Engineering Consultants, document that final cover has been constructed over the entirety of the original unlined landfill.*

There are no changes required or requested to Special Provision #6.

## 2.4 PERMIT AMENDMENTS TO CURRENT PERMIT

There have been no permit amendments to the current permit.

## 2.5 NEW PERMIT AMENDMENT AND VARIANCE REQUESTS

Climax Molybdenum Company currently does not have any new permit amendment requests or new variance requests from Iowa Administrative Code.

## 2.6 REQUIRED PLANS AND SPECIFICATIONS

Appendices are included to address the updates as noted in Form 50 in Section 1. An updated site map with topographic data from December 29, 2023 is included in Appendix A. The current organizational chart is included in Appendix B. The updated detailed description of disposal processes is included in Appendix C. The updated equipment listing is included in Appendix D. The updated contingency plan is included in Appendix E. The proof of ownership is included in Appendix F. The updated Emergency Response and Remedial Action Plan (ERRAP) is included in Appendix G.

# Appendix A

# Updated Site Map

E 2000

E 2500

E 3000

N 4500

N 4000

PHASE 1 FILL AREA

PHASES 2 & 3 CELLS

CLOSED AREA

WASTE

MW-26

MW-18R

MW-18

MW-25

MW-27

MW-28

MW-8

MW-7

MW-15

MW-10

MW-9

MW-11

MW-12

MW-20

MW-13

MW-14

MW-16

MW-21

MW-19

MW-23

TW-2

TW-3

LPZ-5

LPZ-4

LPZ-3

LPZ-2

LPZ-1

#1

#2

#3

LEACHATE LIFT STATION

ACCESS ROAD

LEACHATE STORAGE LAGOON

FML

## LEGEND

- EXISTING GROUND SURFACE (2 FT. CONTOUR INTERVAL)
- APPROXIMATE EXISTING WASTE BOUNDARY
- FML BOUNDARY
- BUILDING
- GRAVEL ROAD
- FENCELINE
- CULVERT
- CONSTRUCTED CLAY LINER LIMITS
- LEACHATE PIPING (SOLID/PERF.)
- TOE DRAIN
- MONITORING WELL
- ABANDONED MONITORING WELL
- LEACHATE PIEZOMETER
- LEACHATE CLEANOUT
- LEACHATE VALVE
- MANHOLE
- SURVEY CONTROL/BENCHMARK
- TREE LINE

100 0 100 200

SCALE FEET

| REV. | DATE | CK BY |
|---|---|---|
| 0 | - | - |
| 1 | - | - |
| 2 | - | - |
| 3 | - | - |
| 4 | - | - |
| 5 | - | - |

SHEET TITLE: **SITE MAP**

PROJECT TITLE: **CLIMAX MOLYBDENUM COMPANY INDUSTRIAL LANDFILL PERMIT RENEWAL**

CLIENT: **CLIMAX MOLYBDENUM COMPANY**
**P.O. BOX 220**
**FORT MADISON, IA 52627**

**SCS ENGINEERS**
1690 All State Court, Suite 100
West Des Moines, IA 50265
PH: (515) 631-6160

PROJ. NO. 27224153.00 | DSN. BY: IAC | DWN. BY: IAC | CHK. BY: CLC | PROJ. MGR: CLC

CADD FILE: CLIMAX MOLYBDENUM SITE MAP-2024.DWG

DATE: 3/27/24

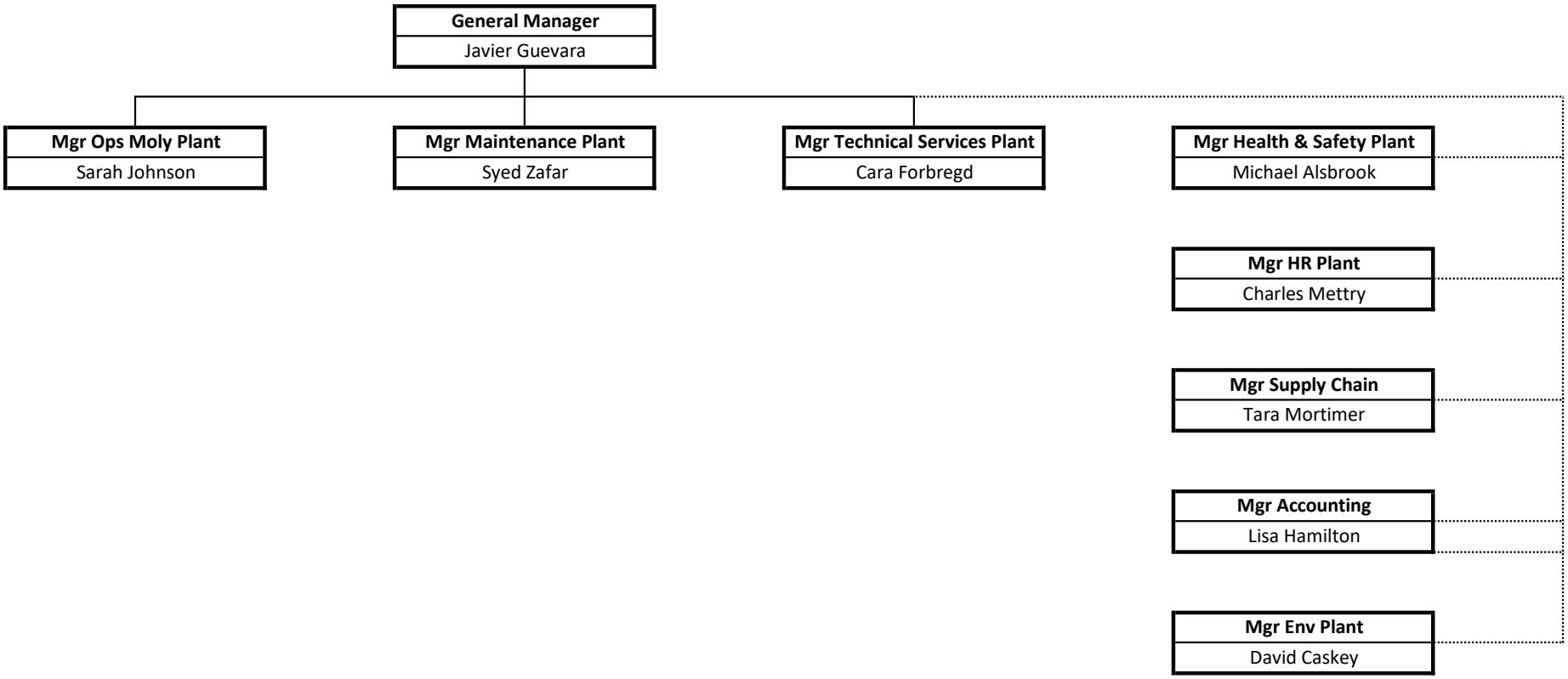
DRAWING NO. **1**

\\DES-FS01\DESMOINES\PROJECT\27224153.00\AUTOCAD\CLIMAX MOLYBDENUM SITE MAP-2024.DWG

# Appendix B

# Organizational Chart

# Climax Moly Company - Fort Madison Plant Organizational Chart



# Appendix C

# Detailed Description of Disposal Process

# Detailed Description of Disposal Process

*IAC 567-115.13(6) A detailed description of the disposal process to be used.*

The Climax Molybdenum Company Industrial Landfill (Landfill) is used on an as needed basis. Disposal at the facility typically occurs every two years and lasts approximately two month. Once disposal is completed, an intermediate cover is constructed over the most recent active working face. Facility operation events such as clean out of the entire gypsum pond at the plant may result in the Landfill being open for a longer period of time.

Climax Molybdenum Company currently hires a third party contractor for hauling of material from the plant to the Landfill in addition to operating the Landfill.

When the Landfill is being used, the gypsum sludge is mechanically dewatered and loaded onto disposal trucks at the plant and then transported to the Landfill. The trucks unload the gypsum sludge at the tipping face of the currently active cell.

Weekly cells are opened and on the last working day of each week's operation, six inches of compacted soil is placed over the working cell, per Special Provision #2c of the permit.

The cover is graded to channel runoff away from the current working face to the extent possible. If an area is not going to be used for disposal for more than two months, then a minimum of two feet of intermediate cover is applied and sloped to drain.

Lifts will progress vertically until the final contour elevations, less four feet, are attained. Upon completion of the final contours, the area will be graded to provide an even surface. Two feet of compacted soil are placed on the graded intermediate cover. The soil is applied in lifts not to exceed eight (8) inches. At least one field density test is performed per acre for each lift. The permeability must be less than $1x10^{-7}$ cm/sec or additional compaction will be required. The results of the permeability tests will be submitted to IDNR. The outer perimeter of the final cover will be keyed into the natural subsoils.

After quality control checks have verified a satisfactory installation, two feet of uncompacted soil will be applied over the two foot layer of compacted soil and graded. This soil layer will be seeded as soon as is practical to prevent erosion. If deemed necessary, on slopes exceeding 20%, a wood excelsior mat will be stapled to the surface to aid in erosion control and help achieve successful vegetation. It is the intent of this scheme of development to achieve the final contour elevations in a logical manner.

# Appendix D

# Equipment Listing

# Equipment Listing

*IAC 567-115.13(7) A table listing the equipment to be used, its design capacities and expected loads.*

Climax Molybedenum Company utilizes a third-party contractor to both haul the material to the Landfill and to operate the Landfill. Typical equipment the Contractor has at the Landfill includes:

- Caterpillar 943 Loader (tract type)
    - Vehicle weight: 21,000 pounds
    - Bucket capacity (struck): 1.2 cubic yards
    - Bucket capacity (heaped): 1.5 cubic yards

# Appendix E

# Contingency Plan

# Contingency Plan

*IAC 567-115.13(8) A contingency plan detailing specific procedures to be followed in case of equipment breakdown, maintenance downtime, or fire in equipment or vehicles, including methods to be used to remove or dispose of accumulated waste..*

Climax Molybdenum Company currently contracts with a third-party contractor for the operations of the Landfill. In the event of equipment breakdown, maintenance downtime, or fire in equipment or vehicles, the third-party contract operator will be responsible to provide additional equipment

# Appendix F

# Proof of Ownership

IOWA STATE BAR ASSOCIATION
Official Form No. 1.1 (Trade-Mark Registered, State of Iowa, 1967)

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

# WARRANTY DEED

**Know All Men by These Presents:** That PAUL D. BOYD and VERA M. BOYD, husband and wife,

, in consideration of the sum of One dollar and other valuable consideration in hand paid do hereby Convey unto AMAX INC.,

Grantees' Address: Highway 61 South, Fort Madison, Iowa

the following described real estate, situated in Lee County, Iowa, to-wit:

THE NORTHWEST QUARTER (NW¼) OF SECTION THIRTY-TWO (32); THE WEST HALF (W½) OF THE NORTHEAST QUARTER (NE¼) OF SECTION THIRTY-TWO (32) IN TOWNSHIP SIXTY-SEVEN (67) NORTH, RANGE SIX (6) WEST OF THE FIFTH PRINCIPAL MERIDIAN , LEE COUNTY, IOWA.

And the grantors do Hereby Covenant with the said grantees, and successors in interest, that said grantors 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 distributive share in and to the described premises.

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.

Signed this 22nd day of July, 1980.

STATE OF IOWA,
COUNTY OF LEE } ss.

Paul D. Boyd

Vera M. Boyd

On this 22nd day of July, 1980 before me the undersigned, a Notary Public in and for said County and State personally appeared Paul D. Boyd and Vera M. Boyd, husband and wife,

R.R., Argyle, Iowa
(Grantors' address)

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 in and for said County and State

Please type or print names under signature lines as per Sec. 558.3 Code of Iowa

1.1 WARRANTY DEED

Corporate

# QUIT CLAIM DEED

SPACE ABOVE THIS LINE
FOR RECORDER

For the consideration of One Dollar(s) and other valuable consideration, AMAX INC., a New York corporation, AMAX Center, Greenwich, CT 06836-1700

do hereby Quit Claim to Climax Molybdenum Company, a Delaware corporation, AMAX Center, Greenwich, CT 06836-1700

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

See Exhibit "A" attached hereto and incorporated herein by reference.

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: January 30, 1988

STATE OF Colorado, ss:
Jefferson COUNTY,

On this 30th day of January, 1988, before me the undersigned, a Notary Public in and for said State, personally appeared Charles E. Stott, Jr.

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

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

My Commission Expires Nov. 8, 1988

AMAX INC.

By Charles E. Stott, Jr. (Grantor)
Vice President

Attest: (Grantor)
Raymond J. Cooke

By (Grantor)
Ass't Secretary

(Grantor)

(Grantor)

(Grantor)

STATE OF _____ , _____ COUNTY, ss:

On this _____ day of _____, 19 ____ before me, the undersigned, a Notary Public in and for said County and 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 Colorado , Jefferson COUNTY, ss:

On this 30th day of January, 19 88, before me, the undersigned, a Notary Public in and for said State, personally appeared Charles E. Stott, Jr. and Raymond J. Cooke _____, to me personally known, who, being by me duly sworn, did say that they are the Vice President _____ and Assistant Secretary _____ respectively, of said corporation; that ~~(no seal has been procured by the said)~~ (the seal affixed thereto is the seal of 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 Charles E. Stott, Jr and Raymond J. Cooke 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.

My Commission Expires Nov. 8, 1988

~~My Commission Expires Nov. 8, 1988~~

Mary Ford, Notary Public

QUIT CLAIM DEED

TO

Entered upon transfer books and for taxation this _____ day of _____, 19 ____

_____ Auditor

By _____ Deputy

Filed for record, indexed and delivered to County Auditor this _____ day of _____, 19 ____ at _____ o'clock ____ M., and recorded in _____ of _____ County Records.

Recorder's fee $ _____ PAID.

Auditor's fee $ _____ PAID.

_____ Recorder

By _____ Deputy

WHEN RECORDED RETURN TO

Exhibit "A"
to
Quit Claim Deed
from AMAX INC. to Climax Molybdenum Company

Parcel 1

All of the Southwest Quarter (SW 1/4), Section 22, Township 67 North, Range 5 West, 5th P.M., Lee County, Iowa, lying East of the right of way for U.S. Highway #61, bounded by the following described lines:

Beginning on the South line of said Section 22 at the Easterly right of way line of said Highway #61, located 1710.1 feet East of the Southwest corner of said Section 22; thence North 4°-45' East, 2663 feet with said Easterly right of way line to the North line of the SW 1/4, Section 22; thence East 744 feet with said quarter-section line to the center of Section 22; thence South 2654 feet with the quarter-section line to the South quarter corner of Section 22; thence West 930 feet to the point of beginning, containing 50.9 acres.

The Southeast Quarter (SE 1/4) of Section 22, Township 67 North, Range 5 West, 5th P.M., containing 160 acres.

That part of the South half (S 1/2) of Section twenty-three (23), Township 67 North, Range 5 West, 5th P.M., lying South of the channel of Devil's Creek as said channel existed prior to the construction of the Keokuk Dam, and which is more particularly described as follows:

Commencing at a point on the North line of the South Half (S 1/2) of said Section 23, located 410 feet West of the center of said Section, thence South 18°-30' East, 512.2 feet, thence South 49° East, 126.1 feet, thence South 86° East, 130.00 feet, to a point on the north-south quarter-section line, located 575 feet South of the center of said Section, thence continuing South 86° East, 526 feet, thence South 44° East, 999.9 feet, thence South 74° East, 714.1 feet, thence South 19° East, 114.8 feet, thence South 8°-45' East, 1020 feet, to the South line of said Section 23, said point being 550 feet West of the Southeast corner of said Section, thence West with the Section line to the Southwest corner of said Section, thence North with the Section line to the Quarter Section corner, thence East with the Quarter Section line to the point of beginning, containing 156 acres in the Southwest Quarter (SW 1/4), and 73 acres in the Southeast Quarter (SE 1/4). This description is referenced to the original land lines, but shall in no way confine the owners' right of claim to natural accretions thereto.

Part of the South Half (S 1/2) of the Northwest Quarter (NW 1/4) of said Section 23, bounded by a line commencing at the Northwest corner of the SW 1/4 of the Northwest Quarter (NW 1/4) of said Section 23, thence East 198 feet to Big Devil Creek, thence South 54° East to South line of said Northwest Quarter (NW 1/4), thence West 2211 feet on center section line, thence North 1320 feet to the point of beginning, containing 36.5 acres.

Parcel 2

The North Half (N 1/2) of the North Half (N 1/2) of the Northeast Quarter (NE 1/4) of Section Twenty-Seven (27); the North Half (N 1/2) of the East Thirty (30) Acres of the Northeast Quarter (NE 1/4) of the Northwest Quarter (NW 1/4) of Section Twenty-seven (27); the North half (N 1/2) of the North half (N 1/2) of the Northwest Quarter (NW 1/4) of Section Twenty-six (26); also, that Part of the North Half (N 1/2) of the Northwest Quarter (NW 1/4) of the Northeast Quarter (NE 1/4) of Section Twenty-six (26) lying West of the Mississippi River and consisting of 13.34 acres, more or less; all in Township 67 North, Range 5 West in Lee County, Iowa.

Parcel 3

The following described property located in Section 22, Township 67 North, Range 5 West of the 5th Principal Meridian in Lee County, Iowa:

The Southeast Quarter of the Northeast Quarter;

The Southwest Quarter of the Northeast Quarter, except the Atchison, Topeka and Santa Fe Railway Company right-of-way; and

The East part of the Southeast Quarter of the Northwest Quarter described as beginning at the Southeast corner of the Southeast Quarter of the Northwest Quarter; thence West to the Easterly right-of-way line of Highway 61; thence Northerly along said Highway right-of-way line to the North line of the Southeast Quarter of the Northwest Quarter; thence East following said North line to the Northeast corner of the Southeast Quarter of the Northwest Quarter; thence South to the point of beginning, excepting therefrom, however, the Atchison, Topeka and Santa Fe Railway Company right-of-way.

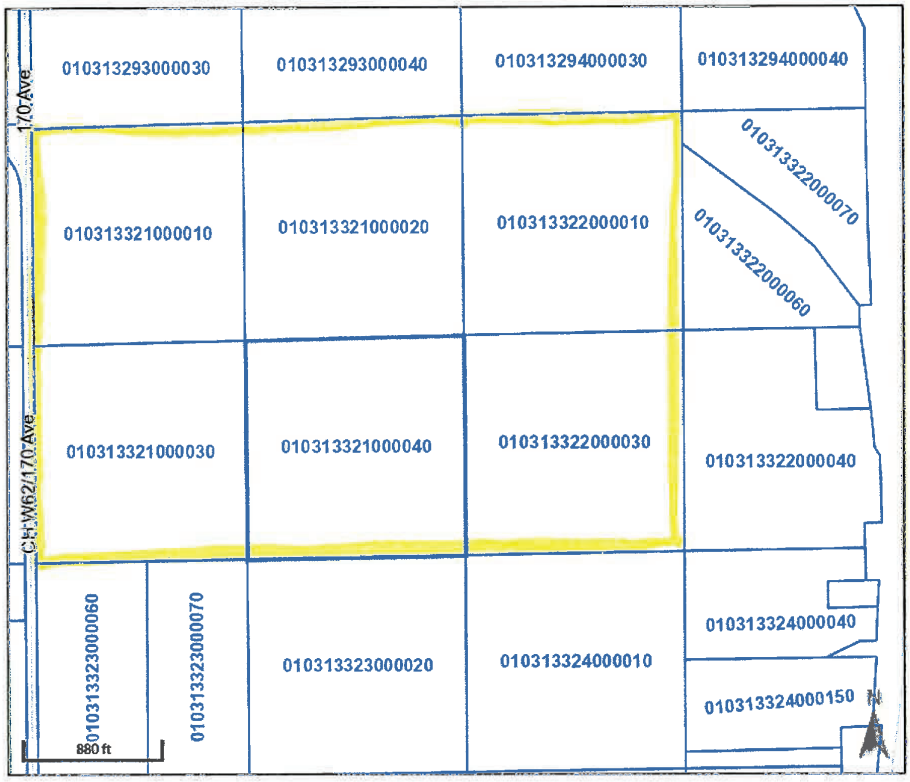
Subject to flowage rights and easements of record.

Parcel 4

The Northwest Quarter (NW 1/4) of Section Thirty-two (32); the West half (W 1/2) of the Northeast Quarter (NE 1/4) of Section Thirty-two (32) in Township Sixty-seven (67) North, Range Six (6) West of the Fifth Principal Meridian, Lee County, Iowa.

LAND FILL PROPERTY

# Beacon™ Lee County, IA




**Legend**

- Corporate Limits
- Geographic Townships
- Parcels
- Named Roads

| | | | | | |
|---|---|---|---|---|---|
| **Parcel ID** | 010313321000040 | **Alternate ID** | 1332100004 | **Owner Address** | Climax Molybdenum Co |
| **Sec/Twp/Rng** | 32-67-6 | **Class** | A | | ,00000- |
| **Property Address** | | **Acreage** | 40 | | |
| **District** | CHARLESTON TWSP | | | | |
| **Brief Tax Description** | SE NW | | | | |
| | (Note: Not to be used on legal documents) | | | | |

Date created: 6/6/2018
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Developed by

# Appendix G

# Emergency Response and Remedial Action Plan

# Emergency Response and Remedial Action Plan

Climax Molybdenum Company Industrial Landfill
Climax Molybdenum Company
Fort Madison, IA 52627
(319) 463-7151

SCS ENGINEERS

Project No. 27224153.00 | May 2024

1690 All State Court, Suite 100
West Des Moines, IA 50265
(515) 631-6160

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Attachment 3 Iowa Department of Natural Resources Guidelines for Reporting Hazardous Conditions
Attachment 4 Directions to Hospital/Clinic
Attachment 5 Special Populations Within Five Mile Radius

# 1.0 EMERGENCY RESPONSE AND REMEDIAL ACTION PLANS [567 IAC – 115.30(455B)]

# 2.0 115.30(4)A FACILITY INFORMATION

Climax Molybdenum Company (Owner) owns and operates the Climax Molybdenum Company Industrial Landfill (Landfill). The Climax Molybdenum Company Sanitary Landfill is an operating landfill, providing disposal services for the Climax plant at Fort Madison, Iowa. Authorization for disposal is in accordance with the approved Comprehensive Plan Part I, as approved by the Waste Management Assistance Division.

The site specific sanitary disposal permit (SDP) allows for the disposal of Special Wastes, specifically gypsum waste. As such, it is a private, controlled landfill. Hauling of gypsum waste from the plant at Fort Madison and filling and covering operations at the Landfill site are by contract. Hauling and filling are conducted on an infrequent basis, directly related to removal of gypsum waste from sedimentation basins at the Climax plant. The Landfill is located on a parcel of approximately 240 acres. The fill area, of which approximately half is closed, is approximately 5.6 acres.

## 115.30(4)"a"(1) Permitted Agency

Climax Molybdenum Company

## 115.30(4)"a"(2) DNR Permit Number

Permit number is 56-SDP-06-80P.

## 115.30(4)"a"(3) Facility Description

Industrial Monofill

## 115.30(4)"a"(4) Responsible Official and Contact Information

The Responsible Official for this facility has been designated as the Manager of the Environmental Plant (Environmental Manager). Contact information is included below.

Mr. David Caskey
Climax Molybdenum Company
2598 Highway 61
Fort Madison, Iowa 52627
Ph: (319) 463 - 2201

## 115.30(4)"a"(5) Project Location

The Landfill is located within the NW ¼ and W ½ of the NE ¼ and south 150 feet of the E ½ of the NE ¼, Section 32, T67N, R6W, Lee County, Iowa.

## 115.30(4)"a"(6) Site and Environs Map

See Attachment 1 for the Site Map.

# 3.0 115.30(4)B REGULATORY REQUIREMENTS

## 115.30(4)"b"(1) Iowa Code Section 455B.307(6)"d" Criteria Citation

This Emergency Response and Remedial Action Plan (ERRAP) is designed to meet the requirements of Iowa Administrative Code (IAC) 455B.306(7)"d" that requires the submission of an ERRAP by all sanitary disposal projects.

This ERRAP is intended to:

- Identify possible occurrences that may endanger human health and the environment.
- Establish provisions to minimize the possibility of fire or explosion; and
- Establish provisions to minimize any releases to air, land, or water of pollutants that could threaten human health and the environment.

## 115.30(4)"b"(2) Reference to Provisions of the Permit

An updated ERRAP will be submitted at the time of each permit renewal application if a review indicates that revisions are required. The ERRAP is intended to be flexible and to meet contingencies arising at the facility. Requests for changes to the ERRAP may be submitted to the Environmental Manager.

# 4.0 115.30(4)C EMERGENCY CONDITIONS - RESPONSE ACTIVITIES- REMEDIAL ACTION

## 115.30(4)"c"(1) Failure of Utilities

Utilities include only electricity. Electricity is used to operate the leachate lift station, fuel pump and Supervisory Control and Data Acquisition (SCADA) sensors. Short-term operation may be curtailed or suspended until repairs are complete.

### Electricity

*Electricity Failure – Short-Term*

The Landfill is serviced by only one outside utility – that is, Alliant Energy which provides electrical power service. This service includes supplying electrical power to the leachate pumping station. Power is also provided for lighting in the storage building, and for the fuel pump that serves the diesel bulk storage tank.

A complete or partial (internal system) power failure could occur. The response activity, until power is restored to the site or to a given operation, is to;

- Determine if the power failure has caused any injury to personnel or created a fire or any other emergency affecting human health.
- Respond to any power-outage-caused fires or emergencies as outlined in subsequent sections of this ERRAP.
- Determine the cause of the power failure and whether the effect is site-wide or restricted to specific facilities/operations.

- Determine the expected duration of the power outage. If the power outage is expected to be short term (48 hours or less), and if it affects only specific buildings or operations, maintain normal landfill operations.
    - Also, if required to maintain minimum leachate levels, initiate procedures to maintain the pumping of leachate to the leachate storage basin through the use of a portable engine-driven pump.
    - If fueling of heavy equipment is necessary, provide for bulk fuel delivery until repairs to the power supply for the fuel pump are completed.

Work with Alliant Energy or contract electrical contractors as applicable to restore power services.

*Electric Failure – Long Term*

If the power outage is expected to be or develops into a long-term outage (over 48 hours), such that normal landfilling operations with the above-noted adaptations and restrictions cannot be maintained, initiate the above short-term response and, in addition, provide standby power for pumping of leachate (note design storage capacity of leachate storage basin is seven days minimum).

In case of electrical failure, the following individuals must be contacted:

- Environmental Manager – See Attachment 2 for telephone number.
- Electricity Supply Company – See Attachment 2 for telephone numbers.
- Alliant Energy – See Attachment 2 for telephone numbers.

## 115.30(4)"c"(2) Weather-Related Events

Use battery-operated radios/televisions to receive the most updated information on local conditions.

### Tornado and Wind Events

*Tornado Terminology*

- Tornado Watch – The weather conditions are possible for a tornado.
- Tornado Warning – A tornado has been sighted or indicated by weather radar.

*Tornado Watch Procedures*

- Watch the sky and listen to the radio or television for more information.
- Locate emergency supplies such as battery-powered radios, mobile telephones, and spare batteries.
- Be prepared to take shelter in the nearest safe area.
- If you see any revolving funnel-shaped clouds, report them immediately by telephone to your local law enforcement agency.
- If you are in a trailer or similar structure, move to a more secure structure.

*Tornado Warning Procedures*

- Environmental Manager or other on-site Owner employees or contract operators staff will announce the tornado warning to Owner employees or contract operators staff workers via cell phone and encourage them to proceed to the nearest safe area while watching the sky for imminent danger.
- Take shelter in the nearest safe area with a battery-operated radio.
- Avoid places with wide-span roofs. Stay away from windows and open spaces.
- Turn on a battery-operated radio or television and wait for the "all clear" announcement by the authorities.

*Tornado Safety – Outdoors*

- During a tornado warning, Owner employees or contract operator's staff proceeding to a shelter by vehicle should keep an eye out for any other Owner employees or contract operators along the way and pick them up for transport.
- If possible, get inside a substantial building.
- If shelter is not available or there is no time to get indoors, lie in a ditch, culvert, or low-lying area or crouch near a strong building. Use your arms to protect your head and neck. Be alert for potential flash flooding.

*Tornado Safety – In a Vehicle*

- Never try to outrun a tornado in a vehicle. Heavy rain, hail, and traffic may impede your movement. Tornadoes can change directions quickly and can easily lift a vehicle and toss it through the air.
- Pull to the side of the road avoiding trees, power lines, and other objects that could fall or be hazardous.
- Get out of the vehicle immediately and try to take shelter in a nearby building.
- If there is not time to get indoors, get out of the vehicle and lie in a ditch, culvert, or low-lying area away from the vehicle. Use your arms to protect your head and neck. Be alert for potential flash flooding.

*After a Tornado*

- Try to get out of damaged buildings. Once out, do not re-enter the damaged building unless necessary, and use great caution.
- Extinguish all smoking and small fires.
- Monitor the radio or television for emergency information or instructions.
- Go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (see Attachment 1).
- Account for Owner personnel and known guests/contractors, and check on neighbors who may require special assistance.
- Check for injured victims. Render first aid if necessary. Call the necessary emergency responders such as ambulance services or fire/rescue services.
- Do not attempt to move severely injured victims unless necessary. Wait for emergency medical assistance to arrive.

- Watch out for broken glass and downed power lines.
- Report any downed power lines.
- Use the telephone only for emergency calls. Telephone lines may be down. Mobile telephone services may be used for emergency calls.
- Take photos or videotape of the damage to the property.
- If driving, be alert for hazards in the roadway.
- If unaffected by the tornado, stay out of the damaged area until allowed in by officials. Your presence may hamper emergency operations.

*After a Tornado – Gas System Damage*

- There are no landfill gas (methane) systems at this site.

*After a Tornado – Electrical System Damage*

- Look for electrical system damage.
- If you see sparks, broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker.
- If you must step in water to get to the fuse box or circuit breaker, call an electrician first for advice (See Attachment 2 for emergency contacts).

*After a Tornado – Sewage and Water Line Damage*

- There are no sewage or water lines at this site.

*Check Leachate Transportation and Leachate Storage Systems:*

- Check leachate transportation and storage systems including tanks, basins, and lines.
- If leachate is leaking into the environment, attempt to shut the leachate line valve to stop the flow of leachate.
- If leachate is leaking into the environment from a storage basin, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- The leachate pumping system conveys leachate from the fill area to the leachate storage basin. This basin has a design storage capacity of at least 7 days. Leachate is hauled by tanker truck to the plant for treatment.
- For the short term (48 hours or less), the storage basin will be adequate. If an outage persists for an extended time, hauling of leachate with a tanker truck will be initiated to maintain suitable liquid levels in the storage basin.
- Report leachate spills to the Iowa Department of Natural Resources(DNR). See Attachment 2 for emergency contacts.

*After a Tornado – Bulk Fuel/Solvent Storage Systems*

- Extinguish all smoking and small flames.
- If a spill/leak exists, attempt to stop the leak/spill or absorb fuel/solvents with inert materials.
- There is a 600-gallon above ground diesel fuel storage tank with a concrete curb containment (110% of tank capacity).
- If bulk fuel or solvent is leaking into the environment from a storage system, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report spills or leaks to the DNR (See Attachment 2 for emergency contacts).

*After a Tornado – Hazardous Waste Storage/Operations*

- There is no hazardous waste storage conducted at this site.

*After a Tornado – Bulk Fuel/Solvent Storage Systems*

- The only building at the site is a pole barn occasionally used for storage of heavy equipment. A tornado may cause damage to this site building, possibly to the point where continued use is not feasible. It could also cause damage to the overhead power line supplying the landfill site, resulting in a power outage. Lastly, scattering of debris would likely result from a tornado.

*Wind Storm Terminology*

- Derecho – A line of intense, widespread, and fast-moving windstorms and sometimes thunderstorms that move across a great distance and is characterized by damaging winds.
- Down Burst – A strong out rush of wind formed by rain-cooled air. Strong downbursts, which produce extensive damage, are often mistaken for tornadoes. A downburst can easily overturn a mobile home, tear roofs off houses, and topple trees.

*Winter Storm Terminology*

- Winter Storm Watch – Indicates that severe winter weather may affect your area.
- Winter Storm Warning – Indicates that severe winter weather conditions are definitely on the way.
- Blizzard Warning – Indicates that large amounts of falling or blowing snow and sustained winds of at least 35 miles per hour are expected for several hours.

*Winter Storm Procedures*

- Listen to the radio or television for more information.
- Locate emergency supplies such as battery-powered radios, mobile telephones, and spare batteries.
- If you are in a trailer or similar structure, move to a more secure structure.
- Proceed with caution as snow can hinder vision and ice can cause vehicles and people to slide.

## Intense Rainstorms, Mud, and Erosion

*Thunderstorm Terminology*

- Severe Thunderstorm Watch – A severe thunderstorm (damaging winds 58 miles per hour or more, or hail three-fourths of an inch in diameter or greater) is likely to develop.
- Severe Thunderstorm Warning – A severe thunderstorm has been sighted or indicated by weather radar.

*Thunderstorm Watch Procedures*

- Locate a safe place.
- Watch the sky.
- Assign someone to listen to a battery-powered radio or television for more information.

*Thunderstorm Warning Procedures*

- Go to a safe place.
- Turn on a battery-operated radio or television and wait for the "all clear" by the authorities.
- Tornadoes are spawned by thunderstorms and flash flooding can occur with thunderstorms. When a "severe thunderstorm warning" is issued, review what actions to take under a "tornado warning" or a "flash flood warning."

*Procedures After a Thunderstorm*

- Check personnel, guests, clients, and contractors for injuries.
- Report downed utility wires.
- Check scale for proper operation. If the electricity is out, see Section 115.30 (2)"c"(1)1.
- Continue to listen to the radio for flash floods and/or tornado watches and warnings and other instructions and advice.

*Check Leachate Transportation and Leachate Storage Systems:*

- An intense rainstorm may produce an additional quantity of leachate from the active fill area, from which it will be pumped into the leachate storage basin. Owner employees or contract operators will observe this operation to ensure that satisfactory pumping of leachate occurs.
- Check leachate transportation and storage systems including tanks, lagoons, and lines.
- If leachate is leaking into the environment, attempt to shut the leachate line valve to stop the flow of leachate.
- If leachate is leaking into the environment from a lagoon, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report leachate spills to the DNR. See Attachment 2 for emergency contacts.

*Check Bulk Fuel/Solvent Storage Systems & Household Hazardous Materials Storage Systems*

- Intense rainstorms are not expected to adversely impact the bulk diesel storage tank. The containment may receive rainwater, which will be observed for contamination before discharge.
- Extinguish all smoking and small flames.
- If a spill/leak exists, attend to stop the spill/leak or absorb fuel/solvents with inert materials.
- If bulk fuel or solvent is leaking into the environment from a storage system, take immediate steps to limit flow into drainage ways by constructing an earthen berm. See Attachment 2 for DNR Emergency Contacts.
- See Attachment 3 for DNR guidelines for reporting hazardous conditions and a copy of Iowa Administrative Code Chapter 131.

*Buildings/General Operations*

- An intense rainstorm is not expected to have any adverse effect on the building or operations within the building (heavy equipment storage only).
- For the duration of the storm, active filling and related operations may have to be curtailed, to be resumed after the storm has passed. Intense rain of long duration may cause the active fill area to be temporarily closed.
- Storm drainage including culverts, waterways, terraces, letdown structures, etc. has been incorporated into the cover design for the Landfill. As such, no adverse drainage issues are expected as a result of an intense rainstorm. An extended period of intense storms may cause some surface erosion of the landfill cover. Should this occur, regrading and reseeding of the affected areas will be completed as necessary.

## Lightning Strikes

There are relatively safe places from lightning strikes, however, no location is free of risk. Large, enclosed structures are generally safer than small or open structures. The risk of lightning injury depends on whether the structure incorporates appropriate lightning protection.

Enclosed vehicles, fully enclosed farm vehicles, etc. with the windows rolled up generally provide good shelter from lightning. Avoid contact with metal or conducting surfaces outside or inside the vehicle.

Avoid being in or near:

- High places and open fields, isolated trees, unprotected sheds, communication towers, flagpoles, light poles, metal fences, and water.
- When inside, avoid using the telephone, contact with water, or conductive surfaces with exposure to the outside such as metal door or window frames, electrical wiring, telephone wiring, cable TV wiring, and plumbing, etc.

*Lightning Strike Victim*

- A person who has been struck by lightning does not carry an electrical charge that can shock other people.
- A nearby strike may also cause medical problems, check personnel and call emergency medical assistance (911) if necessary.
- Provide first aid and call emergency medical assistance (911) immediately. Look for burns where lightning entered and exited the body. If a victim is burned, provide first aid and call emergency medical assistance immediately.

## Flooding

*Flood Terminology*

- Flash Flood Watch – A flood is possible, be alert to signs of flash flooding, and be ready to evacuate. Know the local terrain; flash floods can happen more quickly in hilly terrain or low-lying areas.

- Flash Flood warning – A flood is already occurring and will occur soon in your area. Listen to local radio and television for local information and advice.

*Flood Damage Prevention Procedures*

- Move key documents, electronic files, computers, etc. to higher ground or take them with you if you must evacuate.
- Review evacuation procedures with employees.
- If necessary, attempt to build earthen dams to protect buildings and property.
- Turn on a battery-operated radio or television to get the latest emergency information.
- If told to leave, do so immediately.

*Procedures During a Flood*

- Evacuation may be necessary. If advised to evacuate, do so immediately.
- Never drive into a flooded area.
- Never drive around road barricades.
- In case employees are separated from one another during floods or flash floods, each employee shall contact the Environmental Manager so all employees can be accounted for.
- Evacuation is much simpler and safer before floodwaters become too deep for ordinary vehicles to drive through.
- Listen to a battery-operated radio or television for evacuation instructions.
- Follow recommended evacuation routes – shortcuts may be blocked.
- Leave early enough to avoid being marooned by flooded roads.

*Procedures During a Flood – If Outdoors*

- Climb to high ground and stay there.
- Avoid walking through any floodwaters. If it is moving swiftly, even water 6 inches deep can sweep you off your feet.

*Procedures During a Flood – If in a Car*

- Never drive into a flooded area.
- Never drive around road barricades.
- If you come to a flooded area, turn around and go another way.
- If your car stalls, abandon it immediately and climb to higher ground. Many deaths have resulted from attempts to move stalled vehicles.

*Procedures After a Flood*

- Return to the area only after it has been declared safe by local emergency management officials. Follow all emergency rules, laws, and regulations.
- Report and stay clear of loose power lines or damaged utilities.
- Report downed power lines to your utility company or local emergency manager.
- Some appliances, such as television sets, can shock you even after they have been unplugged. Do not use appliances or motors that have gotten wet unless they have been taken apart, cleaned, and dried.

- Be alert for propane leaks. Use a flashlight to inspect for damages. Do not smoke or use candles, lanterns, or open flames unless you are sure that the gas has been turned off and the area has been aired out.
- Look for fire hazards - broken or leaking gas lines, flooded electrical circuits, submerged furnaces, electrical appliances, or flammable or explosive materials coming from upstream.
- Service damaged septic tanks, cesspools, pits, and leachate systems as soon as possible. Damaged sewage systems are health hazards.
- Document the damage for insurance purposes by taking notes and photographs.

*Structural Stabilization: Temporary Measures*

- Identify potential deficiencies and provide temporary shoring to protect life and property while the water levels recede. All shoring measures should be planned with the assistance of qualified structural engineers or contractors.
- Support unstable or leaning structures or features with temporary bracing and reinforcement.
- Strengthen exposed foundations or brace areas of undermining by following engineer's recommendations.
- Brace and strengthen decayed or damaged floor and ceiling structures. Check bearing locations for movement or settlement.

*Check Leachate Transportation and Storage Systems*

- The leachate pumping and storage basin facilities are located at an elevation such that flooding is not expected to have any adverse impact.
- Check leachate transportation and storage systems including tanks, lagoons, and lines.
- If leachate is leaking into the environment, attempt to shut the leachate line valve, stopping the flow of leachate.
- If leachate is leaking into the environment from a lagoon, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report leachate spills to the DNR. See Attachment 2 for emergency telephone numbers.

*Check Methane Collection and Venting Systems*

- This facility does not generate methane gas. No venting or collection systems are needed.

*Check Bulk Fuel/Solvent Storage Systems*

- Bulk fuel diesel storage tank is located at an elevation such that flooding is not expected to have any adverse effect.
- Extinguish all smoking and small flames.
- If a spill/leak exists, attempt to stop the leak/spill or absorb fuel/solvents with inert materials.
- If bulk fuel or solvent is leaking into the environment from a storage system, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report spills or leaks to the DNR. See Attachment 2 for emergency contacts.

*Check for Large Scale Erosion*

- Immediately cover any eroded areas exposing waste.
- Identify and repair access roads, approach ramps, and internal roads that were affected by erosion.
- Identify and repair let-down structures, berms, and terraces affected by erosion.

*Acceptance of Flood Related Wastes*

- The Landfill does not accept municipal waste.

*If a Spill is Identified*

- Notify the Environmental Manager of the type and amount of material spilled (See Attachment 2).
- Assess the type and quantity of the spilled material to determine if outside assistance is required.
- If outside assistance is necessary, contact the appropriate emergency services (See Attachment 2).
- If no outside assistance is required, immediately stop the flow by closing the open valve, setting the container upright, plugging the leak, etc.
- Once the spill has been corrected, deploy appropriate waste spill kit tools to prevent material from exiting the hazardous material storage unit, mixing with incompatible materials, or spreading further.
- Use extreme caution while managing a hazardous material spill. A severe weather event may cause more than one material to spill – multiple materials may pose a serious hazard if they are exposed to one another.

### Event and Post Event Conditions

See Sections under Section 115.30(4)“c”(2) Weather Related Events.

## 115.30(4)“c”(3) Fire and Explosions

Stockpile soil near the scale to assist with hot loads. In case of a fire, the local Fire Department will be called. The building will have a fire extinguisher clearly marked for quick response. All employees are trained in the use of fire extinguishers on site and know where extinguishers are located. Fire exits and maps are posted for personnel. Drills are conducted twice annually to assist in the education of the personnel in case of fire/explosions. Upon evacuation of the facilities, the Environmental Manager (or other person in charge) should move everyone as far away as possible and account for all employees. Contact 911 as soon as possible. If people are injured, move them to safety before dealing with fire or explosion activities. See Attachment 2 for emergency telephone numbers.

In case of any size fire, the following individual must be contacted:

- Environmental Manager – See Attachment 2 for telephone number.

## Basic Fire Safety

- The site will comply with local and state fire codes, including the placement and maintenance of fire extinguishers, smoke detectors, etc.
- See the Site Map (Attachment 1), identify Evacuation Routes, and Emergency Assembly Locations.
- Keep exit routes clear and well-marked.
- Cigarette, cigar, and/or pipe smoking is not allowed indoors in public places in Iowa. Make sure smoking materials are completely extinguished before entering the building. Never leave hot ashes or burning tobacco products unattended.
- Avoid using extension cords wherever possible, especially small-wired cords used with high-wattage appliances.
- Extension cords should not be run under rugs or hooked over nails.
- If a fuse blows (or a breaker "trips"), find the cause. Remove excess appliances (lamps, stereo components, space heaters, etc.) from a breaker circuit that frequently "trips."
- Discard food that has been exposed to heat, smoke, or soot.
- Do not discard damaged goods until after an inventory has been taken.
- Give first aid where appropriate.
- Stay out of damaged buildings.
- Return to the facility only when local fire authorities say it is safe.

## Waste Materials

- Since the waste being landfilled at the Climax site is gypsum, no waste fires are expected.

## Buildings and Site

All fires occurring in the building or on-site will be immediately reported to the local Fire Department – telephone 911.

If the fire is small, and not capable of generating toxic fumes or resulting in an explosion, operating personnel may attempt to extinguish the fire using approved methods including covering with soil. If the fire is major or capable of generating toxic fumes or causing an explosion, all operating personnel and public customers will be immediately evacuated to a safe area.

*Small Localized Fire – Building*

- Caution: A small-localized fire can engulf a room in less than 60 seconds.
- Act quickly. Smoke can be dangerous.
- Use a fire extinguisher to extinguish the flame; aim at the base of the flame.
- Remove nearby flammable materials such as paper, drapes, rags, etc.
- Evacuate all unnecessary personnel – go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).

*Out of Control Fire – Building*

- Get out of the building. Familiarize yourself with at least two exits from each room; for example, one window and one door.
- Go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).
- Contact the Fire Department from a mobile phone. See Attachment 2 for telephone number.
- Never go back inside a building for any reason.
- Evacuation procedures are posted in the facility. Personnel are familiar with the procedures due to explanations and drills conducted by the Environmental Manager.

## Equipment

All equipment fires will be immediately reported to the local Fire Department – telephone 911. If the fire is small, and not capable of generating toxic fumes or resulting in an explosion, operating personnel may attempt to extinguish the fire using approved methods including covering it with soil. If the fire is major or capable of generating toxic fumes or causing an explosion, all operating personnel and public customers will be immediately evacuated to a safe area (see Section 115.30(4)"b"(2)).

## Fuels

*General Safety*

- All fuel fires will be immediately reported to the local Fire Department – telephone 911.
- Vapors from fuels can be more flammable than liquid, always use caution when filling vehicles or containers.
- Equipment shall be refueled only at designated locations.
- In case of spillage, filler caps shall be replaced, and spillage disposed of before engines are started.
- Engines shall be stopped, and operators shall not be on the equipment during refueling operations.
- Only designated persons shall conduct fueling operations.
- Smoking and open flames shall be prohibited in areas used for fueling, fuel storage, or enclosed storage of equipment containing fuel.
- Liquid fuels not handled by pump shall be handled and transported only in portable containers or equivalent means designed for that purpose. Portable containers shall be plastic, have tight closures with screw or spring covers, and shall be equipped with spouts or other means to allow pouring without spilling. Leaking containers shall not be used.

*Fire Event*

- If possible, turn off the pump or the nozzle distributing flammable liquid.
- Evacuate the area. Stay well clear of the above-ground storage tank in case of explosion. Go to the Emergency Assembly Location (See Attachment 1). In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).

- Call the Fire Department. See Attachment 2 for telephone number.
- Call the Environmental Manager. See Attachment 2 for telephone number.

## Utilities

If the fire is small, and not capable of generating toxic fumes or resulting in an explosion, operating personnel may attempt to extinguish the fire using approved methods including covering it with soil. If the fire is major or capable of generating toxic fumes or causing an explosion, all operating personnel and public customers will be immediately evacuated to a safe area.

*Electrical – Small Localized Fires*

- Use a fire extinguisher rated Class C: Energized Electrical Equipment including Wiring, Fuse Boxes, Circuit Breakers, Machinery, and Appliances.
- Caution: A small-localized fire can engulf a room in less than 60 seconds.
- Act quickly.
- Remove nearby flammable materials such as paper, drapes, rags, etc.
- Evacuate all unnecessary personnel – go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).

*Electrical – Larger Uncontrolled Fires*

- Get out of the building. Familiarize yourself with at least two exits from each room; for example, one window and one door.
- Go to the Emergency Assembly Location. In the event the Emergency Assembly Location is dangerous or inaccessible, proceed to the Secondary Emergency Assembly Location (See Attachment 1).
- Contact the Fire Department from a mobile phone. See Attachment 2 for telephone number.
- Never go back inside a building for any reason.

## Facilities

See Section 115.30(4)“c”(3) Buildings and Site. There are no additional facilities that have not been previously covered.

## Working Area

The working area inside the landfill consists of fire-resistant materials. Therefore, fires in the working area is not likely to occur. In the unlikely event that unallowed materials reach the landfill and should ignite a fire or explosion, the emergency procedures outlined in Attachment 1 will be followed.

Landfill fires can be started by several causes: spontaneous combustion, careless smoking, methane flash, and arson.

- Understand and be aware of warning signs.
- Always report any visible smoke and or steam to the Environmental Manager.

- If in doubt about a possible fire or signs of fire call the Fire Department. See Attachment 2 for telephone number.

*Once a Fire is Identified*

- Control access and site security.
- All persons must be required to sign in and out.
- Establish communications with firefighting, public safety, and Landfill personnel.
- First aid should be available on-site.
- Warning fences should be placed around any trenches dug as fire breaks.
- Spotters should be used to assist equipment operators.

Controlling a landfill fire may be accomplished through local firefighting equipment. Follow the instructions of the firefighting professionals on site.

- Excavated waste may require a hot pad where it can be spread and soaked with water or other fire extinguishing media.
- Soaked material may require a cool pad storage area.
- Earthmoving equipment may be required to dig firebreaks down to bare earth or to build earthen dams.

Landfill stockpile fires can be started by several causes: spontaneous combustion, careless smoking, lightning, and arson.

- Understand and be aware of warning signs.
- Always report any visible smoke to the Environmental Manager. Report unusual levels of steam to the Environmental Manager.
- If in doubt about a possible fire, call the Fire Department – See Attachment 2 for telephone numbers.
- Use caution when excavating "hot" materials, exposure to the air may create flames.
- Before attempting to excavate the "hot spot" within a stockpile, a spotter should watch equipment operators.
- Move "hot" materials to a hot pad so the materials can be sprayed with water or fire extinguishing media.

Unaffected stockpile materials and soaked stockpile materials should be moved to a cool pad while the remaining materials are excavated.

## Hot Loads

Since the waste being landfilled at the Landfill is gypsum, no "hot load" waste fires are expected.

*Smoldering or ignited fires in a vehicle.*

- "Hot loads" are loads of waste or vehicles that are smoking, smoldering, or are on fire. Hot loads may arrive at the facility without the driver being aware of the risk.
- Do not dump hot loads on top of exposed waste of any kind.
- Do not stop a truck on fire or containing a hot load near a building.
- Quickly alert the driver and direct the truck toward a safe area.

- Call the Fire Department. See Attachment 2 for telephone numbers.
- If the load can be dumped without harming the driver or others, dump the load in a safe area. Caution: A fire may spread quickly or “flash” as air is introduced.
- Use soil to place over smoldering or burning loads.
- Stay out of the "zone of danger," which is the cone-shaped area directly behind a vehicle with the gas tank located in the usual position at the back. If a gas tank explodes, it sends a tremendous blast out from the rear of the vehicle. This can be lethal for 50 to 100 feet behind the vehicle.

*Once a Fire is Identified*

- Immediately notify personnel in the vicinity of the fire hazard.
- Cease all building activities, control access to the site, and establish site security until the fire threat is contained and controlled.
- Evacuate the building, head to the Emergency Assembly point (see Attachment 1), and contact the Fire Department if necessary (see Attachment 2 for telephone numbers).
    - Remove and isolate other materials away from the tipped load that is smoldering or on fire. Do not run equipment through the tipped load that is smoldering or on fire as this may spread the material.
    - Remove the waste from the building if weather conditions allow for the safe removal of material. Waster may require a hot pad, where it can be spread and soaked with water or other fire extinguishing media.
    - Use extreme caution while removing waste as exposing waste to air may create flames.
    - Always use a spotter to assist the equipment operator while excavating smoldering or on fire material.
    - Soaked material may require a cooling pad for storage.

## Waste Gases

- Since the waste being landfilled at the Landfill is gypsum, no waste gas fires are expected. In the unlikely event that unallowed materials reach the Landfill and generate gas that ignites a fire or explosion, the emergency procedures outlined in Attachment 1 will be followed.
- See the Site Map (Attachment 1) with Evacuation Routes, Fire Escape Routes, and Emergency Assembly Locations.
- Call the Fire Department. See Attachment 2 for telephone numbers.
- Contact the Environmental Manager. See Attachment 2 for telephone numbers.

## Explosive Devices

- Leave the area immediately. If the Emergency Assembly Point is a safe distance away, go to that site or go to the Secondary Emergency Assembly Point.
- The Site Plan Map (see Attachment 1) identifies Evacuation Routes, Fire Escapes, and Emergency Assembly Points.
- Contact the Fire Department – See Attachment 2 for telephone numbers.
- Contact the Environmental Manager – See Attachment 2 for telephone numbers.

### Evacuation

- Since this is a private landfill, only Owner employees or contract operator's staff are present, and then only on an occasional basis when this site is being operated. If these Owner employees or contract operator's staff are present during events involving potential or actual fire or explosion, they will be evacuated whenever a fire is determined to be capable of producing toxic fumes or causing an explosion.
- Leave the area immediately. If the Emergency Assembly Location is a safe distance away, go to that site or go to the Secondary Emergency Assembly Location.
- See the Site Map (Attachment 1) with Evacuation Routes, Fire Escape Routes, and Emergency Assembly Locations.
- Call the Fire Department. See Attachment 2 for telephone numbers.
- Contact the Environmental Manager. See Attachment 2 for telephone numbers.

## 115.30(4)"c"(4) Regulated Waste Spills and Releases

### Waste Spills and Releases Terminology

- Regulated Waste – Generally includes non-hazardous material such as leachate, municipal solid waste, and petroleum-contaminated soils.
- Spill – A spill primarily involves liquids or solids that are deposited accidentally on the facility's property in an incorrect location but remain within the facility's property boundary. Spills include quantities of 100 gallons or less, or two tons or less.
- Release – A release may involve spills of solids or liquids greater than 100 gallons or greater than two tons that enter lagoons, sedimentation ponds, drainage ways, etc., but stay on-site.
- Off-site Release – An off-site release is a release or spill that leaves the facility's property boundary. This section includes groundwater releases.

### Waste Materials

*Waste Materials Terminology*

- Waste Materials – Waste materials are materials normally accepted at a landfill. Waste materials are also regulated wastes.
- On-Site Spill or Release – In all events of waste spills or releases contact the site supervisor immediately. Make certain everyone is safe and then attempt to temporarily contain or stop spills or releases. Use caution and remove the waste, placing it in an acceptable location. Employees should determine the cause of the spill or release and correct the problem.
- Off-Site Spill or Release – If waste materials are identified beyond the property and/or waste materials are observed to be in a waterway, see Section 115.30(2) "c"(4).

The only waste being landfilled at the Landfill is gypsum. No regulated materials are handled at this site.

### Leachate

All spills and releases of leachate will be handled as required by [567] IAC Chapter 131. A copy of this rule is included as Attachment 3 of this ERRAP. Additionally, whenever possible, leachate spills may be diverted for containment in the leachate storage basin.

Note that the leachate storage basin (minimum 7 days design storage) serves to contain excess leachate. This basin has no outlet or overflow piping.

In the event, that the leachate pumping system becomes inoperable for an extended period and the leachate storage basin becomes full, continued hauling of leachate to the Climax plant for treatment may become necessary to prevent overflow and subsequent discharge of leachate from the storage basin.

### Waste Gases

Since only gypsum is disposed of at this site, no waste gases or methane will be generated.

### Waste Stockpiles and Storage Facilities

There are no waste stockpiles and storage facilities at this site.

### Waste Transport Systems

There are no waste transport systems at this site.

### Litter and Airborne Particulate

No materials are disposed of at this site which will produce litter.

Airborne particulates will likely occur from traffic on the haul roads and from filling and covering operations. Operations, including covering the waste, are conducted in such a manner as to minimize any such emissions.

### Site Drainage System

The site drainage system consists of the final cover, with terraces and let-down structures to control surface flow.

### Off-Site Releases

There are no regulated wastes disposed of at this site; therefore, there are no candidates for off-site releases of regulated materials.

## 115.30(4)"c"(5) Hazardous Material Spills and Releases

- See Attachment 3 for State Guidelines for Reporting Hazardous Conditions.
- Do not smoke. Do not create sparks.
- Be aware of the wind and avoid inhaling hazardous fumes.
- Use caution when operating near hazardous materials. The material should be considered hazardous even if the suspected material has not yet been confirmed hazardous by a professional.
- Do not let people or equipment contact liquids, dust, or fumes of hazardous materials.
- Only trained professionals should attempt to clean up the hazardous materials.
- Do not come into contact with hazardous material.

- Some hazardous materials can react violently with other chemicals and other materials. Use extreme caution.
- Emergency contacts are listed in Attachment 2.

### Load-Check Control Points

Only gypsum waste is disposed of by the Owner at this site. Therefore, control is exercised at the plant as the waste is loaded.

### Mixed Waste Deliveries

Only gypsum waste is disposed of by the Owner at this site. No mixed waste is generated for disposal.

### Fuels

There is a 600-gallon bulk diesel fuel storage tank on site. A concrete curb provides for 110% containment of this tank. Therefore, a release is unlikely.

Response to spills of petroleum oils or motor fuels resulting from the fueling operations will be in accordance with the requirements of [567] IAC Chapter 131, a copy of which is included as Attachment 3 of this ERRAP.

### Waste Gases

Since only gypsum is disposed of at this site, no waste gases or methane will be generated.

### Site Drainage Systems

The site drainage system consists of the final cover, with terraces and let-down structures to control surface flow.

*If hazardous wastes enter drainage systems during flood/heavy rain/wet conditions:*

- Contact 911.
- Contact the Environmental Manager – See Attachment 2 for telephone numbers.
- Contact the DNR – See Attachment 2 for telephone numbers.
- Emergency/Hazardous Material professionals will provide assistance to minimize the risk downstream.

*If hazardous wastes enter drainage systems during non-flood/heavy rain/wet conditions:*

- Prevent the waste from washing beyond the property boundary.
- Get assistance before attempting to remove the wastes.
- Assistance should be obtained from trained professionals.

### Off-Site Releases

There are no regulated wastes disposed of at this site; therefore, there are no candidates for off-site releases of regulated materials. Early intervention of on-site releases, as described above, will ensure no significant off-site releases occur.

- Contact 911.
- If possible, construct an earthen dam or similar structure to reduce the spread of contamination. Do not contact the material, contaminated dust, fumes, or gases.
- Should a spill leave the property, Owner employees or the contract operator's staff s will notify a hazardous material professional. The trained hazardous material professional will supply needed resources and take charge of the response effort.

*In case of an off-site release, the following individuals must be contacted:*

- Environmental Manager - See Attachment 2 for telephone phone number.
- Contact the DNR - See Attachment 2 for telephone numbers.
- See Attachment 3 for reporting hazardous conditions to the State.

## 115.30(4)"c"(6) Mass Movement of Land and Waste

Earthquakes of any proportion are rare in this area, and the damage that may result is difficult to predict. Therefore, should one occur, the initial response will be to physically observe the Landfill to check for readily visible damage such as waste shifts or slope failures, and possible damage to groundwater monitoring wells, leachate piezometers, and the leachate collection system. Additional responses to this type of damage will be described in the following subsections.

### Earthquakes

*During an Earthquake*

- Duck, cover, and hold. If you are inside, crawl under a heavy piece of furniture and hold on or get under a doorframe.
- If you are outside, stay in an open area.
- If you are in your car or equipment, stop driving.

*After an Earthquake*

- Check for injuries.
- Get out of the building if it appears to be structurally unsound – do not re-enter the building. If the building is evacuated, go to the Emergency Assembly Point and account for landfill personnel, contractors, guests, etc.
- Listen to a battery-powered radio for further instructions.
- Be aware of broken glass and other sharp objects on the floor.
- Be aware of material above your head that might fall.
- Check water and electric lines for damage then see Attachment 2 for information on utilities.
- Check the stability of stockpiles and slopes.
- Do not use matches or smoke.
- Avoid the telephone.

- Do not go sightseeing.
- Expect aftershocks.
- Have the scale checked and re-certified by a qualified technician.

In case of an earthquake, the following individuals must be contacted:

- Environmental Manager – See Attachment 2 for telephone and mobile phone numbers.

*Check Bulk Fuel/Solvent Storage Systems & Household Hazardous Material Storage*

- Extinguish all smoking and small flames.
- If a leak/spill exists, attempt to stop the leak/spill or absorb fuel/solvents with inert materials.
- If bulk fuel or solvent is leaking into the environment from a storage system, take immediate steps to limit flow into drainage ways by constructing an earthen berm.
- Report spills or leaks to the DNR. See Attachment 2 for emergency contacts.

## Slope Failure

If a slope failure is observed at the Landfill, the initial response will be to isolate the area by establishing an exclusion zone around the damaged area. All persons and vehicles will be prevented from entering the exclusion zone. Additionally, groundwater monitoring wells, leachate piezometers, and the leachate collection system will be checked for damage. Once the area is secured, assistance from outside consultants will be sought to further assess the extent of any damage and what steps need to be taken to correct the failure.

Several dangers exist with slope failures including: exposing waste, leachate, bacteria, and other materials to the environment, allowing wastes to leave the site property, allowing wastes to enter wetlands or other regulated environments, and allowing wastes to overrun roads and buildings.

- Perform a head count of employees, contractors, and guests.
- Stay away from other nearby areas that may also be at risk.

In case of a slope failure contact the following:

- Environmental Manager - See Attachment 2 for telephone numbers.
- Call 911 if there are any injuries or if someone may be buried under the failed slope.

## Waste Shifts

- Any waste shift separate from a slope failure would likely occur in the active working area before completion of final compaction and placement of the final cover. If such a waste shift occurs, the material will be re-filled and/or recompacted to a stable condition.
- A professional engineer should be consulted to control side slope and stability.
- Use caution when excavating the “toe” of the stockpile. Removing too much material may destabilize the upper portion of the stockpile causing it to “slide” or fall down.

In case of any stockpile slide, the following individuals/companies must be contacted:

- Environmental Manager – See Attachment 2 for telephone numbers.
- The DNR should be contacted for large slope failures when waste is exposed, or if waste leaves the property boundary.

### Waste Subsidence

Subsidence of the waste occurs continuously, with the greatest settlement occurring near the center (the deepest portion) of the filled area. In most cases, the result is a reduction in the slope of the face of the fill area, which is normally not of concern. Subsidence may also result in the loss of slope to adequately accommodate surface drainage or result in the failure of cover materials. In such cases, additional cover material will be placed in the affected area, to reestablish adequate surface drainage and restore adequate thickness of cover.

Leachate piezometers may be located in an area where waste subsidence could occur. These systems will be routinely inspected for the effects of waste subsidence or other damage. When such damage is observed, appropriate temporary measures will be taken, and repairs or replacement will occur as soon as practicable.

- Settling of large or small areas of the Landfill is a natural occurrence; however, sudden settling may cause changes in slope stability. See Section 115.30(4)"c"(6) – Slope Failure.
- Waste subsidence is generally gradual; if a large sinkhole or other large depression is created from subsidence, stay away from the area as additional subsidence may occur.
- Large depressions or holes should be reported to the Environmental Manager.

## 115.30(4)"c"(7) Emergency and Release Notification and Reporting

All communications shall be directed by the Environmental Manager. Communications shall include DNR regional and state offices and all emergency service units of Lee County. Communications will be directed through the 911 Communications Center to the appropriate agencies.

Discontinuance of long or short-term service will be coordinated through the Environmental Manager. Access and re-routing will be coordinated with the agencies, communication center, and the Environmental Manager. Waste acceptance or processing shall be coordinated by the Environmental Manager, State, and Regional Iowa DNR offices, and appropriate emergency service providers.

Emergency reporting and notifications will be provided as needed by state, federal, and local authorities.

### Federal Agencies

See Attachment 2 for Emergency Contacts.

### State Agencies

See Attachment 2 for Emergency Contacts.

See Attachment 3 for Reporting Hazardous Conditions.

### County and City Agencies Including Emergency Management Services

See Attachment 2 for Emergency Contacts.

### News Media

See Attachment 2 for Emergency Contacts.

### Public and Private Facilities with Special Populations within Five Miles

See Attachment 2 for a list of facilities and phone numbers.

### Emergency Response Agencies and Contact Information

See Attachment 2 for Emergency Contacts.

### Reporting Requirements and Forms

Emergency reporting requirements and forms will be provided as needed by the state, federal, and local authorities.

## 115.30(4)"c"(8) Emergency Waste Management Procedures

### Communications

In the event of an emergency or a release that may require outside assistance (i.e.: fire, ambulance), operating personnel are expected to immediately seek such assistance by telephoning 911. All other communications regarding waste management procedures should flow from affected Owner employees or contract operators staff through the Environmental Manager. In the event of an emergency or a release at the Landfill, the Environmental Manager or at his/her direction, the Climax Public Relations Director will initiate communications to outside personnel, including the initial notifications to federal, state, and local agencies and authorities. Similarly, the same line of communication should be followed when providing information to the news media or the public.

Necessary communications between on-site personnel will be verbal (person-to-person) or by telephone, including cellular phones.

The following systems of communication may be used in an emergency.

- Cellular/digital telephones are not provided by the facility; however, personal cellular/digital telephones may be available.
- Honking horns can be used to indicate an emergency.
- Personal communication can also be used to communicate an emergency.

### Temporary Discontinuation of Services – Short-Term and Long-Term

Normal landfill operations will be maintained whenever possible, giving priority to response and remedial action for emergencies and releases. In the event the Environmental Manager determines that it is necessary to reduce, modify, or curtail normal landfill operations, either for the short or long-

term, necessary communication to affected plant personnel and the contract haulers/operator will be made by the Owner's Environmental Manager.

*Short-Term*

- If telephone service is discontinued, cellular or digital telephones can be used.
- The Environmental Manager can dispatch messengers to deliver emergency messages in case of discontinuation of normal communication systems.
- If the Landfill's transportation, processing, or landfilling services must be discontinued, the Environmental Manager will contact member municipalities, county governments, and hauling companies as soon as possible to communicate rerouting instructions.

*Long-Term*

See Section 115.30(2) "c"(8) Temporary Discontinuation of Services – Short-Term.

## Facilities Access and Rerouting

If either full or partial operations are maintained, but limited access or rerouting is necessary, instructions to the contract haulers and operator will be issued by the Owner's Environmental Manager. Particularly where rerouting is necessary temporary barricades, traffic cones, etc. may be used to facilitate the rerouting process.

- The Environmental Manager will facilitate emergency rerouting.
- If access to the Landfill is blocked, telephone, and person-to-person contact at the Landfill will be used to communicate new directions and rerouting.
- The Environmental Manager will contact alternate disposal sites and arrange for disposal. After the emergency, normal disposal or transportation systems should resume as soon as possible.

## Waste Acceptance

In the event of an emergency or a release, waste may be accepted on a normal or limited basis, with priority given to the emergency and/or release.

When restrictions on waste acceptance are minor in nature and/or short-term or when major restrictions are necessary and/or restrictions are to be for a long term, notice will be issued to inform contract haulers and operators of the restriction, when the restrictions are lifted, and normal operations are resumed. All such communication is to be handled through the Environmental Manager.

- The Environmental Manager will contact alternate disposal sites and arrange for disposal.
- During an emergency, waste acceptance operations will cease.
- After the emergency, normal disposal or transportation systems should resume as soon as possible.
- If wastes must be diverted for more than one day, contact the DNR; see Attachment 2 for telephone numbers.

### Waste in Process

Emergencies, including releases that require a response or remedial action, may occur during normal operating hours. For such events, priority will be given to the emergency or the release, followed by maintaining normal operations such as unloading waste loads that have entered the site, handling waste loads that are in the process of unloading at the working face, and compacting/covering of waste at the working face.

The Environmental Manager will determine if continuing to handle wastes that are "in process" is appropriate, and if such continued processing may be done without adversely impacting the emergency or release response operations. Instructions will be communicated to contract operator's staff who will, in turn, communicate with and work with others to either continue to handle wastes that are in process or to reject those wastes, presumably for acceptance at a later time.

- During an emergency, the safety of human life is a priority.
- Wastes being tipped, processed, or handled must be left in place until the threat to human life is greatly reduced.
- If an emergency does not threaten human life, the Manager will decide how best to manage waste in process depending on the emergency circumstances.
- When the threat to human life is reduced, the waste should be processed according to the Landfill's permit.

## 115.30(4)"c"(9) Primary Emergency Equipment Inventory

The following emergency supplies should be readily available.

- Flashlight with extra batteries or electric lantern with batteries.
- Portable, battery-operated radio(s).
- Air horn.
- Extra batteries.
- First-aid kit and manual.
- Fire extinguishers.

### Major Equipment

The major equipment available to respond in the event of an emergency or a release is a variety of heavy earth-moving equipment, to accomplish such tasks as cover fire areas with soil, construct earthen containment dikes, remove storm-generated debris, etc. Heavy equipment and/or private vehicles will be available for emergencies.

### Fire Hydrants and Water Sources

There is no water service at the site.

### Off-Site Equipment Resources

The contract operator has other heavy equipment available off-site, including backhoes, trucks, etc. The Fort Madison/Keokuk Fire Departments also have available firefighting equipment and related emergency and release response equipment.

## 115.30(4)"c"(10) Emergency Aid

All emergency aid – responder contacts, traffic control, fire suppression, and medical services – are available through Keokuk County. A commercial first-aid kit will be maintained at the Landfill office. The Environmental Manager and/or the Owner employees or contract operator's staff will administer minor first-aid treatment when required. Serious injuries will be handled through the local 911 Emergency Service (see Attachment 2).

Initial contact for all services is by telephone: 911.

- In case of accidents occurring outside normal operating hours, it will be the responsibility of the senior staff person to provide first-aid treatment and to arrange for professional assistance if required.
- Call 911, professional emergency aid workers should be notified for injuries needing immediate first aid care.
- See Attachment 2 for Emergency Contacts.
- The Environmental Manager should be notified of any injury (See Attachment 2 for Emergency Contacts).

### Responder Contacts

- Contact 911.
- The Fire Department and/or the Hazardous Material Division will be the first responders in the case of a spill or release involving hazardous materials.

### Medical Services

- Contact 911.
- Contact 911 before transporting sick or injured individuals in a personal vehicle or non-emergency vehicle.
- Emergency medical response and ambulance service is available through both the Cities of Fort Madison/Keokuk and Lee County – telephone 911.
- Medical services are also available at Fort Madison Community Hospital in Fort Madison, Iowa.
- Directions to the Hospital are located in Attachment 4.

### Contracts and Agreements

- The Landfill does not have any contracts or agreements for emergency aid.
- 911 service is provided to county businesses and businesses of incorporated cities.

## 115.30(4)"c"(11) ERRAP Training Requirements

- During the first year, after the ERRAP is approved by the DNR, existing and new employees will review the contents of the approved ERRAP with the Training Provider (See Section *115.30(2)"b"(2)2 – Training Providers*).

- The Environmental Manager should identify hazardous waste contractors that can service the Landfill in case hazardous materials are accidentally received.

### Training Providers

The Environmental Manager will serve as the training provider, will review the ERRAP with existing and new employees, and will provide any additional training required to fulfill the roles outlined in the ERRAP. Various operating, management, and administrative personnel have received operations, safety, and waste management training. The training and procedures completed are as follows:

- First Aid – Southeastern Community College
- CPR – Southeastern Community College
- Hazardous Waste Operations and Emergency Response (HASWOPER) Training (OSHA 40 Hour) – CMS, Inc. (Stuart, Iowa)
- Landfill Operator Certification – DNR, OSI Waste Management Division

### Employee Orientation

New employees are required to review the ERRAP and become familiar with the contents of ERRAP. Attachment 2 (Emergency Contacts) will be provided to each employee.

### Annual Training Updates

Refresher training and/or renewal is provided in accordance with the following schedule:

- Annual – CPR – HAZWOPER
- Bi-annual – Certified Operator
- Tri-annual – First Aid

Continuing Education Units (CEUs) are required in some instances (ie: Certified Landfill Operator). The CEU requirements are met on an individual basis by attending formal classroom sessions, conferences, seminars, etc., including attendance at conferences sponsored by the Iowa Society of Solid Waste Operations (ISOSWO), Iowa Recycling Association (IRA), Solid Waste Association of North America (SWANA).

### Training Completion and Record Keeping

Training for Owner employees is documented, and training records are kept by the Human Resources/Safety Department.

## 115.30(4)"c"(12) Reference Tables, Figures and Maps

A site map which includes emergency evacuation routes and emergency assembly points is provided in Attachment 1. Attachment 2 contains emergency phone numbers and contact information. Attachment 3 contains the DNR's Guidelines for Reporting Hazardous Conditions. Directions to the nearest hospital are included in Attachment 4. Special populations within 5 miles are included in Attachment 5.

# Attachment 1

# Site Plan Map

Emergency Evacuation Routes

Fire Escape Routes

Emergency Assembly Point

Secondary Emergency Assembly Location

E 2000

E 2500

E 3000

N 4500

N 4000

PHASE 1 FILL AREA

PHASES 2 & 3 CELLS

CLOSED AREA

WASTE

MW-8 MW-7

MW-26

MW-18 MW-18R MW-25

MW-27

MW-28

LPZ-5

LPZ-4

LPZ-3

LPZ-2

LPZ-1

#1

#2

#3

TW-2

TW-3

MW-19

MW-21

MW-15 MW-10 MW-9

MW-12 MW-11 MW-20

MW-13 MW-14 MW-16

MW-23

SECONDARY EMERGENCY ASSEMBLY LOCATION

ACCESS ROAD

LEACHATE LIFT STATION

LEACHATE STORAGE LAGOON

PRIMARY EMERGENCY ASSEMBLY LOCATION

EM

660 670 680 690

## LEGEND

- EXISTING GROUND SURFACE (2 FT. CONTOUR INTERVAL)
- APPROXIMATE EXISTING WASTE BOUNDARY
- FML BOUNDARY
- BUILDING
- GRAVEL ROAD
- FENCELINE
- CULVERT
- CONSTRUCTED CLAY LINER LIMITS
- LEACHATE PIPING (SOLID/PERF.)
- TOE DRAIN
- MONITORING WELL
- ABANDONED MONITORING WELL
- LEACHATE PIEZOMETER
- LEACHATE CLEANOUT
- LEACHATE VALVE
- MANHOLE
- SURVEY CONTROL/BENCHMARK
- TREE LINE
- EMERGENCY EVACUATION ROUTE

100 0 100 200

SCALE FEET

| REV. | DATE | CK BY |
|---|---|---|
| | - | - |
| | - | - |
| | - | - |
| | - | - |
| | - | - |
| | - | - |

SHEET TITLE: SITE MAP

PROJECT TITLE: CLIMAX MOLYBDENUM COMPANY INDUSTRIAL LANDFILL

CLIENT: CLIMAX MOLYBDENUM COMPANY
P.O. BOX 220
FORT MADISON, IA 52627

SCS ENGINEERS
1690 All State Court, Suite 100
West Des Moines, IA 50265
PH. (515) 631-6160

| PROJ. MGR | CLC |
|---|---|
| DWN. BY | IAC |
| CHK. BY | CLC |
| DSN. BY | IAC |

PROJ. NO. 27224153.00

CADD FILE: CLIMAX MOLYBDENUM SITE MAP-2024.DWG

DATE: 5/6/24

DRAWING NO. 1

\\DES-FS01\DESMOINES\PROJECT\27224153.00\AUTOCAD\CLIMAX MOLYBDENUM SITE MAP-2024.DWG

# Attachment 2

# Emergency Phone Numbers

**ENVIRONMENTAL MANAGER:**

David Caskey
Manager of Environmental Plant
Climax Molybdenum Company
Highway 60 South
P.O. Box 220
Fort Madison, Iowa 52627
(319) 463-2245 (Work)

**FIRE:**

Donnellson Volunteer Fire Department, Donnellson, Iowa

Fire Department / Rescue ..... 911

Sheriff ..... 911

Dispatch Nonemergency ..... (319) 372-1152

**POLICE:**

Fort Madison Police Department ..... 911

Keokuk Police Department ..... 911

Lee County Sheriff ..... 911

Dispatch Nonemergency ..... (319) 372-1152

**AMBULANCE:**

Fort Madison ..... 911

Keokuk ..... 911

Lee County ..... 911

**HOSPITAL:**

Fort Madison Community Hospital ..... (319) 372 - 6530

5445 Avenue O, Fort Madison, Iowa 52627

Directions to Hospital/Clinic ..... See Attachment 4

**POISON:**

Poison Control Center ..... (800) 222 - 1222

**STATE OF IOWA:**

DNR Field Office #6 – Washington, Iowa ..... (319) 653 - 2135

Air Quality Bureau ..... (515) 725 - 8200

Environmental Protection Division ..... (515) 725 - 8200

Spill Response / Release Reporting ..... (515) 725 - 8694

Water Quality Bureau ..... (515) 725 - 8200

**FEDERAL:**

U.S. EPA Region #7 ..... (913) 281 - 0991

National Response Center ..... (800) 424 - 8802

**UTILITIES:**

Buried Utilities: Iowa One-Call ..... (800) 292 - 8989

Electricity: Alliant Energy ..... (800) 255 - 4268

**DNR EMERGENCY RESPONSE:**

Iowa Department of Natural Resources ..... (515) 725 - 8694

**ENGINEER OF RECORD:**

SCS Engineers ..... (515) 631 - 6160

# Attachment 3

# Iowa Department of Natural Resources

# Guidelines for Reporting Hazardous Conditions

Including Iowa Administrative Code Chapter 131

"Notification of Hazardous Conditions"

**IOWA DEPARTMENT OF NATURAL RESOURCES**
ENVIRONMENTAL SERVICES DIVISION
FIELD SERVICES & COMPLIANCE BUREAU

# Iowa Administrative Code Chapter 131
# Notification of Hazardous Conditions

## 24 hour number for release reporting
## 515/725-8694

### Summary of Key Points and Definitions

### Definitions

*"Hazardous Condition"* means any situation involving the actual, imminent or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which, because of quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety or to the environment.

*"Hazardous Substance"* means any substance or mixture of substance that presents a danger to the public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity, may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead, and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents. "Hazardous substances" may include any hazardous waste identified or listed by the administrator of the United States Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under Section 307 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous substance designated under Section 311 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous material designated by the secretary of transportation under the Hazardous Materials Transportation Act (49 CFR 172.101)

### Key Points

**Who is Required to Report Hazardous Conditions.** Any person manufacturing, storing, handling, transporting, or disposing of a hazardous substance shall notify the department at (515) 725-8694 and the local police department or the office of the sheriff of the affected county of the occurrence of a hazardous condition as soon as possible but not later than six hours after the onset of the hazardous condition or the discovery of the hazardous condition. A sheriff or police chief who has been notified of a hazardous condition shall immediately notify the department. Reports made pursuant to this rule shall be confirmed in writing as provided in 131.2(2).

**Reporting Subsequent Findings.** All subsequent finding and laboratory results should be reported and submitted in writing to the department as soon as they become available.

Reminder ~ VERBAL REPORTS ARE REQUIRED WITHIN 6 HOURS OF INCIDENCE OCCURRENCE OR DISCOVERY.

REV. 1/2019

IOWA DNR EMERGENCY RESPONSE UNIT
502 E. 9TH STREET / DES MOINES, IOWA 50319-0034
515-725-8694 TDD 515-242-5967 www.iowadnr.gov

**IOWA DEPARTMENT OF NATURAL RESOURCES**
ENVIRONMENTAL SERVICES DIVISION
FIELD SERVICES & COMPLIANCE BUREAU

# Guidelines for Reporting Hazardous Conditions
# Verbal Reporting

24 hour number for release reporting
515/725-8694

Report the Condition if:

- ☐ The hazardous substance has the potential to leave the property by run-off, sewers, tile lines, culverts, drains, utility lines, or some other conduit, or,
- ☐ The hazardous substance has the potential to reach a water of the state – either surface water or groundwater or,
- ☐ The hazardous substance can be detected in the air at the boundaries of the facility property by the senses (sight and smell) or by monitoring equipment or,
- ☐ There is a potential threat to the public health and safety or,
- ☐ Local officials (Fire department, law enforcement, Hazmat, public health, and emergency management) respond to the incident or,
- ☐ The release exceeds a Federal Reportable Quantity (RQ).

## ~ If in Doubt, Report It ~

IDNR REQUIRES VERBAL REPORTS WITHIN 6 HOURS OF INCIDENCE OCCURRENCE OR DISCOVERY

- It is recommended that all spills be cleaned up although a particular spill may not be reportable. A series of small spills over time can result in one big cleanup.
- Department rules stress the immediate or potential danger that a spill may cause.
- A written report of the Hazardous Condition is required within 30 days of the verbal notification.

*In general, Iowa reporting requirements are more stringent than Federal reporting requirements. However, the **time limit** for reporting at the Federal level is more immediate.*

IOWA DNR EMERGENCY RESPONSE UNIT
502 E. 9TH STREET / DES MOINES, IOWA 50319-0034
515-725-8694 TDD 515-242-5967 www.iowadnr.gov

**IOWA DEPARTMENT OF NATURAL RESOURCES**
ENVIRONMENTAL SERVICES DIVISION
FIELD SERVICES & COMPLIANCE BUREAU

# Guidelines for Reporting Hazardous Conditions Written Report Requirements

## 24 hour number for release reporting 515/725-8694

The Iowa Department of Natural Resources
Requires a written report of any Hazardous Condition.
(VERBAL REPORT REQUIRED WITHIN 6 HOURS)

**Written Report.** The written report of such a hazardous condition shall be submitted to the department within 30 days and contain the following information:

a. The exact location of the hazardous condition.
b. The time and date of onset or discovery of the hazardous condition.
c. The name of the material, the manufacturer's name, and the volume of each material involved in the hazardous condition in addition to contaminants within the material if they by themselves could cause a hazardous condition.
d. The medium (land, water, or air) in which the hazardous condition occurred or exists.
e. The name, address, and telephone number of the party responsible for the hazardous condition.
f. The time and date of the verbal report to the department of the hazardous condition.
g. The weather conditions at the time of the hazardous condition onset of discovery.
h. The name, mailing address, and telephone number of the person reporting the hazardous condition.
i. The name and telephone of the person closest to the scene of the hazardous condition who can be contacted for further information and action.
j. Any other information, such as the circumstances leading to the hazardous condition, visible effects, and containment measures taken that may assist in the proper evaluation by the department.

The written report should include the IDNR Spill Number (assigned at the time of the verbal report) and be addressed to the duty officer responding to the spill. Reports can be sent via mail, fax, or electronic mail to the addresses listed below.

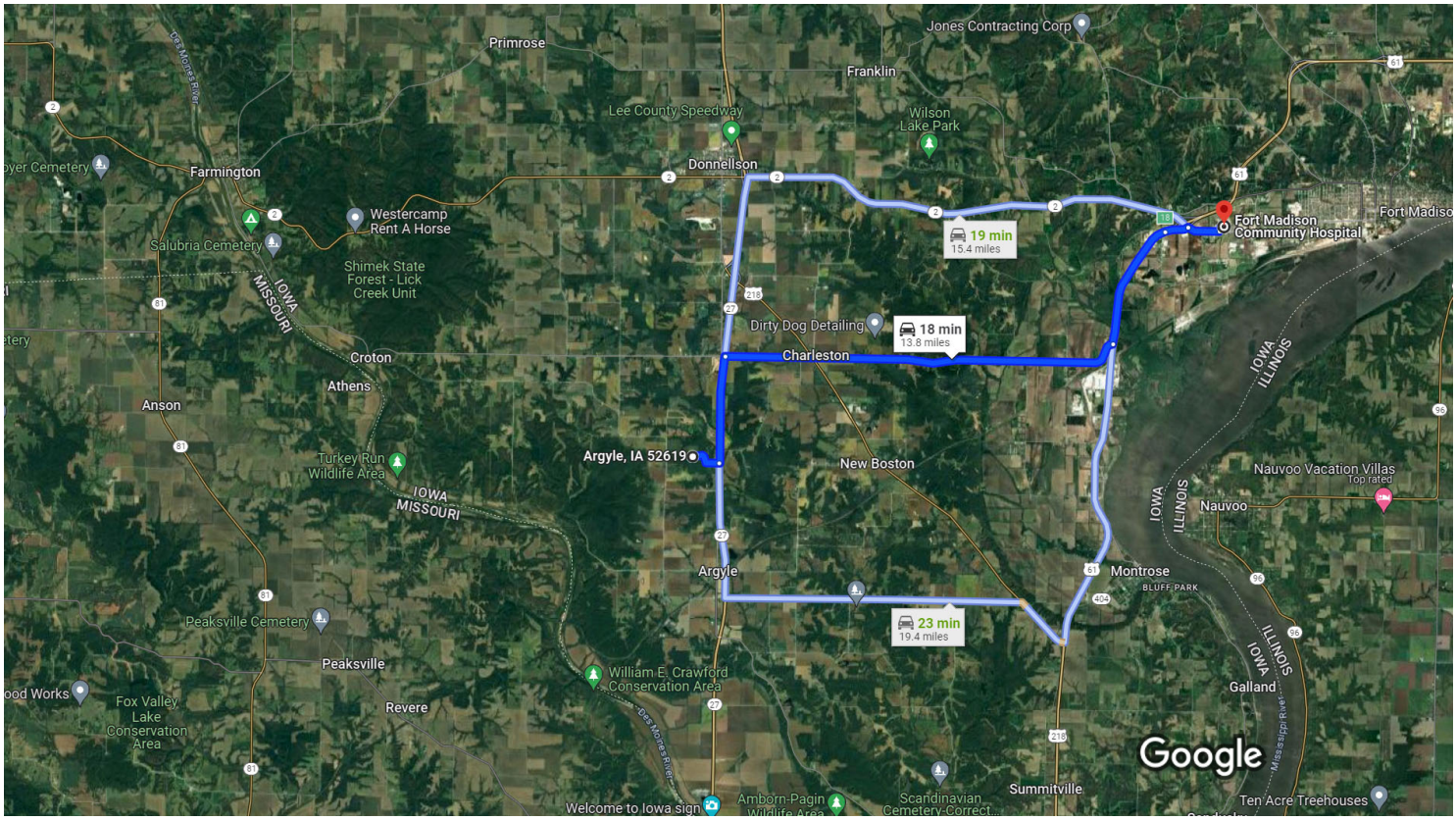
| Mail | Fax | E-Mail |
|---|---|---|
| Iowa DNR<br>Field Services Emergency Response<br>502 E. 9th Street<br>Des Moines, IA 50319-0034 | 515/281-7229 | Emergency_Response@dnr.iowa.gov |

# Attachment 4

# Directions to Hospital/Clinic

# Argyle, Iowa 52619 to Fort Madison Community Hospital, 5445 Avenue O, Fort Madison, IA 52627

Drive 13.8 miles, 18 min




Imagery ©2024 TerraMetrics, Map data ©2024 2 mi

Argyle
Iowa 52619

1. Head east toward IA-27 S

2 min (0.6 mi)

## Drive from 255th St to Fort Madison

15 min (13.0 mi)

2. Turn left onto IA-27 N

2.0 mi

3. Turn right onto 255th St

7.5 mi

4. Turn left onto US-61 N

2.4 mi

5. Take exit 18 for IA-2 toward US-61 BUS/Fort Madison/Donnellson

0.5 mi

6. Turn right onto US-61 BUS/Avenue O

0.6 mi

## Drive to your destination

1 min (0.2 mi)

7. Turn left

420 ft

8. Continue straight

374 ft

9. Turn left

69 ft

10. Turn left

Destination will be on the right

23 ft

**Fort Madison Community Hospital**
5445 Avenue O, Fort Madison, IA 52627

# Attachment 5

# Special Populations Within Five Mile Radius

# SPECIAL POPULATIONS WITHIN 5-MILE RADIUS

There is not likely to be a release from the Landfill that would pose a threat to public health. Adjacent property owners may be contacted by Climax in the event of an emergency or release occurrence, to ensure that they are provided accurate information. Adjacent property owners of record consist of:

1. Bar 20 Ranch LLLP
   2699 HWY 27
   Donnellson, IA 52625

2. Doyle, Judith K Trustee
   750 Anemone RD
   Four Seasons, MO 65049

3. Annaleen M Plowman Trust
   2776 170th Ave
   Argyle, IA 52619

4. Lestina, Dixie A
   2741 HWY 27
   Argyle, IA 52619

5. Link, Rodney L/ Lena P
   PO Box 144
   Argyle, IA 52619

6. Keefe, Tony M/Rosemary A
   PO BOX 355
   Donnellson, IA 52625

7. Grossman, Robert Joseph Jr
   2725 HWY 27
   Argyle, IA 52619