

**EMERGENCY ACTION PLAN
ASH POND 2
JOLIET 29 STATION
UPDATED APRIL 2025**

This Emergency Action Plan (EAP) has been prepared pursuant to both Title 35 of the Illinois Administrative Code (35 IAC) Part 845, Subpart E, Section 845.520 and Title 40 of the Code of Federal Regulations (40 CFR) Part 257, Subpart D, Section 257.73(a)(3) for Ash Pond 2 at Midwest Generation, LLC (MWG) Joliet 29 Station (Station) in Joliet, Illinois. This update includes a revised contact list and expands problem event definition, evaluation and actions with respect to weather and flooding emergencies. The EAP is presented as follows:

Section 1.0: Definition of the events or circumstances involving the CCR surface impoundment(s) that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

Section 2.0: Definition of the responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR surface impoundment(s); and contact information of emergency responders;

Section 3.0: Site maps which delineate the downstream areas that would be affected in the event of an Ash Pond 2 failure and a physical description of the CCR surface impoundments;

Section 4.0: Provisions for an annual face-to-face meeting or exercise between representatives of the Joliet 29 Station and local emergency responders; and

Section 5.0: Certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of 35 IAC 845.520 and Part 257 Section 257.73(a)(3).

1.0 DEFINITION OF THE EVENTS THAT REPRESENT A SAFETY EMERGENCY

The following tables define the events and/or circumstances involving Ash Pond 2 that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner.

The information provided in Tables 1 through 4 provides a list of potential problems that may occur at Ash Pond 2, how to make a rapid evaluation of the problem, and what action should be taken in response to the problem. These tables present only generalized information to aid in first response to a given problem. Suspected problems should be reported as soon as possible, as discussed in Section 2.0, and assistance from a qualified engineer should be obtained if necessary.

The problems outlined in this section are related to above grade, earthen-type embankment dams similar in construction to Ash Pond 2. The problems discussed herein include:

- Table 1: Seepage;
- Table 2: Sliding;
- Table 3: Cracking;
- Table 4: Animal Burrows and Holes; and
- Table 5: Weather and Flooding.

For each problem, the indicators are discussed followed by evaluation techniques and then by action items for each problem.

Table 1: Ash Pond 2 Event Definition, Evaluation, and Action: Seepage

Definition	Evaluation	Action
1A: Wet area on downstream embankment slope or other area downstream of the embankment, with very little or no surface water or very minor seeps.	1B: Condition may be caused by infiltration of rainwater, which is not serious; or may be the start of a serious seepage problem, which would be indicated by a quick change to one of the conditions below.	1C: No immediate action required. Note the location for future comparison.
2A: Same wet area as above, with moderate seeps of clear or relatively clear water and the rate of flow not increasing.	2B: Measure the flow periodically and note changes in clarity.	2C: No immediate action required. Note the location, flow rate, and clarity for future comparison. During reservoir flood stages, the seepage area should be watched for changes.
3A: Same wet area as above, with moderate seeps of clear or relatively clear water and rate of flow increasing.	3B: Measure the flow periodically and note changes in clarity. Inspect downstream area for new seeps.	3C: Contact a qualified engineer for immediate inspection (see Table 7). Observe the condition constantly for further changes in flow rate or clarity, unless notified otherwise by the engineer.
4A: Piping (seepage with the removal of materials from the foundation or embankment), moderate to active flows of cloudy to muddy water.	4B: If the water is cloudy to muddy, and the rate of flow is increasing, this condition could lead to failure of the dam. If, along the piping, there is an upstream swirl (whirlpool) caused by water entering through the abutments of embankment, failure is imminent.	4C: Immediate action is necessary. Notify the appropriate agencies (see Table 7).
5A: Boils (soil particles deposited around a water exit forming a cone, varying from a few inches in diameter spaced 2 to 3 feet apart to isolated locations several feet in diameter in the floodplain downstream of the dam) may show the types of flow as noted above.	5B: Evaluation of the problem is the same as noted above for the various flow conditions, i.e., clear and constant, clear and increasing, and cloudy or muddy and increasing.	5C: Actions to be taken are essentially the same as those noted above.

Table 2: Ash Pond 2 Event Definition, Evaluation, and Action: Sliding

Indicator	Evaluation	Action
1A: Movement of a portion of the embankment, either the upstream or downstream slope, toward the toe of the dam.	1B: Various degrees of severity of a slide require different responses. The first condition is that the slide does not pass through the crest and does not extend into the embankment for more than 5 feet, measured perpendicular to the slope.	1C: For this condition, a qualified engineer, see Table 7, should be consulted before repairs are initiated to determine the cause of the slide and to recommend modifications to prevent future slides. The downstream side of the dam should be watched for the emergence of water, either through the slide or opposite the slide. If water is noted discharging, the area should be treated as a seepage location and monitored as noted above.
2A: Slide passes is the second condition.	2B: In this condition, the slide passes through the crest and that the reservoir elevation is more than 10 feet below the lowered crest.	2C: Use the same actions as noted above and notify the appropriate MWG personnel (see Table 7) of the situation so they may be prepared to act if the condition worsens.
3A: Slide passes is also the third condition.	3B: In this condition, the slide passes through the crest and that the reservoir elevation is less than 10 ft. below the lowered crest.	3C: This condition is critical, and failure of the dam should be considered imminent. Notify the appropriate agencies (see Table 7).

Table 3: Ash Pond 2 Event Definition, Evaluation, and Action: Cracking

Indicator	Evaluation	Action
1A: Cracks in the embankment can occur either in the longitudinal (along the length of the dam) or transverse (across the dam from upstream to downstream directions).	1B: Some cracking of the surface soils may occur when they become dry. This cracking is to be expected, and no further action is required.	1C: No further action is required.
2A: Longitudinal cracking can indicate the beginning of a slide or be an uneven settlement of the embankment.	2B: Monitor the crack for future changes and contact a qualified engineer for assistance in the evaluation of the crack and recommended repairs.	2C: Contact a qualified engineer for assistance and recommendations (see Table 7).
3A: Transverse cracking can indicate uneven settlement or the loss of support below the crack. Such cracks usually occur over an outlet conduit, near the abutments, or in the taller portion of the embankment.	3B: Monitor the crack for future changes and contact a qualified engineer for assistance in the evaluation of the crack and recommended repairs.	3C: Contact a qualified engineer for assistance and recommendations (see Table 7)

Table 4: Ash Pond 2 Event Definition, Evaluation, and Action: Animal Burrows and Holes

Indicator	Evaluation	Action
1A: Holes in the embankment, varying in size from about one inch in diameter to one foot in diameter caused by animals.	1B: If the holes do not penetrate through the embankment, the situation is usually not serious. Some animal holes will have soil pushed out around the hole in a circular fashion, which may look like a boil (crayfish or crawdad). Watch for the movement of water and soil particles from these holes to determine whether they are boils.	1C: Backfill as deeply as possible with impervious material. If rodents become a nuisance, an effective rodent control program, as approved by the Illinois Department of Natural Resources District Wildlife Biologist, should be implemented.

Table 5: Problem Event Definition, Evaluation and Action: Weather and Flooding

Indicator	Evaluation	Action
1A: Ash Pond 2 is out of service and only receives water from precipitation without potential for flooding.	1B: Ash Pond 2 is inspected by a qualified person on a weekly basis and after precipitation events greater than 6.20 inches. Results of the inspections including water depth are entered into the operating record.	1C: If the water level in Ash Pond 2 exceeds 18 feet, report the water level to Plant Manager, and commence operations to pump down the Ash Pond 2.
2A: If Ash Pond 2 reservoir level reaches a depth of 18 feet and it is currently raining, a flood warning will be disseminated through the appropriate notifications as outlined in the above tables and Table 7.	3B: The Ash Pond 2 dam and appurtenances will be monitored continuously until the reservoir level falls to below a depth of 18 feet and the rain has stopped.	3C: Contact a qualified engineer for assistance and recommendations (see Table 7).

2.0 RESPONSIBLE PERSONS, RESPECTIVE RESPONSIBILITIES, AND NOTIFICATION PROCEDURES

The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person. The following sections define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving Ash Pond 2. Contact information is provided in Table 7, attached.

2.1 Responsible Persons and Responsibilities

Appropriate parties will be notified based on the nature and severity of the incident as determined by the Station environmental specialist, or designated alternate. If failure is imminent or has occurred, notification and mitigation procedures are a top priority, particularly for a potentially hazardous situation. The Station environmental specialist, in conjunction with the plant manager, is responsible for this determination.

2.2 Notification Sequence

The following notification procedures shall be used by employees in the event of a safety emergency with Ash Pond 2:

- (1) Notify the shift supervisor and environmental specialist.
- (2) If unsafe conditions exist, the employee should evacuate the area.
- (3) Only the environmental specialist shall have any official communication with non-employees or regulatory agencies, and only the communications director shall have any contact, and/or the media.

The environmental specialist, or designated alternate should follow these procedures in the event of a safety emergency involving Ash Pond 2:

- (1) Organize appropriately trained Station personnel and/or other employees or contractors as necessary to assist with the safety emergency.
- (2) After consultation with appropriately trained Station personnel, contact the proper civil authorities (e.g., fire, police, etc.) if necessary. Notify the appropriate agencies where there has been a reportable release of material(s) into the environment. See Table 7, attached, for contact information. Notify MWG Corporate via the Intelix online notification system within twenty-four hours in the event of a reportable release. A reportable release is a Material Release defined as a spill or leak that materialized in the waterway. A Non-Material Release is a spill or leak that did not come into contact with the waterway.
- (3) Be prepared to evacuate the potential inundation areas at any time during the safety emergency response.
- (4) If the emergency is beyond the Station's response capabilities, contact one or more emergency response contractors as necessary.
- (5) Corrective actions should only be performed by properly trained individuals.

2.3 Emergency Responders Contact Information

Table 7, attached, provides contact information of emergency responders. The Station environmental specialist or alternate will determine whom to notify, including any affected residents and/or businesses, in the case of an imminent or actual CCR surface impoundment dam failure. The Station environmental specialist or alternate will ensure proper notifications are made.

Appropriate contractors will be utilized to assist the Station environmental specialist or alternate with mitigated actions being undertaken in order to minimize the impact of an event that has occurred. Contact information for contractors and consultants are provided in Table 5, attached.

3.0 **SITE MAP AND A SITE MAP DELINEATING THE DOWNSTREAM AREA**

In accordance with §257.73(a)(3)(i)(D), the following section provides a physical description of Ash Pond 2. A site vicinity map is provided as Figure 1, and a site plan is provided as Figure 2, attached. Drawings depicting the locations of, and the downstream areas affected by, a potential failure of Ash Pond 2 were prepared by Geosyntec in October 16, 2016 and are provided in Appendix A.

3.1 Pond Location and Description

The physical address for Joliet Station 29 is Illinois & Michigan Canal State Trail, 1800 Channahon Road (U.S. Route 6) in Joliet, Illinois. As shown in Figure 1, the Station is bound by Channahon Road on the north and the Des Plaines River on the south. Ash Pond 2 is situated east of the Station Entrance/Guard House and Pond 1, and west of the Wastewater Treatment Plant immediately adjacent to U.S. Route 6 (see Figure 2). Ash Pond 2 is situated northeast of the Main Power Block Building.

Ash Pond 2 is an out of service CCR surface impoundment that only receives storm water. CCR was removed down to the warning layer (limited risk). Placement of CCRs into Pond 2 ceased in 2016 and placement of process water ceased in 2021. The lined pond was constructed with an elevated earthen embankment on one side. The south side of the pond is an earthen berm. Physical characteristics of Ash Pond 2 are provided in Table 6, below.

Table 6: Pond Characteristics

Ash Pond 2	
Estimated Storage Capacity (acre-feet)	45.0
Estimated Maximum Basin Depth (ft)	19
Elevation - Maximum Crest (ft msl)	535

3.2 Delineation of Downstream Areas

The potential impacts from failure of Ash Pond 2 were evaluated and reported by Geosyntec in the Hazard Potential Classification Assessment (HPCA), dated October 2016. A copy of the HPCA is contained on the CCR Rule Compliance Data and Information web site (<http://www.nrg.com/legal/coal-combustion-residuals>).

Results of the HPCA indicate that Ash Pond 2 is classified as significant hazard potential CCR surface impoundments. The evaluation reports no loss of life resulting from failure of Ash Pond 2 is probable because no occupied buildings are located within the anticipated inundation areas. However, potential failure during flood conditions could result in offsite economic or environmental impacts. Inundation Maps are provided in Appendix A.

4.0 ANNUAL FACE-TO-FACE MEETING

A face-to-face meeting or an exercise between representatives of the Station and the local emergency responders shall be offered and, if acceptable, be held on an annual basis. The purpose of the annual meeting is to review the EAP to assure that contacts, addresses, telephone numbers, etc. are current. The annual meeting will be offered whether or not an incident occurred in the previous year. In the event an incident occurs, the annual meeting date may be moved up in order to discuss an incident closer to the date of occurrence. If no incidents have occurred, the annual meeting will be held to inform local emergency responders on the contents of the EAP and changes from the previous year. Documentation of the annual face-to-face meeting will be recorded and placed in the operating record for the Station.

The EAP requires modification whenever there is a change in conditions that would substantially affect the EAP in effect. Changes to the plan shall be made as appropriate, and a copy of the changes will be kept at the station, with the revised EAP placed in the Station's operating record. The written EAP must be evaluated, at a minimum, every five years to ensure the information required is accurate.

5.0 LIMITATIONS AND CERTIFICATION

This emergency action plan was prepared to meet the requirements of 35 IAC 845.520 and 40 CFR 257.73(a)(3) and was prepared under the direction of Mr. M. Dean Jones, P.E.

By affixing my seal to this, I do hereby certify to the best of my knowledge, information, and belief that the information contained in this report is true and correct. I further certify I am licensed to practice in the State of Illinois and that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Seal:



Signature: _____

Name: M. Dean Jones, P.E.

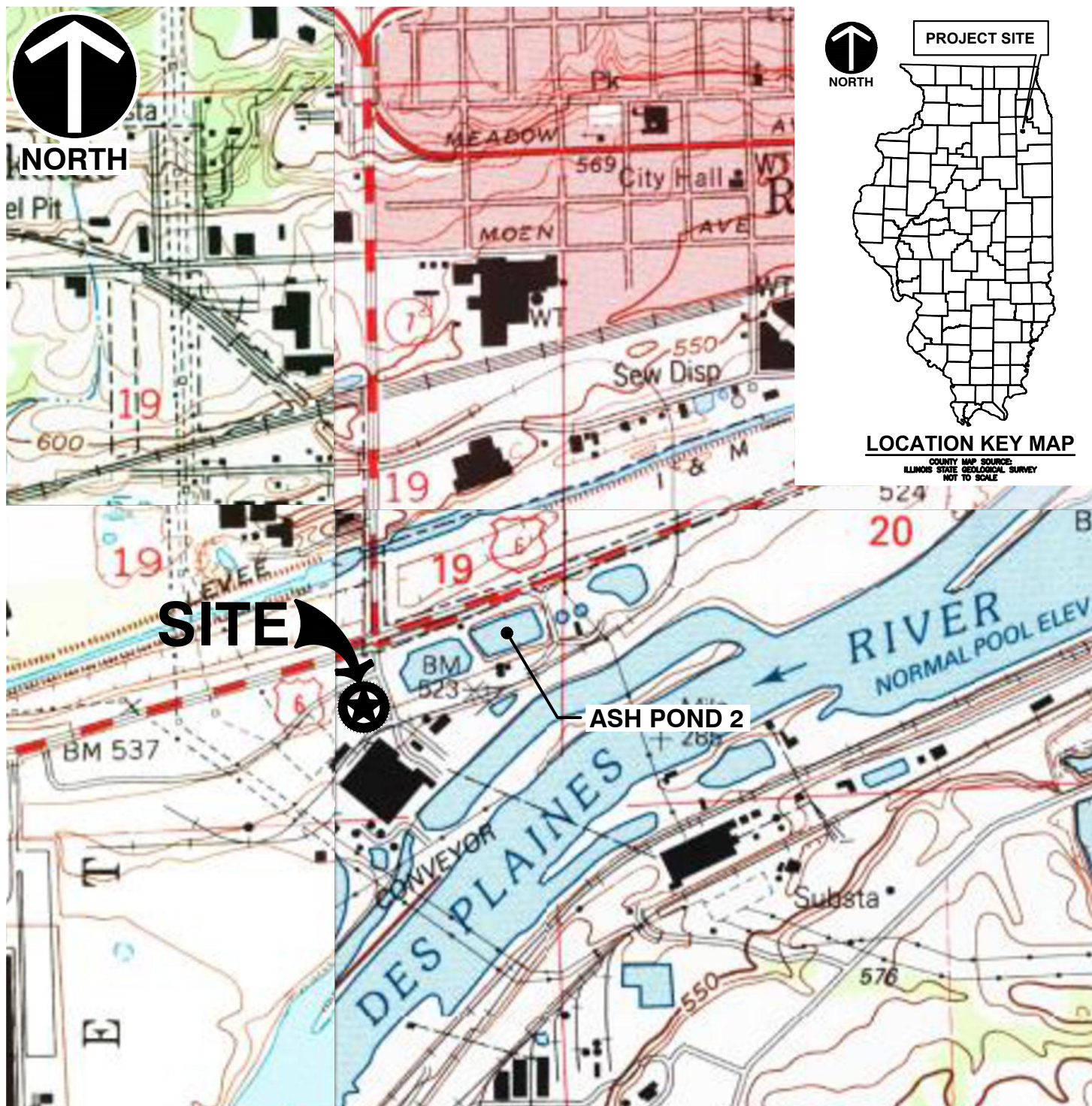
Date of Certification: April 22, 2025

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2025

FIGURES

P:\300-000\302-771\ -CADD\DWG\302771-CV01-129 EAP\302771-CV01-C101-Site Vicinity Map.dwg[LAYOUT] LS:(10/26/2021 12:08 PM LP: 10/26/2021 12:08 PM



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MIDWEST GENERATION LLC
JOLIET 29 STATION
ASH POND 2
JOLIET, ILLINOIS

SITE VICINITY MAP

DRAWN BY:	CAC	CHECKED BY:	MDJ	APPROVED BY:	MDJ*	FIGURE NO.:
DATE:	10/25/2021	DWG SCALE:	1"=1000'	PROJECT NO:	302-771.0121	1



NORTH

CHANNAHON ROAD (U.S. ROUTE 6)

ASH POND 2

DES PLAINES RIVER

REFERENCE

1. TOPOGRAPHIC INFORMATION PROVIDED BY AERO-METRIC, INC. DATE OF AERIAL PHOTOGRAPHY: JUNE 19, 2008.

LEGEND

TOPOGRAPHY
(1-FOOT INTERVAL)

*HAND SIGNATURE ON FILE

SCALE IN FEET



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DRAWN BY:

CAC

CHECKED BY:

MDJ

DATE:

10/25/2021

DWG SCALE:

1"=100'

APPROVED BY:

MDJ*

PROJECT NO:

302-771.0121

FIGURE NO.:

2

MIDWEST GENERATION LLC
JOLIET 29 STATION
ASH POND 2
JOLIET, ILLINOIS

SITE PLAN

TABLE 7

EAP NOTIFICATION LIST

**Table 7: Midwest Generation Joliet 29 Station CCR Surface Impoundment
EAP Notification List**

Plant Contacts:

Name	Title	Contact Info
James Thorne	Environmental Specialist Class K WWT Operator	(O) 815-207-5470 (C) 815-671-3397
Phillip Raush	Plant Manager	(O) 815-207-5412 (C) 312-636-1539
Mark Scully	Shift Supervisor	(C) 815-210-0113

Corporate Support:

Name	Title	Contact Info
Sharene Shealey	Director, Environmental	(C) 724-255-3220
Jill Buckley	Senior Manager, Environmental	(C) 570-948-1679
Tony Shea	Director - Environmental Compliance	(O) 609-524-4923 (C) 609-651-6478
Ann Duhon	Stations Communications Director (point of public contact)	(C) 713-562-8817

Emergency Response Agencies:

Agency	Address	Contact Info
National Response Center (NRC) - US Army Corp of Engineers	Brandon Road Lock and Dam Joliet, Illinois Illinois River; Des Plaines River 286.0 RDB	Phone: 800-424-8802 Emergency: 815-744-1714
Illinois Department of Natural Resources, Office of Water Resources	One Natural Resources Way, 2nd Floor Springfield, Illinois 62702-1271	8:30 a.m.-5:00 p.m. 217-785-3334
Illinois Emergency Management Agency (IEMA)	110 East Adams Springfield, Illinois 62701	800-782-7860
Illinois Environmental Protection Agency (IEPA)	Bureau of Water 1021 North Grand Avenue East Springfield, Illinois 62794	217-782-3637
Will County Emergency Management Agency Operations Center	302 North Chicago Street Joliet, Illinois 60432	Phone: 815-740-8351 24-hour: 815-740-0911
Will County ETSB: Dispatches to Fire, Police and Emergency Medical services	302 North Chicago Street Joliet, Illinois 60432	Emergency: 9-1-1 Non-Emergency: 815-740-8376
Rockdale Police Department	79 Moen Avenue Rockdale, Illinois 60436	Emergency: 9-1-1 Non-Emergency: 815-725-2171 Front Desk: 815-725-0360
Rockdale Fire Department	603 Otis Avenue Rockdale, Illinois 60436	Emergency: 9-1-1 Non-Emergency: 815-725-6928

Earthwork and Environmental Response Contractors/Consultants:

Contractor/Consultant	Address	Contact Info
Civil & Environmental Consultants, Inc.	1230 East Diehl Road, Suite 200 Naperville, Illinois 60563	630-963-6026
Bluff City Materials (Earthwork Contractor)	2252 Southwind Boulevard Bartlett, Illinois 60103	630-497-8700
Lindblad Construction Company (Earthwork Contractor)	717 E Cass St, Joliet, IL 60432	(815) 726-6251
SET Environmental (Spill Response)	450 Sumac Road Wheeling, Illinois 60090	847-850-1056 877-437-7455 (24-hour)

APPENDIX A

GEOSYNTEC HPCA INUNDATION MAPS



