
Illinois Power Resources Generating, LLC

EDWARDS POWER PLANT
BARTONVILLE, PEORIA COUNTY, ILLINOIS

Emergency Action Plan (EAP)

40 C.F.R. § 257.73(a)(3), Ill. Adm. Code 845.520
**Coal Combustion Residual (CCR) Impoundment
& Related Facilities**

- Ash Pond (NID # IL50710) (IEPA # W1438050005-01)

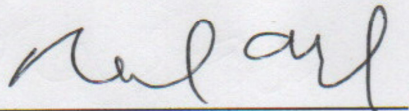
Revision Date: September 16, 2021

Qualified Professional Engineer Certification; Emergency Action Plan for the Edwards Power Plant Ash Pond

In accordance with 40 C.F.R. § 257.73(a)(3)(iv) and 35 Ill. Adm. Code 845.520(e), the owner or operator of a CCR unit that is required to prepare a written Emergency Action Plan under 40 C.F.R. § 257.73(a)(3) and 35 Ill. Adm. Code 845.520(a) must obtain a certification from a qualified professional engineer stating that the written Emergency Action Plan meets the requirements of 40 C.F.R. § 257.73(a)(3) and 35 Ill. Adm. Code 845.520.

I, Phil Morris, being a Professional Engineer in good standing in the State of Illinois, do hereby certify, to the best of my knowledge, information, and belief that:

1. the information contained in this Emergency Action Plan was prepared in accordance with the accepted practice of engineering; and
2. this Emergency Action Plan meets the requirements of 40 C.F.R. § 257.73(a)(3) and 35 Ill. Adm. Code 845.520.



Phil Morris
Senior Director, Corporate Environmental

9/27/21

Date



**EDWARDS POWER PLANT
EMERGENCY ACTION PLAN
CCR IMPOUNDMENT & RELATED FACILITIES**

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**EDWARDS POWER PLANT
EMERGENCY ACTION PLAN
CCR IMPOUNDMENT & RELATED FACILITIES**

PART I – EAP NARRATIVE AND EXHIBITS

1 STATEMENT OF PURPOSE

The Edwards Power Plant (Power Plant) is located near Bartonville in Peoria County, Illinois. The location is shown in Figure 1-1. The Power Plant is a coal-fired electricity producing power plant owned and operated by Illinois Power Resources Generating, LLC, a subsidiary of Dynegy. This Emergency Action Plan (EAP) was prepared in accordance with 40 CFR § 257.73(a)(3) and covers the following Coal Combustion Residual (CCR) surface impoundment located at the site:

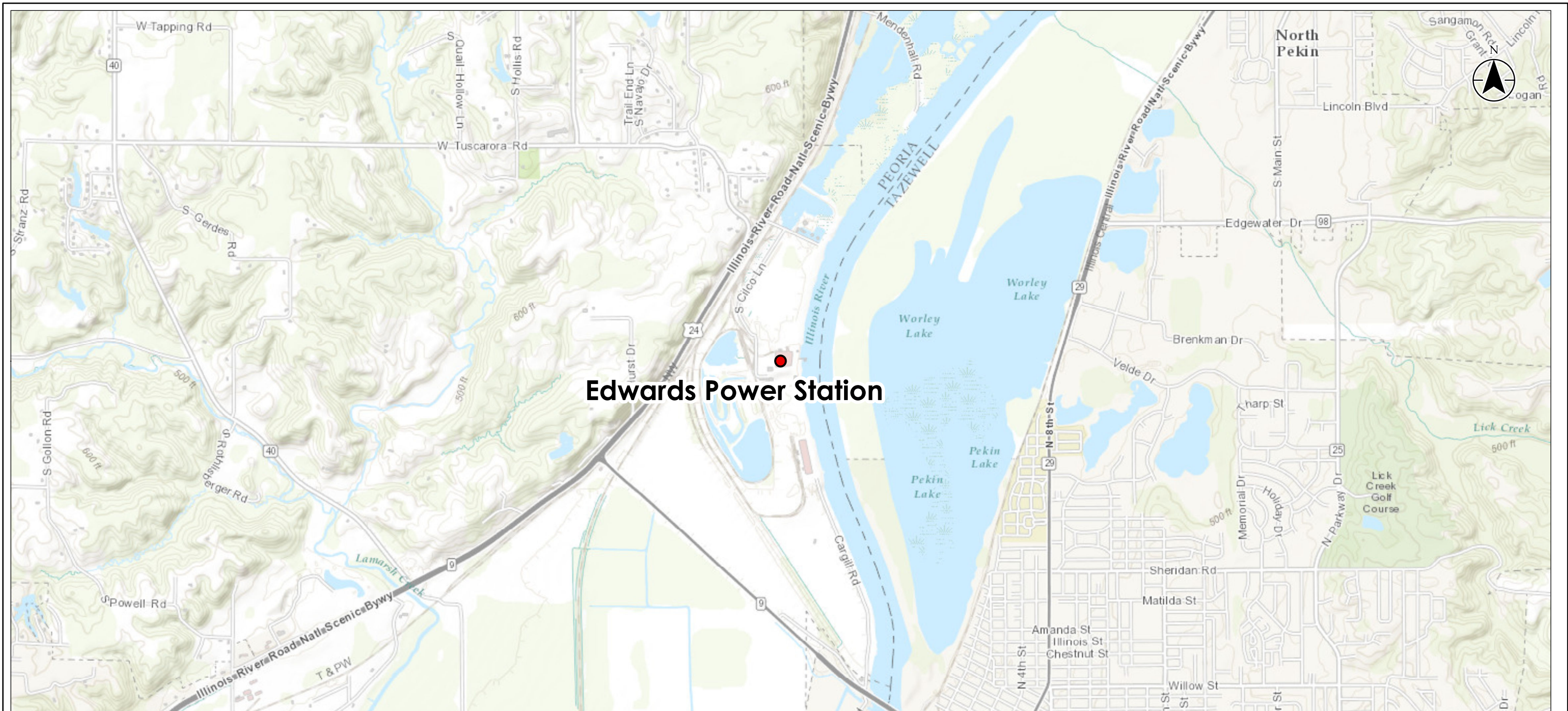
- Ash Pond (NID # IL50710) (IEPA # W1438050005-01)

The location of this impoundment is shown in Figure 1-2. Section 6 of this EAP includes a description of the impoundment.

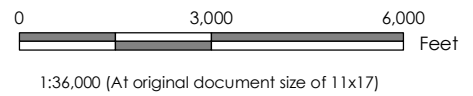
The purpose of this Emergency Action Plan (EAP) is to:

1. Safeguard the lives, as well as to reduce property damage, of citizens living within potential downstream flood inundation areas of the CCR impoundment and related facilities at the Edwards Power Plant.
2. Define the events or circumstances involving the CCR impoundment and related facilities at the Edwards Power Plant that represent atypical operating conditions that pose a safety hazard or emergency and how to identify those conditions.
3. Define responsible persons, their responsibilities, and notification procedures in the event of a safety emergency.
4. Provide contact information of emergency responders.
5. Identify emergency actions in the event of a potential or imminent failure of the impoundment.
6. Identify the downstream area that would be affected by failure of the impoundment.
7. Provide for effective facility surveillance, prompt notification to local Emergency Management Agencies, citizen warning and notification responses, and preparation should an emergency occur.

Information provided by Illinois Power Resources Generating, LLC was utilized and relied upon in preparation of this report.



Edwards Power Station



Project Location: 175605019
 Latitude: 40.595595 Prepared by CMB on 2017-04-12
 Longitude: -89.662764 Technical Review by SN on 2017-04-12
 Peoria County, Illinois Independent Review by WSW on 2017-04-12

Client/Project
 Edwards Power Station
 Emergency Action Plan

Figure No.

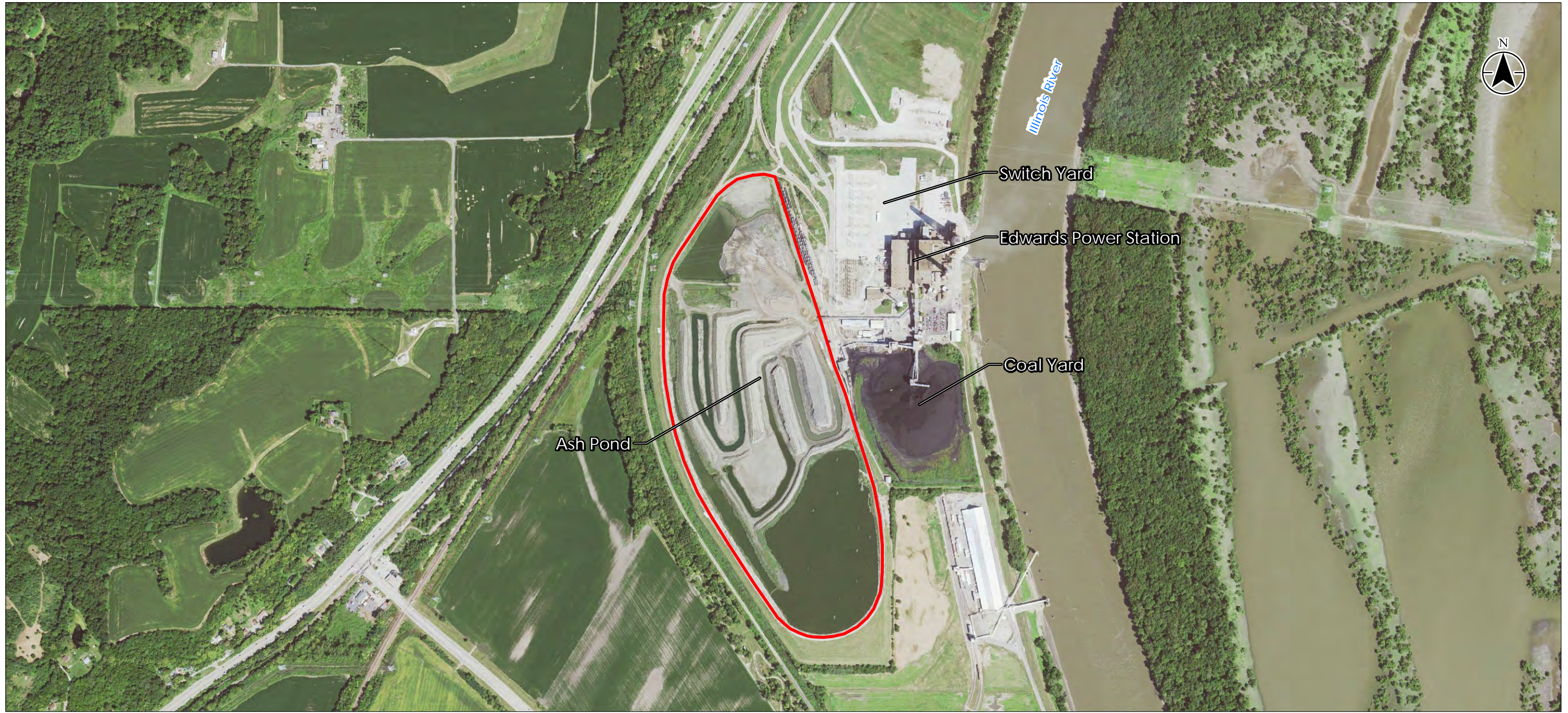
1-1


Title
Location Map

Notes
 1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 2. Aerial Source: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO,
 3. NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User

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Legend
 CCR Surface Impoundment Boundary

0 1,000
 Feet
 1:12,000 (At original document size of 11x17)



Project Location 175605019
 Latitude: 40.595484 Prepared by CMB on 2017-03-29
 Longitude: -89.663301 Technical Review by SN on 2017-03-29
 Peoria County, Illinois Independent Review by WSW on 2017-03-29

Client/Project
 Edwards Power Station
 Emergency Action Plan

Figure No.
 1-2

Title
 CCR Impoundment

Notes
 1. Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere
 2. Aerial Source: 2015 NAIP Imagery
 3. Impoundment Boundaries Provided by Client (Dated 9/9/2015)

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2 COMMUNICATION

To facilitate understanding among everyone involved in implementing this EAP, four response levels are used to identify the condition of an impoundment. These are:

Response Levels:

- **Level 0:** Normal conditions and routine operations, including surveillance and initial investigation of unusual conditions and effects of storm events.
- **Level 1:** Potentially hazardous condition exists, requiring investigation and possible corrective action.
- **Level 2:** Potential failure situation is developing; possible mode of failure is being assessed; corrective measures are underway.
- **Level 3:** Failure is occurring or is imminent, public protective actions are required.

The 4-Step Incident Response Process is outlined in Figure 2-1. This should be used in conjunction with the Notification Flowchart (Figure 2-2) and EAP Decision Tree (Figure 2-3). Section 4 provides guidance tables for determining Response Levels and a table providing emergency actions to be taken given various situations. Table 2-1 lists contact information for the emergency responders.

Figure 2-1. Summary/Sequence of Tasks 4-Step Incident Response Process

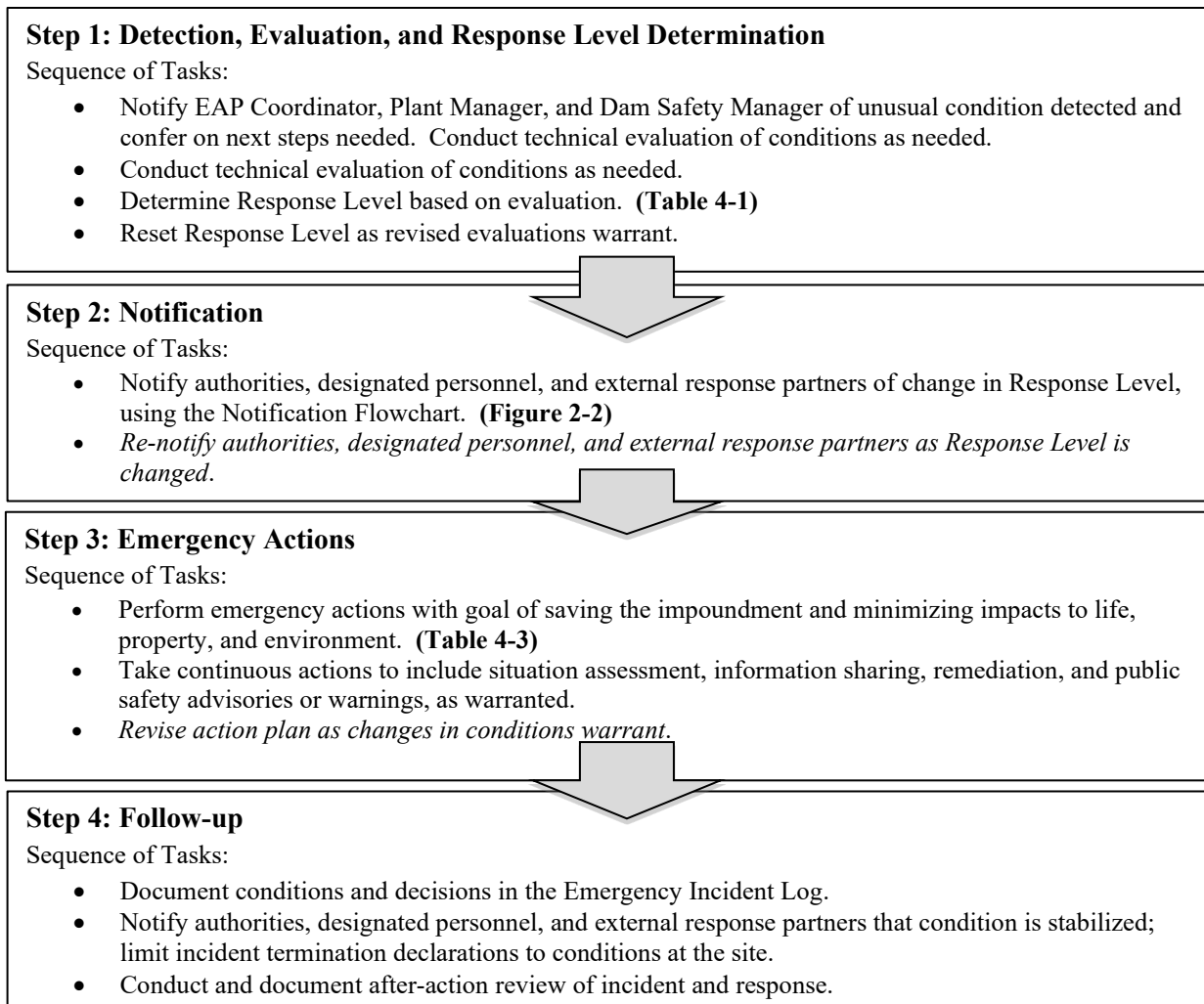


Figure 2-2. Notification Flowchart

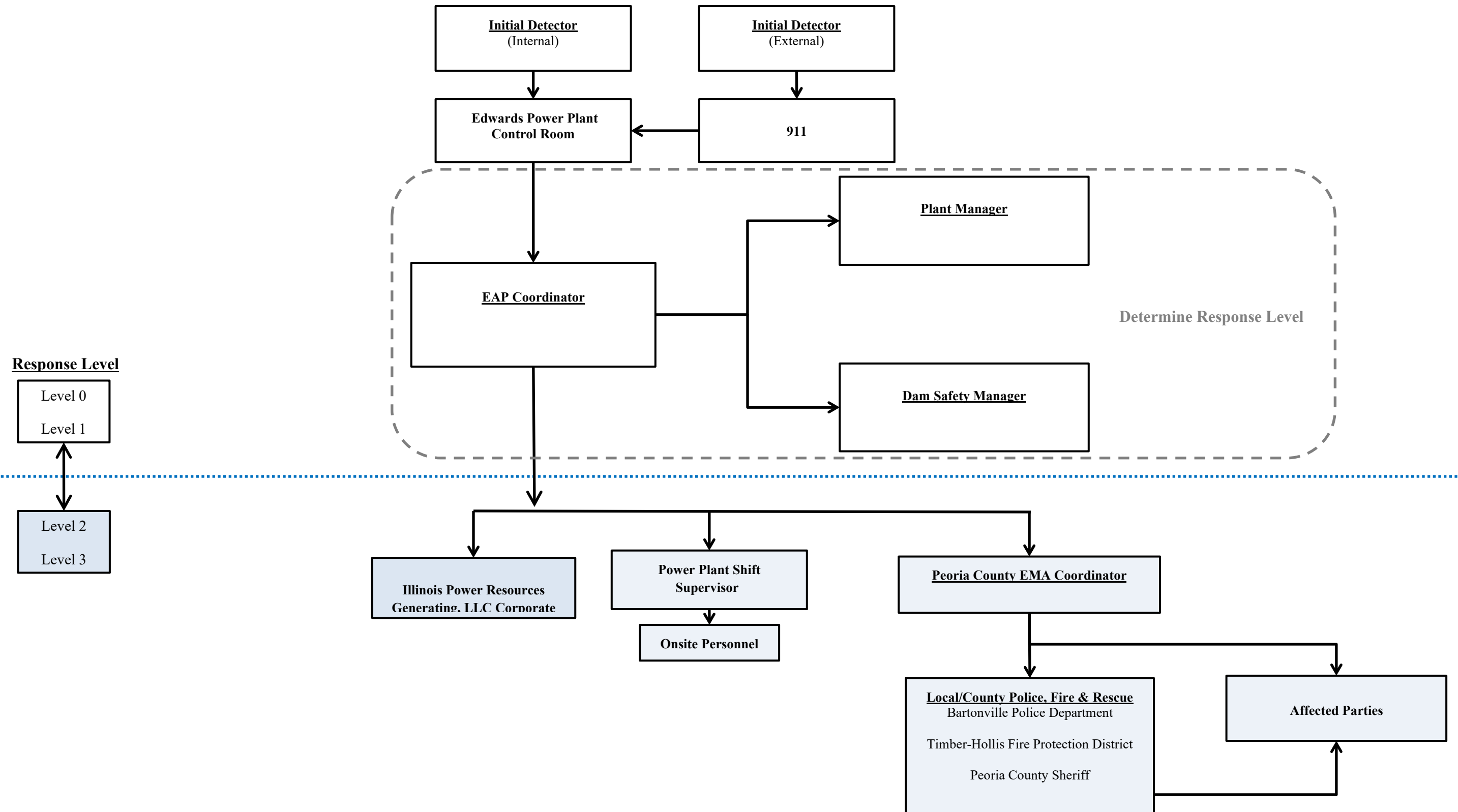


Figure 2-3. EAP Response Process Decision Tree

Note: At any given below, if failure is imminent or actively occurring **CALL 911 IMMEDIATELY** to notify emergency responders and then continue with process afterwards.

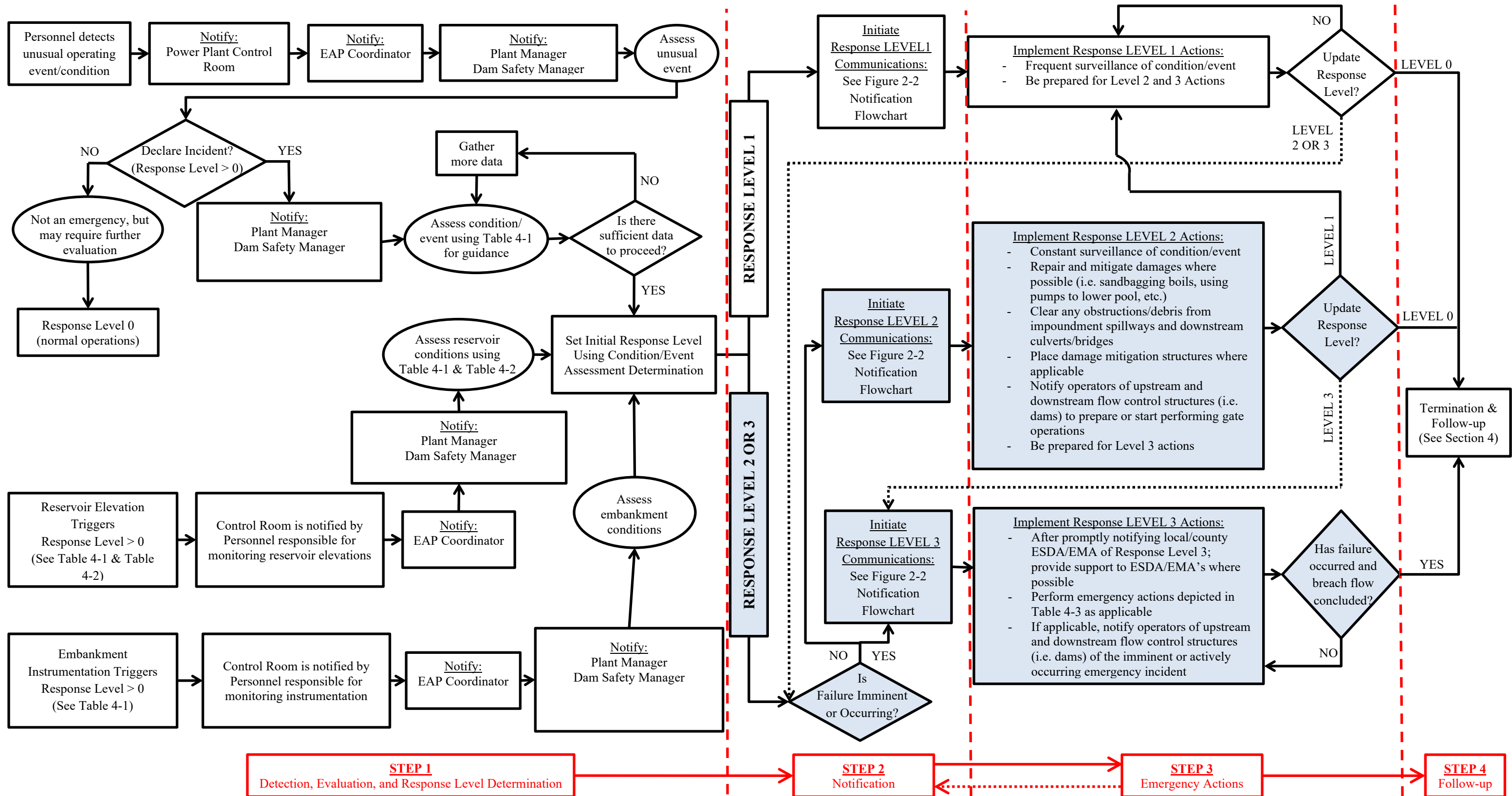


Table 2-1. EAP Emergency Responders

Position/Entity	Name
Internal Contacts	
Edwards Power Plant	Phone #
Plant Manager	
EAP Coordinator	(309) 241-4219
Control Room	(309) 633-2425
DMG Corporate Operations	
Dam Safety Manager	(618) 792-8488
External Contacts	
Local/County EMA, Police, & Fire	Phone #
Peoria County – EMA	(309) 691-3111
Peoria County – Sheriff Dept.	(309) 697-8515
Bartonville, IL Police Department	(309) 697-2323
Timber-Hollis Fire Protection District	(309) 303-3458
Spring Lake State Fish and Wildlife Area	(309) 968-7135
Peoria County E-911 Board	911
State Emergency Management Agencies & Organizations	Phone #
Illinois Conservation Police	(309) 573-8434

3 EAP ROLES AND RESPONSIBILITIES

Table 3-1 provides a summary of the EAP roles during an emergency event.

Table 3-1. Summary of EAP Roles

Entity	Role Description
Emergency Response Team (ERT)	<p>ERT: Personnel responsible for EAP implementation, distribution, updates/maintenance, and training activities. The <u>ERT</u> is comprised of the following roles:</p> <ol style="list-style-type: none"> 1. Corporate: DMG corporate entity, committee, team, or position with relevant responsibility for a given generating power plant. 2. Plant Manager: Personnel responsible for day-to-day operation and management of the Power Plant. 3. Dam Safety Manager: Personnel that is most knowledgeable about the design and technical operation of facilities at a given power plant. 4. EAP Coordinator: Personnel responsible for implementing the EAP and associated activities. <p style="text-align: center;"><u>Emergency Event – EAP Responsibilities</u></p> <ol style="list-style-type: none"> 1. Respond to emergencies at the Power Plant. 2. Verify and assess emergency conditions. 3. Notify and coordinate as appropriate with participating emergency services disaster agencies or emergency management agencies (ESDA/EMA’s), emergency responders, regulatory agencies, and all other entities involved or affected by this EAP. 4. Take corrective action at the Power Plant. 5. Declare termination of emergencies at the Power Plant.
Peoria County EMA	<ol style="list-style-type: none"> 1. Receive Response Level reports from <u>Illinois Power Generating Resources, LLC Corporate</u> through <u>EAP Coordinator</u>. 2. Coordinate emergency response activities with local authorities: police, fire, and rescue, etc. 3. Coordinate notification of public as necessary through established channels, which may include door-to-door contact. 4. Coordinate notification activities to affected parties within inundation areas. 5. Evaluate risk to areas beyond the inundation areas, communicate needs to the <u>Illinois Power Generating Resources, LLC Corporate</u> and/or <u>EAP Coordinator</u>, and coordinate aid as appropriate. 6. Responsible for declaring termination of an emergency condition off-site upon receiving notification of an emergency status termination from the <u>Corporate</u>. 7. If necessary, coordinate with <u>State ESDA/EMA</u>.
Local/County Police, Fire & Rescue	<ol style="list-style-type: none"> 1. Receive alert status reports from the <u>ERT</u> or the Peoria County <u>EMA</u>. 2. If necessary, notify Affected Parties and general public within inundation areas (see Section 7). 3. Render assistance to Peoria County EMA, as necessary. 4. Render assistance to <u>Illinois Power Generating Resources, LLC Corporate and Power Plant Management</u>, as necessary.

4 EAP RESPONSE

The 4-Step Incident Response Process is shown in Figure 2-1. The Decision Tree shown in Figure 2-3 provides a flowchart for the various elements of the response process. Upon reaching Step 4 of the response process (termination and follow-up), the EAP Coordinator is responsible for notifying the ESDA/EMA's that the condition of the dam/impoundment has been stabilized. The purpose of this section is to provide specific information that can be used during a response. This information is provided in the following tables:

- Table 4-1 provides guidance for determining the response level.
- Table 4-2 provides impoundment pool level trigger elevations.
- Table 4-3 lists emergency actions to be taken depending on the situation.

Table 4-1. Guidance for Determining the Response Level

Event	Situation	Response Level
Spillway flow (See Table 4-2 for relevant elevations)	Primary spillway flow is not causing active erosion and impoundment water surface elevation is below auxiliary spillway crest elevation (if equipped).	Level 0
	Impoundment water surface elevation is at or above auxiliary spillway crest elevation (if equipped). No active erosion caused by spillway flow.	Level 1
	Spillway flow actively causing minor erosion that is not threatening the control section or dam/impoundment stability.	Level 2
	Spillway flow that could result in flooding of people downstream if the reservoir level continues to rise.	Level 2
	Abnormal operation of the spillway system due to blockage or damage that could lead to flooding.	Level 2
	Spillway flow actively eroding the soil around the spillway that is threatening the control section (e.g., undermining) or dam/impoundment stability.	Level 3
	Spillway flow that is flooding people downstream.	Level 3
Embankment Overtopping (See Table 4-2 for relevant elevations)	Impoundment water surface elevation at or below typical normal pool fluctuation elevation.	Level 0
	Impoundment water surface elevation above typical high pool fluctuation elevation.	Level 1
	Impoundment water surface elevation within 2 feet of the embankment crest elevation	Level 2
	Impoundment water surface elevation at or above embankment crest elevation.	Level 3
Seepage	New seepage areas in or near the dam/impoundment with clear flow.	Level 1
	New seepage areas with cloudy discharge or increasing flow rate.	Level 2
	Heavy seepage with active erosion, muddy flow, and/or sand boils.	Level 3
Sinkholes	Observation of new sinkhole in impoundment area or on embankment.	Level 2
	Rapidly enlarging sinkhole and/or whirlpool in the impoundment.	Level 3

Table 4-1. Guidance for Determining the Response Level

Event	Situation	Response Level
Embankment cracking	New cracks in the embankment greater than ¼ inch wide without seepage.	Level 1
	Any crack in the embankment with seepage.	Level 2
	Enlarging cracks with muddy seepage.	Level 3
Embankment movement	Visual signs of movement/slippage of the embankment slope.	Level 1
	Detectable active movement/slippage of the embankment slope or other related effects (tension cracking, bulges/heaves, etc.) that could threaten the integrity of the embankment.	Level 2
	Sudden or rapidly proceeding slides of the embankment slopes.	Level 3
Embankment Monitoring Equipment (piezometers, inclinometers, surface displacement mounts, etc.)	Instrumentation readings beyond historic normal.	Level 1
	Instrumentation readings indicate the embankment is susceptible to failure.	Level 2
	Instrumentation readings indicate embankment is at threshold of failure or is currently failing.	Level 3
Earthquake or another event	Measurable earthquake felt or reported on or within 100 miles of the impoundment.	Level 1
	Earthquake or other event resulting in visible damage to the impoundment or appurtenances.	Level 2
	Earthquake or other event resulting in uncontrolled release of water or materials from the impoundment.	Level 3
Security threat	Verified bomb threat or other physical threat that, if carried out, could result in damage to the impoundment.	Level 2
	Detonated bomb or other physical damage that has resulted in damage to the impoundment or appurtenances.	Level 3
Sabotage/ vandalism	Damage to impoundment or appurtenance with no impact to the functioning of the impoundment.	Level 1
	Modification to the impoundment or appurtenances that could adversely impact the functioning of the impoundment. This would include unauthorized operation of spillway facilities.	Level 2
	Damage to impoundment or appurtenances that has resulted in seepage flow.	Level 2
	Damage to impoundment or appurtenances that has resulted in uncontrolled water release.	Level 3

Table 4-2. Impoundment Trigger Elevations

Impoundment	Embankment Crest Elevation	Auxiliary spillway Crest Elevation	Normal Pool Fluctuation	
			Typical	High
Ash Pond (north open water area)	461 ft.	Not Applicable	449.8 ft.	452 ft.
Ash Pond (south open water area)	461 ft.	Not Applicable	447.6 ft.	452 ft.

Notes:

Elevations are in reference to NAVD88
All remaining values are GIS estimated.

Table 4-3. Step 3: Emergency Actions

Condition	Description of Condition	Action to be Taken
High Water Level/ Large Spillway Release	See Table 4-1 and Table 4-2 for elevations and triggering water levels associated with the impoundment and spillway covered by this EAP.	<ol style="list-style-type: none"> 1. Assess cause of increased reservoir stage, especially during fair weather conditions. 2. Determine Response Level. 3. Make proper notifications as outlined in the Figure 2-2 Notification Flowchart. 4. Perform additional tasks as determined through consultation with the ERT. 5. Make notifications if condition worsens such that downstream flooding is imminent. Response Level 0: require enhanced surveillance 3 times per day Response Level 1: contact internal chain of command and external partners as necessary; inspect impoundment minimum 1 time per hour Response Level 2: contact internal chain of command; notify ESDA/EMA's and notify additional external partners (ESDA/EMA's notify affected parties) Response Level 3: contact internal chain of command; notify ESDA/EMA's and notify additional external partners (ESDA/EMA's notify affected parties of emergency incident)
Seepage	Localized new seepage or boil(s) observed along downstream face / toe of earthen embankment with muddy discharge and increasing but controllable discharge of water.	<ol style="list-style-type: none"> 1. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection notes. 2. Determine Response Level. 3. Make proper notifications as outlined in the notification flowcharts in the Figure 2-2 Notification Flowchart. 4. ERT (with Dam Safety Manager as lead) to determine mitigation actions. The following actions may apply: <ol style="list-style-type: none"> a) Place a ring of sand bags with a weir at the top towards the natural drainage path to monitor flow rate. If boil becomes too large to sand bag, place a blanket filter over the area using non-woven filter fabric and pea gravel. Attempt to contain flow in such a manner (without performing any excavations) that flow rates can be measured. Stockpile gravel and sand fill for later use, if necessary. b) Inspect the embankment and collect piezometer, water level and seepage flow data daily unless otherwise instructed by the Engineer. Record any changes of conditions. Carefully observe embankment for signs of depressions, seepage, sinkholes, cracking or movement.

Table 4-3. Step 3: Emergency Actions

Condition	Description of Condition	Action to be Taken
		<ul style="list-style-type: none"> c) Maintain continuous monitoring of feature. Record measured flow rate and any changes of condition, including presence or absence of muddy discharge. 5. Make notifications as outlined in the lower portion of the Figure 2-2 Notification Flowchart if condition worsens such that failure is imminent.
Sabotage and Miscellaneous Other Issues	Criminal action with significant damage to embankment or structures where significant repairs are required and the integrity of the facility is compromised—condition appears stable with time.	<ul style="list-style-type: none"> 1. Contact law enforcement authorities and restrict all access (except emergency responders) to impoundment. Restrict traffic on embankment crest to essential emergency operations only. 2. Determine Response Level. 3. Make internal notifications as outlined in the flowcharts in the upper portion of the Figure 2-2 Notification Flowchart. 4. In conjunction with the Dam Safety Manager, assess extent of damage and visually inspect entire embankment and ancillary structures for additional less obvious damage. Based on inspection results, confirm if extent of damage to various components of the impoundment warrants a revised Response Level and additional notifications. 5. Perform additional tasks as directed by the ERT. 6. Make notifications if conditions worsen.
Embankment Deformation	<p>Cracks: New longitudinal (along the embankment) or transverse (across the embankment) cracks more than 6 inches deep or more than 3 inches wide or increasing with time. New concave cracks on or near the embankment crest associated with slope movement.</p>	<ul style="list-style-type: none"> 1. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection notes. 2. Restrict traffic on embankment crest to essential emergency operations only. 3. Determine Response Level. 4. Make notifications as outlined in the Figure 2-2 Notification Flowchart 5. ERT (with Dam Safety Manager as lead) to determine mitigation actions. The following actions may apply: <ul style="list-style-type: none"> a) Place buttress fill against base of slope immediately below surface feature. Stockpile additional fill. b) Place sandbags as necessary around crack area to divert any storm water runoff from flowing into crack(s). 6. As directed by the Dam Safety Manager, additional inspection and monitoring of the dam may be required. Items may include inspect the dam on a schedule determined by the engineers; collect piezometer and water level data; and record any changes of condition. Carefully observe dam for signs of depressions, seepage, sinkholes, cracking or movement. 7. Make notifications as outlined in the Figure 2-2 Notification Flowchart if conditions worsen such that failure is imminent.
Embankment Deformation (cont.)	<p>Slides / Erosion: Deep slide / erosion (greater than 2 feet deep) on the embankment that may also extend beyond the embankment toe but does not encroach onto the embankment crest and appears stable with time.</p>	<ul style="list-style-type: none"> 1. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection report. 2. Restrict traffic on embankment crest to essential emergency operations only. 3. Determine the Response Level. 4. Make notifications as outlined in the Figure 2-2 Notification Flowchart. 5. ERT (with Dam Safety Manager as lead) to determine mitigation actions. Additional actions may include the following items. <ul style="list-style-type: none"> a) Place sandbags as necessary around slide area to divert any storm water runoff from flowing into slide(s). b) Increase inspections of the dam; collect piezometer and water level data; and record any changes of condition. During inspections,

Table 4-3. Step 3: Emergency Actions

Condition	Description of Condition	Action to be Taken
		<p>carefully observe dam for signs of depressions, seepage, sinkholes, cracking or movement.</p> <p>6. Make notifications as outlined in the Figure 2-2 Notification Flowchart if conditions worsen such that failure is imminent.</p>
	<p>Sinkholes: Small depression observed on the embankment or within 50 feet of the embankment toe that is less than 5 feet deep and 30 feet wide or which is increasing with time.</p>	<p>1. Slowly open drain gates to lower pool elevation.</p> <p>2. Measure and record feature dimensions, approximate flow rate, and relative location to existing surface features. Take photos. Document location on a site plan and in inspection notes.</p> <p>3. Restrict traffic on embankment crest to essential emergency operations only.</p> <p>4. Determine Response Level.</p> <p>5. Make notifications as outlined in the Figure 2-2 Notification Flowchart.</p> <p>6. ERT (with Dam Safety Manager as lead) to determine mitigation actions. Additional actions may include the following items:</p> <ul style="list-style-type: none"> a) Backfill the depression with relatively clean earth fill (free of organic materials) generally even with surrounding grade and slightly mounded (6 to 12 inches higher) in the center to shed storm water away from the depression. Stockpile additional fill. b) Increase inspections of the dam; collect piezometer and water level data daily unless otherwise instructed by engineer; and record any changes of condition. Carefully observe dam for signs of depressions, seepage, sinkholes, cracking or movement. <p>7. Make notifications as outlined in the Figure 2-2 Notification Flowchart if conditions worsen such that failure is imminent.</p>
Gate Malfunction or Failure	Sluice gate damaged structurally (sabotage, debris, etc.) with uncontrolled release of water at a constant volume. Condition appears stable.	<p>1. Close any other gates, if open.</p> <p>2. Determine Response Level.</p> <p>3. Make notifications as outlined in the Figure 2-2 Notification Flowchart.</p> <p>4. Obtain instructions from the Engineer to determine if there are other methods to stop or slow down the flow of water.</p> <p>5. If conditions worsen such that failure is imminent, make notifications as outlined in the lower portion of the Figure 2-2 Notification Flowchart.</p>

5 PREPAREDNESS

The intent of this section is to provide information that will be utilized during a response. Established emergency supplies and locations, suppliers, and equipment are provided in Table 5-1. Supplier contact information is listed in Table 5-2.

A coordination meeting shall be conducted annually between representatives of the Illinois Power Resources Generating, LLC and local emergency responders. This meeting may be in the form of a face-to-face meeting, tabletop exercise, or additional training regarding the EAP.

Table 5-1. Emergency Supplies and Equipment

Item	On-site (Yes/No/Occasionally)	Remarks
Flashlights	Yes	Contact Shift Supervisor for location(s).
Generator	Yes	Contact Shift Supervisor for location(s). Contact National Rental, Inc. for additional emergency generators (see Table 5-2).
Extension Cords	Yes	Contact Shift Supervisor for location(s).
Fire extinguishers	Yes	Contact Shift Supervisor for location(s).
Floodlights	Yes	Contact Shift Supervisor for location(s). Contact JM Industrial Supply for additional emergency lighting (see Table 5-2).
Backhoe	Yes	Contact Shift Supervisor for location(s).
Dozer	Yes	Contact Shift Supervisor for location(s).
Dump Truck	No	Contact Shift Supervisor for resources and availability. Contact: <ul style="list-style-type: none"> National Rental, Inc.
Large Equipment (Rental – including excavating equipment, pumps, lighting)	Occasionally	Contact Shift Supervisor for resources and availability. Contact: <ul style="list-style-type: none"> National Rental, Inc. Sunbelt Rentals
Pump and Hoses	Yes	Contact Shift Supervisor for location(s). Contact National Rental, Inc. and/or JM Industrial Supply for high-capacity portable pumps (see Table 5-2).
Sandbags and Sand	No	Contact: <ul style="list-style-type: none"> Pekin Sand & Gravel, L.L.C. (see Table 5-2)
Fill (Stone, aggregate, sand)	No	Contact: <ul style="list-style-type: none"> Pekin Sand & Gravel, L.L.C. (see Table 5-2) Westside Aggregates (see Table 5-2)
Concrete/grout	No	Contact: <ul style="list-style-type: none"> Roanoke Concrete Products (see Table 5-2) United Ready-Mix Inc. (see Table 5-2)
Geotextile Filter Fabric	Yes	Contact Shift Supervisor for location(s).
Plastic Sheeting	Yes	Contact Shift Supervisor for location(s).
Rope	Yes	Contact Shift Supervisor for location(s). Should be maintained near any features that might require immediate access.
Personal Flotation Devices	Yes	Contact Shift Supervisor for location(s).

Table 5-2. Supplier Addresses

Supplier	Distance from Site (miles)	Address
National Rental, Inc.	4.4	706 S. 2 nd , Pekin, IL 61554
Sunbelt Rentals	18.9	1601 N. Main Street, East Peoria, IL 61611
JM Industrial Supply	6.7	2323 Lakeshore, Pekin, IL 61554
Pekin Sand & Gravel, L.L.C.	7.9	13018 Manito Road, Pekin, IL 61554
Westside Aggregates	8.8	2401 West Rhodora Avenue, West Peoria, IL
Roanoke Concrete Products	5.5	1675 S. 2 nd Street, Pekin, IL 661544
United Ready-Mix Inc.	6.0	2101 S. 2 nd Street, Pekin, IL 61544

6 FACILITY/IMPOUNDMENT DESCRIPTION

The impoundment included in this EAP is described as follows and illustrated in Figure 1-2. Table 6-1 contains additional geometric details for the impoundment.

The Edwards Power Plant is located in Peoria County, Illinois approximately one-half mile east of the intersection of U.S. Highway 24 and Illinois Route 9. The plant is located on the west bank of the Illinois River, just over one mile northwest of downtown Pekin, Illinois. The Ash Pond is located west of the power plant and Switch Yard and east of the Toledo Peoria & Western Railroad.

The Ash Pond is located on the west side of the Edwards Power Plant. The impoundment is a perched pond with watershed area beyond the extent of the pond limited to small areas of the switchyard and Edwards Power Plant. The surrounding areas will contribute an insignificant amount of runoff to the Ash Pond. According to the drainage construction plans for the Ash Pond primary spillway, flow from the Ash Pond discharges east to the Illinois River through a 36-inch diameter Corrugated Metal Pipe (CMP) located parallel to the property boundary, south of the Coal Yard. The primary spillway is equipped with a flapgate and has a sluice gate located at the embankment along the Illinois River. The Ash Pond has wet bottom storage areas on the north and south ends and does not have a dedicated auxiliary spillway. The earthen impoundment also services a railroad line.

Table 6-1. Power Plant Impoundment Characteristics

Feature/Parameter	Ash Pond
Maximum Embankment Height	29 ft.
Length of Dam	6,700 ft.
Crest Width	14 ft.
Crest Elevation	461 ft. **
Reservoir Area at Top of Dam	89 acres
Storage Capacity at Top of Dam	1,024 acre-ft.
Primary Spillway Type	36-inch diameter CMP*
Primary Spillway Crest Elevation	450.1*
Storage Capacity at Primary Spillway Elevation	580
Reservoir Area at Normal Water Surface Elevation (south wet bottom storage area)	23 acres
Reservoir Area at Normal Water Surface Elevation (north wet bottom storage area)	5 acres
Auxiliary spillway Type	N/A
Auxiliary spillway Crest Elevation	N/A

Notes:

*Kleinfelder. (May 2011). *Coal Ash Impoundment Site Assessment Final Report*. All remaining values are GIS estimated.

**Elevation in reference to NAVD88

7 BREACH INUNDATION MAP AND POTENTIAL IMPACTS

An inundation map for Ash Pond potential breach scenarios is provided in this section. It is the Peoria County EMA's responsibility to keep a current list of affected parties/properties to contact in the case of emergencies that result in Response Level 2 or 3. This list should encompass all properties within and adjacent to the probable inundation extents shown in the provided map.

The methodology used to identify probable inundation extents for potential breach scenarios varied as a function of the impoundment size, location, surrounding topography, and surrounding structures/facilities/waterbodies.

Probable Maximum Flood (PMF) and crest volume transfer analyses were completed for potential breach scenarios to the west and east embankments of the Ash Pond. The approximate inundation area is illustrated in Figure 7-1.

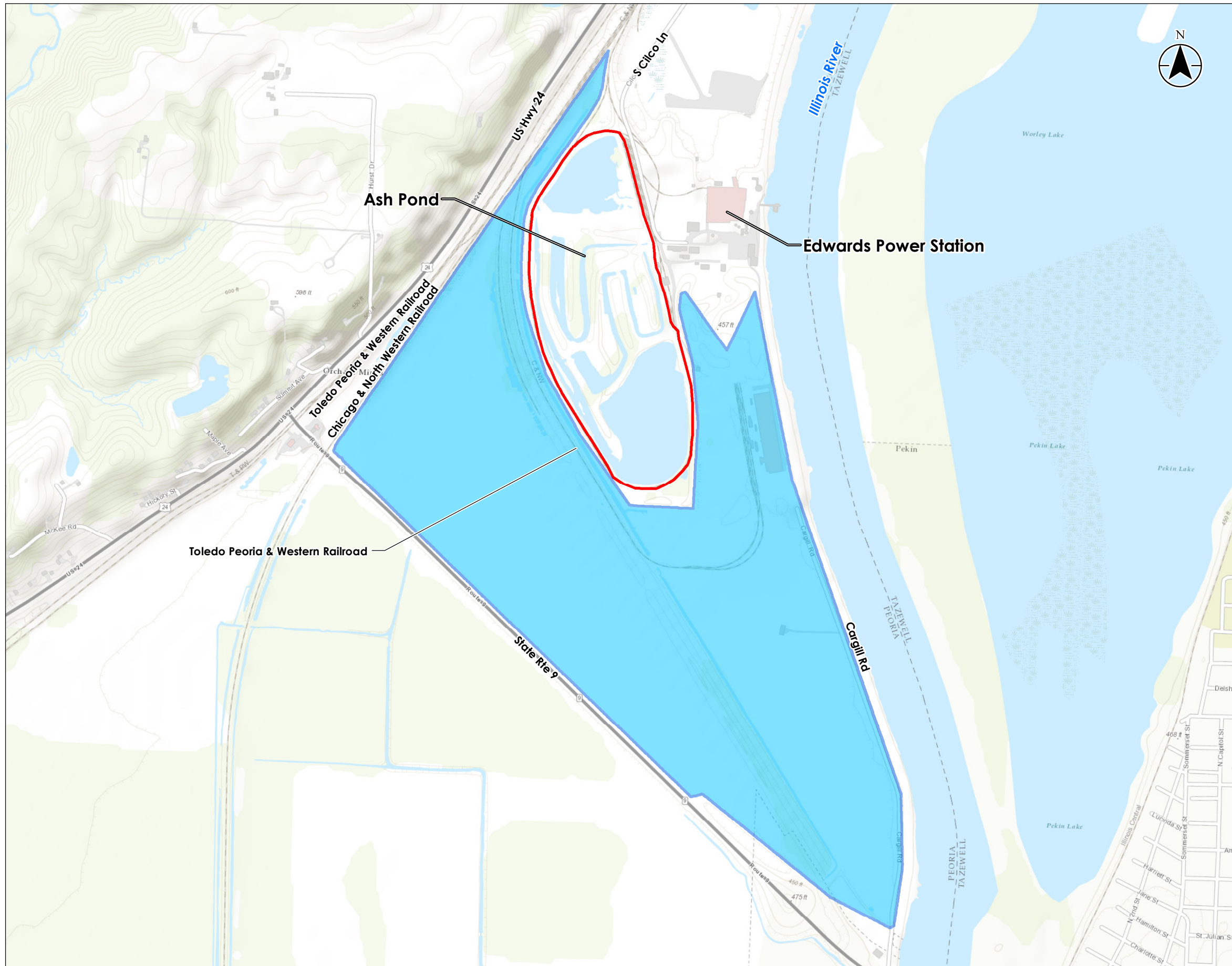
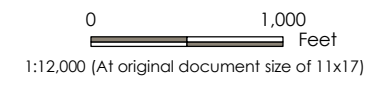


Figure No. **7-1**
 Title **Inundation Map Ash Pond**
 Client/Project **Edwards Power Station Emergency Action Plan**
 Project Location **175605019**
 Latitude: 40.595595 Prepared by CMB on 2017-04-12
 Longitude: -89.662764 Technical Review by SN on 2017-04-12
 Peoria County, Illinois Independent Review by WSW on 2017-04-12



Legend
 [Red Outline] CCR Surface Impoundment Boundary
 [Blue Area] Expected Breach Inundation Area



Notes
 1. Coordinate System: NAD 1983 StatePlane Tennessee FIPS 4100 Feet
 2. Aerial Source: 2015 NAIP Imagery



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