

SCS ENGINEERS

February 17, 2016
File No. 25211357.32

Ms. Jennifer Hatfield, PE
Indianapolis Power & Light
Harding Street Generating Station
3700 South Harding Street
Indianapolis, IN 46217-3333

Subject: 2015-2 Dike Inspection-Harding Street Generating Station Ash Pond Facilities

Dear Ms. Hatfield:

SCS Engineers (SCS) is pleased to submit this dike and pond inspection report for the Indianapolis Power & Light (IPL) Harding Street Generating Station Ash Pond Facilities. Mr. David M. Hendron, PE, of SCS made the inspection and prepared this report. This report presents a Summary of Visual Observations, and Conclusions and Recommendations. Mr. Hendron performed the inspection, and a presentation summarizing the findings was given to IPL on November 11, 2015.

At the Harding Street Generating Station there are several active ash disposal ponds identified by number. The ash ponds inspected were Pond 1; Ponds 2A and 2B; and Pond 3. The general location of each is given on **Figure 1**. The inspections were performed by Ms. Jennifer Hatfield of IPL and Mr. Hendron. The weather during the inspection was cloudy and cool. Results of the inspection were discussed with Ms. Hatfield at the conclusion of the inspection. A brief summary of the findings was prepared and given to the attendees at the meeting after the completion of the field inspection.

SUMMARY OF VISUAL OBSERVATIONS

The IPL Dike Field Review Checklist form was completed to document the results of the inspection. The completed form is given in **Attachment A** to this letter report. The photographs taken during the inspection of all of the ponds are in **Attachment B**. A summary of our visual observations follows.

Flow Pipes Between Ponds

The observations at the time of the inspection and the inventory shows that all flow pipes between the active ash ponds are in satisfactory condition. Pond 1 was active during this inspection, handling ash and FGD slurry streams from plant operations.



Future slurry waste processing operations at the plant will use Pond 1 (primary sedimentation), Pond 2A/B (secondary sedimentation), and Pond 3 (tertiary sedimentation).

Pond 1

1. Pond 1 continues to be used as the primary sedimentation basin for ash handling at the plant and will remain so for the foreseeable future. Pond 1 dredging was discussed in the previous inspection report (15-1).
2. The low area on the west end of the North dike of Pond 1 that was filled to increase the level of the rest of Pond 1 since the 14-2 inspection appeared to be in good condition.

Ponds 2A and 2B

1. Ponds 2A and 2B were being used for ash processing at the time of the inspection and appear to continue to be in satisfactory condition. Previous repairs to the exterior dikes for these ponds continue to appear to be in satisfactory condition.
2. Ponds 2A and 2B water levels were reasonably low at the time of the inspection.
3. The west end of intermediate dike between Ponds 2A and 2B was breached by excavation to allow flow between the two formerly separated pond areas. The newly created pond will be identified as Pond 2A/B in the future.
4. There appears to be some erosion of the South perimeter dike of Pond 2A/B where the breach was excavated. This erosion should be repaired by placement of suitably designed rip-rap as soon as practical. An alternate may be to excavate a breach somewhere internal on the dike separating Ponds 2A and 2B and filling the breach created at the westernmost point of this dike.

Pond 3

1. Pond 3's location is shown on **Figure 1**. During the inspection, this pond was being actively used as a tertiary settling basin for ash, and slurry-handling activities at the plant. Given the decommissioning activities described earlier for Pond 2, Pond 3 will also be required to handle tertiary sedimentation of all storm water flows from Pond 2.
2. There does not appear to be any hydrologic or hydraulic calculations to support the diversion of surface water flows from Pond 2 into Pond 3.
3. The completed repairs to the discharge pipe from Pond 3 to Lick Creek continued to appear to be in satisfactory condition.
4. The water level in Pond 3 was about normal at the time of the inspection. There was discharge from Pond 3 to Lick Creek at the time of the inspection.

5. It was possible to observe seepage conditions on the downstream slope of the Northern perimeter dike of Pond 3. There were no observations of seepage or instability of the area during this inspection.

CONCLUSIONS AND RECOMMENDATIONS

Flow Pipes Between Ponds

The flow of fluids between all active ponds was observed to be occurring on a satisfactory basis during this inspection. We recommend that the flow conditions be a specific observation during all future inspections and that the inventory be updated on an annual basis. If the inspection or inventory indicate flow conditions are damaged or obstructed, we recommend repairs be made immediately.

There have been significant changes to the flow between ponds since the last inspection. There have been no calculations provided to document the design of the excavation features created to make these changes or to document the hydraulic and hydrologic conditions that will arise during storm water flows into the active ponds. We recommend that these calculations be provided as soon as practical.

Staff Gages in Ponds

IPL has installed staff gages in all ponds at the Harding Street Generating Station. Water levels in the ponds are being documented during each weekly inspection by IPL staff. It is recommended that IPL document the algorithm used to calculate the water level in each pond and that the water level be documented each time that IPL makes a staff gage reading.

Pond 1

1. There are no recommendations for Pond 1 at this time.

Ponds 2A and 2B

1. There appears to be some erosion of the south perimeter dike of Ponds 2A/B where the breach was excavated. This erosion should be repaired by placement of suitably designed rip-rap as soon as practical. An alternate may be to excavate a breach somewhere internal on the dike separating Ponds 2A and 2B and filling the breach created at the westernmost point of this dike.

Pond 3

1. The downstream slope of Pond 3 appeared stable at the time of the inspection.
2. The recommended repair of the discharge pipe from Pond 3 into Lick Creek contained in the 12-1 Inspection Report continued to appear to be in satisfactory condition.

3. There does not appear to be any hydrologic or hydraulic calculations to support the diversion of surface water flows from Pond 2 into Pond 3. It is recommended that these calculations be made as soon as possible and that alterations to Pond 3 be made as necessary to provide the necessary freeboard and stability.

SCS appreciates the opportunity to perform this inspection and looks forward to assisting IPL in future inspection of their ash disposal facilities. If you have any questions with regard to this report, please do not hesitate to contact me at (312) 286-9397.

Sincerely,



David M. Hendron, PE
Indiana PE 10000050
SCS ENGINEERS

DMH/AJV

Enclosures: Figure 1 – Site Plan
Attachment A – IPL Dike Field Review Checklist Form
Attachment B – Photographs

FIGURE 1

Site Plan

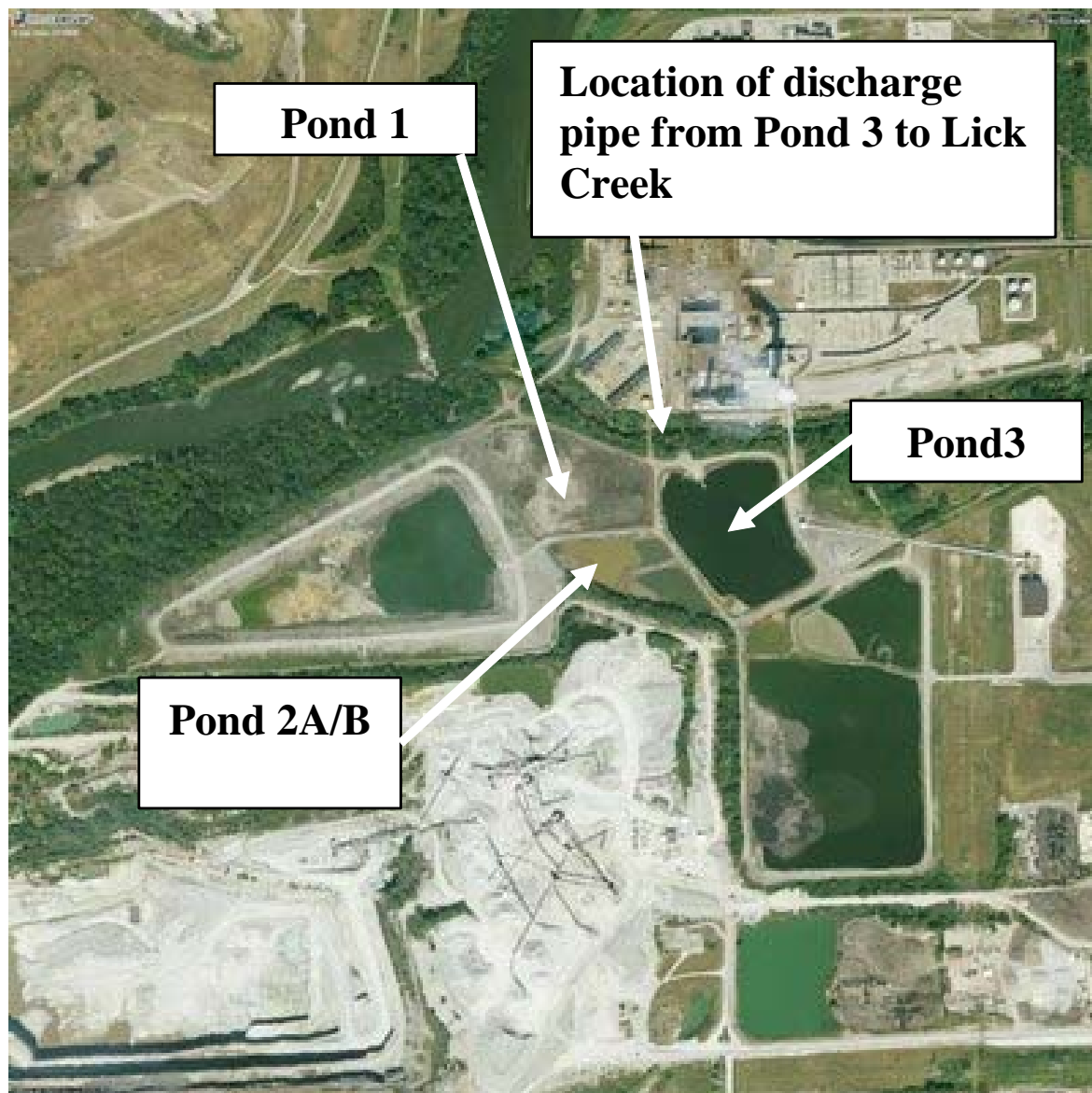


Figure 1. Site Plan

ATTACHMENT A

IPL Dike Field Review Checklist Form

IPL Dike Field Review Checklist– Inspection 15-2 – Harding Street Station

1) Complete all Portions of this Section (Pre-review)

Date of Review: **November 11, 2015**

Name of Dike: **Ash Ponds 1, 2A, 2B, and 3** Project Number: **25211357.32**

2) Review Inventory – Highlight missing information (Pre-review)

Owner(s) Name(s): **Indianapolis Power & Light Company (IPL)**

Address: **3700 South Harding Street**

City: **Indianapolis** State: **Indiana** Zip (+4) **46217-3333**

Telephone (Home): Telephone (Work): **317-261-3603**

Contact Person: **Ms. Jennifer Hatfield and Mr. Juan Hummel**

Designed By: **IPL**

Constructed By: **IPL**

Year Completed: **Various** Plans Available (Yes, No) (Location): **For some of the dikes**

Purpose of Dike: **Ash processing**

Age of Dike: **Various**

3) General Information

Mowing (times per year): **Twice**

Prior problems (wet areas, erosion, slides): **Specified in previous inspection reports.**

All significant prior problems specified in previous inspection reports have been corrected.

Repair or modification (what & when): **Installation of the staff gages is completed in all ponds.**

Failure/Incident/Breach (max. pool): **None**

Downstream hazard status (recent changes): **None since last inspection.**

Dike Embankment Material: **These are given for each of the ash ponds in the action plan report submitted in April 2012.**

Slope Erosion Control:

4) Field Information (while at site)

Pool Elevation (during review): **Pond water levels for Pond 1, Pond 2A/B and Pond 3 at the design water levels for these ponds.**

Site Conditions (temp., weather, ground moisture): **Sunny and cool**

Review Party: **Mr. Dave Hendron, Ms. Jennifer Hatfield, Mr. Juan Hummel. Review party briefed on results of the inspection after completion.**

5) **INSIDE SLOPES** Gradient: Horizontal: Varies from about 2.5 to 3.0 Vertical: 1.0 (est. meas.)**x** ☒ **VEGETATION** [no problem]

- ☐ Trees: Quantity: (<5, sparse, dense) _____
 Diameter: (<6", 6-12", >12") _____
 Location: _____
 Notes: _____
- ☐ Brush: Quantity: (sparse, dense) _____
 Location: _____
 Notes: _____
- ☐ Ground Cover: Type: (grass, crown vetch) Other: _____
 Quantity: (**bare**, sparse, adequate, dense) _____
 Appearance: (too tall, too short, good) _____
 Notes: _____

x ☒ **SLOPE PROTECTION** [no problem, could not inspect thoroughly]

- ☐ None
- ☐ Riprap: Average Diameter: _____
 (**adequate**, sparse, displaced, weathered, vegetation) (bedding/fabric noted=yes, no)
 Notes: _____
- ☐ Wave Berm: _____
 Vegetation: (adequate, bare, sparse, improper vegetation) _____
 Notes: _____

x ☒ Other: Slope protection continues present on all of the perimeter inside slopes for all of the ponds where required by the observance of previous active erosion.

Notes:

x ☒ **EROSION** [no problem, could not inspect thoroughly]

- ☐ Wave Erosion (beaching): Scarp: Length: _____ Height: _____
 Location: _____
 Notes: _____
- ☐ Runoff Erosion (Gullies): Quantity: _____
 Depth: _____ Width: _____ Length: _____
 Location: _____
 Notes/Causes: _____

x ☒ **INSTABILITIES** [no problem, could not inspect thoroughly]

- ☐ Slides: Transverse Length: _____ Longitudinal Length: _____
 Scarp: Width: _____ Length: _____
 Location: _____
 Crack: Width: _____ Depth: _____
 Notes/Causes: _____
- ☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other
 Quantity: _____ Length: _____ Width: _____ Depth: _____
 Location: _____
 Notes/Causes: _____

{Inside Slope, Crest, Outside Slope, Outlet/Inlet Structures, Pond Drain}

None	Monitor	Maintenance	Engineer
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other
 Quantity: _____ Length: _____ Width: _____ Depth: _____
 Location: _____
 Notes/Causes: _____

☐ Bulges ☐ Depressions ☐ Hummocky
 Size: _____ Height: _____ Depth: _____
 Location: _____
 Notes/Causes: _____

☐ Bulges ☐ Depressions ☐ Hummocky
 Size: _____ Height: _____ Depth: _____
 Location: _____
 Notes/Causes: _____

☒ **OTHER** [no problem, could not inspect thoroughly]

☐ Rodent Burrows: (few, numerous) _____
 Location: _____
 Notes/Causes: _____

☐ Other:
 Notes: **NA**

6) CREST Length: _____ Width: _____ (est. meas.)

☒ **VEGETATION** [no problem]

☐ Trees: Quantity: (<5, sparse, dense) _____
 Diameter: (<6", 6-12", >12") _____
 Location: _____
 Notes: _____

☐ Brush: Quantity: (sparse, dense) _____
 Location: _____
 Notes: _____

☐ Ground Cover: Type: (grass, crown vetch) Other: _____
 Quantity: (bare, sparse, adequate, dense) _____
 Appearance: (too tall, too short, good) _____
 Notes: _____

☒ **EROSION** [no problem, could not inspect thoroughly]

☒ Runoff Erosion (Gullies): Quantity: _____ Depth: _____ Width: _____ Length: _____
 Location: _____
 Notes: _____

Inside Slope, Crest, Outside Slope, Outlet/Inlet Structures, Pond Drain}

None	Monitor	Maintenance	Engineer
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required
Action

x ☐ **WIDTH [no problem]**

☐ Too Narrow

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

x ☐ **INSTABILITIES [no problem, could not inspect thoroughly]**

☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other

Quantity: _____ Length: _____ Width: _____ Depth: _____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other

Quantity: _____ Length: _____ Width: _____ Depth: _____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

☐ Bulges: ☐ Depressions ☐ Hummocky

Size: _____ Height: _____ Depth: _____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

x ☐ **OTHER [no problem, could not inspect thoroughly]**

☐ Rodent Burrows: (few, numerous) _____

Location: _____

Notes: _____

☐ ☐ ☐ ☐

☐ Other: **Road level on the west side of the North perimeter dike for Pond 1**

that has been regarded to provide freeboard for Pond 1 appears satisfactory. Continue to monitor.

☐ ☐ **x** ☐ ☐

Notes: **Roadway appeared to be stable at the time of the inspection.**

7) OUTSIDE SLOPES

Gradient: Horizontal: **2.0 to 3.0**

Vertical: **1.0** (est. meas.)

x ☐ **VEGETATION [no problem]**

x ☐ Trees: Quantity: (<5, sparse, moderate, dense) **Generally been removed**

Diameter: (<6", 6-12", >12") _____

Location: _____

Notes: **The trees mentioned in previous reports have generally been removed.**

☐ **x** ☐ ☐ ☐

x ☐ Brush: Quantity: (sparse, dense) _____

Location: _____

Notes: _____

☐ ☐ ☐ ☐

x ☐ Ground Cover: Type: (**grass**, crown vetch) Other: _____

Quantity: (bare, sparse, **adequate**, dense) _____

Appearance: (too tall, too short, **good**) **Ground cover was in great condition**

throughout the system.

Notes: _____

☐ ☐ ☐ ☐

{Inside Slope, **Crest**, **Outside Slope**, Outlet/Inlet Structures, Pond Drain}

☒ **EROSION** [no problem, could not inspect thoroughly]

☒ Runoff Erosion (**Gullies**): Quantity: ____ Depth: ____ Width: ____ Length: ____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

☒ **INSTABILITIES** [no problem, could not inspect thoroughly]

☐ Slides: Transverse Length: ____ Longitudinal Length: ____

Scarp: Width: ____ Length: ____

Location: _____

Crack: Width: ____ Length: ____

Notes/Causes: _____

☐ ☐ ☐ ☐

☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other

Quantity: ____ Length: ____ Width: ____ Depth: ____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

☐ Cracks: ☐ Transverse ☐ Longitudinal ☐ Other

Quantity: ____ Length: ____ Width: ____ Depth: ____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

☐ Bulges: ☐ Depressions ☐ Hummocky

Size: ____ Height: ____ Depth: ____

Location: _____

Notes/Causes: _____

☐ ☐ ☐ ☐

☒ **OTHER** [no problem, could not inspect thoroughly]

☐ Rodent Burrows: (few, numerous) _____

Location: _____

Notes: _____

☒ ☐ ☐ ☐

☐ Other: _____

Notes: _____

☐ ☐ ☐ ☐

☒ **SEEPAGE** [no problem, could not inspect thoroughly]

☐ Wet Area ☐ Flow ☐ Boil ☐ Sinkhole

Flow Rate: ____ Size: ____

Location: _____

☐ Aquatic Vegetation ☐ None

☐ Rust Colored Deposits ☐ None

☐ Sediment in Flow ☐ None

☐ Other: _____

☒ ☐ ☐ ☐

Notes/Causes: **Area of downstream slope of Pond 3 was inspected. No**

seepage observed. Continue to monitor this area for seepage.

{Inside Slope, Crest, **Outside Slope**, Outlet/Inlet Structures, Pond Drain}

☐ Wet Area ☐ Flow ☐ Boil ☐ Sinkhole
 Flow Rate _____ Size: _____
 Location: _____
☐ Aquatic Vegetation ☐ None
☐ Rust Colored Deposits ☐ None
☐ Sediment in Flow ☐ None
☐ Other: _____
 Notes/Causes: _____

☐ ☐ ☐ ☐

8) OUTLET/INLET STRUCTURES

☒ **GENERAL INLET** [no problem, could not inspect thoroughly]

☐ ☐ ☐ ☐

☐ Inlet Pipe Dimensions: _____ (adequate, too small)
 Type: (steel, concrete, aluminum, stainless steel, corrugated metal wood, other): _____
 Location: _____
 Deterioration: (missing sections, rusted, collapsed) _____
 In Use: (Yes, No) _____

☐ Pond Erosion at Inlet: (Describe)
☐ Other

☐ ☐ ☐ ☐

☒ **OUTLET STRUCTURES** [no problem, could not inspect thoroughly]

☐ Number of Outlet Structures: **Numerous – Most occur between the individual ponds. All outlet structures appeared stable and in good working condition at the time of this (15-2) inspection. Since last inspection, Pond 2B has been eliminated.**

☐ ☐ ☐ ☒

☒ Description/Location of Outlet Structures:

☐ ☒ ☐ ☐

☒ Outlet Structures between Ponds :
 Type: (steel, concrete, aluminum, stainless steel, **corrugated metal**, wood, **other**): _____

Notes: _____

☐ ☐ ☐ ☐

{Inside Slope, Crest, Outside Slope, **Outlet/Inlet Structures**, Pond Drain}

x ☐ Outlet Structure on the North end of Pond 3

xType: (steel, **concrete**, aluminum, stainless steel, corrugated metal wood, other):_____

Deterioration: (missing section, collapsed, rusted):

Erosion at Outlet Structure: (soil piping, seep collar, etc.)

Debris: (leaves, trash, logs, ice, etc.)_____

Notes:_____

☐ Outlet Structure 3 Dimensions:_____

Type: (steel, concrete, aluminum, stainless steel, corrugated metal wood, other):_____

Deterioration:(missing section, collapsed, rusted):_____

Erosion at Outlet Structure: (soil piping, seep collar, etc.)_____

Debris: (leaves, trash, logs, ice, etc.)_____

Notes:_____

☐ **x** ☐ ☐ ☐

☐ ☐ ☐ ☐

9) POND DRAIN

x ☐ **GENERAL**

☐ None Found ☐ Does not have one

☐ Type of Pond Drain

(isolated control/intake tower, valve vault w/outlet conduit, valve in riser/drop inlet, siphon)

Notes: **The outlet pipe from Pond 3 is available for drainage of pond fluids.**

☐ Operated During Inspection (yes, **no**)

Notes: **This valve is operated on a frequent basis as part of normal IPL operations of Pond 3 and appears to be in good working condition.**

☐ ☐ ☐ ☐
☐ ☐ ☐ ☐

☐ **ACCESS TO VALVE/SLUICE GATE** [no problem, could not inspect thoroughly]

☐ Type (not accessible, from shore, boat, walkway, other)_____

Notes:_____

☐ Walkway/Platform:_____

☐ Concrete Deterioration ☐ Cracks (platform, piers, end supports, railing)

Location:_____

Notes:_____

☐ ☐ ☐ ☐

☐ ☐ ☐ ☐

☐ ☐ ☐ ☐

{Inside Slope, Crest, Outside Slope, **Outlet/Inlet Structures, Pond Drain**}

		Required Action			
		None	Monitor	Maintenance	Engineer
<input type="checkbox"/>	Wood Deterioration Notes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Metal Deterioration (minor, moderate, extensive, other) Notes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	POND DRAIN COMPONENTS [no problem, could not inspect thoroughly]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Concrete Structure Locations: _____ Description: (deterioration, misalignment, cracks): _____ Notes/Causes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Valve Control (Operating Device) <input type="checkbox"/> No Operating Device <input type="checkbox"/> No Stem <input type="checkbox"/> Bent/Broken Stem <input type="checkbox"/> Other Notes/Operability: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Metal Deterioration: (surface rust, minor, moderate, extensive, other) Location: _____ Flow Rate: _____ Notes/Causes: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Mis-alignment Notes/Causes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Leakage – Flow Rate: Notes/Causes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Outlet Conduit <input type="checkbox"/> Metal: (loss of coating/paint, surface rust, corrosion (pitting, scaling), rusted out) Location: _____ Notes/Causes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Concrete (bug holes, hairline crack, efflorescence) (spalling, popouts, honeycombing, scaling, craze/map cracks) (isolated crack, exposed rebar, disintegration, other) Dimensions/Location: _____ Notes/Causes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Plastic: (deterioration, cracking) _____ Location: _____ Notes/Causes: _____ _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
{Inside Slope, Crest, Outside Slope, Outlet/Inlet Structures, Pond Drain }		None	Monitor	Maintenance	Engineer
		Required Action			

		Required Action			
		None	Monitor	Maintenance	Engineer
<input type="checkbox"/> Conduit Deformation	<input type="checkbox"/> Mis-Alignment:				
Location: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes/Causes: _____					

<input type="checkbox"/> Separated Joint	<input type="checkbox"/> Loss of Joint Material				
Location/Description: _____		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes/Causes: _____					

<input type="checkbox"/> Undermining		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location/Description: _____					
Notes/Causes: _____					

<input type="checkbox"/> Vegetation (trees, brush)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes: _____					

<input type="checkbox"/> Other		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes: _____					

<input type="checkbox"/> Discharge Outlet		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Type (pipe outlet, concrete channel, rock-lined channel, none)					
Notes: _____					

<input type="checkbox"/> Riprap: Average Diameter:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(adequate, sparse, displaced, weathered, vegetation) bedding/fabric noted – yes, no))					
Notes: _____					

<input type="checkbox"/> Concrete (bug holes, hairline crack, efflorescence)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(spalling, popouts, honeycombing, scaling, craze/map cracks)					
(isolated crack, exposed rebar, disintegration, other)					
Dimensions/Location: _____					
Notes/Causes: _____					

<input type="checkbox"/> Mis-alignment		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location/Description: _____					
Notes/Causes: _____					

<input type="checkbox"/> Separated Joint	<input type="checkbox"/> Loss of Joint Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location/Description: _____					
Notes/Causes: _____					

<input type="checkbox"/> Undermining		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location/Description: _____					
Notes/Causes: _____					

<input type="checkbox"/> Other					
Notes: _____					

{Inside Slope, Crest, Outside Slope, Outlet/Inlet Structures, Pond Drain }					

ATTACHMENT B

Photographs

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 1: Pond 1, looking south.



Photo 2: Pond 1, looking west.



Photo 3: Crest Road condition on North side of Pond 1.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 4: Pond 1, looking northeast from the Pond 1 area.



Photo 5: Pond 2A, looking east from the Pond 1 area.



Photo 6: Pond 2A, looking east from Northwest corner of Pond 2A.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 7: Discharge conditions occurring from Pond 2 into Pond 2A.



Photo 8: Discharge conditions occurring from Pond 1 into Pond 2A.



Photo 9: FGD slurry discharge into Pond 1.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 10: Breach excavated in the South abutment of the intermediate dike between former Pond 2A and Pond 2B. Some erosion of the interior slope in the abutment.



Photo 11: Pond 2A, looking northwest from the intermediate dike between former Pond 2A and Pond 2B.



Photo 12: Former Pond 2B, looking northwest from the Northeast corner of Pond 2B.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 13: Pond 3, looking north from the Southwest corner of Pond 3.



Photo 14: Same as Photo 13, looking east.



Photo 15: Close up of Southwest corner of Pond 3.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 16: Pond 3, looking west.



Photo 17: Pond 3, looking north from the Southeast corner of Pond 3.



Photo 18: Pond 3, looking east from the Southwest corner of Pond 3.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 19: Same as Photo 18, looking south.



Photo 20: Same as Photo 18, looking west.



Photo 21: Outfall of Pond 3 to Lick Creek.

**IPL Harding Street Station – Photos from 15-2 Inspection
3700 South Harding Street-Indianapolis, IN
SCS Engineers Project #25211357.32**



Photo 22: Conditions of the exterior slope of the North perimeter dike of Pond 3, looking west from the outfall structure. No seepage observed.



Photo 23: Same as photo 22, looking north.



Photo 24: Same as Photo 22, looking east.