IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION
Field Office 6,
1023 West Madison, Washington, IA 52353-1623
Tel: (319) 653-2135 Fax: 2856

REPORT OF INVESTIGATION

INVESTIGATION DATES: Current: 3-13-15

TO: Thabit Hamoud
IDNR Wastewater Engineering
Des Moines/Wallace Bldg.

PERSONS CONTACTED:
Jeff@OGS

RE: Chemical Building
Wastewater Site Survey
Facility No. 6-9000101
Work Request # 2945

INSPECTOR: Russell Royce DATE: 3-13-15

REVIEWER: Terry Jones DATE: 3-16-2015

DISTRIBUTION: FIELD OFFICE: CENTRAL OFFICE: Chris Sullivan, Hard Hat Services, 932 N. Wright St. Suite 160, Naperville, IL 60563

OBSERVATIONS/RECOMMENDATIONS:

On 3-13-15 I conducted a site survey for the proposed building to house a chemical feed system located in Section 26, T-73-N, R-15-W, Wapello County. Subrule 567 IAC 64.2(3), was referenced in conducting the site survey. The following observations were made:

1. All separation distances stated in Schedule F appear to have been met.

All property within 1,000 feet of proposed building appear to belong to Alliant Energy.

J:\Fo6\SHARED\Rroyce\WW\WW Site Surveys\OGS site survey 3-13-15.docx
Picture Filenames: OGS site survey 3-13-15

Or S

Exhibit 11A

Iowa Department of Natural Resources Wastewater Engineering Section

Construction Permit Application

SCHEDULE A, General Information

APPLICANT	ENGINEER
OWNER E-MAIL ADDRESS Interstate Power and Light (IPL) Company Ottumwa Generating Station NicholToomire@alliantenergy.com	FIRM E-MAIL ADDRESS Hard Hat Environmental Services Mark.Loerop@hardhatinc.com
ADDRESS 20775 Power Plant Road, Ottumwa, Iowa 52501	ADDRESS 932 N. Wright St., Suite 160, Naperville, Illinois 60563
REPRESENTATIVE TELEPHONE Nichol Toomire Alliant Energy – Interstate Power and Light Company Ottumwa Generating Station Plant Manager (641) 935-2903	PROJECT OFFICER TELEPHONE Mark Loerop, P.E. Principal Hard Hat Environmental Services (630) 687-9160

PROJECT IDENTIFICATION	ESTIMATED START DATE *	ESTIMATED COMPLETION DATE
Ottumwa Generating Station Coal Pile Runoff Pond Treatment Design	April 2015	October 2015

PLEASE RESPOND TO ALL QUESTIONS	YES	NO
1. Has an engineering report, facilities plan or other information previously been submitted for this project?	☐	☒
If Yes=> PROJECT IDENTITY / DATE SUBMITTED		
2. Does the project and construction permit application, as submitted, follow the recommendations, design loadings, construction schedule, permit limits, and conclusions of the approved engineering report or facilities plan?	☒	☐
If No=> Provide the design basis and technical information justifying all changes.		
3. Are there three complete sets of plans and specifications accompanying this application? For a minor gravity sewer extension within the meaning of 455B.183.3 Code of Iowa and Design Standard 11.1, two complete sets will be adequate for expeditious approval. For more complex projects, three sets of plans and specifications may be requested.	☒	☐
4. Are approved standard specifications a part of this application?	☐	☒
If Yes=> APPROVED STANDARD SPECIFICATIONS OF (municipality or firm) / DATE APPROVED		
5. Does each set of plans and specifications or engineering report accompanying this application contain a "professional engineering seal" executed in conformance with 542B.16, Code of Iowa?	☒	☐
If No=> Processing will be delayed pending receipt of applicable design schedules and certified plans, specifications or engineering report.		
6. Is this a joint wastewater and water supply project?	☐	☒
If Yes=> A construction permit application for the water supply project should be submitted separately to the Water Supply Section. A water supply permit fee may be required.		
7. Is the applicant to provide treatment of effluent resulting from this construction?	☐	☒
If No=> A Sewage Treatment Agreement (DNR Form 29) executed by the authority providing treatment must accompany this application.		
8. Is a new or amended operation permit necessary to use the facilities described in this application?	☐	☒
If Yes=> A new or amended permit to operate may be requested prior to the receipt of a construction permit.		
9. Is any waterline located within 10 feet; or any private or public well, lake, or public recreation area located within 400 feet of the proposed construction?	☐	☒
If Yes=> Identify and locate the facility(s) relative to the proposed construction.		
10. Will construction inspection be conducted by a licensed engineer employed by the applicant?	☒	☐
If No=> NAME OF ENGINEERING FIRM CONDUCTING INSPECTION: Hard Hat Environmental Services		
11. Will this project utilize CWSRF loan funds?	☐	☒

CERTIFICATION

APPLICANT	ENGINEER
I certify that I am the authorized representative of the owner and state that the project identified above is approved by the owner.	I certify that all aspects of design included in this application conform to applicable standards contained in Chapter 567 IAC 64, or that an explanation and justification for any proposed variations from such standards is attached. I am familiar with the information contained in this application, and to the best of my knowledge, such information is complete and accurate.
SIGNATURE: [signature] DATE: 2/19/15	SIGNATURE: [signature] DATE: 2/19/15

*** Estimated Construction Start Date: Complete applications must be submitted at least 120 days in advance of the date for starting construction in accordance with Rules 567 IAC 60.4 and 64.2**

PLEASE COMPLETE THE SCHEDULE CHECKLIST ON THE FOLLOWING PAGE OF THIS FORM

DNR form 28A (Sept 2010) 542-3129

Construction Permit Application

SCHEDULE A, General Information, page 2

DOCUMENT CHECKLIST

Identify all categories included in this project. Also, identify schedules attached to this application.

SCHEDULE	TITLE	ATTACHED	INCLUDED IN PROJECT	SUBMITTAL DATE
B	Collection system	☐	☐	
C	Lateral Sewer Extension	☐	☐	
D	Trunk & Interceptor Sewer	☐	☐	
E	Wastewater Pump Station	☐	☐	
F	Treatment Project Site Selection	☐	☐	
G	Treatment Project Design Data	☒	☐	
H1	Schematic Flow Diagram	☐	☐	
H2	Treatment Process Loading and Removal Efficiency	☐	☐	
H3	Mechanical Plant Reliability	☐	☐	
I	Screening, Grit Removal and Flow Measurement	☐	☐	
J	Septic Tank System	☐	☐	
K1	Controlled Discharge Pond	☐	☐	
K2	Aerated Pond	☐	☐	
K3	Anaerobic Lagoon	☐	☐	
L	Setting Tanks	☐	☐	
M	Fixed Film Reactor – Stationary Media	☐	☐	
N	Rotating Biological Contactor	☐	☐	
O	Aeration Tanks or Basins	☐	☐	
P	Gas Chlorination	☐	☐	
Q	Sludge Digestion and Holding	☐	☐	
R1	Sludge Dewatering and Disposal	☐	☐	

Iowa Department of Natural Resources
Wastewater Section
Construction Permit Application
SCHEDULE F, Treatment Project Site Selection

DATE PREPARED	PROJECT IDENTITY	DNR USE
03/04/2015	Interstate Power and Light (IPL) Company – Alliant Energy	PROJECT NO.
DATE REVISED	Ottumwa Generating Station	
	Coal Pile Runoff Pond Treatment Design	PERMIT NO.

1. Project Location: County Wapello Section 26 Township 73N Range 15W
   Is this a new site? No Existing site? Yes or Expansion of existing site? _____

2. Provide the following as attachments (minimum of three each needed):
   (a) General plat layout of area within a five mile radius of the project, noting all important features. (U.S.G.S. map may be used).
   (b) Site layout of area within a 1,500 foot radius of the project with a scale of approximately 1 inch equal to 200 feet, noting project and all features listed in Subrule 567 IAC 64.2(3): inhabitable residences, commercial buildings, inhabitable structures, public shallow wells, public deep wells, private wells, lakes and public impoundments, property lines and rights-of-way, etc.

3. Does the project lie in a floodplain? Yes ☐ No ☒
   Elevation of 100 year flood (MSL) N/A Elevation of 25 year flood (MSL) N/A
   Will the treatment works structures, including the electrical and mechanical equipment, be protected from physical damage by the 100-year flood? Yes ☒ No ☐
   Will the plant remain operational during the 25-year flood? Yes ☒ No ☐
   Method of flood protection Above flood plain. Drainage away from building

4. Minimum distance to high water table N/A

5. Describe geology of area Information provided from an Ash Pond Slope Stability Report prepared for the Ottumwa Generating Station describes the local geology. The site area bedrock along the Des Moines River consists of older Mississippian shale, sandstone, and limestone units. The bedrock units are nearly horizontal in the area. The soil or unconsolidated material overlying the bedrock generally consists of loess soil overlying a glacial till and weathered material from the parent rock. The soil is generally thinner near the Des Moines River and increases in thickness moving toward the uplands.

6. Describe soil conditions Reference #5 above.

7. State the minimum distances and direction to:
   (a) Municipal wells N/A
   (b) Private wells N/A
   (c) Residences or Businesses N/A
   (d) Recreation areas N/A
   (e) Other McNeese Wildlife Area, 500 feet southeast of 1,500 foot radius

8. Direction of the prevailing winds The wind is most often out of the South

9. Sulfate content of the raw water supply source N/A mg/l. Identify source N/A

10. Is this area available for expansion? Yes ☒ No ☐ If yes, how much? N/A
    Location of area N/A Identify owner of property N/A

11. Will site be accessible via an all weather access road? Yes ☒ No ☐ Type _____

12. Source of STP water supply:
    Maintenance/Cleanup N/A Potable? Yes ☐ No ☐
    Laboratory/Sanitary N/A Potable? Yes ☐ No ☐
    _____ Potable? Yes ☐ No ☐

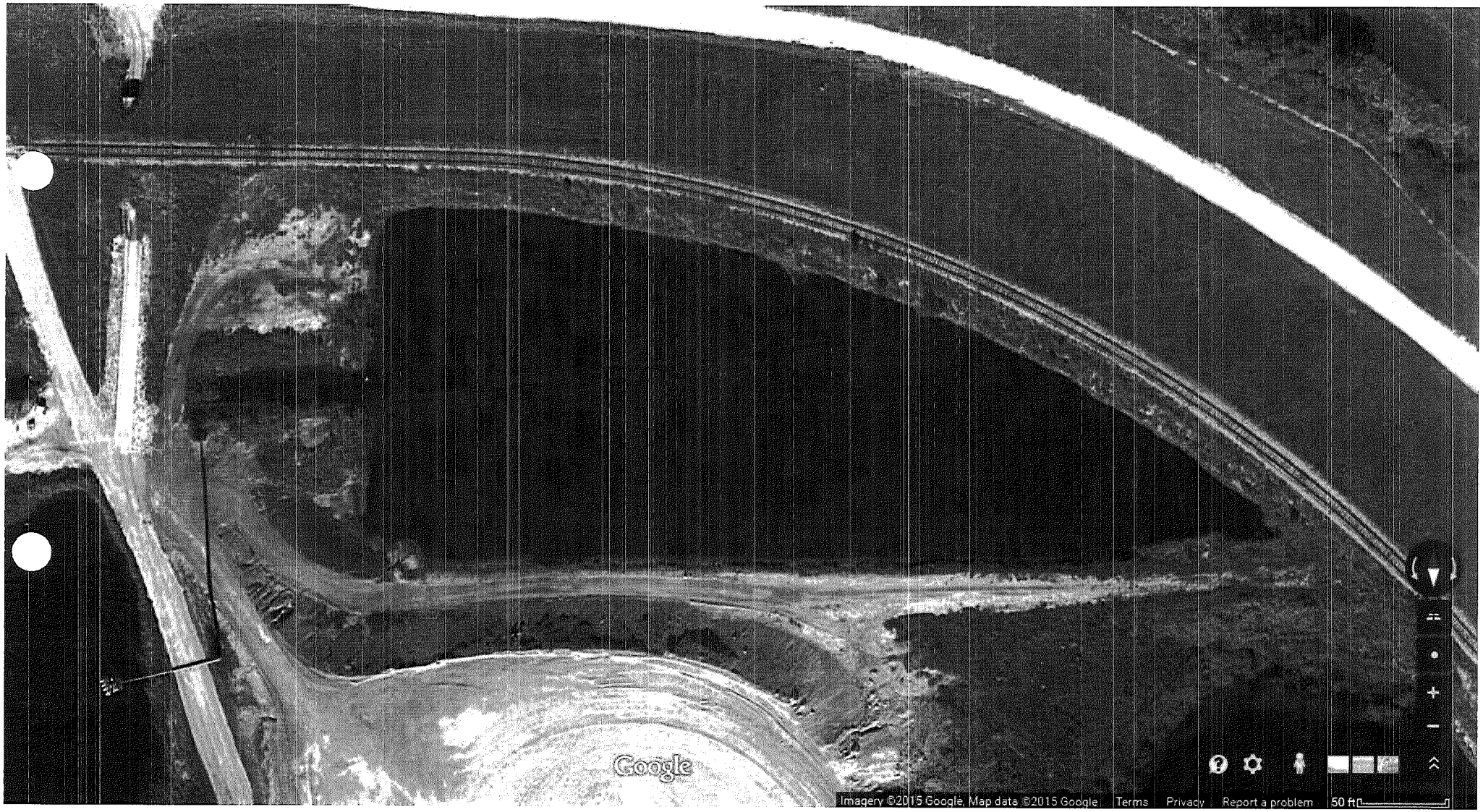
13. Receiving Stream Unnamed Creek tributary to Des Moines River

7-day 10-year Low Flow N/A cfs. Source of stream flow data Coal Pile Runoff Pond
Drainage area above site N/A square miles
Is stream a dry run N/A intermittent X continuous flow
Describe downstream usage of the receiving stream N/A

R2(A & B)	Low Rate Land Application of Sludge	☐	☐	
R3	Land Application of Sewage Sludge (To be developed)	☐	☐	
S	Land Application of Wastewater (To be developed)	☐	☐	
	Sewage Treatment Agreement	☐	☐	

Identify any categories included in this project which are not provided in the above list of schedules.

Attached to permit application is finalized design set for coal pile runoff pond treatment project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