



Location Restrictions Certification Report

NIPSCO R. M. Schahfer Generating Station Landfill Phase V and Phase VI

Pursuant to: 40 CFR §257.64

Submitted to:

Northern Indiana Public Service Company

R. M. Schahfer Generating Station
Wheatfield, Indiana

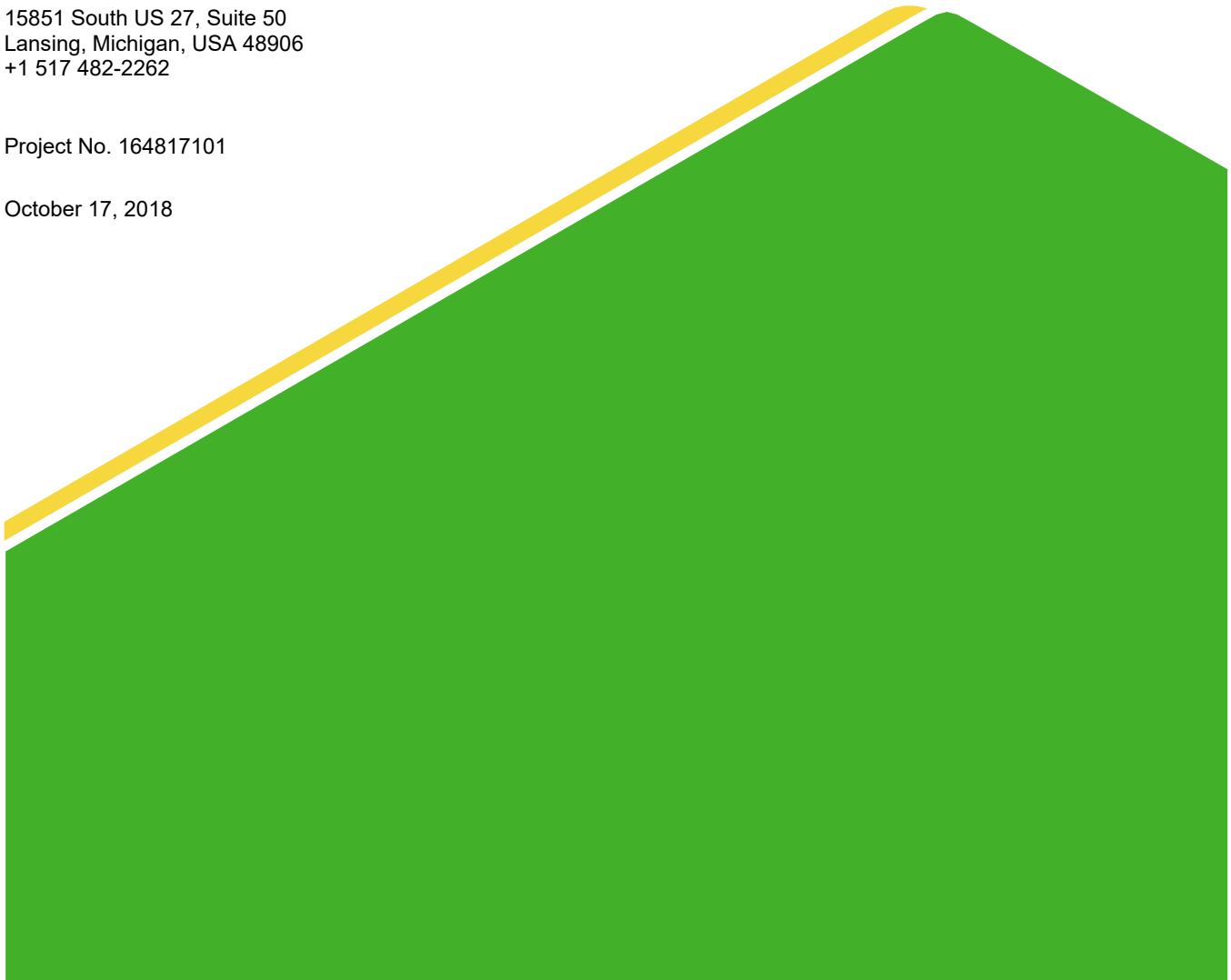
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October 17, 2018

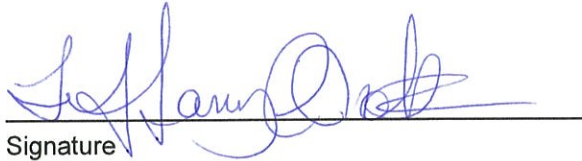


CERTIFICATION

Professional Engineer Certification Statement [40 CFR §257.60-64(b)]

I hereby certify that, having reviewed the attached documentation and being familiar with the provisions of Title 40 of the Code of Federal Regulations, Section 257.64 (40 CFR §257.64), I attest that this RMSGS Landfill Location Restrictions Certification Report is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of 40 CFR §257.64.

Golder Associates Inc.


Signature



10/17/18
Date of Report Certification

Tiffany D. Johnson, P.E.
Name

PE11500730
Indiana Professional Engineer Certification Number

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1.0 INTRODUCTION

1.1 Background

40 Code of Federal Regulations (CFR) Parts 257 and 261, “Hazardous and Soil Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule” (CCR Final Rule), as amended, and corresponding regulations under 329 Indiana Administrative Code (IAC) 10-9-1 place requirements on the location of CCR management units. Golder Associates Inc. (Golder) on behalf of Northern Indiana Public Service Company (NIPSCO) evaluated the location criteria and prepared this Location Restrictions Certification Report for the R. M. Schahfer (RMSGs) Landfill Phase V and Phase VI (RMSGs Landfill; together, the CCR Unit) located in Wheatfield, Indiana. RMSGs occupies an area of approximately four-square miles located at 2723 E 1500 N Road, Wheatfield, Jasper County, Indiana (Latitude 41° 12' 36" and Longitude 87° 01' 48", see Figure 1). Phase V is an approximately 18-acre cell that closed April 1, 2017. Phase VI is an approximately 15-acre cell located due north of Phase V, which began receiving CCR on August 1, 2016 (see Figure 2).

1.2 Purpose

The purpose of this Location Restrictions Certification Report is to provide demonstrations for the certification required by 40 CFR §257.64. Location Restrictions criteria for existing CCR landfills include:

- §257.64 Unstable areas

2.0 LOCATION RESTRICTIONS

The following sections outline NIPSCO’s (“owner”) requirements as presented in the 40 CFR §257 Subpart D, Location Restrictions regulations.

2.1 Unstable Areas [40 CFR §257.64]

Based on research conducted through the Indiana Geological Survey information website (<http://igs.indiana.edu/>), the USGS, and historical reports prepared by Golder and others for the RMSGs site, the following unstable areas information was identified.

2.1.1 Petroleum Fields/Wells

There is a 400 feet deep petroleum well identified 0.5 miles north and west of the Site.

2.1.2 Sand and Gravel Pit

The closest identified pit is located approximately two miles east of the Site.

2.1.3 Active Mineral

There are no active industrial minerals sites identified within three miles of the Site.

2.1.4 Karst

There are no karst terrain locations mapped near the Site.

2.1.5 Liquefaction Potential

NIPSCO subcontracted an Indiana-licensed engineer to design and oversee construction of the Landfill CCR Unit in accordance with IDEM Solid Waste Management Division regulations 329 Indiana Administrative Code (IAC) 10, following which an operating permit would be issued by IDEM. The Indiana Solid Waste Management

regulations are as stringent as the CCR Final Rule requirements. Therefore, foundation soils for the RMSGS Landfill are not likely susceptible to seismically induced liquefaction.

2.1.6 Surface Mine

There are no surface coal mines identified near the Site.

2.1.7 Underground Mine

There are no underground coal mines identified near the Site.

2.1.8 Steep Slope

Per the IDEM-approved permit application prepared by NIPSCO's third-party engineer, the slopes of the landfill are not anticipated to have slope stability issues.

2.1.9 Abandoned Quarries

There are no abandoned quarries identified near the Site.

2.1.10 Differential Settlement

Per the Indiana Solid Waste Management Division requirements for landfill design (329 IAC 10-15-08), NIPSCO's third-party engineer had to assess the potential for differential settlement in the design of the Landfill CCR Unit. Based on this requirement, differential settlement is not expected in the foundation soils for the RMSGS Landfill CCR Unit and thus it meets the stability requirements under 40 CFR §257.64.

3.0 CONCLUSION AND SUMMARY

This report has been prepared in general accordance with normally accepted civil engineering practices to fulfill the reporting requirements of 40 CFR §257.64. Based on the review of the available information provided by NIPSCO, including IDEM Type I, Restricted Waste Landfill (RWS I) Operating Permit 37-01 issued January 1984, the Schahfer Landfill Phase V and VI meets the requirements of 40 CFR §257.64.

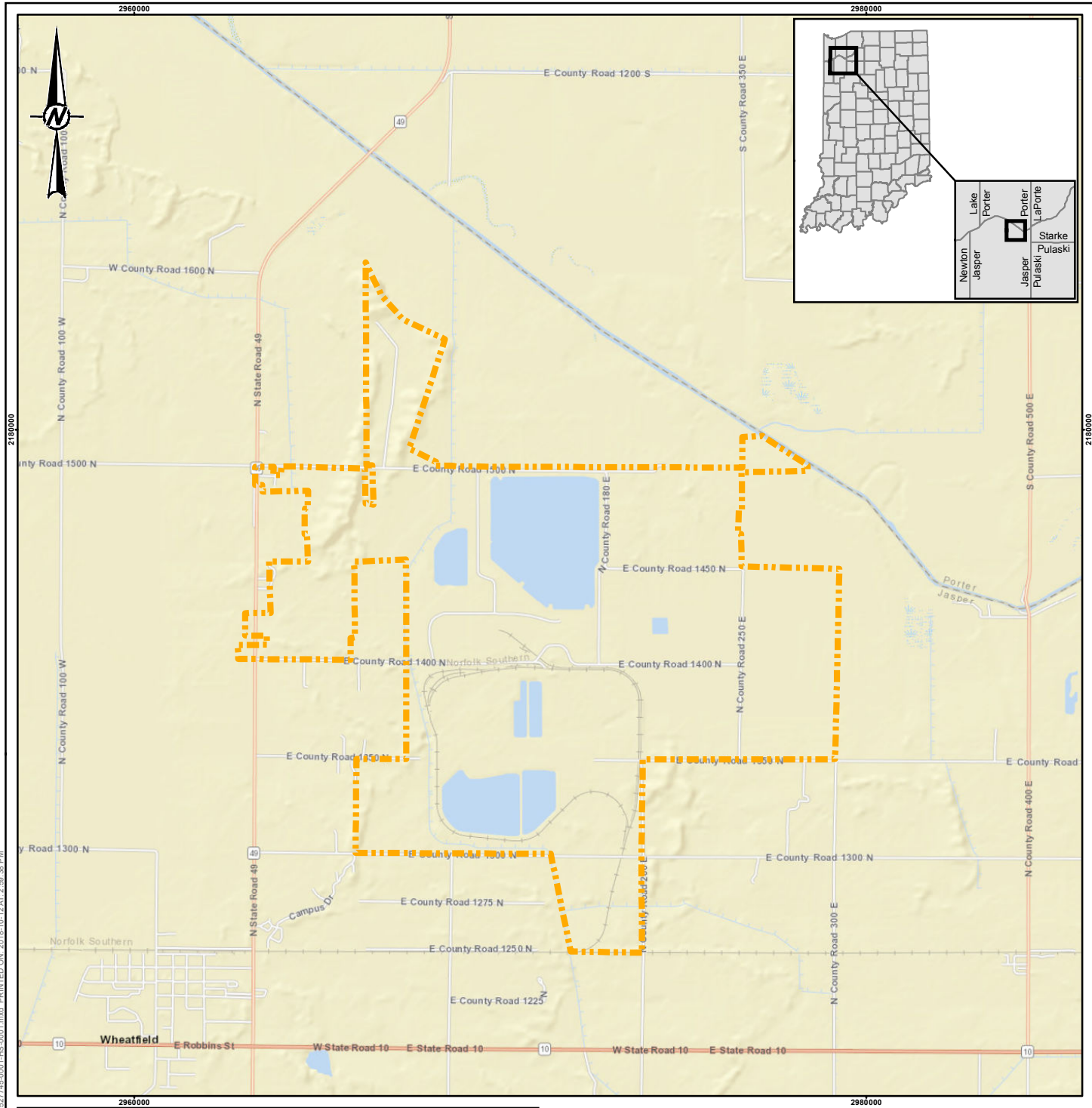
4.0 REFERENCES

Gray, W. E., Steinmetz, J. C. 2012, Map showing known faults and historic earthquake epicenters having magnitude 3.0 and larger in Indiana: Indiana Geological Survey Miscellaneous Map 85.

Indiana Geological website, <http://maps.indiana.edu/LayerGallery.html>, September 2018.

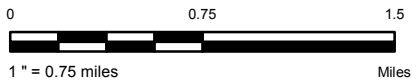
Indiana Solid Waste Management Rules, 329 Indiana Administrative Code 10

United States Geological Survey, U.S. Seismic Design Maps. Retrieved September 2018, from <https://earthquake.usgs.gov/designmaps/beta/us/>.



LEGEND

Approximate Property Line



NOTE(S)

REFERENCE(S)

SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

CLIENT

NORTHERN INDIANA PUBLIC SERVICE COMPANY

PROJECT

NORTHERN INDIANA PUBLIC SERVICE COMPANY
R.M. SCHAHFER GENERATING STATION
WHEATFIELD, INDIANA

TITLE

SITE LOCATION MAP

CONSULTANT



YYYY-MM-DD	10/12/2018
DESIGNED	DFS
PREPARED	SHL
REVIEWED	JSP
APPROVED	MAH

PROJECT NO.
164817101

CONTROL
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FIGURE
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