January 15, 2025

Activity Specific Soil Management Plan for Exploratory Borings Empire Generating South 40 Site City of Rensselaer Rensselaer County, New York BCP Site No. C442035

Prepared for:

EMPIRE GENERATING CO, LLC
75 Riverside Avenue
Rensselaer, New York 12144

Prepared by:

C.T. MALE ASSOCIATES
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Latham, New York 12110
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C.T. Male Associates Project No: 24.4190

ACTIVITY SPECIFIC SMP – SOIL BORINGS
EMPIRE GENERATING SOUTH 40 SITE
CITY OF RENSSELAER, RENSSELAER COUNTY, NY

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ACTIVITY SPECIFIC SMP
EMPIRE GENERATING SOUTH 40 SITE
CITY OF RENSSELAER, RENSSELAER COUNTY, NY

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ATTACHMENTS

1.0 INTRODUCTION AND PURPOSE

1.0 Introduction

This document constitutes the activity specific Soil Management Plan (SMP) for an environmental boring investigation planned to be completed at the Empire Generating Site "the Site" also known as the BASF Corporation "South 40" Site (BCP Site No. C442035) located at 36 Riverside Avenue in the City of Rensselaer, Rensselaer County, New York. The current street address for the site is known as 75 Riverside Avenue. A Site Location Map is included as Figure 1. This SMP supplements the February 2008 Site Management Plan prepared by Earth Tech Northeast, Inc. and the September 2007 revised January 2008 Soil Management Plan prepared by LG Constructors, Inc. for the Site.

The scope of the geotechnical boring investigation includes advancement of a total of six (6) borings up to 15 feet below ground surface to evaluate the type of materials that may be encountered and displaced when installing the foundations for the Transformer Storage Building. Soil samples will be collected for laboratory analysis to assist in determining proper handling of existing soils if displaced by building foundation installation. The approximate locations of the planned borings are shown on Figure 2.

This SMP has been developed by C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C (C.T. Male) as the Consulting Engineer for Empire Generating Co, LLC (Empire Generating). Core Down Drilling, LLC (CDD) is the geotechnical/environmental drilling company working as a subcontractor to C.T. Male.

The following sections describe the logistics of the geotechnical boring investigation for the Site. This SMP may be amended as field conditions warrant during implementation of the work. The NYSDEC project manager will be notified of any changes and/or additions to this SMP.

2.0 SOIL HANDLING PROCEDURES

2.1 Supervision

C.T. Male will be on site full time during the environmental boring investigation and will be responsible for implementation of this SMP.

2.2 Utility Clearance and Identification

At least 48 hours prior, but not more than 10 days, to commencement of the geotechnical boring investigation, CDD will contact Dig Safely New York to identify and mark out in the field the location of any participating public underground utilities in the area, and will not proceed until there is 100% response from Dig Safely New York utility providers. C.T. Male will coordinate with Empire Generating to place boring locations safely away from any above ground or below ground public utilities as well as any private utilities owned by Empire Generating.

2.3 Personnel Training

Personnel that will be working on the Site and have the potential to come into contact with contaminated soils shall have successfully completed OSHA 40-hour HAZWOPER training and an annual 8-hour refresher course, as applicable. Personnel that will be working on site must also have had a physical as part of an employer sponsored medical surveillance program within one (1) year prior to the start of the work and be medically cleared to wear a respirator.

2.4 Equipment and Limits of Disturbance

A Geoprobe® 7822 DT drill rig will be used to advance the geotechnical borings. As described in Section 1.0, a total of six (6) borings are proposed for this investigation. There are no groundwater monitoring wells to be installed. The limits of disturbance at each of the boring locations will be an approximately 8" diameter hole where the augers are advanced into the ground surface. As shown on Figure 2, none of the borings are anticipated to fall within the limits of the restricted material area where a fabric demarcation layer and soil cover system are in place. Figure 3 shows the entire limit of the restricted material soil cover limits upon which the site's Site Management Plan

applies. Due to the nature of the proposed work, the only portion of the equipment that will come into contact with the potentially contaminated site soils beneath the cover system are the augers, drill rods and split-spoon sampler.

2.5 Soil Handling

Soil handling will be limited to those soils brought to the surface from advancing the augers. Excess soil cuttings that accumulate around the augers will be transferred into a 55-gallon DOT drum.

The split-spoon sampler used to collect samples for geotechnical evaluation and soil classification will be handed while wearing disposable nitrile gloves, or equivalent. The split spoon sampler will be opened on the tailgate of a truck covered in a sheet of poly and a representative sample of the soil will be placed into a glass jar and sealed. Excess soil will be placed into the 55-gallon drum.

During the advancement of the borings, C.T. Male and CDD personnel will observe the soils for obvious visual or olfactory evidence of petroleum contamination. C.T. Male will also be equipped with a photoionization detector meter (PID) to screen soils for the presence of detectable volatile organic compounds (VOCs). The PID will be calibrated daily prior to use.

Upon completion of each boring, if no signs of petroleum contamination are observed, the soils may be placed back into the open borehole up to, but not above, the elevation of the fabric demarcation layer of the soil cover system. Any excess soil cuttings not able to be placed below the level of the demarcation layer, or soils that exhibit petroleum odors, staining or elevated PID meter readings will remain in the 55-gallon drum. Sampling and disposal off site of any excess soils is described in Section 5.0.

3.0 COMMUNITY AIR MONITORING

3.1 Particulate Air Monitoring

Two (2) real-time particulate monitors capable of continuously measuring concentrations of particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) will be utilized. The instruments will be placed inside environmental enclosures at temporary monitoring stations based on the prevailing wind direction each work day, one (1) upwind and one (1) downwind of the designated work areas where the ground disturbance is occurring.

Each particulate monitor will be equipped with a telemetry unit capable of transmitting real-time particulate data to the designated field representative. The particulate monitoring instruments will be capable of displaying and transmitting the short term exposure limit (STEL) or 15 minute averaging period, which will be compared to the NYSDOH Generic Community Air Monitoring Plan action levels for particulates, as listed below. Instrument alarms will be transmitted in real time to the field representative via email and/or text message, which is set up prior to commencement of work. The dust monitoring data will be stored in an on-line database and will be periodically downloaded and stored electronically.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques including, but not limited to, spraying down the area with clean water, must be employed. Work may continue with dust suppression techniques provided that the downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, the downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped, and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

In the event of poor weather such as heavy rain, particulate monitoring will not be performed for protection of instrumentation. These weather conditions would limit the effectiveness of the sensitive monitoring equipment and likely suppress particulate generation. Work activities will be halted if fugitive dust migration is visually observed for a sustained period during poor weather conditions.

3.2 Organic Vapor Monitoring

It is not proposed to formally monitor for organic vapors as part of the CAMP with dedicated monitoring stations as the contaminants of concern for the Site are metals including arsenic, chromium, lead and zinc (not volatile organic compounds) and therefore are not anticipated to be encountered during the drilling work. As part of the soil handing procedures as described in Section 2.5, C.T. Male will be screening soils from the borings and by extension, the immediate work area for VOCs. If elevated PID meter readings are recorded in the immediate work area, PID meter readings will be taken at the downwind perimeter of the work area (i.e., at the same location as the downwind particulate monitor) and documented in the daily field report. In the event elevated PID meter readings (i.e. above 5 parts per million above background concentrations) are documented at the downwind perimeter of the work area, work will be temporarily halted and additional engineering controls necessary to reduce airborne VOC concentrations will be determined and implemented prior to resuming work.

If elevated VOC readings are found in the downwind location, and additional engineering controls are implemented, then continuous VOC CAMP-based monitoring at the upwind and downwind locations will be performed to coincide with the particulate CAMP-based monitoring.

3.3 Notification of CAMP Action Level Exceedances

Notification of CAMP action level exceedances will be made to the NYSDEC and NYSDOH within 24 hours (i.e., by the end of the next business day). Any corrective measures taken must be provided to both the NYSDEC and NYSDOH within the same reporting timeframe.

4.0 EQUIPMENT DECONTAMINATION

Drilling equipment including augers, rods and split-spoon samplers as well as any hand tools or other equipment that will come into contact with potentially contaminated soils will be decontaminated prior to the start of work, between each boring, and at the completion of the work prior to leaving the site. The split-spoon sampler will be decontaminated between each sample interval. Decontamination will consist of brushing with potable water with alconox soap wash, or using a pressure washer. All decontamination water will be collected in 55-gallon drums. Sampling and disposal off site of the decontamination water is described in Section 5.0.

5.0 INVESTIGATION DERIVED WASTE

As described in Section 2.5, excess soil cuttings from advancement of the soil borings and decontamination water from decontaminating drilling and sampling equipment will be collected in separate 55-gallon drums. Upon completion of the work, samples of the soil and decontamination water will be collected for waste characterization purposes. The exact parameters to be analyzed for will be dependent upon the anticipated disposal facility and their requirements, but at a minimum will include the Site's contaminants of concern, this being arsenic, chromium, lead and zinc.

Representative sample(s) of each material will be collected wearing new disposable nitrile gloves and transferred directly into laboratory supplied containers. Samples will be placed in a cooler with bagged ice and delivered to the analytical laboratory following proper chain of custody procedures.

Disposable items such as nitrile gloves, plastic, etc. will be disposed of off-site as solid waste.

6.0 SITE RESTORATION

Upon completion of the soil borings, soil cuttings not exhibiting subjective evidence of petroleum impacts or elevated PID meter readings may be placed back into the boreholes. The remaining portion of, or the entire borehole depending on soil conditions encountered will be grouted with a cement/bentonite grout mixture that complies with NYSDEC's CP-43 Groundwater Monitoring Well Decommissioning Policy, and will be topped off as necessary if any settling occurs. The ground surface above the demarcation layer will be repaired to match the existing surface conditions.

Drums of soil cuttings and decontamination water generated during the project will be temporarily stored on site and surrounded with caution tape in an area designated by Empire where they will remain, pending off-site disposal as discussed in Section 5.0.

7.0 SCHEDULE

Empire Generating, C.T. Male and CDD are prepared to initiate this Environmental Investigation immediately upon approval from NYSDEC of this SMP. It is anticipated that the borings will take one (1) day to complete. Analytical samples of investigation derived wastes will be collected upon completion of the work and results will be available within approximately two (2) weeks following collection. Once analytical results have been received, waste profiles will be generated and the drums disposed off-site in a timely manner.

8.0 HEALTH AND SAFETY PLANS

8.1 C.T. Male HASP

C.T. Male's Site Specific Health and Safety Plan (HASP) is included in Attachment A.

8.2 Subcontractor HASP

CDD's Site Specific HASP is included in Attachment B.

9.0 REPORTING

9.1 General

Upon completion of the soil borings and result of analytical results, a summary letter or report will be prepared to document the soil boring activities, adherence or approved adjustments to this activity specific soil management plan, community air monitoring results, organic vapor field screening results of the recovered spilt-spoon samples, and as applicable, waste disposal paperwork.

9.2 CAMP Exceedances

By the end of the next business day of CAMP data collection, a summary of the results will be prepared and sent to NYSDEC and NYSDOH via email. This summary will include, if applicable, an explanation of action level exceedance(s) and implemented corrective action(s).

FIGURES

XREFS: NONE

PROJECT NUMBER: 19.9415

MATCH LINE "A" SHEET 3

MATCH LINE "A" SHEET 3

MATCH LINE SHEET 2

MATCH LINE SHEET 2

RIVERSIDE AVENUE

RIVERSIDE AVENUE

RIVERSIDE AVENUE

PERMENANT DRAINAGE EASEMENT CITY OF RENSSELAER SOUTH STREET ARTERIAL MAP NO. 76 PARCEL NO. 74 & 75

Lands Now or Formerly of
ALBANY PORT
DISTRICT COMMISSION
Tax Map No. 154.00-5-3.1
Book 462 Page 338
AREA= 449,264± SQ. FT. OR 10.3± ACERS

POWER LATOWKA AREA
ALBANY PORT DISTRICT COMMISSION TO
BESCORP-EMPIRE DEVELOPMENT COMPANY, LLC
BOOK 4223 PAGE 316
ASSIGNMENT OF LEASE BETWEEN BESCORP-EMPIRE
DEVELOPMENT COMPANY, LLC AND BESCORP-EMPIRE
POWER COMPANY, LLC
BOOK 4224 PAGE 1
SEE CTM DRAWING 10-659 SHEET 1 OF 1

UNPLOTTABLE 25' WIDE PERMANENT EASEMENT GRANTED TO GENERAL ANILINE & FILM CORPORATION ALONG NORTH SIDE OF RIVERSIDE AVENUE EXTENDED TO HUDSON RIVER PER BOOK 1087 PAGE 204.

UTILITY EASEMENT AS DESCRIBED IN BOOK 1655 PAGE 117

EASEMENT FOR RAIL SIDING AS DESCRIBED IN LEASE TO ASHLAND CHEMICAL COMPANY

TRANSMISSION LINE EASEMENT

ACCESS ROAD

ELECTRICAL EASEMENT
ALBANY PORT DISTRICT COMMISSION
TO NIAGARA MOHAWK POWER
CORPORATION
BOOK 4221 PAGE 344

TEMPORARY ELECTRICAL EASEMENT
CITY OF RENSSELAER TO
BESCORP-EMPIRE POWER
DEVELOPMENT COMPANY, LLC
BOOK 3337 PAGE 182
SCHEDULE B ITEM 14

BENCHMARK RAIL ROAD SPIKE IN UTILITY POLE
ELEVATION=16.06'

Lands Now or Formerly of
ALBANY PORT
DISTRICT COMMISSION
Tax Map No. 154.00-5-3.1

CITY OF RENSSELAER FOR THE RELOCATION OF 6TH AVE. AS DESCRIBED IN BOOK 483 PAGE 184

6TH CHAIN LINK FENCE

EASEMENT TO PENN CENTRAL TRANSPORTATION COMPANY BOOK 1257, PAGE 663

CITY OF RENSSELAER FOR THE RELOCATION OF 6TH AVE. AS DESCRIBED IN BOOK 483 PAGE 184

ELECTRICAL EASEMENT CITY RENSSELAER TO BESCORP-EMPIRE DEVELOPMENT COMPANY,LLC BOOK 3337 PAGE 182 SCHEDULE B ITEM 14 TO BESCORP-EMPIRE POWER COMPANY, LLC BOOK 4221 PAGE 329 SCHEDULE B ITEM 14 SEE CTM DRAWING 10-665 SHEET 1 OF 1

ELECTRICAL EASEMENT
BASF CORPORATION TO
BESCORP-EMPIRE POWER
COMPANY, LLC
BOOK 4221 PAGE 329
SCHEDULE B ITEM 19

EASEMENT
NIAGARA MOHAWK POWER
BOOK 1655 PAGE 319

EASEMENT BASF CORP. TO NIAGARA MOHAWK POWER BOOK 1655 PAGE 88

ELECTRIC EASEMENT
BASF CORPORATION TO
BESCORP-EMPIRE POWER COMPANY, LLC
BOOK 4221 PAGE 328
SCHEDULE B ITEM 19

Lands Now or Formerly of
BASF WYANDOTTE CORPORATION
Tax Map No. 154.00-5-2.11
Book 1300 Page 746
LOT 1 MAP REF. NO. 3

AREA=25.07 ACRES
TOTAL AREA LOT 1=33.88 ACRES

LOCKED YARD
30' ACCESS
2019.07.16

PORT ACCESS HIGHWAY

PERMENANT DRAINAGE EASEMENT
CITY OF RENSSELAER SOUTH
STREET ARTERIAL MAP NO. 75
PARCEL NO. 73

GAS LINE EASEMENT
BASF CORPORATION TO BESCORP-EMPIRE
DEVELOPMENT COMPANY,LLC
SCHEDULE B ITEM 15

Lands Now or Formerly of
POLSINELLO FUELS, INC.
Book 1260 Page 1017
Tax Map No. 154.00-5-7

Lands Now or Formerly of
BASF WYANDOTTE CORPORATION
Tax Map No. 154.00-5-2.11
Book 1300 Page 746

AREA = 8.81± ACERS

SUBJECT TO RAILROAD TRACK RIGHTS RESERVED IN
BOOK 449 PAGE 388 (SCHEDULE B, ITEM 8)
BOOK 963 PAGE 211 (SCHEDULE B, ITEM 7)
BOOK 1300 PAGE 746 (SCHEDULE B, ITEMS 7 AND 9)

Lands Now or Formerly of
CSX RAIL CORPORATION
Tax Map No. 143.44-1-2

EASEMENT AS DESCRIBED IN BOOK 1655 PAGE 92

20' WIDE SANITARY SEWER EASEMENT

H.O. ANDERSON CORP. TRUCK BUILDING

RENSSELAER COUNTY LAND SITE

GREY WATER EASEMENT
ALBANY PORT DISTRICT COMMISSION TO
BESCORP-EMPIRE DEVELOPMENT COMPANY, LLC
BOOK 4224 PAGE 8
PARCEL 31
SCHEDULE B, ITEM 81
SEE CTM DRAWING 10-662 SHEET 1 OF 1

30' EASEMENT FOR WATER, ELECTRIC AND GAS AS DESCRIBED IN BOOK 1655 PAGE 127

1410.81'

GREY WATER EASEMENT
ALBANY PORT DISTRICT COMMISSION TO
BESCORP-EMPIRE DEVELOPMENT COMPANY, LLC
BOOK 4224 PAGE 8
(PARCEL 2)
SCHEDULE B, ITEM 81
SEE CTM DRAWING 10-662 SHEET 1 OF 1

Parcel Leased To
NORTH AMERICAN
RECYCLING CORPORATION

WATER LINE EASEMENT
EMPIRE GENERATING CO LLC
TO CITY OF RENSSELAER
BOOK 1173 PAGE 278
SCHEDULE B ITEM 31
SEE CTM DRAWING 19-270

30' EASEMENT FOR
STORM LINE TO BASF
BOOK 1655 PAGE 114

20' EASEMENT FOR
STORM LINE TO BASF
BOOK 1655 PAGE 85

GREY WATER EASEMENT
EASEMENT CITY RENSSELAER TO
BESCORP-EMPIRE DEVELOPMENT COMPANY,LLC
BOOK 3337 PAGE 334
SCHEDULE B ITEM 14
SEE CTM DRAWING 10-664 SHEET 1 OF 1

BENCHMARK TOP NUT
ON HYDRANT
ELEVATION=18.21'

WATER EASEMENT
BASF CORPORATION TO
BESCORP-EMPIRE POWER COMPANY, LLC
BOOK 4222 PAGE 14

GAP TO RENSSELAER COUNTY
SEWER DISTRICT 8/28/77

WATER EASEMENT
BASF CORPORATION TO
BESCORP-EMPIRE POWER COMPANY, LLC
BOOK 4222 PAGE 14
AREA=2.598± ACRES

APPROXIMATE LOCATION OF WATER LINE
AS PER CLOUGH HARBOR ASSOCIATES.
SEE MAP REFERENCE NO. 2B
(NOT PLACED IN PROPOSED EASEMENT)

Lands Now or Formerly of
BASF WYANDOTTE CORPORATION
Book 1300 Page 746
Tax Map No. 154.00-5-2.13
LOT 3 MAP REF. NO. 3

BENCHMARK CHISELED "X"
ON RIM OF MANHOLE
ELEVATION=16.00'

POINT OF BEGINNING
STA. 4+86.94

Lands Now or Formerly of
ALBANY PORT
DISTRICT COMMISSION
Tax Map No. 154.00-5-3.1
(0.32 acre parcel reserved in Book 963
Page 211 containing equipment building)

EASEMENT TO GENERAL SEWER DISTRICT
OF TOWN OF EAST GREENBUSH
2/23/78 MAP 1 PARCEL 2

EASEMENT NIAGARA MOHAWK POWER CORPORATION
BOOK 1434 PAGE 304
SCHEDULE B, ITEM 84

GREY WATER EASEMENT
BASF CORPORATION TO
BESCORP-EMPIRE POWER COMPANY, LLC
BOOK 4222 PAGE 14
SEE CTM DRAWING 10-660 SHEET 1 OF 1

APPROX. LOCATION OF WATER LINE
FROM RECORD PLANS 20' EASEMENT

Lands Now or Formerly of
BASF WYANDOTTE, CORP.
Book 1300 Page 746
Tax Map No. 154.00-5-2.12
LOT 2 MAP REF. NO. 3

SEWER EASEMENT CITY OF
RENSSELAER 1/15/79

SEWER EASEMENT TO CITY OF RENSSELAER
RESERVED IN BOOK 916 PAGE 211

15" SEWER (SEE DEED FROM
ALBANY PORT DISTRICT
COMMISSION 8/8/54)

APPROXIMATE LOCATION OF WATER LINE
FROM RECORD PLANS 20' EASEMENT

SEWER EASEMENT CITY OF
RENSSELAER BOOK 545 PAGE 448
SCHEDULE B, ITEM 72

POND

GRAVEL

TURBINE BUILDING

COOLING BUILDING

WATER TREATMENT BUILDING

TANK HEIGHT=69.16

TANK HEIGHT=68.48

TANK HEIGHT=70.46

TANK HEIGHT=52.15

TANK HEIGHT=54.50

TANK HEIGHT=62.80

TANK HEIGHT=62.74

TANK HEIGHT=69.16

TANK HEIGHT=54.92

TANK HEIGHT=77.40

BUILDING HT=110.15

BUILDING HT=110.38

BUILDING HT=118.11

BUILDING HT=118.27

BUILDING HT=118.44

BUILDING HT=54.86

BUILDING HT=55.10

BUILDING HT=37.04

BUILDING HT=37.12

BUILDING HT=55.00

BUILDING HT=76.75

BUILDING HT=76.90

BUILDING HT=73.23

BUILDING HT=77.40

BUILDING HT=46.21

BUILDING HT=46.43

BUILDING HT=46.78

BUILDING HT=39.75

BUILDING HT=35.70

STEEL FRAME STRUCTURE PARTIALLY ENCLOSED

STACK PIPE (HEIGHT=271.29

OVERHEAD UTILITY RACK

VERTICAL PIPES

PIPE RACK

STEEL FRAME STRUCTURE ON CONCRETE PAD PARTIALLY ENCLOSED

STACK PIPE HEIGHT=271.34

COVERED CONCRETE WALK

METAL STAIRS AND METAL LANDING

METAL STEPS & METAL LANDING

METAL STEPS

METAL WALL

METAL COVER FOR PUMP

BLACKTOP

CONCRETE CURB

CONCRETE PAD W/ 15" HIGH CONCRETE WALLS

CONCRETE PAD W/ VENT STACK

CONCRETE PAD W/ (2) DIESEL FUEL TANK

CONCRETE PAD W/ TANKS

CONCRETE PAD W/ TRANSFORMER

CONCRETE PAD W/ CONTROL PANEL

CONCRETE PAD W/ BUILDING SHELL

CONCRETE PAD W/ TRANSFORMER AND CURBING

CONCRETE PAD W/ PIPES

CONCRETE PAD W/ DISCHARGE FLOW METER

CONCRETE PAD W/ TANK

CONCRETE PAD W/ BUILDING

CONCRETE PAD W/ SHED

CONCRETE PAD W/ CONCRETE BAY

CONCRETE PAD W/ RAISED STRUCTURE

CONCRETE PAD W/ METAL STAIRS

CONCRETE PAD W/ METAL STEPS

CONCRETE PAD W/ RAISED STRUCTURE

CONCRETE PAD W/ BUILDING

CONCRETE PAD W/ TANKS

CONCRETE PAD W/ METAL LANDING

CONCRETE PAD W/ CONCRETE BAY

CONCRETE PAD W/ BUILDING

CONCRETE PAD W/ SHED

CONCRETE PAD W/ TANK

CONCRETE PAD W/ PIPES

CONCRETE PAD W/ TANK

CONCRETE PAD W/ TANK

CONCRETE PAD W/ TANK

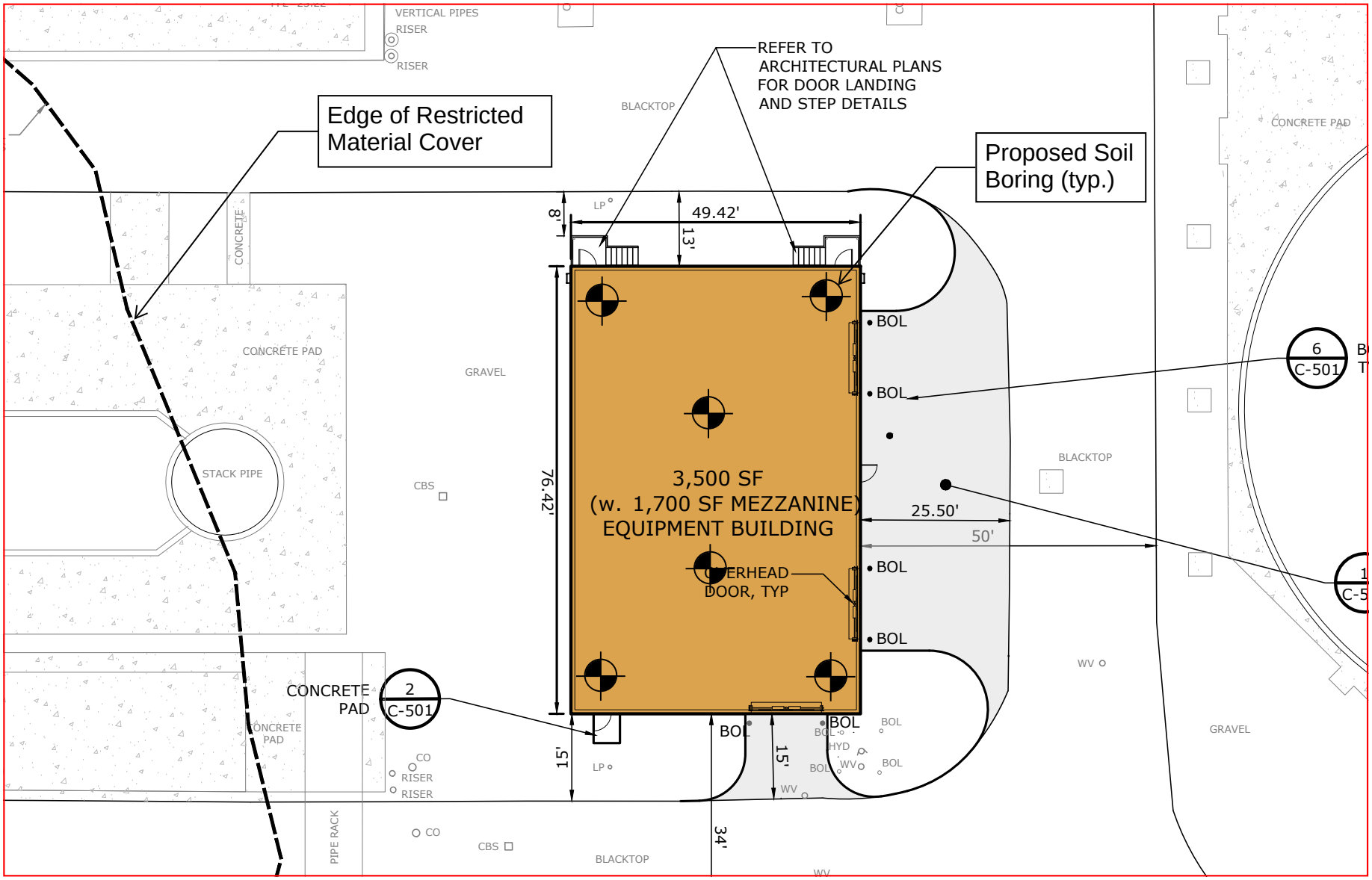


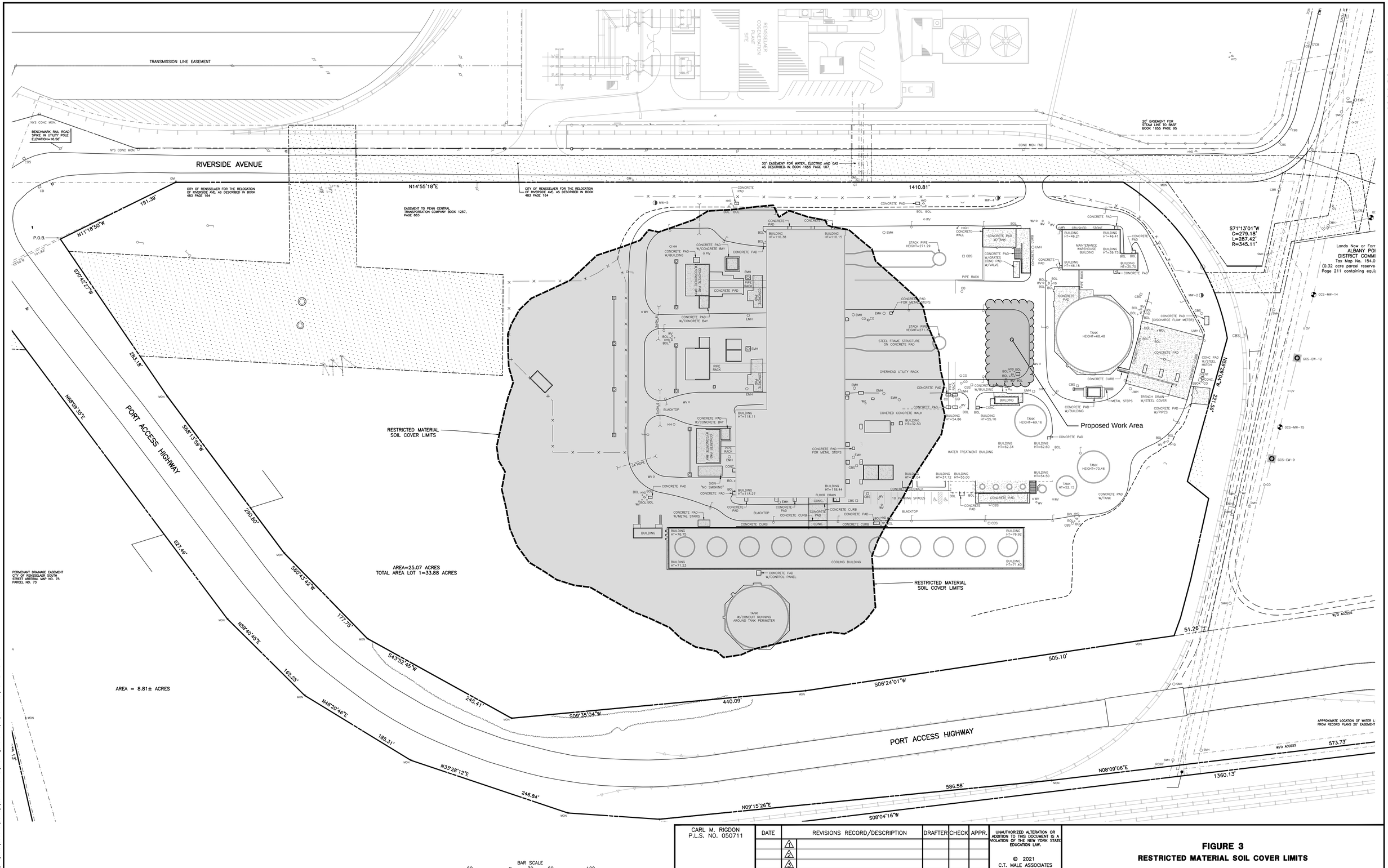
FIGURE 2
WORK AREA MAP

Map Reference
1.) This map was prepared by C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
2.) The locations and features depicted on this map are approximate and do not represent an actual field survey.
4.) Not to scale.

XREFS: NONE

PROJECT NUMBER: 21.1474

CAD DWG. FILE NAME: K:\Projects\006678\Survey\2019 UPDATE\Drawings and Maps\Main Site\FIGURE 3.DWG



"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY".

CARL M. RIGDON
P.L.S. NO. 050711

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			

APPROVED: _____
DRAFTED : KEC
CHECKED : CMR
PROJ. NO: 21.1474
SCALE : 1"=60'
DATE : OCT. 5, 2021

FIGURE 3
RESTRICTED MATERIAL SOIL COVER LIMITS

CITY OF RENSSELAER — RENSSELAER COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
COBLESKILL, NY · GLENS FALLS, NY · POUGHKEEPSIE, NY
JOHNSTOWN, NY · RED HOOK, NY · SYRACUSE, NY
www.ctmale.com

SHEET 1 OF 1
DWG. NO: 21–592

ATTACHMENT A

C.T. MALE'S HEALTH AND SAFETY PLAN

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 Century Hill Drive, Latham, NY 12110
518.786.7400 FAX 518.786.7299 www.ctmale.com

Site Specific Health & Safety (H&S) Plan (January 2025)
Empire Generating Co. LLC South 40 Site
75 Riverside Avenue
Rensselaer, New York
C.T. Male Project No.: 24.4190

Introduction

This site specific health & safety plan is prepared to provide health and safety related guidance to C.T. Male employees working at the Empire Generating Co. LLC South 40 Site located at 75 Riverside Avenue in Rensselaer, New York. The work to be completed involves environmental drilling for a new Transformer Storage Building being designed for the subject site. C.T. Male is providing observation of the drilling being completed by a subcontractor to C.T. Male. Observation of the drilling will include handling recovered soil samples for classification and field screening of representative soil for potential environmental impacts.

The subject site is occupied by a 635 MW combined cycle natural gas turbine power plant. This plant is constructed on a designated NYSDEC Brownfield Cleanup Program site, that was remediated as part of the plant's construction. The remediation included removal of buried drum carcasses, lab packs, and some impacted soil. A soil cover was installed to cover existing soils (i.e., restricted material) in a centralized portion of the overall site. The environmental drilling will be a ground intrusive activity that will not come into contact with restricted material which may not trigger the need for an activity specific soil management plan, but is still being prepared for presentation to NYSDEC.

Any C.T. Male employee working at the subject site must read and understand the content of this site specific health and safety plan and be given a safety briefing by Jeffrey A. Marx, PE, the overseeing and certifying Managing Environmental Engineer. C.T. Male employees are governed by the C.T. Male Corporate Health and Safety Manual; Employee Manual; and Standard Operating Procedures for field work in addition to this site specific health and safety plan. Contact information for key personnel and emergency services are listed below for reference and use.

Contact Name & Numbers

NYSDEC:

SPILL PROGRAM:	Christopher O'Neill	(518) 357-2394 (518) 376-7605 (Cell)

OWNER:

EMPIRE GENERATING CO. LLC :	Robert O'Connell	(518) 694-8205 (Office) (845) 616-1408 (Cell)

ENVIRONMENTAL ENGINEER:

CONSULTING ENGINEER:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12110	(518) 786-7400
	Jeffrey A. Marx, PE Health & Safety Officer (HSO) & Managing Environmental Engineer	(518) 786-7548 Cell Phone: (518) 461-2176

EMERGENCY PHONE NUMBERS:

PERSONAL INJURY OR EMERGENCY:	Albany Medical 43 New Scotland Avenue Albany, NY 12208	(518) 262-3131
FIRE DEPARTMENT:	Emergency Rensselaer Fire Department 959 Broadway Rensselaer, NY 12144	911 (518) 465-3243
POLICE:	Emergency Rensselaer Police Department 201 Broadway Rensselaer, NY 12144	911 (518) 462-7451
NYS POLICE	Emergency NYS Trooper G 760 Troy Schenectady Road Latham, NY 12110	911 (518) 783-3211
UPSTATE NEW YORK REGIONAL POISON CONTROL CENTER:	University Hospital Upstate Medical University SUNY Health Science Center 750 East Adams Street Syracuse, NY 13201	(800) 222-1222
NATIONAL RESPONSE	c/o United States Coast Guard (G-OPF)	(800) 424-8802

CENTER: 2100 2nd Street, Southwest - Room 2611
Washington, DC 20593-0001

NYSDEC SPILL HOTLINE: (800) 457-7362

Potential Site Contaminants

Potential site contaminants which may be encountered during the environmental drilling include chromium, lead, zinc an arsenic although the drilling locations are outside of the demarcated restricted material.

Hazard Assessment

For this project, C.T. Male will be providing services at the site in relation to C.T. Male project responsibilities as addressed by this site specific health and safety plan. The drilling company's work is governed by their own health and safety plan and on-site safety representative. C.T. Male will direct or assist the drilling company or other workers on site with health and safety issues. C.T. Male will notify the drilling company if there is a condition for which the C.T. Male employee would take steps to address health and safety as per this plan.

Subsurface Work

Soil handling will be related to completion of exploratory soil borings, as part of the environmental drilling program. The potential exposures to personnel during this work are dermal contact and vapor inhalation of the potential site contaminants. Level D protection should be sufficient to protect against dermal contact during handling of the subsurface soils. If organic vapors are present at the action levels described in the air monitoring section, based on organic vapor monitoring of the employee breathing zone during the work, it may be necessary to upgrade to Level C respiratory protection.

Air Monitoring

During the drilling observation work by C.T. Male employee(s), the ambient air in the C.T. Male employee work area will be monitored with a photoionization detector (PID) for total volatile organic compounds (MiniRAE 3000) prior to the start of work and continually throughout the workday. If a concentration of 10 ppm (sustained for 5 minutes) of total volatile compounds (VOC) is detected within the C.T. Male employee work area on the instrument, relative to an isobutylene standard (used to calibrate the instrument), the employee will leave the work area to an area at which the PID meter is reading less than 10 ppm.

The level of personal protective equipment (PPE) protection will be evaluated prior to continuing work in an area where sustained elevated readings are recorded. If a PPE upgrade to Level C is required, it will include: a half face air purifying respirator equipped with combination organic vapor and particulate cartridges for 10-15 ppm exposure levels, prior to continuing work. If a concentration greater than 15 ppm is encountered, the C.T. Male employee will remove themselves from the work are to a safe distance where the PID meter is reading less than 10 ppm. The C.T. Male employee will notify the contractor of the PID reading.

Table 1 summarizes the action levels relative to the required respiratory protection.

Table 1
C.T. Male Action Levels & Required Respiratory Protection

Action Level	Level of PPE	Type of Respiratory Protection
0-10 parts per million	Level D	No respiratory protection
10-15 parts per million	Level C	Negative pressure half-face respirator
15-50 parts per million	To be determined	Evaluate work procedures
Greater than 50	Leave work area	Evaluate work procedures

-Facial hair is not permitted while wearing respirators.
-Workers required to wear a respirator must have a minimum of OSHA 40 Hour training with current medical monitoring and fit test documentation.

Hazard Identification and Control

Table 2 presents generalized hazards potentially involved with the tasks to be completed on this project and identifies general procedures to follow to prevent or reduce accident, injury or illness. Any C.T. Male employee on-site who identifies a potential hazard must report the condition to the Project Manager or designee, and initiate control of the hazardous condition.

Table 2

Potential Hazard	Control
Vehicular Traffic	1. Wear Hi-Vis safety vest when vehicular hazards exist. 2. Use cones, flags, barricades, and caution tape to define work area. 3. Use vehicle to block work area. 4. Contact police for high traffic situations.
Slip, Trip, and Fall Protection	1. Assess work area to determine if there is a potential for falling, tripping, or slippery surfaces (water, mud, or condensation). Additional PPE can be utilized to reduce slip, trip, fall hazards.

Table 2	
Potential Hazard	**Control**
	2. Make sure work area is neat and tools are staged in one general area. 3. Wear steel-toe or composite boots with adequate tread and always watch where the individual is walking. Carry flashlight when walking in poorly lighted areas.
Inclement Weather	1. Stop working outdoors during electrical and thunderstorms, high winds, blizzard conditions and other extreme weather conditions such as extreme heat or cold temperatures. 2. If there is lighting or thunder, staff need to stop work for 30 minutes since last occurrence and take cover in a safe location. Not in a field or under a tree. 3. Take cover indoors or in vehicle. 4. Listen to local forecasts for warnings about specific weather hazards such as tornadoes, hurricanes, and flash floods.
Noise	1. Wear hearing protection when equipment such as a drill rig, excavator, jackhammer, or other heavy equipment is operating on-site. 2. Wear hearing protection whenever you need to raise your voice above normal conversational speech due to a loud noise source; this much noise indicates the need for protection. 3. Hearing protection is required when measured sound exceeds 85 decibels (dB) where employees stand or conduct work.
Physical Injury	1. Wear safety glasses, reflective Hi-vis safety vest and/or shirt always when on-site. Personnel to have hearing protection on them and in use when it is required. 2. Maintain visual contact with any equipment operators and wear hard hats and Hi-vis safety vest when heavy equipment is operating on-site. Be aware of other vehicle traffic while heavy machinery is operating onsite. 3. Avoid loose clothing, long hair, and jewelry when working around rotary equipment. 4. Keep hands and feet away from drilling augers, excavation equipment tracks/tires, and other onsite heavy equipment. 5. Test emergency shut-off switches on equipment prior to daily use. 6. Wear life preserver in boats. 7. Do not enter manholes or confined spaces. 8. Be aware of openings into manholes and keep area clear of trip hazards. 9. Be aware of outside terrain – steep slopes and slip, trip hazards while working. 10. Be aware of biological hazards onsite such as insects (bees, mosquitoes, and flies), ticks, spiders, and snakes. 11. Be aware of botanical hazards such as poison ivy, poison sumac, and giant hogweed. 12. Contractor should test emergency shut-off switches on drilling equipment regularly. This should be covered by the drilling contractor's HASP.
Back Injury	1. Use a mechanical lifting device or a lifting aid where appropriate. 2. Make sure the route is free of obstructions. 3. Bend at the knees and use leg muscles when lifting. 4. Use the buddy system if lifting heavy or awkward objects. 5. Do not twist or jerk your body when lifting.

Table 2	
Potential Hazard	**Control**
Heat Stress	1. Increase water and electrolytes intake while working. 2. Avoid excessive alcohol intake the night before working in heat stress situations. 3. Increase number of rest breaks as necessary, and rest in a shaded area. 4. Watch for signs and symptoms of heat exhaustion and fatigue. 5. Rest in cool, dry areas. 6. In the event of heat stress or heat stroke, bring the victim to a cool environment and call 911.
Cold Stress	1. Wear cotton, wool or synthetics (polypropylene) undergarments to absorb perspiration from the body. 2. Wear additional layers of light clothing as needed for warmth. The layering effect holds in air, trapping body heat, and some layers could be removed as the temperature rises during the day. 3. Pay close attention to body signals and feelings (hypothermia symptoms), especially to the extremities. Correct any problem indications by breaking from the work activity and moving to a rest area to warm up and add additional clothing. 4. Increase water intake while working. 5. Avoid excessive alcohol intake the night before working in cold conditions. 6. Increase the number of rest breaks as necessary, and rest in a warm area. 7. In the event of hypothermia, frost bite, bring the victim to a warm environment and call 911.
Fire Control	1. Smoke only in designated areas, or off-site. 2. Keep flammable liquids in closed containers. 3. Isolate flammable and combustible materials from ignition sources. 4. Keep fire extinguisher nearby and use only if deemed safe.
Media Sampling (water, soil, etc.)	1. Wear appropriate PPE to avoid skin, eye, and inhalation contact with contaminated media. 2. Stand upwind to minimize possible inhalation exposure, especially when opening monitoring wells or closed containers/vessels. 3. Conduct air monitoring, whenever necessary to determine level of respiratory protection. 4. If necessary, employ engineering controls to assist in controlling chemical vapors.
Cleaning Equipment	1. Wear appropriate PPE to avoid skin and eye contact with isopropyl alcohol, alconox, or other cleaning materials. 2. Stand upwind to minimize possible inhalation exposure. 3. Properly dispose of spent chemical cleaning solutions and rinse accordingly.
Deer Ticks	1. Wear light colored pants and long sleeve shirts; spray with tick repellent. 2. Perform personal body checks for the presence of ticks 3. Notify the Health and Safety Officer immediately if you have been bitten by a tick and contact your physician.

Table 2	
Potential Hazard	**Control**
Poison Ivy	1. Visual assess area for poison ivy. 2. Avoid contact. 3. Dress appropriately. Wear gloves, a cap, a long-sleeve shirt, and long pants. Wear boots or shoes. Do not wear sandals or open-toed shoes. 4. At the end of the workday, do not take a bath. Urushiol (chemical in ivy sap) can stay in the tub water and can cling to your body when you get out of the tub. Instead, take a shower. 5. Wash all your work clothes and gloves in hot water. Do not wash them with other clothes. 6. Wash off tools with an outdoor water hose.
Note: A first aid kit and fire extinguisher will be located in the C.T. Male company vehicle.	

Response actions to personal exposure from on-site contaminants include skin contact, eye contact, inhalation, ingestion, and puncture or laceration, as detailed below:

THE PROJECT EMERGENCY COORDINATOR IS:

Site Health and Safety Officer (HSO) Jeffrey A. Marx, PE

The following standard emergency procedures will be used by on-site personnel. The Project Manager and HSO shall be notified of any on-site emergencies and be responsible for assuring that the appropriate procedures are followed.

Personal Injury

Emergency first aid shall be administered on-site as deemed necessary and only by a trained individual, if available at the site. If a trained individual is not available on-site, decontaminate, if feasible, and transport individual to nearest medical facility (Albany Medical Hospital). The HSO will ensure the incident report is completed.

Personal Exposure

The recommended response to worker exposure from contaminants on-site includes the following:

SKIN CONTACT: Use generous amounts of soap and water. Wash/rinse affected area thoroughly, then provide appropriate medical attention, as necessary.

EYE CONTACT: Wash eyes thoroughly with potable water supply provided on site. Eyes should be rinsed for at least 15 minutes subsequent to chemical contamination. Provide medical attention, as necessary.

INHALATION:	Move worker to fresh air and outside of the work zone and/or, if necessary, decontaminate and transport to hospital (Albany Medical Center). If respirator use is implemented at the time of inhalation, worker must not remove respirator until completely away from the work zone.
INGESTION:	Decontaminate, if feasible, and transport to hospital (Albany Medical Center).
PUNCTURE WOUND OR LACERATION:	Provide first aid at the site and if wound needs medical attention, decontaminate, if feasible, and transport to hospital (Albany Medical Center).

If the affected worker is exposed to contaminants on-site and the injury or accident prevents decontamination of the individual, the emergency responders must be notified of this condition and the exposure must be kept to a minimum.

Potential or Actual Fire or Explosion

Immediately evacuate area in the event of potential or actual fire or explosion. Notify the local fire and police departments, and other appropriate emergency response groups, as listed above. Perform off-site decontamination and contain wastes for proper disposal. If a fire or explosion occurs, all on-site personnel must meet in the designated area of the site (established by the HSO or designee) for an accurate head count.

Spill Response

The HSO shall initiate a corrective action program in the event of an accidental release of a hazardous material, suspected hazardous material or petroleum. The HSO will notify the Site contact of a release of materials. C.T. Male will act as the Emergency Coordinator for the purposes of spill prevention; identifying releases; implementing clean up measures; and notification of appropriate personnel.

Personal Protection – Level of Protection

Based on evaluation of the potential hazards, the minimum level of protection to be worn by C.T. Male employees during implementation of the remedial investigation activities is defined as Level D protection and will be controlled by the HSO or designee.

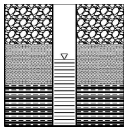
The minimum level D protective equipment will consist of field clothes, Hi-Vis vest or shirt, rubber gloves (nitrile and/or PVC), hard hats, safety glasses, ear plugs, and safety

boots (steel-toe required). As appropriate, this level of protection may be modified to include polylaminated Tyvek suits, coveralls, leg chaps, or face shield for additional protection.

If required, level C protective equipment will consist of the items listed for Level D protection with the added protection of half-face or full-face, negative pressure air purifying (organic vapor and particulate) respirator, chemical resistant clothing, inner and outer chemically resistant gloves (i.e. solvent resistant nitrile, PVC/nitrile), and chemical resistant safety boots/shoes.

ATTACHMENT B

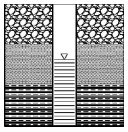
CORE DOWN DRILLING'S HEALTH AND SAFETY PLAN



CORE DOWN DRILLING, LLC
SITE SPECIFIC HEALTH & SAFETY PLAN

Empire Generating Facility
Rensselaer, New York

January 2025



Core Down Drilling, LLC

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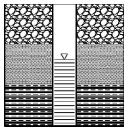
APPENDICIES

CORE DOWN DRILLING, LLC

Daniel Bellucci
President
Core Down Drilling, LLC

January 15, 2025
Date



1 Site Background

A Site Management Plan (SMP) has been prepared for Empire Generating Co, LLC (Empire) for the BASF Corporation (BASF) South 40 Parcel (Site), Rensselaer, New York. The Site is located in a heavy industrial zoned area of the City of Rensselaer. New York. The Site is located to the south of the BASF former Main Plant manufacturing facility property (Main Plant site). The South 40 parcel covers an area of approximately 35 acres. Engineering and Institutional controls are in place at the property. The primary purposes of these controls are (I) to limit exposure of people and the environment to subsurface contaminants remaining at the Site by ensuring the protection and maintenance of the soil cap which was constructed per the Remedial Action Work Plan (RA WP) for the Site; (2) minimize impacts of construction related activities; (3) to prevent or restrict activities in certain areas of the Site that may increase the risk of damage to the soil cap; and (4) to manage stormwater to prevent unacceptable impact to the soil cap and underlying groundwater.

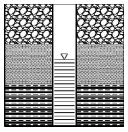
According to various sources, properties along Riverside Avenue in Rensselaer have been characterized by chemical industrial activity for over 100 years. The effect of regional industrial operations on soil and groundwater quality is well documented by regulatory agencies. In compliance with the Brownfield Site Cleanup Agreement, the remedy consisted of excavation of all identified anomaly areas and removal of buried drum carcasses encountered. Also, arsenic contaminated soils with concentrations greater than 500 ppm total arsenic were excavated and shipped off-site for disposal. The excavation areas were sampled on a grid pattern and backfilled with certified clean soil. The final portion of the remedy included installation of a demarcation layer over the entire approximate 8-acre area and covering the demarcation layer with one foot of clean backfill soil.

A principal objective of the SMP, as it pertains to the proposed geotechnical drilling scope presented below, is to describe the binding and enforceable engineering and institutional controls to be implemented that will facilitate future construction activities on the Site while at the same time maintaining the short-term and long-term effectiveness of the remedy established in the RAWP. The intent of this health and safety plan is to describe onsite procedures to be followed by CDD personnel to comply with provisions of the SMP. **Section 2.0** presents site specific procedures to be followed to ensure compliance with the SMP and the health and safety of onsite workers. **Sections 3.0** through **6.0** are more general in nature and reflect CDD's overall commitment to health and safety procedures in.

1.1 PROPOSED WORK SCOPE

Core Down Drilling, LLC (CDD) has been retained by CT Male Associates (CT Male) to advance six (6) environmental soil borings at the Site. The borings will be advanced using a Geoprobe® 7822 drill rig advancing 2 and 3-inch Macro core samplers at specified intervals (continuous 0 - 15-feet). The proposed boring termination depth is 45-feet bgs or equipment refusal, whichever encountered first.

As part of the RAWP, a soil cover (Soil Cap) was constructed over approximately 8 acres of the Site; the limits of the Soil Cap. This Soil Cap encompasses the contaminated soils area that contains levels of arsenic above 7.5 ppm. The Soil Cap consists of an orange demarcation layer that separates the contaminated soil from the clean soil cover. The Soil Cap provides protection from exposure for human health and the environment and will be maintained in accordance with the Soil Management Plan. The soil borings will be advanced outside the 8-acre portion of the property where the Soil Cap is in place. The follow



2 SITE SPECIFC WORK SCOPE AND DRILLING PROCEDURES

2.1 FIELD PERSONNEL TRAINING AND PPE

All onsite field workers will have OSHA 40-hour training. All workers will maintain Level C Personal Protective Equipment, including but not limited to, steel toe boots, approved hard hats, safety vests and safety glasses. Additional PPE, including half face respirators (particulate cartridges) may used during grout mixing or other potential dust generating activities. CAMP and VOC air monitoring will be conducted by the CT Male Field Engineer. CDD field personnel will adhere to any additional site-specific health & safety procedures outlined by CT Male.

2.2 SOIL CUTTINGS HANDLING

In accordance with the Soil Management Plan, all soil cuttings generated during the boring advancement (estimated 600-700 pounds) will be containerized in steel 55-gallon DOT drums with locking lids. CDD will provide Non-Hazardous waste labels, to filled out by the field engineer. CDD will stage drummed soil cuttings using a drum dolly in a designated area as specified by the field engineer, within a reasonably close distance from the boring locations.

2.3 TOOLING DECONTAMINATION

All down hole tooling, including auger flights, inner rods, and split spoons will be decontaminated between boring locations. In addition, split spoons will be decontaminated between sample intervals. Tooling decontamination will consist of brushing tooling with potable water and Alconox solution to remove loose soil/ debris. All decontamination water will be placed in 55-gallon DOT drums with locking lids. CDD will provide Non-Hazardous waste labels, to filled out by the field engineer. CDD will stage drummed decontamination water using a drum dolly in a designated area as specified by the field engineer, within a reasonably close distance from the boring locations.

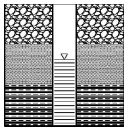
2.4 BOREHOLE ABANDONMENT

In accordance with the SMP, all soil borings will be tremie grouted from the bottom up after termination of the borings. A CP-43 grout mixture (generally 94 lbs Type I Portland to 7.8 gallons water to 3.9 pounds of powdered bentonite) will be prepared and pumped into the borehole from bottom out through a 1.25-inch diameter tremie pipe. The auger flights will be removed simultaneous to grout placement. If settling occurs, additional grout will be added to seal the boring as needed. The ground surface will repaired to match existing conditions (i.e. asphalt, concrete or soil), or as specified by the field engineer.

Grouting equipment, including the tremie pipe and pump must be cleaned between boring locations. Potable water will be used to remove wet grout from tooling, and will be discharged on the ground surface.

2.5 SITE DEMOBILIZATION

All down hole tooling will be decontamination prior to demobilization from the site. The drill rig tracks and support truck tires will be cleaned onsite if loose soil is observed. No site restoration is proposed. All disposable PPE (i.e. nitrile gloves) will be disposed in trash bags or onsite waste containers.



3 FIRST-AID PROCEDURES

Emergency Phone Numbers

Safety Coordinator: Daniel Bellucci
First Aid Response: 911
Ambulance: 911
Nearest Hospital: (518) 471-3111
600 Northern Blvd, Albany, NY

Poison Control: (800) 222-1222
Fire Department: 911
Police: 911

3.1 MINOR FIRST-AID TREATMENT

First-aid kits are kept in each truck. If you sustain an injury or are involved in an accident requiring minor first-aid treatment:

- Administer first-aid treatment to the injury or wound.
- If a first-aid kit is used, indicate usage on the accident investigation report.
- Access to a first-aid kit is not intended to be a substitute for medical attention.
- Provide details for the completion of the accident investigation report.
- Inform your supervisor

3.2 NONEMERGENCY MEDICAL TREATMENT

For nonemergency work-related injuries requiring professional medical assistance, management must first authorize treatment. If you sustain an injury requiring treatment other than first aid:

- Inform your supervisor.
- Proceed to the posted medical facility. Your supervisor will assist with transportation, if necessary.
- Provide details for the completion of the accident investigation report.

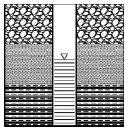
3.3 EMERGENCY MEDICAL TREATMENT

If you sustain a severe injury requiring emergency treatment:

- Call for help and seek assistance from a co-worker.
- Use the emergency telephone numbers and instructions posted on the first-aid kit to request assistance and transportation to the local hospital emergency room.
- Provide details for the completion of the accident investigation report.

3.4 FIRST-AID INSTRUCTIONS

In all cases requiring emergency medical treatment, immediately call or have a co-worker call to request emergency medical assistance. Use required bloodborne pathogen procedures while administering first aid.



Wounds:

Minor: *Cuts, lacerations, abrasions or punctures*

- Wash the wound using soap and water; rinse it well.
- Cover the wound using a clean dressing.

Major: *Large, deep and bleeding wounds*

- Stop the bleeding by pressing directly on the wound, using a bandage or cloth.
- Keep pressure on the wound until medical help arrives.

Broken Bones:

- Do not move the victim unless it is absolutely necessary.
- If the victim must be moved, "splint" the injured area. Use a board, cardboard or rolled newspaper as a splint.

Burns:

Thermal (Heat)

- Rinse the burned area without scrubbing it, and immerse it in cold water. *Do not use ice water.*
- Blot dry the area and cover it using sterile gauze or a clean cloth.

Chemical

- Immediately flush the exposed area with cool water for 15 to 20 minutes.

Eye Injury:

Small particles

- Do not rub your eyes.
- Use the corner of a soft clean cloth to draw particles out, or hold the eyelids open and flush the eyes continuously with water.

Large or stuck particles

- If a particle is stuck in the eye, do not attempt to remove it.
- Cover both eyes with a bandage.

Chemical

- Immediately irrigate the eyes and under the eyelids with water for 30 minutes.

Neck or Spine Injury:

- If the victim appears to have injured his or her neck or spine, or is unable to move his or her arm or leg, do not attempt to move the victim unless it is absolutely necessary.

Heat Exhaustion:

- Loosen the victim's tight clothing.
- Give the victim *sips* of cool water.
- Make the victim lie down in a cooler place with the feet raised.

4 ACCIDENT INVESTIGATION

4.1 ACCIDENT INVESTIGATION PROCEDURES

An accident investigation will be performed by the supervisor at the location where the accident occurred. The safety coordinator is responsible for seeing that the accident investigation reports are being filled out completely and that the recommendations are being addressed. Supervisors will investigate all accidents, injuries and occupational diseases using the following investigation procedures:

- Implement temporary control measures to prevent any further injuries to employees.
- Review the equipment, operations and processes to gain an understanding of the accident situation.
- Identify and interview each witness and any other person who might provide clues to the accident's causes.
- Investigate causal conditions and unsafe acts; make conclusions based on existing facts.
- Complete the accident investigation report.
- Provide recommendations for corrective actions.
- Indicate the need for additional or remedial safety training.

Accident investigation reports must be submitted to the safety coordinator within 24 hours of the accident.

OSHA requires employers to report any/all of the following within 8 hours of the incident:

- Fatalities
- A single incident which requires hospitalization of 3 or more employees

OSHA CENTRAL TELEPHONE NUMBER: 1-800-321-6742

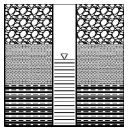
4.2 ACCIDENT INVESTIGATION REPORT

Report No.: _____

Company:

Address:

1. Name of injured:
2. Sex: ☐ M ☐ F Age: _____ Date of accident: _____
3. Time of accident: _____a.m. _____p.m. Day of accident: _____
4. Employee's job title: _____
5. Length of experience on job: _____years: _____months



6. Address of location where the accident occurred: _____
7. Nature of injury, injury type, and part of the body affected: _____
8. Describe the accident and how it occurred: _____
9. Cause of the accident: _____
10. Was personal protective equipment required? ☐yes ☐no
    Was it provided? ☐yes ☐no
    Was it being used? ☐yes ☐no
    If "no," explain: _____
    Was it being used as trained by supervisor or designated trainer? ☐yes ☐no
    If "no," explain: _____
11. Witness(es): _____
12. Was safety training provided to the injured? ☐yes ☐no
    If "no," explain: _____
13. Interim corrective actions taken to prevent recurrence: _____
14. Permanent corrective action recommended to prevent recurrence: _____
15. Date of report: _____ , _____ 20_____
    Prepared by: _____

    Supervisor **(Signature)**: _____ Date: _____
16. Status and follow-up action taken by safety coordinator: _____

    Safety Coordinator **(Signature)** _____ Date _____

4.3 INSTRUCTIONS FOR COMPLETING THE ACCIDENT INVESTIGATION REPORT

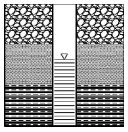
An accident investigation is not designed to find fault or place blame, but it is an analysis of the accident to determine causes that can be controlled or eliminated.

(Items 1-6) Identification:

(Item 7) **Nature of Injury:** Describe the injury, e.g., strain, sprain, cut, burn, fracture.
Injury Type: First aid—injury resulted in minor injury/treated on premises; Medical—injury treated off premises by physician; Lost time—injured missed more than one day of work; No Injury—no injury, near-miss type of incident.
Part of the Body: Part of the body directly affected, e.g., foot, arm, hand, head.

(Item 8) **Describe the accident**: Describe the accident, including exactly what happened, and where and how it happened. Describe the equipment or materials involved.

(Item 9) **Cause of the accident:** Describe all conditions or acts which contributed to the accident, e.g.—



a. unsafe conditions (spills, grease on the floor, poor housekeeping or other physical conditions).
b. unsafe acts (unsafe work practices such as failure to warn, failure to use required personal protective equipment).

(Item 10) **Personal protective equipment:** This section is self-explanatory.

(Item 11) **Witness(es):** List name(s), address(es), and phone number(s).

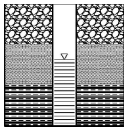
(Item 12) **Safety training provided:** Was any safety training provided to the injured relating to the work activity being performed?

(Item 13) **Interim corrective action:** Measures taken by supervisor to prevent recurrence of incident, e.g., barricading accident area, posting warning signs, shutting down operations.

(Item 14): This section is self-explanatory.

(Item 15): This section is self-explanatory.

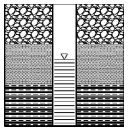
(Item 16) **Follow-up:** Once the investigation is complete, the safety coordinator shall review and follow up the investigation to ensure that corrective actions recommended by the safety committee and approved by the employer are taken and that control measures have been implemented.



5 RECORDKEEPING PROCEDURES

The safety coordinator will control and maintain all employee accident and injury records. Records are maintained for a minimum of five (5) years and include:

- Accident Investigation Reports, see Section 7, page 17
- Workers' Compensation First Report of Injury or Illness
- Log and Summary of Occupational Injuries and Illnesses as required by OSHA's Recordkeeping Regulation, 29 CRF 1904.2:
  - OSHA Form 300 (Rev. 1-2004): Log of Work Related Injuries and Illnesses. A blank copy of this form is included in **Appendix C**.
  - OSHA Form 300A (Rev. 1-2004): Summary of Work Related Injuries and Illnesses
  - OSHA Form 301: Injury and Illness Incident Report. A blank copy of this form is included in **Appendix C**.



6 SAFETY RULES, POLICIES AND PROCEDURES

The safety rules contained on these pages have been prepared to protect you in your daily work. Employees are to follow these rules, review them often and use good common sense in carrying out assigned duties.

These safety rules shall include both general workplace safety rules and job-specific safety rules.

General Rules:

All employees are to report to work each day well rested and prepared for the daily duties. Operation of heavy equipment including trucks, excavators and drill rigs should be conducted in a safe manner at all times. If for any reason and employee cannot complete their duties in a safe manner, the safety supervisor should be notified and the employee should not show up to work. All traffic and highway rules should be abided to at all times while operating company vehicles.

Job-Specific Rules:

- Inspect drill rig and tooling before use
- Evaluate weather conditions and dress appropriately
- Evaluate potential slip, trip and fall hazards
- Utilize road cones and/or appropriate signage to secure work location
- Minimum PPE includes safety toe or steel toe boots, safety glasses, reflective vests or clothing and hard hat.
- Engage truck emergency breaks and use wheel chocks during rig onloading and offloading
- Inspect site for subsurface utilities prior to commencing drilling activities
- Maintain a minimum of 2-feet of distance between the edge of the drilling string and the outer marking of any subsurface utility
- Discuss boring locations with onsite consultant and geophysical contractor prior to advancement of each soil boring
- Evaluate overhead wires prior to extending the rig mast
- Consider location of the closest hospital shall be made for each project
-

6.1 ALL EMPLOYEES

6.1.1 HOUSEKEEPING

1. Use caution signs/cones to barricade slippery areas.
2. Do not store or leave items on stairways.
3. Return tools to their storage places after using them.
4. Do not block or obstruct stairwells, exits or accesses to safety and emergency equipment such as fire extinguishers or fire alarms.
5. Do not place materials such as boxes or trash in walkways and passageways.
6. Do not use gasoline for cleaning purposes.
7. Mop up water around water fountains, drink machines and ice machines.

6.1.2 LIFTING PROCEDURES

General

1. Test the weight of the load before lifting by pushing the load along its resting surface.
2. If the load is too heavy or bulky, use lifting and carrying aids such as hand trucks, dollies, pallet jacks and carts, or get assistance from a co-worker.
3. Never lift anything if your hands are greasy or wet.
4. Wear protective gloves when lifting objects with sharp corners or jagged edges.

6.1.3 WHEN LIFTING—

1. Face the load.
2. Position your feet 6"-12" apart with one foot slightly in front of the other.
3. Bend at the knees, not at the back.
4. Keep your back straight.
5. Get a firm grip on the object using your hands and fingers. Use handles when they are present.
6. Hold the object as close to your body as possible.
7. Perform lifting movements smoothly and gradually; do not jerk the load.
8. If you must change direction while lifting or carrying the load, pivot your feet and turn your entire body. Do not twist at the waist.
9. Set down objects in the same manner as you picked them up, except in reverse.
10. Do not lift an object from the floor to a level above your waist in one motion. Set the load down on a table or bench and then adjust your grip before lifting it higher.

6.1.4 DRIVING/VEHICLE SAFETY

Fueling Vehicles

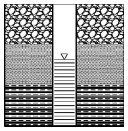
1. Turn the vehicle off before fueling.
2. Do not smoke while fueling a vehicle.
3. Wash hands with soap and water if you spill gasoline on them.

Driving Rules

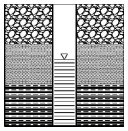
1. Shut all doors and fasten your seat belt before moving the vehicle.
2. Obey traffic patterns and signs at all times.
3. Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.
4. Do not leave keys in an unattended vehicle.

6.1.5 EQUIPMENT USE

1. Do not use fans that have excessive vibration, frayed cords or missing guards.
2. Do not place floor-type fans in walkways, aisles or doorways.
3. Do not plug multiple electrical cords into a single outlet.
4. Do not use extension or power cords that have the ground prong removed or broken off.
5. Do not use frayed, cut or cracked electrical cords.
6. Use a cord cover or tape down cords when running them across aisles, between desks or across entrances or exits.
7. Turn the power switch of the local exhaust fans to "ON" when operating the blueprint machine.



8. Do not use lighting fluid to clean drafting equipment; use soap and water.



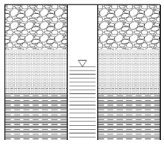
Appendix A

CDD Daily Field Safety Checklist

CDD Daily Field Safety Checklist

Project Address:

Project Date:



Client:

Client Site Contact:

Dig Safe Ticket #(s):

Basic PPE: Hard hat, reflective safety vest, steel or safety toe boots, safety glases and gloves.

Site Information

Time Onsite: Drill Rig:

Time Offsite: CDD Personnel:

Pre-Drilling Site Walk

	Inspection Performed Y/N	Hazard Identified Y/N
1. Walk property boundary and observe utililty markouts and potential conflicts.		
2. Walk boring locations and observe overhead hazards (cables, roof structures, arc hazards).		
3. Identify uneven ground / rollover hazards.		
4. If indoors, is there adequate ventilation for exhaust vapors?		
5. Discuss potential hazards (chemical, radiological, etc.) with consultant and appropriate PPE selection.		
6. Identify potential vehicle/ traffic concerns. Place road cones and position machine to protect driller and field staff.		

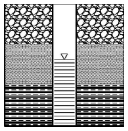
7. Discuss additional safety concerns below:

CDD Driller Signature:_____ **Date:** _____

CDD Driller Signature:_____

Client Name (Print):_____ **Date:** _____

Client Signature:_____



Appendix B

Geoprobe Inspection Form

Geoprobe Direct Push Machine Inspection Form: (sonic rig n/a)

Company Name: Core Down Drilling, LLC Location: Date of Inspection:

Equipment Information				Crew Information	Job Information
Unit Number	Current Hours	Next Service Hour	Unit Serial #	Supervisor:	Job Name:
				Andrew Bellucci	
Inspector:		Geoprobe Model #			

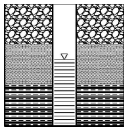
ENGINE COMPARTMENT	Y	N	NA	Comments
Engine oil level add |----------| full				
Engine coolant level add |----------| full				
Hyd. oil level (site glass) btm |----------| top				
Hyd. drain plug cap in place				
Hyd. fill cap installed				
Radiator cleanliness				
Master disconnect secure, clean, functioning				
Battery clean and secure				
Fuse and relay box clean, secure, closed				
Belt in good condition and proper tension				
Air filter cover secure, orientated correctly				
Fuel cap installed				
Hydraulic oil cooler clean				
Hyd lines overall condition and free of leaks				
Wiring secure, condition, frays, corrosion, etc				
MACHINE CHASSIS				
Tracks' condition and correct tension				
Grease chassis as reqd				
Inspect Hyd cylinders for leaks				
Hyd lines overall condition and free of leaks				
Hyd manifolds for security, leaks, damage				
Emergency Stops condition & operation				
Fire Extinguisher				
Strobe light operation				
Wiring secure, condition, corrosion, etc				
Check for loose or missing fasteners				
Frame for damage, cracks, etc				
REMOTE SYSTEMS				
Wireless TX condition, batteries, operation				
Wireless RX security, condition, operation				
Tether Remote – cable, box, condition				
Remote E-stop functionality				

CONTROL PANEL	Y	N	NA	Comments
Cleanliness				
MD3 display condition & messages				
Alarm / Warning light operation				
Manual levers in neutral and secure				
Rocker switches, condition, operation				
Aux flow controls				
Gauges working				
Enable switch operation and condition				
Overlay condition and readability				
Hydraulics free of leaks and secure				
Electrical harness security & condition				
FOOT				
Slides adjusted, secure, lubricated				
Hydraulics free of leaks and secure				
Check for loose or missing fasteners				
GH Hammer charged, secure, condition				
Pull latch security and condition				
Electrical harness security & condition				
E- stop pull cable adjustment, operation				
MACHINE ACCESSORIES				
Moyno Pump or other				
Drop Hammer secure, hyd hoses, lubricated				
Wire Rope condition, secure, lay on drum				
Winch mast shives secured rotating freely				
Mast cylinder upper roll pin installed				
Winch drum backing plate / tensioner				
Winch safety hook condition, & operation				
Extruder installation correct and secure				
Pressure washer instl correct and secure				
Racks, Trays, & etc instl correct & secure				
Safety cage, condition, operation				

MACHINE DISCREPANCIES	SAFETY CRITICAL *(Y/N)*	CORRECTIVE ACTION

FIELD / UNIT NOTES

1 - 800 – GEOPROBE
WWW.GEOPROBE.COM



Appendix C

OSHA 300 and 301 Log Forms

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20__

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name Core Down Drilling, LLC

City Brewster State NY

Identify the person			Describe the case			Classify the case: CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "Injury" column or choose one type of illness: (M)					
(A) Case no.	(B) Employee's name	(C) Job title (*e.g., Welder*)	(D) Date of injury or onset of illness	(E) Where the event occurred (*e.g., Loading dock north end*)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (*e.g., Second degree burns on right forearm from acetylene torch*)	(G) Death	(H) Days away from work	(I) Remained at Work: Job transfer or restriction	(J) Remained at Work: Other record-able cases	(K) Away from work	(L) On job transfer or restriction	(1) Injury	(2) Skin disorder	(3) Respiratory condition	(4) Poisoning	(5) Hearing loss	(6) All other illnesses
			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
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			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
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			/ month/day			☐	☐	☐	☐	days	days	☐	☐	☐	☐	☐	☐
					Page totals ➤												
												(1) Injury	(2) Skin disorder	(3) Respiratory condition	(4) Poisoning	(5) Hearing loss	(6) All other illnesses

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 20__ __

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no work-related injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete and accurate before completing this summary.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the Log. If you had no cases, write "0."

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR Part 1904.35, in OSHA's recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
_____	_____	_____	_____
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
_____	_____
(K)	(L)

Injury and Illness Types

Total number of . . .	(M)		
(1) Injuries	_____	(4) Poisonings	_____
		(5) Hearing loss	_____
(2) Skin disorders	_____	(6) All other illnesses	_____
(3) Respiratory conditions	_____		

Post this Summary page from February 1 to April 30 of the year following the year covered by the form.

Establishment information

Your establishment name Core Down Drilling, LLC

Street **PO Box 763**

City **Brewster** State **NY** ZIP **10509**

Industry description (*e.g., Manufacture of motor truck trailers*)
Environmental & Geotechnical Drilling

Standard Industrial Classification (SIC), if known (*e.g., 3715*)
5 0 8 2

OR

North American Industrial Classification (NAICS), if known (e.g., 336212)
___ ___ ___ ___ ___ ___

Employment information *(If you don't have these figures, see the Worksheet on the back of this page to estimate.)*

Annual average number of employees _____

Total hours worked by all employees last year _____

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

Daniel Bellucci — Company executive
Owner — Title
( ) - 845-803-4347 — Phone
/ / — Date

OSHA's Form 301
Injury and Illness Incident Report

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

This *Injury and Illness Incident Report* is one of the first forms you must fill out when a recordable work-related injury or illness has occurred. Together with the *Log of Work-Related Injuries and Illnesses* and the accompanying *Summary,* these forms help the employer and OSHA develop a picture of the extent and severity of work-related incidents.

Within 7 calendar days after you receive information that a recordable work-related injury or illness has occurred, you must fill out this form or an equivalent. Some state workers' compensation, insurance, or other reports may be acceptable substitutes. To be considered an equivalent form, any substitute must contain all the information asked for on this form.

According to Public Law 91-596 and 29 CFR 1904, OSHA's recordkeeping rule, you must keep this form on file for 5 years following the year to which it pertains.

If you need additional copies of this form, you may photocopy and use as many as you need.

Completed by _____

Title _____

Phone (_____)_____--_____ **Date** ____/ ____/ ____

Information about the employee

1) **Full name** _____

2) **Street** _____

City _____ **State** _____ **ZIP** _____

3) **Date of birth** _____ / _____ / _____

4) **Date hired** _____ / _____ / _____

5) ❒ **Male**
❒ **Female**

Information about the physician or other health care professional

6) **Name of physician or other health care professional** _____

_____

7) **If treatment was given away from the worksite, where was it given?**

Facility _____

Street _____

City _____ **State** _____ **ZIP** _____

8) **Was employee treated in an emergency room?**
❒ **Yes**
❒ **No**

9) **Was employee hospitalized overnight as an in-patient?**
❒ **Yes**
❒ **No**

Information about the case

10) **Case number from the *Log*** _____ *(Transfer the case number from the Log after you record the case.)*

11) **Date of injury or illness** _____ / _____ / _____

12) **Time employee began work** _____ **AM / PM**

13) **Time of event** _____ **AM / PM** ☐ **Check if time cannot be determined**

14) ***What was the employee doing just before the incident occurred?*** **Describe the activity, as well as the tools, equipment, or material the employee was using. Be specific.** ***Examples:*** **"climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."**

15) ***What happened?*** **Tell us how the injury occurred.** ***Examples:*** **"When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."**

16) ***What was the injury or illness?*** **Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or sore."** ***Examples:*** **"strained back"; "chemical burn, hand"; "carpal tunnel syndrome."**

17) ***What object or substance directly harmed the employee?*** ***Examples:*** **"concrete floor"; "chlorine"; "radial arm saw."** ***If this question does not apply to the incident, leave it blank.***

18) ***If the employee died, when did death occur?*** **Date of death** _____ / _____ / _____