ENVIRONMENTAL • GEOTECHNICAL
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SOIL MANAGEMENT PLAN

CAN CLAY FACILITY
402 WASHINGTON STREET
CANNELTON, INDIANA 47520

ATC PROJECT NO. 170IRPC08P

APRIL 7, 2020

PREPARED FOR:

INDIANA 15 REGIONAL PLANNING COMMISSION
221 EAST FIRST STREET
FERDINAND, INDIANA 47532
ATTENTION: MS. LISA GEHLHAUSEN

ENVIRONMENTAL • GEOTECHNICAL
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April 7, 2020

Ms. Lisa Gehlhausen
Indiana 15 Regional Planning Commission
221 East First Street
Ferdinand, Indiana 47532

Re: **Soil Management Plan**
402 Washington Street
Cannelton, Indiana 47520
ATC Project No. 170IRPC08P

Dear Ms. Gehlhausen:

ATC Group Services, LLC (ATC) is pleased to provide the City of Cannelton with this Soil Management Plan (SMP) prepared for the Can Clay Facility located at 402 Washington Street in Cannelton, Indiana (site).

The work and all documents prepared for this SMP were funded through Indiana 15 Regional Planning Commission, which received a U.S. Environmental Protection Agency (USEPA) Brownfields Assessment Grant (USEPA Grant No. BF-00E02383-0). All work prepared for this SMP is provided in this submittal.

We appreciate the opportunity to assist you with this project. If you have any questions concerning information contained in this letter, please do not hesitate to call either of the undersigned below.

Sincerely,

ATC Group Services LLC

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1 Objectives/Purpose

The Soil Management Plan (SMP) addresses: a) construction worker safety as it relates to potential exposure to previously identified contaminants of concern (CoCs) at the site, and b) compliance with applicable regulations and the Indiana Department of Environmental Management (IDEM) Non-rule policy statements.

This plan applies to activities that disturb or expose surface/subsurface soil at the site, which are expected to include excavations less than ten (10) feet below ground surface (bgs).

ATC recommends the following activities be implemented as part of future land use, development, and maintenance activities:

- Any removal, excavation or disturbance of soil must be conducted in accordance with all applicable requirements of Indiana Occupational Safety and Health Administration (IOSHA) / Federal Occupational Safety and Health Administration (OSHA). Contaminated soil that is removed, excavated, or disturbed on the site must be managed and disposed of in accordance with all applicable federal and state laws and regulations.
- Ground surfaces disturbed as a result of excavation and construction activities on the site must be restored in such a manner that any remaining contaminant concentrations (as determined under the IDEM Remediation Closure Guide (RCG)) do not present a threat to human health or the environment.

2 Introduction

ATC was retained by Indiana 15 Regional Planning Commission to prepare a SMP for the Can Clay Facility located at 402 Washington Street in Cannelton, Perry County, Indiana (site). The SMP is expected to assist the City of Cannelton with future redevelopment of the site. The site consists of seventeen (17) parcels located in the northwest portion of downtown Cannelton. The site is currently zoned Industrial (HI). To date, redevelopment plans at the site have not been finalized; however, it is anticipated redevelopment will consist of mixed commercial/industrial/residential land uses. A vicinity map is provided as **Figure 1**, and a site plan is provided as **Figure 2**.

2.1 Current Use of the Site

The site is currently an abandoned manufacturing facility consisting of approximately 33 acres of land in downtown Cannelton. The facility ceased operations in 2019. Eleven buildings totaling approximately 240,134 square feet are currently located on the site. The buildings include a maintenance shop, a storage building, a 3-car garage, a clay shed, a production building (main facility), a tunnel kiln, a joint building (wedge lock), an old machine shop, a loading dock building, a stick shed, and an office. Several of the buildings were observed in poor condition with partially collapsed walls and damaged roofs. Multiple kilns and a sawdust silo are still present on the site. A large lay-down yard storing mostly clay pipe product is located on the north half and central portion of the site. Dense vegetation and trees are present across the lay-down yard due to its low utilization. Stored equipment and multiple containers (55-gallon drums and buckets) were observed in many of the buildings on the site and are used to store various substances including waste oil, hydraulic oil, trash, and resin among others. The majority of the site is covered with asphalt and concrete, with some dense vegetation and trees in the clay dump area along the Ohio River.

2.2 Predominant Past Land Use

The facility once operated as a pipe manufacturer, transforming raw soil into various sizes of clay pipe (terra cotta). The facility was associated with pipe manufacturing from 1906 to 2019, but was closed due to tax delinquency.

2.3 Prior Reports

This SMP was prepared with consideration of the following investigations:

- *Phase I Environmental Site Assessment (ESA)*, dated August 6, 2019, ATC,
- *Underground Storage Tank Closure (UST) and Phase II Limited Subsurface Investigation (LSI)*, dated January 31, 2020, ATC.

3 Environmental Conditions

3.1 Soil Lithology and Hydrogeology Summary

ATC's January 2020 *UST and Phase II LSI* was performed to evaluate the *recognized environmental conditions* (*RECs*) identified from ATC's August 2019 *Phase I ESA*. The scope of work in the *UST and Phase II LSI* was completed in accordance with the IDEM RCG. The *UST Closure and Phase II LSI* included the removal of two (2) USTs consisting of one (1) 10,000 gallon gasoline tank and one (1) 10,000 gallon diesel tank. A third UST was identified within close proximity to a site structure, but was not removed due to safety reasons. A total of twelve (12) confirmatory soil samples were collected from the side walls and base of the UST excavation pit prior to backfilling. Following the UST removal, sixty four (64) soil samples and thirty two (32) groundwater samples were collected from thirty two (32) soil borings/temporary wells advanced on the site. Samples were submitted to a laboratory for analysis in order to evaluate the soil and groundwater quality beneath the site.

Based on the *UST Closure and Phase II LSI* results, the typical soil encountered below the surface (i.e. asphalt, concrete, crushed stone, topsoil, fill material, etc.) consisted of sandy clay at depths ranging from 0.5 to 33 feet below ground surface (bgs), clayey sand at depths ranging from 6 to 40 feet bgs, sandy silt at depths from 6 to 40 feet bgs, and sand at depths ranging from 8 to 40 feet bgs.

The depth-to-groundwater measurements (feet below top of monitoring well casing) from the January 8, 2020 monitoring event ranged from 5.68 feet (B-3) to 33.55 feet (B-30). Based on the relative groundwater elevations, as measured in the temporary wells, groundwater generally flows to the west beneath the site.

3.2 Contaminants of Concern

Based on the *UST and Phase II LSI*, CoCs were detected at concentrations exceeding their respective IDEM RCG screening levels (SLs) in both soil and groundwater. The following tables present the CoCs identified, the locations where the samples were collected, the concentration of the CoCs, and the concentration comparisons to IDEM RCG SLs.

Summary of Soil Analytical Results			
Compound of Concern	**Sample Location(s)**	**Concentration(s) (mg/kg or ppm)**	**Compared to IDEM RCG Screening Levels**
Volatile Organic Compounds			
1,3,5-TMB	SW-2 and SW-6	5.6 and 10.8	> MTGSL of 1.7
Benzene	SW-6	0.16	> MTGSL of 0.051
Polynuclear Aromatic Hydrocarbons			
1-Methylnaphthalene	SW-2	1.4	> MTGSL of 1.2
Benzo(a)pyrene	B-8 (2-4)	**2.4**	**> RDCSL of 1.5**

Summary of Soil Analytical Results			
Compound of Concern	**Sample Location(s)**	**Concentration(s) (mg/kg or ppm)**	**Compared to IDEM RCG Screening Levels**
Naphthalene	SW-2, SW-6, B-4 (2-4), B-6 (0-2), B-8 (2-4), B-10 (2-4), B-18 (2-4), B-26 (0-2), B-29 (0-2)	0.12 to 3.3	> MTGSL of 0.11
Metals			
Arsenic	B-6 (0-2), B-7 (4-6), B-9 (2-4), B-26 (0-2)	**31.5 to 236**	**> IDCSL of 30**
	Twenty-five soil samples	**9.9 to 25**	**> RDCSL of 9.5**
	Twenty-six soil samples	6.1 to 9.2	> MTGSL of 5.9
Lead	B-3 (0-2) and B-10 (0-2)	**1,240 to 2,680**	**> EDCSL of 1,000**
	B-21 (2-4)	**633**	**> RDCSL of 400**
Mercury	B-9 (2-4)	**5.0**	**> EDCSL of 3.1**
Selenium	B-4 (2-4)	7.8	> MTGSL of 5.3

Notes:
> EDCSL = Exceeds the RCG Excavation Direct Contact Screening Level
> IDCSL = Exceeds the RCG Commercial/Residential Direct Contact Screening Level
> RDCSL = Exceeds the RCG Residential Direct Contact Screening Level
> MTGSL = Exceeds the RCG Residential Migration to Groundwater Screening Level

No additional CoCs were detected in the soil samples at concentrations exceeding their respective IDEM RCG SLs.

Summary of Groundwater Analytical Results			
Compound of Concern	**Temporary Monitoring Well Location(s)**	**Concentration(s) (µg/L or ppb)**	**Compared to IDEM RCG Screening Levels**
Volatile Organic Compounds			
1,2,4-TMB	B-32	132	> TAPSL of 56
Polynuclear Aromatic Hydrocarbons			
1-Methylnaphthalene	B-23 and B-32	25.8 to 76.5	> TAPSL of 11
2-Methylnaphthalene	B-23 and B-32	44.0 to 85.6	> TAPSL of 36
Naphthalene	B-23	**219**	**> VEGWRSL of 110**
	B-32	64.7	> TAPSL of 1.7
Metals			
Arsenic	B-1, B-13, B-16 to B-18, B-20, B-22 to B-25, B-27, B-28, B-31, B-32	10.4 to 236	> TAPSL of 10
Barium	B-18	2,250	> TAPSL of 2,000
Chromium	B-13, B-22, B-31	104 to 201	> TAPSL of 100

Summary of Groundwater Analytical Results			
Compound of Concern	**Temporary Monitoring Well Location(s)**	**Concentration(s) (µg/L or ppb)**	**Compared to IDEM RCG Screening Levels**
Lead	B-11, B-13, B-16, B-17, B-20, B-22, B-24, B-25, B-27, B-28, B-31, B-32	18 to 212	> TAPSL of 15
Notes: **> VEGWISL = Exceeds the RCG Commercial/Industrial Vapor Exposure Screening Level** **> VEGWRSL = Exceeds the RCG Residential Vapor Exposure Screening Level** > TAPSL = Exceeds the RCG Residential Direct Contact (Tap) Screening Level			

No additional CoCs were detected in the groundwater samples at concentrations exceeding their respective IDEM RCG SLs.

3.3 Environmental Conditions Conclusions

It appears that soil and groundwater has been impacted by CoCs associated with the historic operations at the site. A site map depicting the location of elevated CoCs is provided as **Figure 2**.

3.4 Potential Exposure to Contaminants of Concern

Human exposure to CoCs from the site could occur from inhalation or ingestion of soil particles, and absorption though the skin. These pathways are not expected to exist under normal site conditions; however, when the soil is disturbed the exposure pathways exist.

3.4.1 Inhalation exposure pathway

The City of Cannelton currently has no specific redevelopment plans for the site; however, it is anticipated redevelopment will consist of mixed use including commercial/industrial/residential. The redevelopment may include excavating soil and the construction of new buildings. Potential exposure to impacted soil via the inhalation exposure pathway could occur during redevelopment activities. Excavation of impacted soil may allow the CoCs to become airborne. Dust generated during construction activities may contain CoCs adsorbed to the soil particles. Inhalation of dust particles containing CoCs is possible.

3.4.2 Ingestion exposure pathway

Soil excavation activities and removal of the existing buildings, including the floor slabs and foundations, presents a potential for the ingestion exposure pathway. Soil and dust particles containing CoCs may be accidentally ingested.

Drinking water wells are not located at the site; therefore, ingestion of CoCs in the groundwater is not considered a likely route of exposure.

3.4.3 Dermal absorption exposure pathway

Potential exposure to CoCs could occur by the dermal exposure pathway during instances when the existing ground surfaces are disturbed and the impacted material is exposed. The CoC concentrations detected on-site exceeded the RCG excavation direct contact SLs, which were established by IDEM as a guideline for exposure scenarios during construction. Therefore, dermal absorption exposure is possible during construction activities.

4 Soil Management Plan

4.1 Contractor Qualifications

Contractors responsible for earthwork operations associated with contaminated soil at this site must certify that personnel have Hazardous Waste Operations and Emergency Response (HAZWOPER) training as required under 29 CFR 1910.120 and have experience with environmental project oversight.

4.2 Health and Safety

Standard health and safety protocols must be established and followed by all selected contractor(s). All site work must follow a site specific Health and Safety Plan (HASP) in accordance with 29 CFR 1910.120. Each contractor and subcontractor on site will be responsible for the health and safety of their own employees. A HASP will be developed by each contractor and subcontractor that identifies anticipated site hazards and required personal protective equipment (PPE) associated with each construction activity.

A project-specific HASP will be required for any activity where CoC impacted soil has been identified. It is recommended that all persons entering the exclusion zone (appropriately demarked as the "active" excavation zone(s) or the property limits) review, sign and follow the HASP. OSHA requires a HASP for construction activity at a hazardous waste site. Previously documented CoC concentrations in the soil represent potential health risks associated with exposure to CoCs. The HASP and associated training is recommended as a conservative measure to ensure adequate health and safety measures.

4.3 Excavation Guidelines

Excavation and construction activities shall be performed in a manner that minimizes worker exposure and protects the environment from site contaminants. A designated work area boundary shall be established for excavation and construction activities. Excavation, digging, or other soil-disturbing activities should immediately cease upon the discovery of potentially contaminated soil or other material in an area not previously identified as containing residual contaminants or contaminated features (e.g., underground sumps, underground tanks, underground drain lines suspected of containing contamination, waste, etc.). Evidence of potentially contaminated soil includes, but is not limited to: discolored soil, odor, or readings on monitoring equipment (e.g., PID/FID) indicating potential presence of contaminants. Please refer to **Section 4.6** for additional steps to take upon discovery of contamination.

4.3.1 <u>Material Handling</u>

To comply with IDEM Uncontaminated Soil Policy (non-rule policy #Waste-0064 in **Appendix A**), soil excavated from areas with concentrations of human introduced chemicals/contaminants less than the RCG residential SLs can be relocated on or off site, provided it's not placed in an environmentally sensitive area (i.e. karst, wetlands, etc.). Soil with concentrations of human introduced

chemicals/contaminants greater than or equal to the RCG residential SLs shall be either directly loaded into awaiting transport trucks or placed in secure roll-off boxes pending off-site disposal at a permitted Subtitle C or D solid waste landfill. Soil removed from the site will be managed in accordance with applicable federal, state and local rules and regulations.

4.3.2 Water Management and Erosion Control

The proposed redevelopment work may consist of surface water and ground water removal as necessary to perform the construction activities. Water management may include:
(1) constructing, installing, building, and maintaining all necessary temporary water containment facilities, channels, and diversions; (2) furnishing, installing, and operating all necessary pumps, piping, and equipment; and (3) removing all such equipment after their intended function is no longer required. Excavations will be dewatered and maintained dewatered so that the material is excavated in its natural state and construction of the foundations is completed in dry conditions. The bottom of the excavation will be kept free from excessive moisture and free-flowing water. Water generated from dewatering activities will be disposed in accordance with all applicable regulations.

Based on the January 2020 *UST Closure and Phase II LSI*, groundwater was encountered beneath the site as high as 5.68 feet below top of monitoring well casing. Based on the expected excavation depths, subgrade foundations and footers may be installed below the documented groundwater table. It should also be noted that seasonal variation in groundwater levels may influence excavation activities. A contingency plan for dewatering will account for possible infiltration of groundwater and accumulated rainwater. Accumulated rain and groundwater may require on-site retention (i.e. rental fractionation vessel) or treatment (e.g. granular activated carbon vessels) prior to discharge. Once the City of Cannelton water quality standards are achieved (and verified via routine analysis), discharge is possible provided all requirements are met.

If necessary for future development, a Stormwater and Erosion Control Plan will be developed in compliance with applicable federal, state, and local regulations (e.g. NPDES permitting, “Rule 5”, and Chapter 600 Erosion and Sediment Control) prior to initiation of site work.

4.3.3 Dust and Odor Control

If visible dust is observed during soil excavation activities, then dust and odor control monitoring and suppression should be in implemented. Should continuous dust monitoring be necessary, it is recommended that monitoring include locations along the site boundary (i.e. attached to perimeter security fencing) in the vicinity of excavation(s). Dust and odor suppression controls may include:

- Reduction of on-site vehicle speeds,
- Minimizing drop heights to material haulers from soil loaders,
- Considering timing of excavation activities and prevalent wind direction(s) and speed,
- Use of odor suppressants like BioSolve®, if necessary,
- Regular watering of haul roads and soil stockpiles, if necessary, and
- Revegetating/stabilizing/covering exposed excavations as soon as practicable.

In the event that dust conditions cannot be addressed using dust compression controls, periodic particulate monitoring should be implemented with the use of real-time particulate monitors capable of monitoring particulate matter less than ten microns (PM_{10}) will be employed.

4.4 Transportation and Disposal

Material transported within site boundaries will be handled so as to minimize exposure to workers. Additionally, care will be taken to minimize the transportation time of contaminated soil and consequently the time construction workers are exposed to these soils. Transportation routes shall be planned prior to the proposed excavation and include specific location and sequencing of events. Haulers will hold and present, upon request, a current valid Commercial Driver's License.

Equipment and vehicles used to move excavated soils will be dedicated to moving contaminated soils for the duration of the project or appropriately decontaminated prior to being loaded with clean soils. Waste tracking manifests will not be required for transportation of soils within the site; however, the contractor will be responsible for documentation detailing the estimated volume of material moved, the original location, and the final location.

4.4.1 Soil Segregation/Stockpile Management

When applicable, soil segregation and stockpiling will be conducted in a manner that is protective of worker health and safety and documented accordingly. Soil stockpiles will be placed on top of heavy-duty plastic sheeting and wherever possible positioned atop an impermeable surface (i.e. improved asphalt or concrete surfaces, plastic liner of appropriate thickness). Soil stockpiles will be placed away from site drainage patterns or lines, roadsides, or culverts and covered with material adequate to prevent soil transport by wind or rainwater runoff (berm). Covers will be maintained in good condition. When not covered, soil stockpile surfaces will be kept visibly moist by water spray, as necessary to eliminate visible dust.

If known or perceived contamination of stockpiled soil is observed, then soil segregation will include field screening in addition to collection of analytical samples to determine material handling and disposal requirements, if any. As per IDEM Non-Rule Policy (**Appendix A**), upon laboratory confirmation that soil stockpile contaminant concentrations are below RCG residential SLs, the soil can be used on-site.

4.4.1.1 Analytical Sampling

If necessary, soil samples will be collected directly from the bucket of the excavator or from stockpiles. Soil samples will be placed in appropriate sample containers provided by the analytical testing laboratory, labeled with unique sample identification, placed in a cooler with ice and transported to an analytical testing laboratory using appropriate chain of custody controls. The soil samples will be submitted for analysis of the previously identified CoCs, which include volatile organic compounds, (VOCs), polynuclear aromatic hydrocarbons (PAHs), and Resource Conservation and Recovery Act (RCRA (8) metals. The soil analytical results will be compared to RCG SLs, which consider exposure concerns from inhalation, ingestion, and dermal contact exposure routes.

If applicable, soils with CoC concentrations below RCG residential direct contact or MTG SLs, whichever is lower, will be considered uncontaminated. Specifically, the comparison of sample results to the lower of the two RCG residential SLs can determine whether or not soils can be deposited on-site or managed in a way other than disposal at a municipal solid waste landfill. Soil excavators/transporters are responsible to ensure soils containing any level of human introduced chemicals at concentrations above the RCG residential SLs are not placed in an environmentally sensitive area. Please refer to **Appendix A** for additional guidance.

4.4.2 Off-site Removal/Waste Manifests

Waste manifests are generally only required for classified hazardous wastes; however, any soil excavated from the site and transported off site for disposal, will be manifested so that any given truckload can be tracked from the point of waste generation to the disposal site. The transportation contractor will be responsible for keeping the wheels and exterior portions of the trucks free of excess dirt and debris while on public roadways. Each truck will be covered to reduce the potential for material blowing onto the roadway while in transit. If excess dirt or debris is deposited on roadways as a direct result of contractor activities, the contractor will be responsible for cleaning the affected areas in a timely manner.

4.4.3 Waste Minimization

To the extent practical, measures shall be taken during excavation activities to minimize the volume of excavated soils, to limit the need for dewatering activities, and to prevent exposure between storm water and impacted soils. Construction activities requiring subsurface excavation will be completed and backfilled as soon as reasonably possible to minimize exposure. The size or length of excavations shall be controlled to allow for proper completion of immediately pending activities. It is recommended that excavations into contaminated soils shall not be left open overnight. If excavations are to be left open overnight, the contractor will secure the excavation area with temporary fencing and adequate perimeter signage.

Where possible, excavation areas shall be protected from storm water run-on by constructing clean soil berms or other diversionary structures on the up-gradient side of the area to direct water away from exposed soils and into proper storm water conveyance structures. If necessary, storm water detention areas can be constructed to allow for collection and transfer by pumping or other means around excavation areas.

4.4.4 Decontamination

Prior to mobilization, all mechanical equipment that is exposed to contaminated soil shall be decontaminated and visually inspected. Equipment inspections shall include hydraulic fluid or other conveyance lines that contain hazardous fluids with necessary repairs completed prior to mobilization. During on-site operations, workers will use brushes, shovels, etc. to conduct gross soil removal on equipment used to excavate or move soil at the site on a daily basis.

All trucks and equipment will be cleaned and decontaminated prior to leaving the site. Water from wheel washes, if necessary, shall be collected and disposed of with consent from the City of

Cannelton (sewer department) or drummed and properly disposed of off-site. Loose soil on excavation and transport equipment should be brushed off and transferred to the truck containing the contaminated soils being transported to the designated landfill.

4.5 Environmental Monitoring

CoC screening will be required for all activities at the site that disturb and/or expose impacted soil. The CoC screening assessment will consist of soil field screening, soil and groundwater analytical testing, and excavation work zone air monitoring to evaluate the potential for CoC exposure during soil disturbance activities.

4.5.1 Field Screening

Field screening will be conducted during the soil excavation of CoC impacted soil. Representative soil samples will be collected from the excavation for field screening. A hand held field instrument capable of real-time measurements for air borne concentrations of the CoCs will be used at strategic locations to evaluate the general air quality during the soil excavation activities. PIDs with a 10.2 eV (+/-) or greater lamp source, oxide semiconductor total hydrocarbon detectors, flame ionization detectors (FIDs), or X-ray fluorescence (XRF) meters can be employed.

Daily instrument calibration will be conducted on site and strict adherence to the manufacturer's instructions for operation, maintenance, and calibration of the instrument will be maintained. In addition, instrument calibration records will be kept. Other systematic approaches to contaminant screening schemes will be discussed with site construction personnel and will be documented accordingly.

4.5.2 Personnel Air Monitoring

Personnel air monitoring will be evaluated during soil disturbance activities (i.e. soil excavation). In the event of elevated field screening results (i.e. dust concentrations exceeding the OSHA PEL or 15 mg/m^3, etc.), each employee that will be within the designated work zone during soil excavation activities will be equipped with a personnel air monitoring device specific to the CoC. The air monitoring will be conducted in accordance with applicable OSHA standards. The personnel air monitoring results will be compared to the OSHA Permissible Exposure Limits (PELs), which are Time Weighted Averages (TWAs) for any 8-hour work shift of a 40-hour work week.

4.6 Contingency Plan for Encountered Contamination

If suspected contaminated soils or groundwater or hazardous materials are discovered during the excavation work, the designated representative (site construction supervisor) will be notified and steps will be taken to avoid the spreading of contaminants into the surrounding environment. Contamination indicators or hazardous materials may include but are not limited to the following:

- Unusual odors
- Discolored/stained soil or groundwater
- Petroleum hydrocarbon contaminated soil and/or free product
- Liquid waste, putrescible waste
- Buried tanks, drums, or debris

During site excavation activities, a designated field representative will actively monitor for the conditions/materials specified above. In the event that these indicators are identified, the following actions will be taken:

- All excavation activity in vicinity of the area where the suspect material has been encountered will stop.
- The site supervisor will be immediately notified.
- The area will be cordoned off as much as practicable with a suitable barrier.
- Work shall not resume in vicinity of the area unless authorized by the project management team.

Additional steps may include:

- Contacting IDEM, the regulatory authority, to notify them that contamination has been discovered and contingency actions are being implemented (if required).
- Characterization of the material by collecting samples for laboratory analysis.
- If appropriate, placement of the material into a covered (plastic lined) roll-off container.
- If excavation into a covered roll-off container is inappropriate, additional excavation work in the vicinity will be postponed and work will move to an area free of contamination until test results are known. Test results will be compared to the RCG SLs to determine whether the material can remain on site or whether it should be directly loaded into trucks for disposal at a licensed landfill.
- Document all appropriate information such as location and quantity of encountered contamination and disposal documentation.
- Record all details on an incident form.

4.7 Imported Soil Verification

Imported soil source material will be verified and details of the material supplier and confirmation of the source(s) and total quantity of imported soil material will be provided. The imported soil will be free from contamination and suitable for proposed use. Sampling and analysis will be required to demonstrate suitability and cleanliness of imported soils. Imported soil will be sampled at a rate of one (1) sample per 100 cubic yards from the same source. Analytical certificates submitted by the soil supplier may be acceptable; however, independent sampling and laboratory analysis will be considered as well. Imported soil samples will be analyzed by an independent accredited laboratory for an analytical suite which will include, at a minimum, VOCs, PAHs, and RCRA (8) metals. Additional analytical parameters (e.g. pH, polychlorinated biphenyls (PCBs), Pesticides/Herbicides, etc.) may be warranted given the particular source.

If more than one imported soil source is used, then at least one sample will be collected from each source at a ratio of one sample per 100 cubic yards. For larger amounts of soil from a single source the sampling frequency can be modified with prior agreement with IDEM. For each source site, the address of the source site, the name of the owner of the source materials, the location where the source materials originated from at the source site, phone number of the owner of the source materials, and history of the site usage (i.e. farm, residential, industrial/commercial, etc.) will be documented.

4.8 Final Cover Preparation

The majority of the site is expected to be covered by buildings/pavement, so final cover preparations appear to be minimal. If CoC impacted soil is not covered by impermeable surface such as buildings/pavement, or at least two feet of clean imported soil, then the installation of an engineered barrier may be necessary over impacted soils that are to remain in place at the site.

Buildings, parking lots, sidewalks, and soil capped areas can serve as engineered barriers to prevent direct contact with the underlying soil. The engineered barriers should not be excavated, removed, disturbed, demolished, or allowed to fall into disrepair without replacement by a barrier that will provide equal or better protection. It should be noted that currently, large portions of the site have asphalt or concrete paving already in place, providing an existing engineering cap.

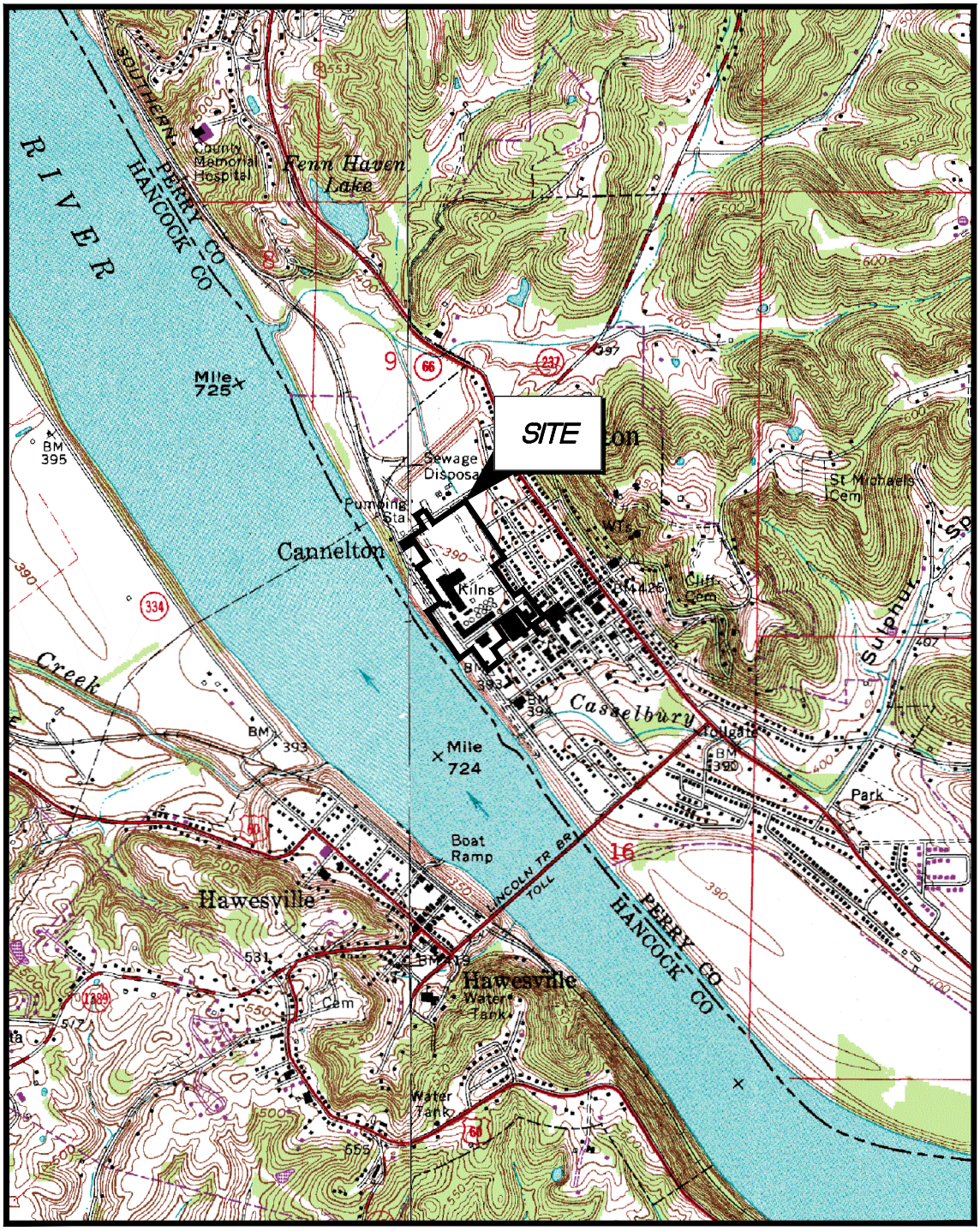
5 Assumptions

This SMP has been developed with the following assumption:

- The SMP has been developed in context with past subsurface investigation; the SMP may not reflect variations to subsurface stratigraphy, contaminant presence, and contaminant concentrations between soil boring locations. The extent of encountered variations may require additional investigation.

Figures

Figure 1: Vicinity Map
Figure 2: Site Plan



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VICINITY MAP

CAN CLAY FACILITY – 402 WASHINGTON STREET
CANNELTON, INDIANA

Project Number: 170IRPC08P		Drn. By: JG
Drawing File: SEE LOWER LEFT		Ckd. By: BK
Date: 1/20	Scale: 1"=2,000'	App'd By:
ATC		Figure: 1

H:\2019\IN 15 REGIONAL PLANNING COMMISSION\CAN CLAY PROPERTY\ENVIRO\PHASE II\170IRPC08P-VIC.DWG, VIC

B-4

11/4/19	2-4	12-14	GW 1/14/20
As	25.0	7.9	<RCGSL
Se	7.8	<RCGSL	<RCGSL
NAP	0.12	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-24

11/8/19	0-2	24-26	GW 11/26/19
As	8.6	<RCGSL	23.5
Pb	<RCGSL	<RCGSL	18.0
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-3

11/4/19	0-2	24-26	GW 11/20/19
As	19.0	6.1	<RCGSL
Pb	1,240	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-5

11/4/19	0-2	12-14	GW 11/4/19
As	7.9	7.1	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-2

11/4/19	12-14	2-4	GW 11/20/19
As	7.8	9.0	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-7

11/5/19	24-26	4-6	GW 1/14/20
As	8.3	236	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-1

11/4/19	0-2	6-8	GW 11/19/19
As	24.1	8.0	22.7
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-20

11/7/19	0-2	36-38	GW 11/20/19
As	14.4	<RCGSL	14.2
Pb	<RCGSL	<RCGSL	19.5
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-6

11/5/19	0-2	16-18	GW 1/14/20
As	35.2	6.8	<RCGSL
NAP	0.13	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-21

11/8/19	2-4	22-24	GW 11/20/19
As	19.2	<RCGSL	<RCGSL
Pb	633	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-19

11/7/19	2-4	6-8	GW 11/21/19
As	7.9	9.1	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-22

11/8/19	0-2	8-10	GW 11/22/19
As	7.9	13.3	90.0
Cr	<RCGSL	<RCGSL	104
Pb	<RCGSL	<RCGSL	76.4
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-8

11/5/19	2-4	20-22	GW 11/25/19
As	18.6	6.6	<RCGSL
BAP	2.4	<RCGSL	<RCGSL
NAP	0.24	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-18

11/7/19	2-4	33-35	GW 11/21/19
As	23.2	<RCGSL	10.4
NAP	0.12	<RCGSL	<RCGSL
BA	<RCGSL	<RCGSL	2,250
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-17

11/6/19	8-10	18-20	GW 11/21/19
As	16.0	8.0	17.4
Pb	<RCGSL	<RCGSL	24.3
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-10

11/5/19	0-2	2-4	GW 11/25/19
As	7.5	14.5	<RCGSL
Pb	2,680	<RCGSL	<RCGSL
NAP	<RCGSL	0.38	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-9

11/5/19	2-4	20-22	GW 1/14/20
As	56.2	<RCGSL	<RCGSL
Hg	5.0	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-23

11/8/19	0-2	18-20	GW 11/22/20
As	<RCGSL	<RCGSL	77.3
1-Meth	<RCGSL	<RCGSL	76.5
2-Meth	<RCGSL	<RCGSL	85.6
NAP	<RCGSL	<RCGSL	219
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-29

11/11/19	0-2	24-26	GW 11/26/19
As	20.1	7.0	<RCGSL
NAP	0.25	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-14

11/5/19	0-2	28-30	GW 1/14/20
As	11.0	6.6	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-30

11/11/19	0-2	26-28	GW 11/26/19
As	14.3	6.4	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-12

11/5/19	0-2	24-26	GW 11/21/20
As	19.7	8.3	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-15

11/6/19	0-2	6-8	GW 1/14/20
As	9.9	18.6	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-16

11/6/19	0-2	7-9	GW 11/22/19
As	8.5	18.4	14.9
Pb	<RCGSL	<RCGSL	19.8
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-31

11/11/19	0-2	8-10	GW 11/26/19
As	15.9	10.4	236
Cr	<RCGSL	<RCGSL	201
Pb	<RCGSL	<RCGSL	212
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-13

11/5/19	0-2	28-30	GW 11/25/19
As	10.8	9.2	63.6
Cr	<RCGSL	<RCGSL	159
Pb	<RCGSL	<RCGSL	41.8
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-32

11/11/19	0-2	24-26	GW 1/14/20
As	14.3	<RCGSL	41.3
124TMB	<RCGSL	<RCGSL	132
1-Meth	<RCGSL	<RCGSL	25.8
2-Meth	<RCGSL	<RCGSL	44.0
NAP	<RCGSL	<RCGSL	64.7
Pb	<RCGSL	<RCGSL	20.9
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-25

11/8/19	0-2	31-33	GW 11/26/19
As	<RCGSL	6.7	28.1
Pb	<RCGSL	<RCGSL	23.6
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-26

11/11/19	0-2	22-24	GW 1/14/20
As	31.5	8.4	<RCGSL
NAP	0.13	<RCGSL	<RCGSL
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-11

11/5/19	0-2	24-26	GW 11/25/19
As	10.4	11.0	<RCGSL
Pb	<RCGSL	<RCGSL	19.5
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-28

11/11/19	0-2	20-22	GW 11/25/19
As	11.4	9.1	45.0
Pb	<RCGSL	<RCGSL	35.8
RCOCs	<RCGSL	<RCGSL	<RCGSL

B-27

11/11/19	0-2	18-20	GW 11/25/19
As	14.2	7.7	81.4
Pb	<RCGSL	<RCGSL	31.8
RCOCs	<RCGSL	<RCGSL	<RCGSL

LEGEND:

B-1 — Boring Identification

SOIL BORING/TEMPORARY MONITORING WELL

SITE PROPERTY LINE

SOIL ANALYTICAL DATA

0/0/00	2-4
As	<1.0
Pb	<1.0
Hg	<1.0
Se	<1.0
BAP	<1.0
NAP	<1.0
RCOCs	<1.0
COCs	<1.0

Date
Depth (ft)
Arsenic (ppm)
Lead (ppm)
Mercury (ppm)
Selenium (ppm)
Benzo (a) Pyrene (ppm)
Naphthalene (ppm)
Remaining Compounds of Concern
Compounds of Concern

ppm = PARTS PER MILLION

CONCENTRATIONS EXCEEDING THE IDEM RCG RESIDENTIAL SOIL MIGRATION TO GROUNDWATER SCREENING LEVEL (UPDADTED MARCH 2019)

CONCENTRATIONS EXCEEDING THE IDEM RCG RESIDENTIAL DIRECT CONTACT SCREENING LEVELS (UPDATED MARCH 2019)

CONCENTRATIONS EXCEEDING THE IDEM RCG COMMERCIAL/INDUSTIRAL DIRECT CONTACT SCREENING LEVELS (UPDATED MARCH 2019)

CONCENTRATIONS EXCEEDING THE IDEM RCG EXCAVATION DIRECT CONTACT SCREENING LEVELS (UPDATED MARCH 2019)

GROUNDWATER ANALYTICAL DATA

1/4/19
<1.0

Date
COMPOUND OF CONCERN (ppb)

ppb = PARTS PER BILLION

CONCENTRATIONS EXCEEDING THE IDEM RCG RESIDENTIAL TAP DIRECT CONTACT SCREENING LEVELS (UPDATED MARCH 2019)

CONCENTRATIONS EXCEEDING THE IDEM RESIDENTIAL VAPOR EXPOSURE SCREENING LEVELS (UPDATED MARCH 2019)

GW = GROUNDWATER DATA

RCGSL = REMEDIATION CLOSURE GUIDE SCREENING LEVELS

NOTE: ALL LOCATIONS ARE APPROXIMATE

Drn. By:	Ckd. By:	App'd By:	Ckd. Date:
JG	BK		

Project Number: 170IRPC08P

Drawing File:

ATC

SITE PLAN

CAN CLAY FACILITY
402 WASHINGTON STREET
CANNELTON, INDIANA

Date:

Scale: AS SHOWN

Figure: 2

H:\2019\IN 15 REGIONAL PLANNING COMMISSION\CAN CLAY PROPERTY\ENVIRO\PHASE II\170IRPC08P-COMBINED 11X17.DWG, 11X17L

Appendix A: Uncontaminated Soil Policy (Non-Rule Policy Document #Waste-0064)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	**STATUS:** Effective	**POLICY NUMBER:** WASTE-0064-NPD	
AGENCY NONRULE POLICY DOCUMENT **SUBJECT:** Uncontaminated Soil Policy	**AUTHORIZED:** Thomas Easterly, Commissioner		
	SUPERSEDES: New	**ISSUING OFFICE(S):** Office of Land Quality	
	ORIGINALLY EFFECTIVE: April 10, 2015	**RENEWED/REVISED:**	

Disclaimer: *This non-rule policy document (NPD) is being established by the Indiana Department of Environmental Management (IDEM), consistent with its authority in state law under the Indiana Code at IC 13-14-1-11.5. It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to IC 13-14-1-11.5, this policy will be available for public inspection for at least 45 days prior to presentation to the appropriate State Environmental Board, and may be put into effect by IDEM 30 days afterward. If the non-rule policy is presented to more than one board, it will be effective 30 days after presentation to the last. IDEM also will submit the policy to the Indiana Register for publication.*

1.0 PURPOSE

The solid waste rules in the Indiana Administrative Code at 329 IAC 10-3-1(1) and 329 IAC 11-3-1(1) exclude from regulation the disposal of uncontaminated dirt (soil) and, alternatively, would consider contaminated soil to be a solid waste that is subject to solid waste regulations. Neither the rules nor the laws define 'uncontaminated,' so the policy of IDEM's solid waste program has been to interpret the presence of any non-natural constituent in a soil as being a contaminant, making the soil subject to the solid waste regulations.

IDEM has developed risk-based non-rule policy documents (NPDs) to address and drive the cleanup of contaminated soil. These NPDs include IDEM's Remediation Closure Guide (RCG) and the Remediation Program Guide (RPG). Screening levels found in the RCG are used for determining if soil contains chemicals at concentrations that may present a threat to human health.

This NPD applies to soils, which do not include waste streams that are specifically regulated by 329 IAC 10 and which contain human introduced constituents (or chemicals) below RCG residential screening levels, and designates how those soils may be managed when excavated. Soils with concentrations of a human introduced chemical not exceeding RCG residential screening levels are considered uncontaminated if they are handled in accordance with this NPD. Soils with concentrations of human introduced chemicals or contaminants exceeding the RCG residential screening levels are considered contaminated soil and are not exempt from the solid waste rules under this NPD.

As defined in the RCG, a screening level is a chemical-specific concentration level that IDEM has determined to be sufficiently protective at any site, provided it is applied under appropriate land use scenarios. The RCG does not assess all environmental risk factors so its consideration is limited to surface and subsurface soils and ground water that may be used as drinking water.

This NPD is to provide consistent standards for excavated soil remaining on-site, reused on-site, or taken offsite for reuse or disposal.

2.0 SCOPE

The scope of this NPD applies to how excavated soil may be managed when found to contain human introduced chemicals below RCG residential screening levels.

The scope of this NPD does not include soils impacted by spilled materials subject to the IDEM Spill Rule at 327 IAC 2-6.

This NPD is not intended to address naturally occurring chemical constituents in soil.

This NPD does not exempt from regulation historical fill material made up of specifically regulated wastes and waste streams, which include, but are not limited to, coal ash, foundry sand, or other waste streams. Such materials are considered solid waste and must either be disposed in a permitted landfill or be approved for a legitimate use project.

This NPD also does not address situations when soil is intermingled with regulated solid waste. Examples include, but are not limited to, ash and debris mixed with soil after a fire, municipal wastewater treatment sludge mingled with soil from a lagoon liner, or similar situations where soil has become part of a waste. If soil can be physically separated from the wastes and is found to be uncontaminated, as specified in this NPD, it would no longer need to be handled as a waste.

In general, this NPD is not intended to address soils containing identifiable industrial wastes, solid wastes, or hazardous wastes that are inseparable from the soil.

3.0 DEFINITIONS

3.1. "Agency" – The Indiana Department of Environmental Management (IDEM).

3.2. "Chemical" – A substance with unique properties consisting of a combination of one or more elements.

3.3. "Contaminant" – "Contaminant" for purposes of environmental management laws, means any solid, semi-solid, liquid, or gaseous matter, or any odor, radioactive material, pollutant (as defined by the federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), as in effect on January 1, 1989), hazardous waste (as defined in the federal Solid Waste Disposal Act [42 U.S.C. 6901 et seq.], as in effect on January 1, 1989), any constituent of a hazardous waste, or any combination of the items described in this section, from whatever source, that:

(1) is injurious to human health, plant or animal life, or property;
(2) interferes unreasonably with the enjoyment of life or property, or otherwise violates:
(A) environmental management laws; or
(B) rules adopted under environmental management laws
(329 IAC 10-2-41, IC 13-11-2-42)

3.4. "Contaminants of concern" – Chemicals that are the focus of screening, investigation or closure in Office of Land Quality remediation programs. For petroleum sites, potentially harmful chemicals within a mixture that are present in sufficient quantity to serve as indicator compounds for that particular mixture.

3.5. "Dirt" – The term "dirt" is used in state rules at 329 IAC 10-3-1(1)(1), but is not defined in statute or rule. For the purpose of this policy, 'dirt' and 'soil' are considered synonymous terms. See 'Soil'.

3.6. "Endangered species" – Any species listed as endangered or threatened under rules of the Indiana Natural Resources Commission at 312 IAC 9-3-19, 312 IAC 9-4-14, 312 IAC 9-5-4, 312 IAC9-6-9, 312 IAC 9-9-4. (329 IAC 10-2-64)

3.7. "Flood plain" – The areas adjoining a river, stream, or lake that are inundated by the base flood. (329 IAC 10-2-75 and 329 IAC 10-2-22)

3.8. "Hazardous waste" – Hazardous waste as defined in the Code of Federal Regulations at 40 CFR 261 subpart B and Indiana Code at IC13-11-2-99.

3.9. “Karst physiographic feature” – Characteristic physiographic features present in karst terrains including any of the following: sinkholes, sinking streams, caves, large springs, blind valleys, grikes, karren, solution widened joints or bedding planes, loss of drilling fluid during core drilling, anastomosis and conduits of less than one meter but more than two and five-tenths (2.5) millimeters, and karst aquifers.

3.10. “Non-rule policy” - The term IDEM assigns to those policies identified in IC 13-14-1-11.5 as any policy that: A. Interprets, supplements, or implements a statute or rule; B. Has not been adopted in compliance with IC 4-22-2; C. Is not intended by IDEM to have the effect of law; and D. Does not apply solely to the internal IDEM organization (is not an administrative policy).

3.11. “Remediation Closure Guide” – IDEM’s Remediation Closure Guide (RCG) is an NPD describing selected approaches to investigation and risk-based closure of contaminated or potentially contaminated sites. Its purpose is to provide for consistent application of Indiana Code (IC) 13-12-3-2 and IC 13-25-5-8.5, which form the statutory basis for risk-based cleanup in Indiana.

3.12. “Screening levels” – Screening levels and, more specifically, the residential screening levels, can be found in Table A-6 in Appendix A: Screening Levels (also referred to as Screening Levels Table) of the IDEM Remediation Closure Guide (RCG).

3.13. “Soil” – Unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand or gravel as classified by the U.S. Natural Resources Conservation Service. For the purpose of this NPD, ‘dirt’ and ‘soil’ are considered to be synonymous terms. (40 CFR 268.2(k) [not inclusive])

3.14. “Solid waste" - As defined in 329 IAC 10-2-174:
(a) Has the meaning as set forth in IC 13-11-2-205(a).
(b) The following are examples of other discarded material:
(1) Ash residue.
(2) Contaminated sediments.
(3) Commercial solid waste.
(4) Construction/demolition waste.
(5) Hazardous waste.
(6) Household waste.
(7) Infectious waste.
(8) Liquid waste.
(9) Pollution control waste.
(10) Municipal solid waste.
(11) Regulated hazardous waste.
(12) Residential waste.
(13) Industrial process waste.

3.15. “Wetlands“ – Areas classified as jurisdictional wetlands or jurisdictional waters of the United States by the United States Army Corps of Engineers under the authority from the federal Clean Water Act, 33 U.S.C. 1344, and areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include (1) swamps, (2) marshes (3) bogs, and (4) similar areas. (329 IAC10-2-207 and IC 13-11-2-265.7)

4.0 ROLES

4.1 The Site Owner/Consultant/Operator or other person responsible for the soil shall:
Be responsible for conducting an investigation of the soils and the site or area where the soil will be removed to determine if the soil contains contaminants. This can include but is not limited to:

- Reviewing site records to determine previous uses of the property, including uses that may have adversely impacted the site. This could include, but is not limited to, records of ownership and taxation, property transfer disclosures, or descriptions of property use (i.e., Sanborn Maps.)

- Reviewing or inspecting the site to determine the presence of stained soil(s) or other indications of contaminated soil, if deemed necessary. During the record review or site inspection, conducting a characterization of the soil(s).
- Determining if the soil contains human introduced chemicals. This will likely require collecting and analyzing representative samples of the soil in accordance with SW846 or other accepted methods and standards.
- Inspecting for stained soils or other wastes and/or other indications of contamination during excavation.
- If present, determining if the concentration of the human introduced chemicals or contaminant in the soil are at levels greater than the RCG residential screening levels.
- Maintaining records/documentation used as a basis for determining the concentration of the human introduced chemicals in the soil.
- If human introduced chemicals are present, maintaining records of where and how much soil was placed on-site or where and how much soil was sent off-site.
- Ensuring that the soils containing any level of human introduced chemicals are not placed in an environmentally sensitive area.

4.2 Excavator/Transporter responsible for the relocation of soils shall:

- Ensure that the soils containing any level of human introduced chemicals are not placed in an environmentally sensitive area.

4.3 IDEM Compliance and Response Branch

- IDEM has been tasked with protecting the environment and shall be responsible for:
  a. Answering questions related to this NPD, and
  b. Investigating improper application of this NPD.

5.0 POLICY

This NPD is meant to aid in determining and explaining when, through the use of the RCG residential screening levels, soil containing detectable levels of human introduced chemicals is considered 'uncontaminated'. As 'uncontaminated' soil, the exclusion in 329 IAC 10-3-1(1) will apply according to the qualifications listed below.

<u>Use of Residential Screening Levels</u>

For excavated soils containing detectable amounts of human introduced chemicals, the residential screening levels provided in Table A-6 in Appendix A: Screening Levels (also referred to as Screening Levels Table) of the IDEM Remediation Closure Guide (RCG) should be used when the soils are:

- Not subject to RCRA hazardous waste regulatory requirements, and
- Going to be deposited on-site, or
- Used as fill on-site or off-site, or
- Managed in a way other than disposal at a municipal solid waste landfill

There are two residential screening levels in Table A-6; the "Migration to Groundwater" and the "Direct Contact" screening levels. The lower of the two screening levels must be used as the residential screening level when comparing the concentrations of the human introduced chemicals in the soil with the residential screening level.

<u>Placement in Environmentally Sensitive Areas</u>

In order to protect the environment, soils with any detectable levels of human introduced chemicals cannot be placed in environmentally sensitive areas.

Environmentally sensitive areas include the following locations:

- Areas of karst physiographic features.
- A wetland, floodway, or standing water, where the standing water reflects the water table.

Additionally, any placement of soil, on-site or off-site, could be subject to other regulations that include, but may not be limited to, the following regulations:

- 327 IAC 15-5 - Storm Water Run-Off Associated with Construction Activity.
- 327 IAC 15-6 - Storm Water Discharges Exposed to Industrial Activity.
- IC 14-28 - Flood Control Act (i.e., IC 14-28-1-22 Construction permits).
- 312 IAC 10 - Flood Plain Management (i.e., 312 IAC 10-4-1 License requirements for construction in a floodway).
- 312 IAC 10-2-39 - Unreasonable detrimental effects upon fish, wildlife, or botanical resources, and IC 14-28-1-22.
- Section 401 of the federal Clean Water Act - State Certification of Water Quality.
- 326 IAC 6-4 - Fugitive Dust Emissions.
- 326 IAC 6-5 - Fugitive Particulate Matter Emission Limitations
- IC 14-21 - Historic Preservation and Archeology.
- Section 404 of the federal Clean Water Act – Wetlands.
- The critical habitat of an endangered species as defined by the Code of Federal Regulations, 50 CFR 17.

Determination/Approval

At any given time, there are large numbers of excavations and large volumes of soil being excavated and moved throughout the state. Putting in place a formal process to require the review and assessment of every excavation by IDEM is not practical or an efficient use of IDEM's time. Therefore, this NPD is meant to be self-implementing.

The owner/operator will still be responsible for adhering to the statutory requirements, rules, and for following this NPD, but will not be required to obtain approval from IDEM.

Case-by-Case Site-Specific Levels

When an RCG screening level does not exist, facilities may develop a site-specific risk analysis to establish a site specific 'screening level'. If a case-by-case site-specific risk analysis is necessary, the owner/operator must submit a written proposal to the IDEM Solid Waste Compliance Section. A written approval from IDEM will be required before excavation may begin. The written proposal will be routed by the IDEM Solid Waste Compliance Section to the IDEM Office of Land Quality Science Services Branch, Risk Services Section.

More Information and/or Questions

If there are questions regarding the application of this NPD, please contact staff of the Solid Waste Compliance Section of IDEM's Office of Land Quality, at (317) 234-6923 or, toll free in Indiana, at (800) 451-6027, ext. 4-6923.

6.0 REFERENCES

6.1. Indiana Administrative Codes:

A. 329 IAC 3.1, Hazardous Waste Management Permit Program and Related Hazardous Waste Management

B. 329 IAC 10, Solid Waste Land Disposal Facilities

C. 329 IAC 11-3-1(1), Solid Waste Processing Facilities; Exclusions; general

6.2. Indiana Statutes:

A. IC 13-13, Department of Environmental Management

6.3 Agency Policies:

A. Remediation Closure Guide NPD (Waste-0046-R1)

B. Contained-In Determination NPD (Waste-0061)

7.0 Signatures

Thomas W. Easterly, Commissioner
Indiana Department of Environmental Management

12/24/14
Date

Bruce Palin, Assistant Commissioner
Office of Land Quality

3/13/14
Date

Carol Comer, Assistant Commissioner
Office of Legal Counsel and Criminal Investigations

4/8/2014
Date

This policy is consistent with agency requirements.

Quality Improvement Program
Office of Planning and Assessment
Indiana Department of Environmental Management

12-29-2014
Date