### FOURTH FIVE-YEAR REVIEW REPORT FOR SOUTH POINT PLANT SUPERFUND SITE LAWRENCE COUNTY, OHIO



## Prepared by

U.S. Environmental Protection Agency Region 5 Chicago, Illinois

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#### LIST OF ABBREVIATIONS & ACRONYMS

CD Consent Decree

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations
COCs Contaminants of Concern

CYs Cubic Yards

ECs Environmental Covenants

EPA United States Environmental Protection Agency

FYR Five-Year Review ICs Institutional Controls

Landfill Eastern Disposal Area Landfill

mg/kg Milligram/Kilogram mg/L Milligram per Liter

NCP National Contingency Plan NPL National Priorities List

OEPA Ohio Environmental Protection Agency

O&M Operation and Maintenance

OM&M Operation Monitoring and Maintenance

OU Operable Unit

c-PAHs Polycyclic Aromatic Hydrocarbons

PRG Preliminary Remedial Goal PRP Potentially Responsible Party PS Performance Standards

PS Performance Standards
RAO Remedial Action Objective
RI Remedial Investigation
ROD Record of Decision

Site South Point Plant Superfund Site

UECA Uniform Environmental Covenants Act
UU/UE Unlimited Use and Unrestricted Exposure

VOCs Volatile Organic Compounds

#### I. INTRODUCTION

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP)(40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the fourth FYR for the South Point Plant Superfund Site (Site). The triggering action for this statutory review is the completion date of the previous FYR. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

The Site consists of one Site-wide operable unit (OU1), which will be addressed in this FYR. OU1 consists of the Plant, the groundwater, Disposal Area D, the Mid-Plant Area, the coke-oven gas line drip pots, the Eastern Disposal Area, Northern Fly Ash Pond, and the Melamine Ponds.

The Site's FYR was led by Nabil Fayoumi, EPA Remedial Project Manager. Participants included Emily Deshaies, the Ohio Environmental Protection Agency (OEPA) project manager. The relevant entities such as the Potentially Responsible Party (PRP) and OEPA were notified of the initiation of the FYR. The review began on 4/14/2020.

#### Site Background

The Site consists of approximately 610 acres located on the eastern bank of the Ohio River in the Village of South Point, Lawrence County, Ohio (Figure 1 – Site Location Map, in Appendix B). Along the eastern side of the Site, Solida Creek, a small intermittent stream, flows from southeast to northwest. A small tributary to Solida Creek, Willow Creek, joins it east of the Site. Solida Creek, Willow Creek, and the Ohio River represent the natural surface-water drainage within the Site. The Ohio River flows northward in the vicinity of the Site, and ultimately southwesterly toward the Mississippi River. The Plant on the Site was constructed in 1943 by the federal government to produce ammonium nitrate which was used to produce explosives. Since that time, several companies have operated at the Site manufacturing compounds such as ammonia, urea, nitrogen fertilizer solution, melamine, formaldehyde, ethanol, liquid carbon dioxide, and urea formaldehyde mixtures until 1985. Various process wastes and general Plant trash were disposed of in disposal units at the Site, including the Northern Fly Ash Pond, the Eastern Disposal Area, Disposal Area D, and the Melamine Ponds.

The Site is not zoned. The village of South Point's commercial, industrial, and residential districts do not extend beyond the downtown area, located adjacent to the Site's southern boundary. Deed restrictions and restrictive covenants restrict the Site's uses to commercial and industrial uses. The current and reasonably anticipated future land use of the Site is an industrial park called the Point.

#### **FIVE-YEAR REVIEW SUMMARY FORM**

SITE IDENTIFICATION						
Site Name: South Po	oint Plant					
<b>EPA ID:</b> OHD 07	1650592					
Region: 5	State: OH	City/County: South Point/Lawrence County				
		SITE STATUS				
NPL Status: Final						
Multiple OUs? No	Has the Yes	ne site achieved construction completion?				
	REVIEW STATUS					
Lead agency: EPA						
Author name (Federal or State Project Manager): Nabil Fayoumi						
Author affiliation: EPA						
<b>Review period:</b> 4/14/2020 - 1/12/2021						
<b>Date of site inspection:</b> FYR Site inspection not conducted due to COVID-19 work travel restrictions; recent PRP annual Site inspection done in January 2020.						
Type of review: Statutory						
Review number: 4						
Triggering action date: 4/14/2016						
Due date (five years after triggering action date): 4/14/2021						

#### II. RESPONSE ACTION SUMMARY

#### **Basis for Taking Action**

The contaminants of concern (COCs) identified in the soil and sediment are the following: antimony, arsenic, barium, beryllium, cadmium, chromium, thallium, and vanadium. In addition, volatile organic compounds (VOCs), and semi-VOCs were identified as COCs in the Site soil. The groundwater was not impacted by these COCs. The COCs identified in the groundwater are ammonia, arsenic, beryllium, cadmium, copper, manganese, nickel and nitrate. The full list of COCs are also identified in Tables 1 and 2 in the Response Actions section of this FYR.

The South Point Plant Baseline Risk Assessment, dated February 2, 1993, and South Point Plant Ecological Assessment, dated April 14, 1992, were completed by the PRP contractor (Geraghty & Miller, Inc.) to identify human health and wildlife hazards posed by the environmental contamination from the Site (Geraghty & Miller, Inc., 1993 and Geraghty & Miller, Inc., 1992 respectively).

These assessments are included in Appendix A. Sample results from the remedial investigation (RI) (Geraghty & Miller, Inc., 1994) were used to evaluate all environmental pathways with potential human exposure routes. Groundwater, soil, and Solida Creek's surface water and sediment pathways were evaluated as possible exposure routes for the COCs. The exposure pathways that triggered CERCLA action were potential ingestion, inhalation, and dermal contact to Site-related contaminants in these media. The receptors are on-site workers, adult trespassers, and child trespassers that could potentially be exposed to contaminants found in on-site soil, sediment, and groundwater. No evidence of stress to wildlife was observed during the field investigation. Resident biota could be exposed to contamination but is not expected to represent a concern.

#### **Response Actions**

On September 26, 1997, EPA signed a Record of Decision (ROD) (EPA, 1997) and selected the remedy for the Site which included:

- Institutional controls (ICs) for soil and groundwater;
- Containment of groundwater through pumping and discharging to the Ohio River;
- Groundwater monitoring;
- Excavation of wastes from Disposal Area D;
- Excavation of arsenic contaminated soils from the Mid-Plant Area;
- Excavation of the coke-oven gas line drip pots and contaminated soils;
- Consolidation of wastes within the Eastern Disposal Area;
- Construction of an on-site landfill with barrier cover in the Eastern Disposal Area for wastes from Disposal Area D and arsenic contaminated soils from the Mid-Plant Area having concentrations less than 400 milligrams per kilogram (mg/kg); and
- Off-site disposal of the coke-oven gas line drip pots and contaminated soils associated with the drip pots, and arsenic contaminated soils from the Mid-Plant Area having concentrations greater than 400 mg/kg.

The 1997 ROD presents remedial action objectives (RAOs) for the surface soil, soil, and groundwater. The RAOs are:

#### Surface Soil

- Minimize potential ingestion and dermal contact of contaminated surface soils (metals, carcinogenic polycyclic aromatic hydrocarbons [c-PAHs]) by current and future human receptors;
- Excavate arsenic-contaminated soils in the Mid-Plant Area that exceed the arsenic Preliminary Remedial Goal (PRG) to reduce risk associated with dermal contact and ingestion of contaminated surface soils by current and future human receptors.

#### Soil

• Excavate drip pots and the surrounding impacted soil to reduce risk associated with dermal contact and ingestion of contaminated soils (c-PAHs) associated with the drip pots in this area by current and future human receptors.

#### Groundwater

- Prevent ingestion of contaminated groundwater (nitrates, ammonia, metals) under the Plant by future human receptors;
- Restore quality of local groundwater under the Plant.

PRGs were developed for the COCs in groundwater, soil and sediment based on the findings of the RI, the Baseline Risk Assessment, and the Ecological Assessment. The PRGs were adopted as performance standards (PS), i.e., cleanup goals. The selected PSs for COCs in groundwater, sediment and soil are presented in Tables 1 and 2 below:

Table 1: Identified COCs and PS in Groundwater

Compound	PS
Compound	(mg/L*)
Ammonia	30
Arsenic	0.05
Beryllium	0.004
Cadmium	0.005
Copper	3.8
Manganese	1.4
Nickel	2
Nitrate	10

<sup>\*</sup>mg/L: milligram/liter

Table 2: Identified COCs and PS in Sediment and Soil

Compound	PS (mg/kg)
1,1-Dichloroethene	10
Benzo(a)anthracene	18
Benzo(a)pyrene	1.8
Benzo(b)fluoranthene	18
Benzo(k)fluoranthene	180
Chrysene	1,800
Dibenz(a,h)anthracene	1,8
Indeno(1,2,3-cd)	18
pyrene	
Antimony	500
Arsenic	40
Barium	88,000
Beryllium	14
Cadmium	630
Chromium	6,300

Thallium	100
Vanadium	8,800

#### **Status of Implementation**

The Site achieved construction completion with the signing of the Preliminary Close-Out Report on December 31, 2001 (EPA, 2001). The completed construction activities included:

#### Demolition of Site's Facilities

Prior to excavation of contaminated soils from the Mid-Plant Area, railroad tracks and ties were removed. Approximately 844 railroad ties were removed and placed within the northern fly ash pond for storage, along with approximately 1,500 linear feet of railroad tracks. These activities were completed before the completion of the soils remedy in December 2001.

#### Excavation and Handling of Contaminated Materials:

#### Mid-Plant Area Arsenic Contaminated Soils

Mid-Plant Area excavation started on May 29, 2001 and was completed on July 23, 2001. A total of 24,600 cubic yards (CY) of soils found to contain between 40 and 400 mg/kg arsenic were placed under the cap area within the Eastern Disposal Area Landfill (Landfill). Mid-Plant Area soils found to contain levels of arsenic greater than 400 mg/kg were characterized, found to be non-hazardous, and disposed of off-site as a non-hazardous solid waste. Backfill of the excavation areas with soils from the on-site borrow to original grade was completed on July 27, 2001.

#### Disposal Area D Excavation

Excavation of Disposal Area D waste started on May 31, 2001 and was completed on June 22, 2001. Approximately 18,525 CY of material was excavated, hauled to the Landfill and placed under the cap. After removal of wastes, this Area was regraded to restore surface water drainage, seeded, and mulched.

#### North Area of the Eastern Disposal Area

All the fly ash and Site's waste residing in the north area of the Eastern Disposal Area was excavated, hauled to the south area of the Landfill and placed under the cap. During the excavation, a small deposit of material identified as melamine, a waste common to the Site, was found in the north area. This material was excavated along with the fly ash. Approximately 30,300 CY of material was removed from the north area of the Eastern Disposal Area and placed under the cap of the Landfill. These activities were part of the soils remedy which was completed in December 2001.

#### South Area of the Eastern Disposal Area

Waste located outside the limits of the proposed cap in the south area of the Landfill was excavated and relocated within the cap limits. In addition, the fly ash waste along the steep east slope of the Eastern Disposal Area was excavated. This waste was relocated into the existing ravine within the cap area and onto the top of the cap to establish grade. In addition to the regrading of materials within the south area of the Eastern Disposal Area, large slag boulders located at the toe of the slope of the cap area were moved and buried within the capped area of the Landfill. These activities were part of the soils remedy which was completed in December 2001.

#### Coke Oven Gas Blow Down Area

The work conducted in this area included the excavation, removal, and off-site disposal of the three drip pots. The drip pots were emptied, decontaminated and disposed of off-site at a local metal recycler. The contents of the drip pots, approximately 3,000 pounds, were disposed of at a licensed hazardous waste disposal facility. Approximately 20 tons of impacted soil was disposed of off-site. These activities were part of the soils remedy which was completed in December 2001.

#### <u>Installation of the Landfill Cap</u>

After Site's waste placement within the Eastern Disposal Area Landfill was completed, the Landfill subgrade was final-graded, prepared, and the cap was installed. The Landfill subgrade consisted of fly ash from the Site with a mix of fine-grained sand. The final quantity of soil and materials excavated and consolidated within the cap of the Landfill was approximately 91,625 CY. A fence has been erected around the Landfill. The purpose of the fence is to protect the landfill cap from disturbance. These activities were part of the soils remedy which was completed in December 2001.

#### Installation of Erosion Control Measures

Erosion control measures, such as sloping and installation of rock riprap, were installed at the Landfill, Disposal Area D, along the banks of Solida Creek, and along the northern fly ash pond dike. Solida Creek was relocated to the east and north, away from the dike of the northern fly ash pond. The relocated stream bank of Solida Creek was lined with rock riprap. These activities were part of the soils remedy which was completed in December 2001.

#### Groundwater

The groundwater monitoring program was initiated in May 2001 in accordance with the 2001 Final Design Report for the Site. In September 2011, EPA and OEPA determined that the pumping was not resulting in any direct benefits, and it may have even been preventing natural attenuation of the Site's plume as it migrated from the pumping wells to the Ohio River and conditionally approved shutting down the two groundwater pumping wells SPIS-23 and SPIS-24.

Currently, the groundwater monitoring program at the Site is conducted in accordance with the 2019 South Point Plant Site Operation, Monitoring, and Maintenance (OM&M) Plan (Wood Environment & Solution, Inc., 2019a). Monitoring wells were selected to monitor water level measurement, quality, and containment of the impacted groundwater. The groundwater monitoring well network consists of the following wells identified below, and as illustrated on Figure 2 – Groundwater Monitoring Wells Locations found in Appendix B.

- Ten inactive production wells and twelve monitoring wells for water level measurement only
- Two inactive production wells and fifteen monitoring wells for water level measurement and groundwater quality monitoring

#### **Institutional Controls**

Table 3 below provides a summary of implemented and planned ICs for the Site. Appendix C - Attachment 3 includes Site maps of areas which do not allow for UU/UE.

**Table 3**: Summary of Planned and/or Implemented ICs

Media, engineered controls, and areas that do not support UU/UE based on current conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Disposal Area Landfill and Northern Fly Ash Ponds- capped area	Yes	Yes	15-123-0201 15-123-0202 39-001-0100	Prohibit the disturbance of the cap over the landfill or disturbance of any other component of the remedy.	Deed Restriction/Restrictive Covenant, March 24, 1999, Lawrence County Recorder's Office  Environmental Covenants (ECs) (planned)
Groundwater	Yes	Yes	See Attachment 3 (All shaded areas indicated on Site Map)	Use of groundwater from the site for any purpose is prohibited.	Deed Restriction/Restrictive Covenant, March 24, 1999, Lawrence County Recorder's Office  ECs (planned)
Surface water	Yes	Yes	See Attachment 3 (All shaded areas indicated on Site Map)	Use of surface water from the site for any purpose is prohibited.	Deed Restriction/Restrictive Covenant, March 24, 1999, Lawrence County Recorder's Office  ECs (planned)

#### Status of Access Restrictions and ICs

Annual IC evaluation activities conducted by the PRPs have revealed that ICs are in place and effective. Implementation of the deed restrictions consisted of the filing of a Notice of Consent Decree Imposing Limitations and Restrictions of Property in the Lawrence County Recorder's office on March 24, 1999, prior to the active remedial construction work. The capped southern portion of the Site's Eastern Disposal Area Landfill, where on-site wastes were consolidated, is fenced, and access is restricted. As a result of the 2016 FYR, in August 2016 a gate was installed and locked to prevent access to the Northern Fly Ash Pond. The 2019 OM&M Plan requires regular inspection of ICs at the Site. However, the 2019 OM&M Plan must be updated to require annual certification to EPA and OEPA that the required ICs are in place and effective.

#### IC Requirements

In accordance with the September 16, 1998, Consent Decree (CD) between EPA and AlliedSignal Inc., Ashland Inc., Ashland Ethanol, Inc, and South Point Ethanol, and the 1997 ROD, ICs included the use of proprietary controls consisting of deed restrictions, along with monitoring of these controls. These ICs are being achieved through the March 24, 1999 deed restrictions that consisted of providing notice of the Limitation and Restrictions of the Property. In order for the remedy to be protective in the long-term, ICs with the following objectives were implemented:

The Site must be restricted to commercial/industrial uses only;

- There must be no use or public access allowed on the fenced and capped southern portion of the Site's Eastern Disposal Area, where on-site wastes were consolidated; and
- Groundwater and surface water use on the Site is prohibited.

#### **Current Compliance:**

Based on the IC review, including a review of transactional and non-transactional, proprietary, government, and informational controls, and the Site's quarterly inspections performed by the PRP contractor, Wood Environment & Solution, Inc., over this FYR period, no inappropriate nor new uses of land, surface water, or groundwater were noted. These inspections are documented in the quarterly inspection reports and in the OM&M annual monitoring reports submitted to EPA and OEPA. Based on these reports, EPA and OEPA are not aware of Site or media uses that are inconsistent with the stated objectives of the ICs and the objectives of the ICs are being complied with. No activities were identified that would have violated the ICs. The cap on the Fly Ash Pond and the Disposal Area Landfill and the remedy components were undisturbed.

#### IC Follow up Actions Needed:

The ICs are being updated to conform to current state law pursuant to the Ohio Uniform Environmental Covenant Act (UECA). The PRP, Honeywell Inc. (formerly Allied Chemical), does not believe such updating is necessary or required by the 1998 CD. However, in the spirit of cooperation and with full reservation of rights, Honeywell prepared an updated draft of the ECs. However, affected property owners and tenants have taken the position that the existing deed restrictions are sufficient. EPA, OEPA, and Honeywell will continue to work with all property owners and tenants to implement mutually acceptable ECs.

#### **Systems Operations/Operation & Maintenance**

The objective of the monitoring program is to assess the flow and quality of groundwater until the remedial goals for the groundwater are met. The operation and maintenance (O&M) activities for the remedial action and the groundwater monitoring program are conducted in accordance with the 2019 OM&M Plan. Per the 2019 OM&M Plan, the Site is inspected on a quarterly basis, semiannual groundwater sampling is conducted, and a review of the existing ICs is completed. Groundwater monitoring wells are inspected on a semi-annual basis when sampling of the wells occurs.

The PRP completed the following O&M activities since the last FYR: quarterly inspections of the Site, semiannual groundwater sampling and inspection of monitoring wells, mowing of the cap area, a review of the existing ICs, and annual reporting. These O&M activities will continue for the Site. The quarterly inspection reports and the OM&M annual reports were reviewed for this FYR period.

#### III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

Table 4: Protectiveness Determinations/Statements from the 2016 FYR

#### **OU1 & Sitewide Protectiveness Statement**

Protectiveness Determination:

**Short-term Protective** 

Protectiveness Statement: The remedy for the South Point Plant Site is currently protective of human health and the environment because it was constructed in accordance with the requirements of the ROD and is functioning as designed. Threats at the Site have been addressed through excavation, onsite consolidation and off-site disposal of contaminated soil, capping of contaminated soil, groundwater containment and contaminant mass removal, and implementation of ICs. However, in order for the remedy to be protective in the long-term, the following actions need to be taken to ensure protectiveness: enhance the existing ICs by implementing the proposed ECs pursuant to the Ohio UECA and update the O&M plan to include provision of regular inspection of ICs and annual certification to EPA and OEPA that the required ICs are in place and effective.

**Table 5**: Status of Recommendations from the 2016 FYR

OU#	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date
OU1/ Sitewide	Existing ICs should be enhanced by implementing the proposed ECs under the Ohio UECA.	Work with property owners to implement mutually acceptable ECs.	Under Discussion	A draft EC was developed by Honeywell. Affected property owners have taken the position that the existing deed restrictions are sufficient. EPA, OEPA, and Honeywell are continuing to work with all property owners and tenants to implement mutually acceptable ECs, and expects to have them completed by the end of 2022.	NA
OU1/ Sitewide	The O&M plan does not include a provision for regular inspection of ICs and annual certification to EPA and OEPA that the required ICs are in place and effective.	Update the O&M plan to include a provision for regular inspection of ICs and annual certification to EPA and OEPA that the required ICs are in place and effective.	Addressed in Next FYR	The OM&M Plan was updated in May 2019 to include a provision for regular inspection of the ICs. However, the OM&M Plan requires updating as it does not include a provision for an annual certification to EPA and OEPA that the required ICs are in	NA

				place and effective. This has been included as a new issue and recommendation.	
OU1/ Sitewide	During the FYR inspection, it was noted that there were persons on all-terrain vehicles (ATVs) trespassing onto the fly ash areas.	Actions, such as placing boulders and no trespassing signs, should be taken to reduce any trespassing onto these areas.	Completed	A gate was installed and locked to prevent access to the Northern Fly Ash Pond.	8/9/2016

#### IV. FIVE-YEAR REVIEW PROCESS

#### **Community Notification, Involvement & Site Interviews**

Adrian Palomeque, EPA Community Involvement Coordinator for the Site, published a notice in the local newspaper, the *Ironton Tribune* on March 3, 2021 stating that a FYR was being conducted and inviting the public to submit any comments to the EPA. EPA received no public comments regarding the FYR for the Site. The results of the review and the FYR report will be made available at the Site information repository at the Briggs Lawrence Library, 317 Solida Rd., and on EPA's website for the Site at <a href="www.epa.gov/superfund/southpoint-plant">www.epa.gov/superfund/southpoint-plant</a>. A copy of the public notice can be found in Appendix C – Attachment 1.

#### **Data Review**

In September 2011, EPA and OEPA determined that the pumping was not resulting in any direct benefits, and it may have even been preventing natural attenuation of the Site's plume as it migrated from the pumping wells to the Ohio River and conditionally approved shutting down the two groundwater pumping wells SPIS-23 and SPIS-24. EPA requested the following actions be performed before the final approvals:

- Sample monitoring wells SPMW-04, SPMW-12, and SPMW-13 quarterly for a minimum of two years following pumping wells' shutdown
- Report analytical results for each monitoring event

EPA provided a final approval of the shutting down of pumping wells SPIS-23 and SPIS 24 on November 10, 2015, following 13 groundwater sampling events showing concentrations of manganese, nitrate and ammonia below the site-specific PSs for each quarterly sampling event for wells SPMW-04, SPMW-12, and SPMW-13. EPA also requested that monitoring wells SPMW-04, SPMW-12, and SPMW-13 be included in the semi-annual monitoring program and Mann-Kendall analysis be performed after four semi-annual groundwater samples have been collected from these wells. A total of eight semi-annual monitoring events were completed to date. A total of 17 monitoring wells were sampled during the semi-annual (April and October) groundwater sampling program. The groundwater monitoring well network consists of the following wells:

- Ten inactive production wells and twelve monitoring wells for water level measurement only.
- Two inactive production wells and fifteen monitoring wells for water level measurement and groundwater quality monitoring.

The groundwater flow map (Appendix B – Figure 4) continues to show that the groundwater flow direction at the Site is generally to the southwest, toward the Ohio River and not toward the Village of South Point municipal well fields. The Village of South Point municipal wells are largely side gradient to any groundwater contamination detected at the Site and are not a likely receptor. No change in groundwater flow direction has been observed during the containment wells' shutdown period. A review of the analytical data (Appendix B – Figures 5 and 6) indicates that only reported concentrations of ammonia, manganese and nitrate exceed the site-specific PSs. Beryllium, cadmium, copper, and nickel were detected in low concentrations that did not exceed the PSs during the FYR period. The arsenic standard was lowered from 0.05 to 0.01 mg/L. However, only one monitoring (well SPIS-23) exceeded the lower standard in April 2019 (0.0143 mg/L) and October 2019 (0.0279 mg/L). Details of the PS exceedances during this FYR review period are discussed below:

Ammonia was detected at concentrations above the site-specific PS of 30 mg/L only at one location (SPMW-11R) during 2016 and 2017 (SPOB-12R2). These two wells are located on the western edge of the Site (Appendix B – Figure 2). The reported ammonia concentrations range was 30.4 to 34.4 mg/L. The monitoring data for ammonia showed a general decline in concentration in 2016 and 2017 (Appendix B – Figure 7).

Nitrate was detected in concentrations at or above the site-specific PS of 10 mg/L at three locations (SPIS-24, SPMW-02, and SPMW-9) during 2016, three locations (SPIS-24, SPMW-05, SPMW-11R) during 2017, two locations during 2018 (SPIS-24, and SMPW-11R), and at three locations during 2019 (SPIS24, SPMW-11R, and SPMW-12). These wells are located throughout the Site (Appendix B – Figure 2). The reported nitrate concentrations range was 13.2 to 54.3 mg/L. Nitrate concentrations appear to be stable or in general decline (Appendix B – Figure 8).

Manganese was detected at or above the site-specific PS of 1.4 mg/L at four locations during 2016 (SPIS-23, SPM-06R2, SPMW-08, and SPMW-09), at four locations during 2017 (SPIS-23, SPMW-03, SPMW-08, and SPMW-09), and at the same three locations during 2018 and 2019 (SPIS-23, SPMW-08, and SPMW-09). These wells are located along the eastern and western edges of the Site (Appendix B – Figure 2). The reported manganese concentrations range was 1.5 to 7.5 mg/L. Manganese concentrations appear to be stable or in general decline (Appendix B – Figure 9).

#### Mann-Kendall Statistical Analysis for Wells SPMW-4, SPMW-12, and SPMW-13

The Mann-Kendall statistical analysis was performed only for constituents that had more than 50 percent of the results detected above the reporting limit.

#### Well SPMW-4

Manganese and nitrate were the only two constituents that had more than 50 percent of the results detected above the reporting limit. The analysis indicates no statistically significant increasing or decreasing trends for manganese and nitrate at this location.

#### Well SPMW-12

Manganese, ammonia, and nitrate were the only constituents that had more than 50 percent of the results detected above the reporting limit. The analysis indicates that ammonia and manganese show no statistically significant increasing or decreasing trends, while nitrate is statistically increasing. Nitrate exceeded the PRG of 10 mg/L on October 30, 2019 with a result of 13.2 mg/L.

Given that in October 2019, the PS for nitrate was exceeded in the groundwater sample collected from monitoring well SPMW-12, a trend evaluation of nitrate detections in the nearby monitoring wells was conducted using sampling data collected since the shutdown of the two groundwater pumping wells in September 2011. Data from a total of 17 semi-annual sampling events from the following monitoring wells: SPMW-02, SPMW-04, SPMW-07, SPMW-11R, SPMW-12, SPMW-13, and SPIS-24 were included in this trend evaluation. Results of this trend evaluation indicate that there are no statistically significant trends in nitrate concentrations in the selected wells, except for the decreasing trend of nitrate in monitoring well SPMW-07. This trend evaluation will continue for the following groundwater sampling events.

#### Well SPMW-13

Manganese and nitrate were the only two constituents that had more than 50 percent of the results detected above the reporting limit. The analysis indicates no statistically significant increasing or decreasing trends for manganese and nitrate at this location.

Based on groundwater monitoring data, the groundwater RAOs of containment of contaminated groundwater and prevention of contaminated groundwater ingestion, have been achieved. In addition, significant progress has been made toward achieving the groundwater RAO to restore quality of local groundwater under the Plant.

#### **Site Inspection**

Due to COVID-19 travel restrictions, the FYR Site inspection could not be completed. The FYR Site inspection will be conducted once it is feasible to do so, and photographs and the Site Inspection Checklist will be included in the Site's files. Therefore, this has been included as an issue and recommendation of this FYR.

The most recent annual O&M inspection of the Site was conducted on January 15, 2020, by Maggie Selbe (OEPA), Patrick Holmes from Jacobs (Honeywell's O&M contractor), and Laura Striban from Wood Environment & Solution, Inc (Honeywell's contractor). The purpose of the inspection was to assess the eastern disposal area cap, northern fly ash ponds, and the groundwater containment system. Results of the January 2020 quarterly Site inspection are detailed below:

#### The Eastern Disposal Area Cap and Fence

The cap area was in good condition. There was no evidence of subsidence, settling, leachate, woody plants, burrowing animals, other irregularities, or damage to the gas vent system. The cap was mowed three times a year. Additional maintenance of the cap was not required.

#### The Drainage System

The drainage system was clear of debris and in good condition. The system appears to be functioning properly. The grating was clear of debris. The drainage system was operating, and no maintenance was necessary.

The Fence and Access Road

The fence, signage, gates, and access roads are in good condition. Maintenance of the fence and access road was not necessary.

#### Northern Fly Ash Ponds

The Northern Fly Ash Ponds were in good condition. The area remains vegetated and it is difficult to fully inspect the terrain, but there was no evidence of rills, slope instability or other irregularities. Maintenance was not required in this area.

OEPA's Site Inspection Email with accompanying photograph is included in Appendix C - Attachment 2. During the inspection, OEPA, Jacobs, and Wood discussed the re-stenciling of monitoring well SPMW-08. They also started a conversation about the future management of some woody vegetation observed on the cap. Currently, monitoring the growth and frequent mowing (approximately 3 times per year) appears to be sufficient management at this time. No other issues were encountered during the annual inspection.

#### V. TECHNICAL ASSESSMENT

**QUESTION A:** Is the remedy functioning as intended by the decision documents? YES

#### **Question A Summary:**

#### **Remedial Action Performance**

A review of Site-specific documents, applicable or relevant and appropriate requirements, risk assumptions, groundwater monitoring data, and the results of the most recent Site quarterly inspection indicate that the remedy is functioning as intended by the 1997 ROD and the 1998 CD. Immediate threats have been addressed at the Site through excavation, on-site consolidation and off-site disposal of contaminated soil, capping of contaminated soil, groundwater containment, contaminant mass removal, and implementation of ICs. Soils RAOs: to minimize potential ingestion and dermal contact of contaminated soils have been achieved. Groundwater RAOs: containment of contaminated groundwater, and to prevent ingestion of contaminated groundwater have also been achieved. Groundwater RAO: to restore quality of local groundwater under the Plant, is on a path to be achieved in a reasonable time frame. Based on groundwater monitoring data, significant progress has been made toward achieving the cleanup standards for the groundwater COCs.

#### **System Operations/O&M**

O&M activities of the cap and the groundwater monitoring program at the Site, as implemented, are working in a manner that will continue to maintain the effectiveness of the remedy. The quarterly O&M inspections of the capped Eastern Disposal Area Landfill verified that it continues to be maintained in excellent condition. There have been no indications of potential issues with the Site remedy over the last five years.

#### **Implementation of Institutional Controls**

On March 24, 1999, the existing deed restrictions/restrictive covenants were placed on the Site. Deed restrictions/restrictive covenants restrict the Site's uses to commercial and industrial uses. The ICs are proving to be effective in prohibiting disturbance of the cap on the Northern Fly Ash Pond and the Eastern Disposal Area Landfill, and in prohibiting surface water and groundwater use.

An IC review has been completed the by the PRP contractor, Wood Environment & Solution, Inc., over this FYR period and concluded that ICs are in place and effective. Long-term protectiveness at the Site requires compliance with use restrictions embodied in effective ICs to ensure the remedy continues to function as intended. Compliance with the effective ICs will be ensured by implementing, maintaining, monitoring and enforcing effective ICs as well as maintaining the Site's remedy components. The quarterly O&M inspection reports include a discussion of a visual assessment of the land-use restrictions required to maintain the integrity of the remedial action. However, the OM&M Plan does not include a provision for annual certification to EPA and OEPA that ICs are in place and effective. A recommended action in this FYR is to update the OM&M Plan to include a provision for annual certification requirement. No activities have been observed during this FYR period that would have violated the objectives of the ICs. The cap on the Northern Fly Ash Pond and the Eastern Disposal Area Landfill were undisturbed, and no new uses of surface water and groundwater were observed. The fence around the Eastern Disposal Area Landfill is intact and in good condition and the gate around the Northern Fly Ash Pond was installed in 2016 to prevent trespassing. Based on quarterly O&M Site inspections, EPA and OEPA are not aware of any Site uses which are inconsistent with the stated objectives of the 1997 ROD and the 1998 CD. The remedy appears to be functioning as intended.

**QUESTION B:** Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid? YES

#### **Question B Summary:**

The RAOs in place at the time of the remedy selection are still valid. The arsenic standard was lowered from 0.05 to 0.01 mg/L. However, only one monitoring (well SPIS-23) exceeded the lower standard in April 2019 (0.0143 mg/L) and October 2019 (0.0279 mg/L). Other factors are discussed below:

<u>Changes in Standards and To-Be-Considered Requirements</u>: Standards outlined in the ROD are still valid. There have been no known changes in Applicable or Relevant and Appropriate Requirements or standards affecting the protectiveness of the remedy since the ROD was signed.

<u>Changes in Exposure Pathways</u>: There have been no changes in the potential exposure pathways at the Site since the ROD was signed. No other changes in the Site's conditions that affect exposure pathways were identified as part of this FYR. There are no current or known planned changes in the Site's land use.

<u>Changes in Toxicity and Other Contaminant Characteristics</u>: Neither the toxicity factors for the COCs nor other contaminant characteristics have changed in a way that could affect the protectiveness of the remedy.

<u>Changes in Risk Assessment Methods</u>: Standardized risk assessment methods have not changed in a way that could affect the assessment of the protectiveness of the remedy.

<u>Expected Progress towards Meeting Remedial Action Objectives</u>: Progress toward meeting the RAOs at the Site continues. The groundwater monitoring program will continue to ensure that any changes in contaminant levels will be detected and addressed as necessary.

**QUESTION C:** Has any other information come to light that could call into question the protectiveness of the remedy? NO

No weather-related events have affected the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy. There have been no changes in the physical conditions of the Site that would affect the protectiveness of the remedy.

#### VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations	
OU(s) without Issues/Recommendations Identified in the Five-Year Review:	
None.	

Issues and Recomm	Issues and Recommendations Identified in the Five-Year Review:					
OU(s):	Issue Category: Institutional Controls					
1/Sitewide	nal certification to e.					
	<b>Recommendation:</b> Update the OM&M Plan to include a provision for annual certification to EPA and OEPA that the required ICs are in place and effective.					
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date		
No	Yes	PRP	EPA/State	12/31/2021		
OU(s):	Issue Category: Ins	stitutional Controls				
1/Sitewide	<b>Issue:</b> Existing ICs the Ohio UECA.	should be enhanced b	y implementing the	proposed ECs under		
	<b>Recommendation:</b> ECs.	Work with property of	owners to implement	mutually acceptable		
Affect Current Protectiveness	Affect Future Party Oversight Party Milestone Date Responsible					
No	Yes	PRP	EPA/State	12/31/2022		
OU(s):	Issue Category: Mo	onitoring				
1/Sitewide	<b>Issue:</b> The FYR Site inspection was not conducted as part of this FYR be work travel restrictions due to COVID-19.					
	<b>Recommendation:</b> Conduct a FYR Site Inspection once COVID-19 travel restrictions are lifted. Document results of inspection in writing and include photographs and Site Inspection Checklist in the Site's files.					
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date		
No	Yes	EPA/State	EPA	12/31/2021		

#### OTHER FINDINGS

In addition, the following is a recommendation that was identified during the FYR and may accelerate site close out, but does not affect current nor future protectiveness:

• Some parts of the Site should be considered for deletion from the NPL. EPA, the PRPs, and OEPA plan to pursue partial deletions of the Site.

#### VII. PROTECTIVENESS STATEMENT

#### **OU1** and Sitewide Protectiveness Statement

Protectiveness Determination:

Short-term Protective

Protectiveness Statement:

The remedy for the Site is currently protective of human health and the environment because it was constructed in accordance with the requirements of the ROD and is functioning as designed. Long-term groundwater monitoring has demonstrated that the concentrations of the COCs have declined towards groundwater cleanup standards. Long-term trends show significant and adequate improvements in groundwater quality. Threats at the Site have been addressed through excavation, on-site consolidation and off-site disposal of contaminated soil, capping of contaminated soil, groundwater containment, contaminant mass removal, and implementation of ICs. Review of the ICs reveals that ICs are in place and effective. However, in order for the remedy to be protective in the long-term, the following actions need to be taken to ensure protectiveness: update the OM&M Plan to include a provision for annual certification to EPA and OEPA that the required ICs are in place and effective; work with property owners to implement mutually acceptable ECs; and conduct a FYR Site Inspection once COVID-19 travel restrictions are lifted and document results of the inspection in writing with photographs to include in the Site's files.

#### VIII. NEXT REVIEW

The next FYR report for the South Point Plant Superfund Site is required five years from the completion date of this review.

#### **APPENDIX A: Reference List**

EPA, 1997. South Point Plant Site Record of Decision

EPA, 2001. Preliminary Close-Out Report; 12/21/2001

EPA, 2006. South Point Plant Site 1st Five Year Review Report; 5/5/2006

EPA, 2011. South Point Plant Site 2<sup>nd</sup> Five Year Review Report; 5/2/2011

EPA, 2016. South Point Plant Site 3<sup>rd</sup> Five Year Review Report; 4/14/2016

Geraghty & Miller, Inc., 1992. South Point Plant Ecological Assessment; 4/14/1992

Geraghty & Miller, Inc., 1993. South Point Plant Baseline Risk Assessment; 2/2/1993

Geraghty & Miller, Inc., 1994. South Point Plant Remedial Investigation Report; 8/1/1994

Wood Environment & Solution, Inc, 2016. South Point Plant Site Annual Monitoring Report; 5/31/2017

Wood Environment & Solution, Inc, 2017. South Point Plant Site Annual Monitoring Report; 4/27/2018

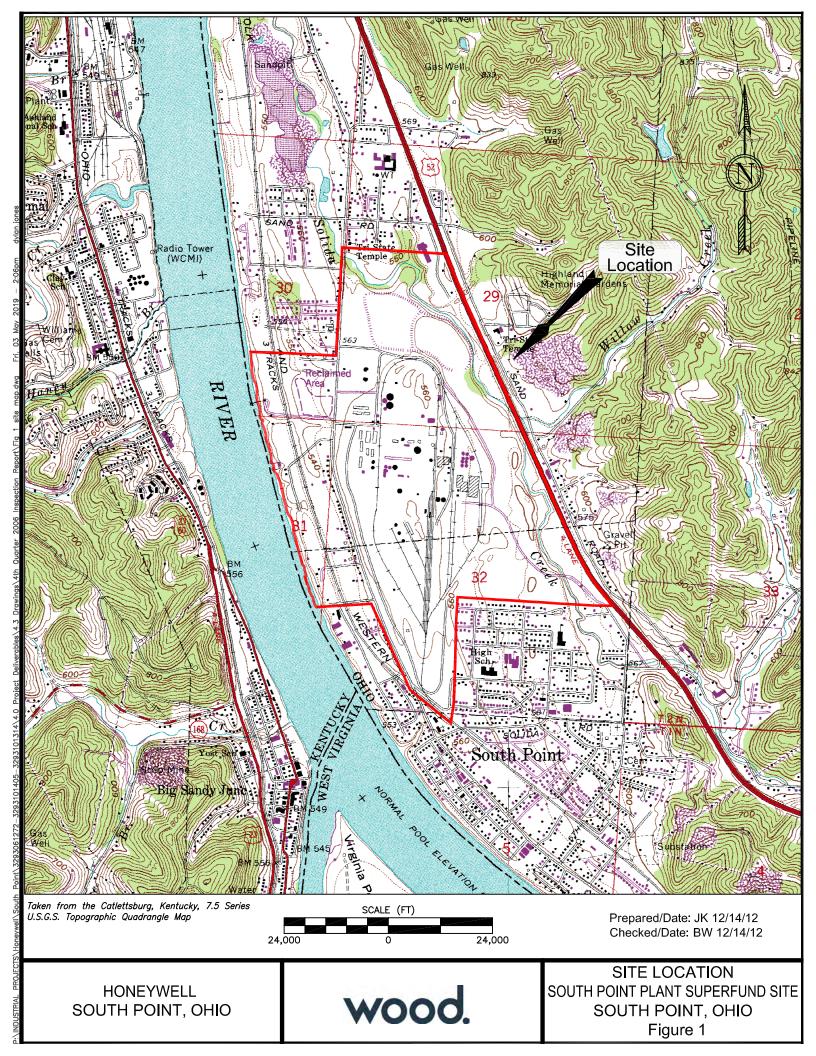
Wood Environment & Solution, Inc, 2018. South Point Plant Site Annual Monitoring Report; 5/7/2019

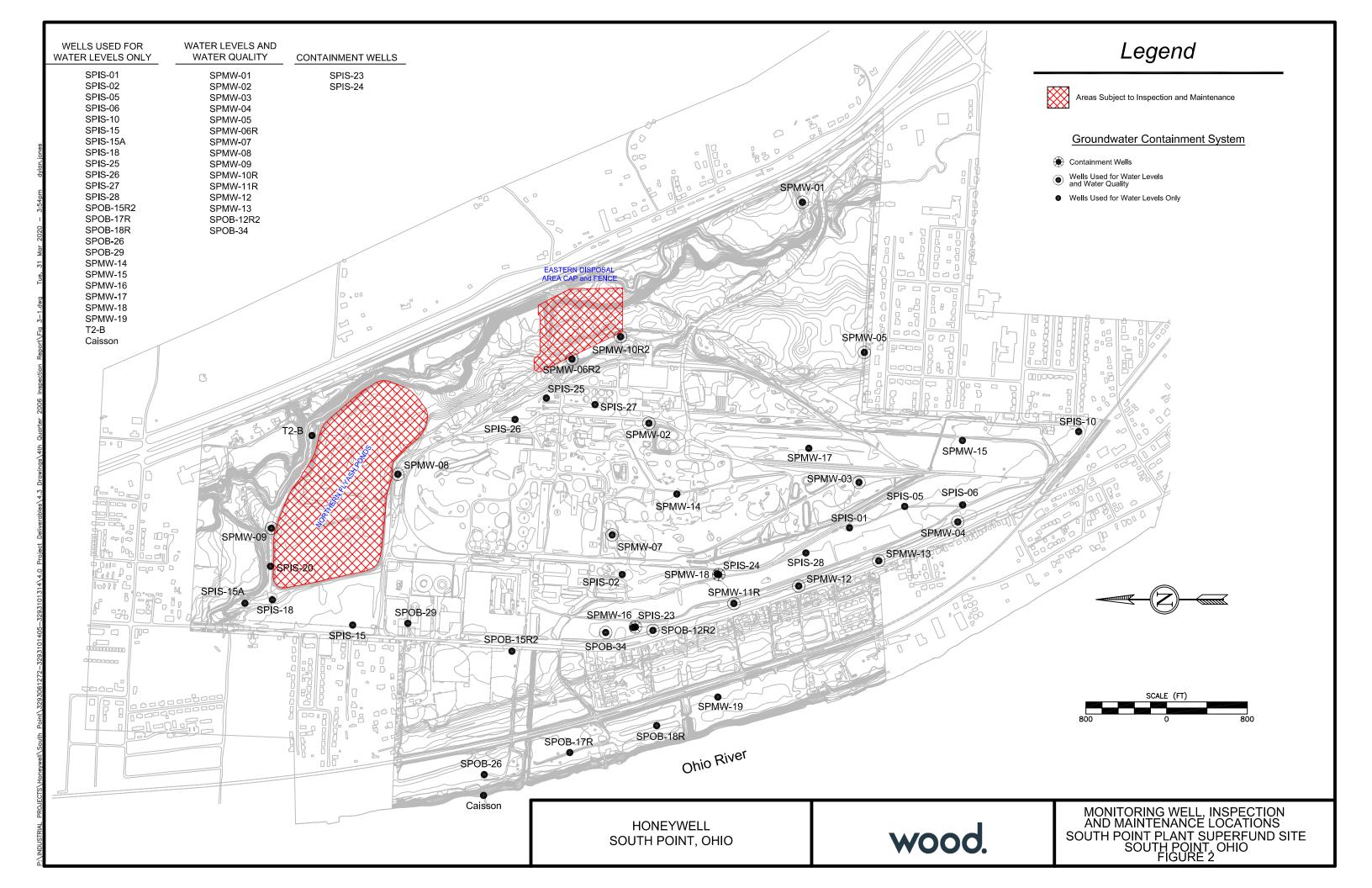
Wood Environment & Solution, Inc, 2019a. South Point Plant Site Annual Monitoring Report; 7/17/2020

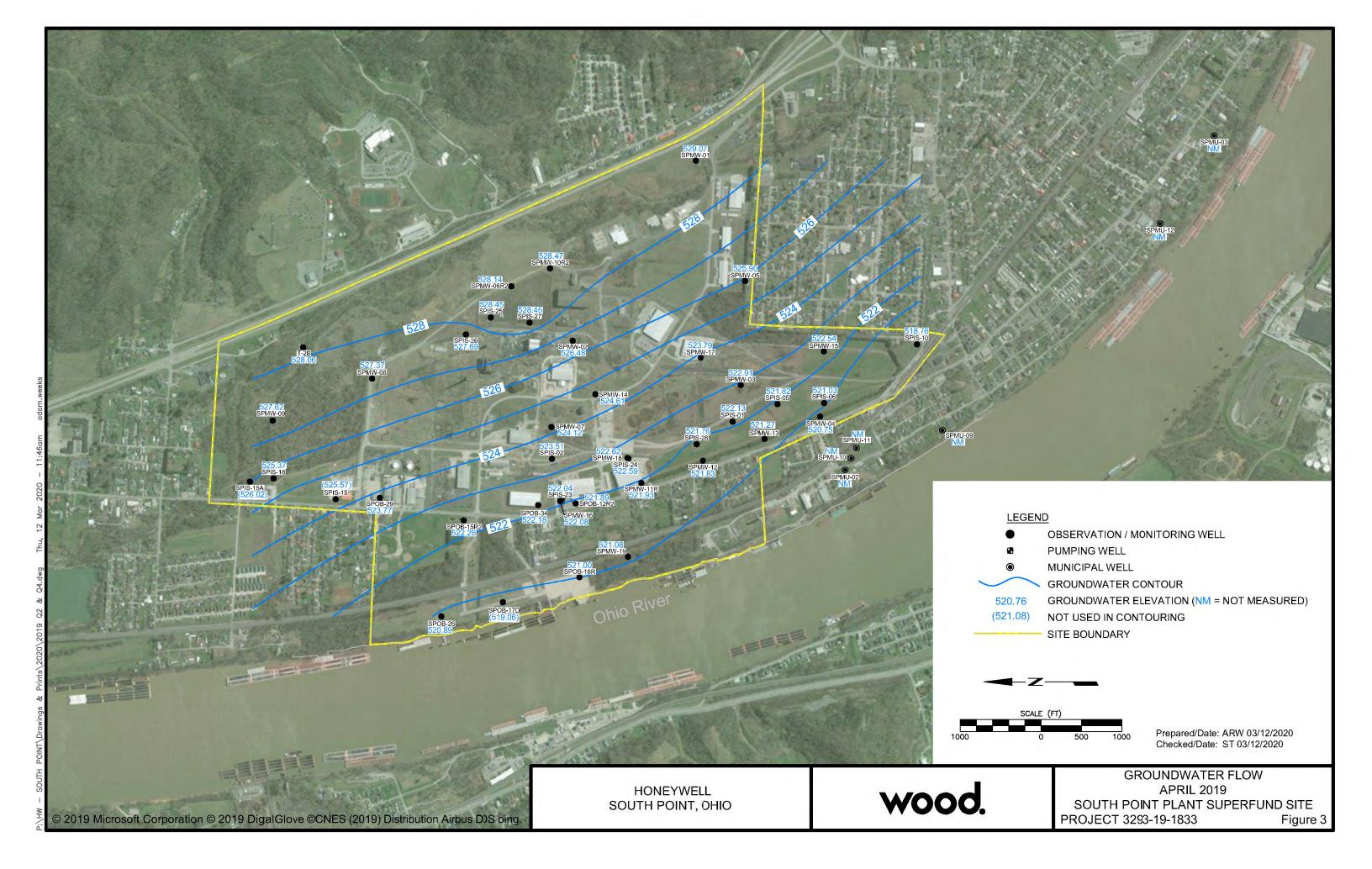
Wood Environment & Solution, Inc, 2019b. South Point Plant Site Operation, Monitoring and Maintenance Plan; 5/1/2019

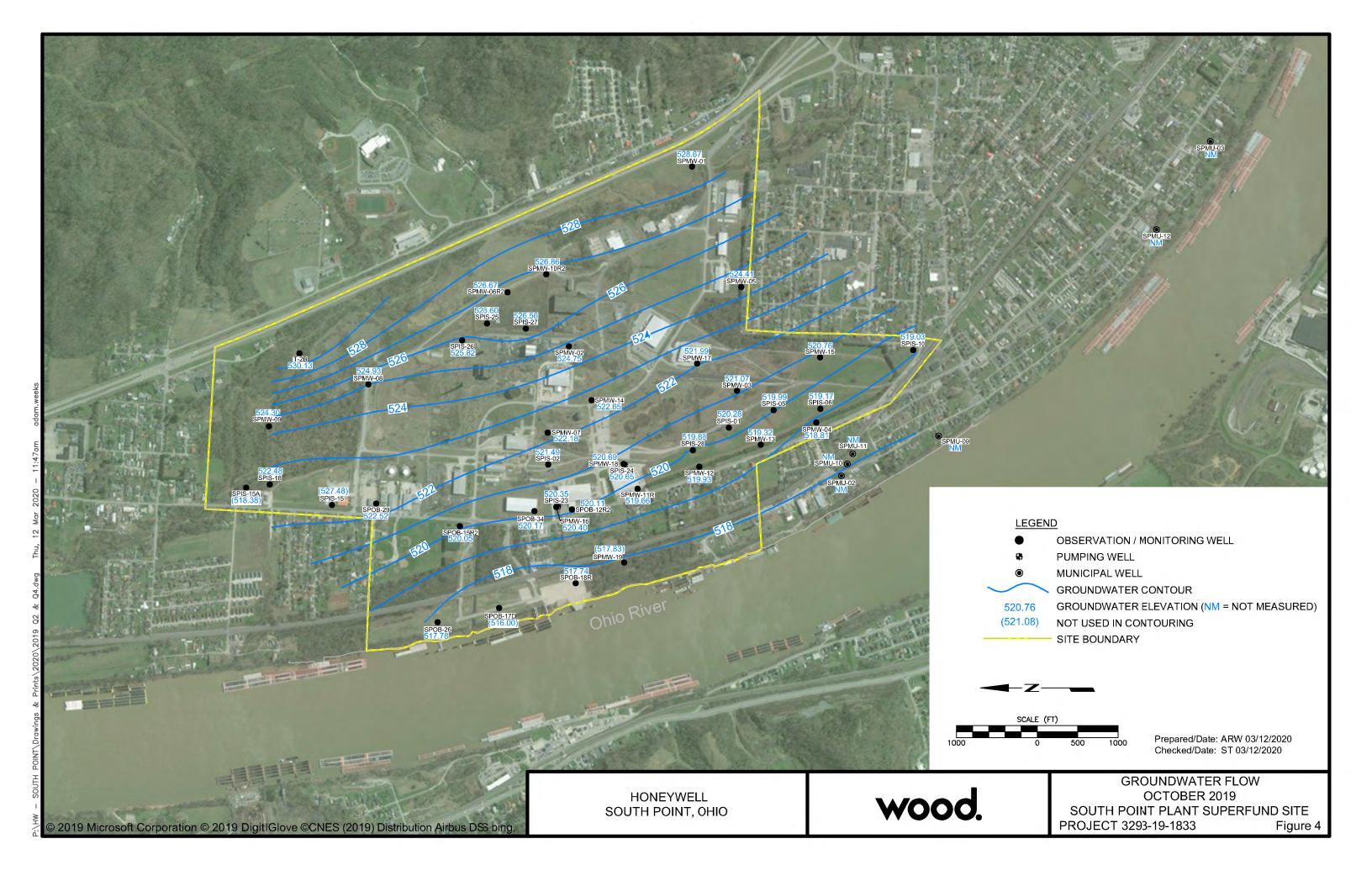
## **APPENDIX B: Figures**

- Figure 1 Site Location, South Point Plant
- Figure 2 Monitoring Wells Location
- Figure 3 Groundwater Flow Maps, April 2019
- Figure 4 Groundwater Flow Map, October 2019
- Figure 5 Analytical Results, April 2019
- Figure 6 Analytical Results, October 2019
- Figure 7 Ammonia Trends in Groundwater
- Figure 8 Nitrate Trend in Groundwater
- Figure 9 Manganese Trend in Groundwater







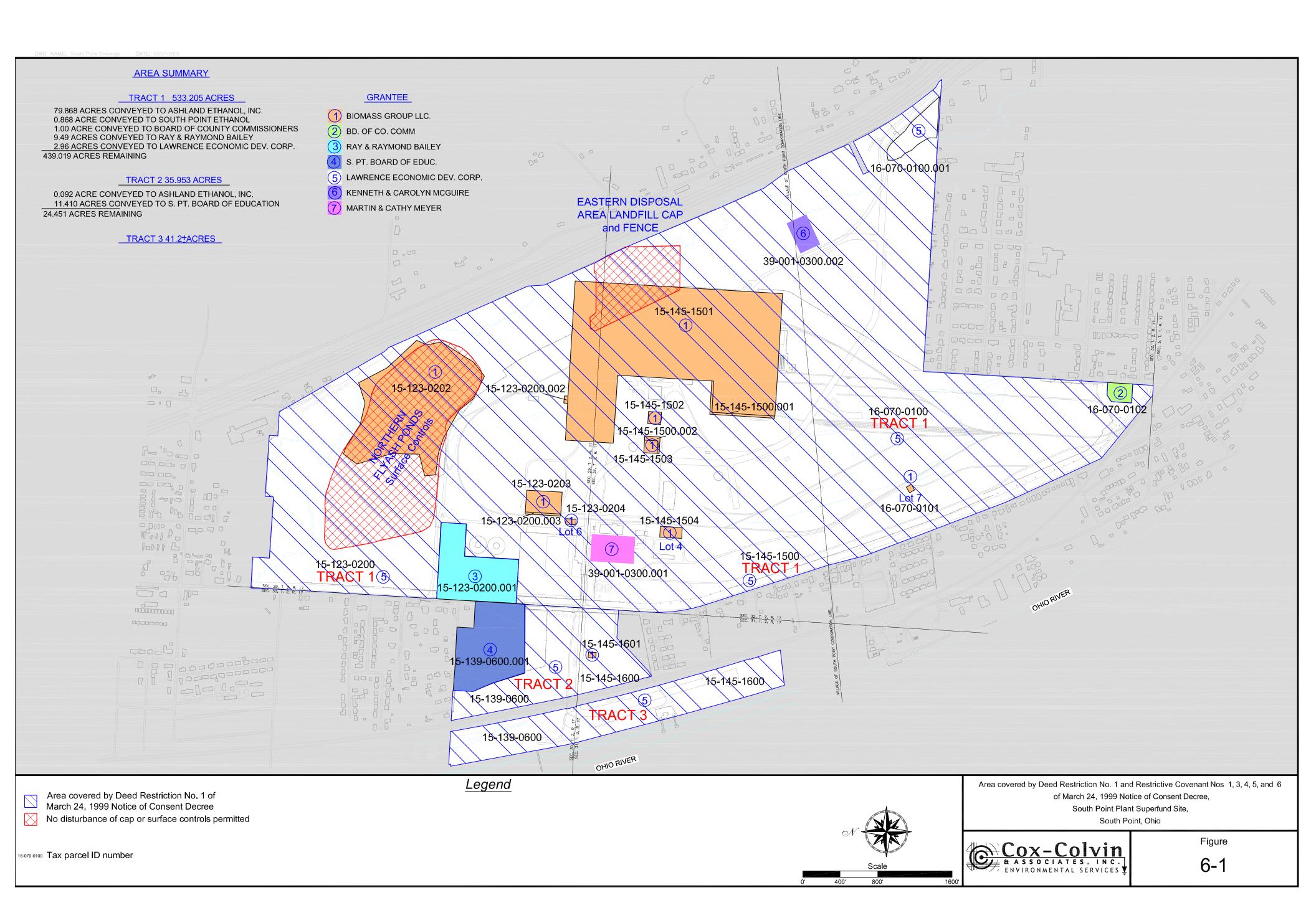


HONEYWELL SOUTH POINT, OHIO wood

Analytical Results
April 2019
South Point Plant Superfund Site
Project 3293-19-1833 Figure 5

HONEYWELL SOUTH POINT, OHIO wood

Analytical Results
October 2019
South Point Plant Superfund Site
Project 3293-19-1833 Figure 6



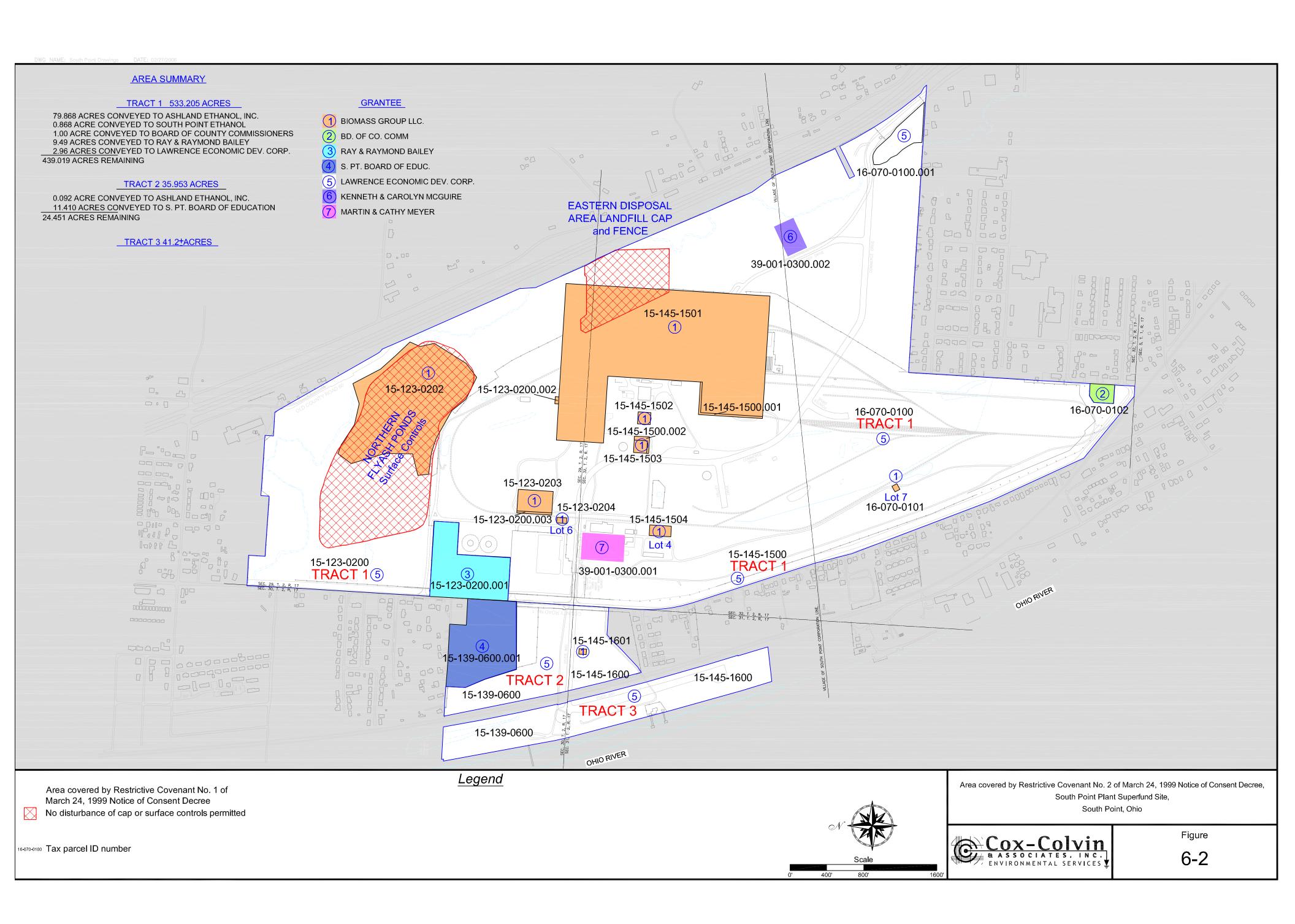


Figure 7
Ammonia Trends in Groundwater
South Point Plant Superfund Site
South Point, Ohio

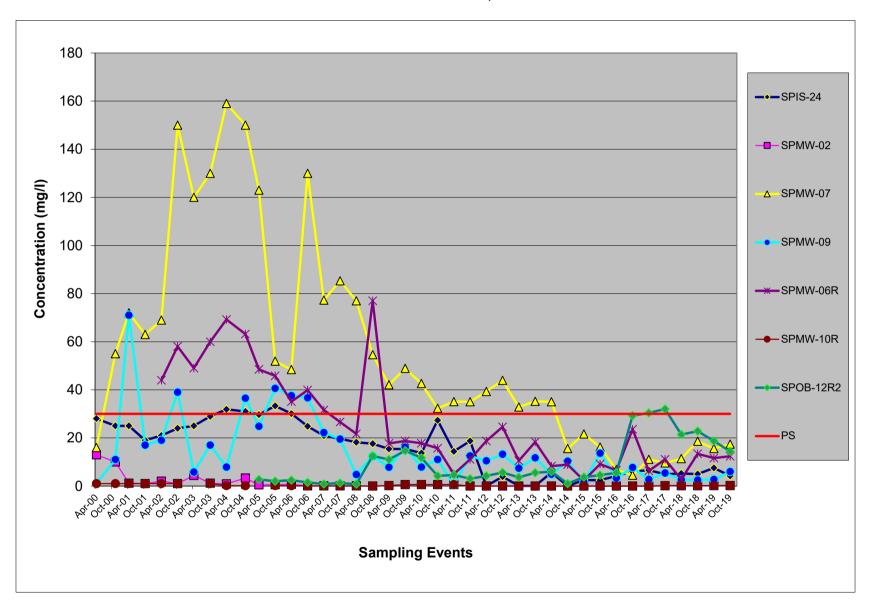




Figure 8
Nitrate Trends in Groundwater
South Point Plant Superfund Site
South Point, Ohio

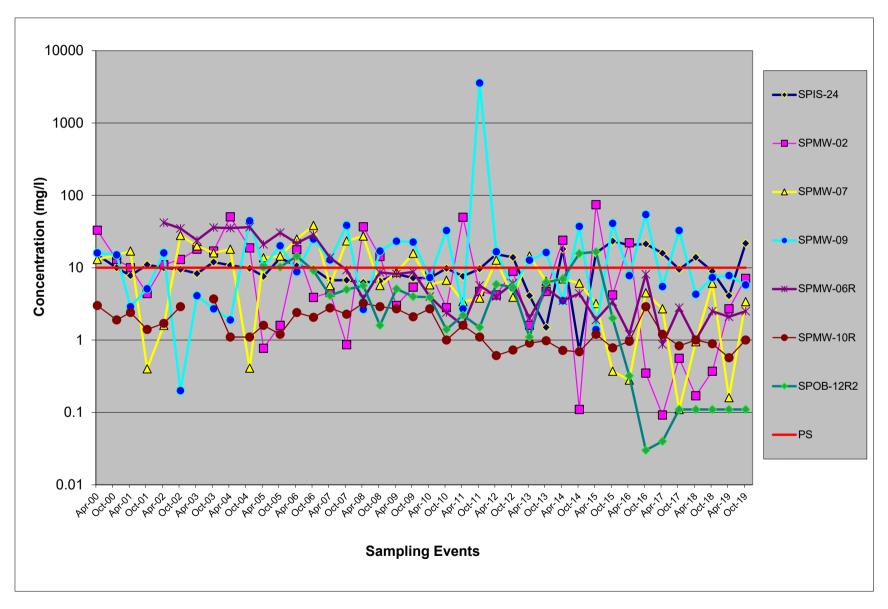
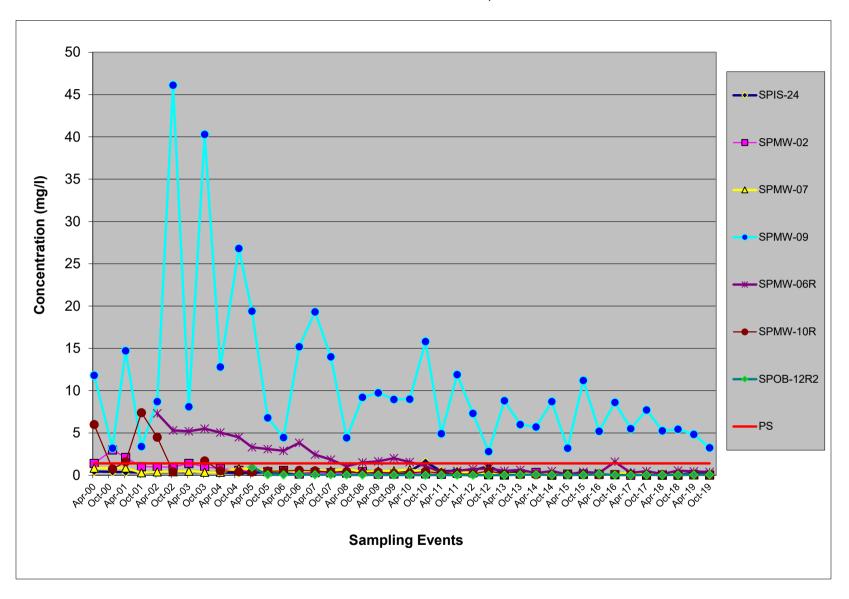




Figure 9
Manganese Trends in Groundwater
South Point Plant Superfund Site
South Point, Ohio





# **APPENDIX C: Attachments**

Attachment 1 Public Notice from Newspapers

Attachment 2 Annual Site Inspection Email

Areas which do not allow for UU/UE Map of Ownership Attachment 3 ICs Maps:

Ownership Parcel Information

# Attachment 1



Water from the Ohio RIver flooded into Storms Creek on North Second Street and required Ironton's Flood Defense to put up part of the flood wall for protection. (The Ironton Tribune | Jeremy Holtzapfel)



# Flooding

CONTINUED FROM PAGE 1A

Once the water reaches 52 feet, it begins flooding Second Street.

"At 52 feet, the water touches the flood gate," said Mike Pemberton, the Flood Defense superintendent. "The water has raised fast in the past four hours, faster than it normally does. So, we are going to put it up.'

He said according to the forecasts he had seen, the Ohio River will reach at least 52 feet.

Pemberton said he didn't know long the wall will be up.

"It will stay up until the water goes back down," he said.

Around 3:30 p.m., they decided to put up the wall after letting buses from the Ironton Elementary and Middle schools get through before

starting the labor-intensive work of putting up the 30-foot long steel trusses and wooden beams into the slots on the concrete flood wall.

"It's a good exercise for the younger city employees," Pemberton said. "It will be a learning exercise and they'll know how to do this because I am not going to be here much longer and neither will some of these other supervisors. So, the young guys need to learn how to do this. They need to know how to put it up and the reasoning of when to put it up."

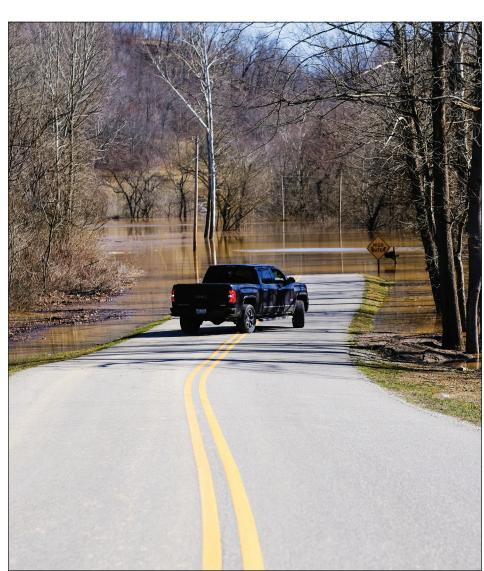
Pemberton said it is hard manual labor to put it up.

"You got steel beams in there that are 30-foot-long and you have to move them by hand," he said. "It is not an easy job."



3A

High waters stretch from North Second Street along State Route 650, cutting off the eastbound entrance and exit ramps of U.S. 52. (The Ironton Tribune | Jeremy Holtzapfel)



A driver forced to turn around on Hog Run Road after running into high waters. (The Ironton Tribune | Jeremy Holtzapfel)

again. The men took

his video camera. He

# Attack

CONTINUED FROM PAGE 1A

Hindi is the president of SHARK (Showing Animals Respect and Kindness, anti-animal cruelty group that videotapes incidents of cockfighting and other

He and another man were investigating allegations of cockfighting taking place at a farm near Waterloo the on

animal abuse.)

morning of Jan 3.

A call was made to the Lawrence County Sheriff's Office dispatch that one person was assaulted and one person was missing after a confrontation with people where the alleged cockfighting was taking place.

responding The deputy met with an Ohio State Highway Patrol trooper at the 2000 block of County Road 4 about a crash.

The trooper said the crash was intentional and the deputy talked with the driver, Adam Fahnestock, who said he and Hindi drove through the gates of farm on Township Road 267 when people noticed they were filming. He said Hindi was assaulted by a man dressed in black.

The pair got into their vehicles and drove away. Fahnestock was followed by tan truck, which followed their rental vehicle for several miles and that "hammered it was several times in the rear of the vehicle, forcing him into a ditch."

Hindi was taken to St. Mary's emergency room, where he had staples put in his head for a large laceration. He also had broken ribs.

He told the deputy that he was at the entrance to the cockalso had a video camfight when he was era, body cameras and attacked by at least two drone controller taken men who kicked him in the head and ribs. He got away, but was followed and attacked

away from him earlier. Summons Newcomb and Clark were issued on Feb. 25 and no court appearance has been set yet.



#### **EPA Begins Review of South Point Superfund Site** South Point, Ohio

U.S. Environmental Protection Agency is conducting a five-year review of the South Point Superfund site near the intersection Old U.S Route 52 and Commerce Drive in South Point. The Superfund law requires regular checkups of sites that have been cleaned up – with waste managed on-site – to make sure the cleanup continues to protect people and the environment. This is the fourth five-year review of this site.

EPA's cleanup at the site consisted of digging up and disposing of waste and contaminated soil at a licensed off-site landfill, consolidating remaining waste under a barrier cover to prevent infiltration of rainwater, pumping out contaminated groundwater, discharging treated groundwater to the Ohio River, long-term monitoring, and limiting the use of and access to the site.

More information is available at the Briggs Lawrence Library, 317 Solida Rd., and at www. epa.gov/superfund/southpoint-plant. The review should be completed by the end of April 2021.

The five-year review is an opportunity for you to tell EPA about site conditions and any concerns you have. If you have questions or need more information, contact:

# **Adrian Palomeque**

Community Involvement Coordinator (312) 353-2035 palomeque.adrian@epa.gov

# **Nabil Fayoumi**

Remedial Project Manager (312) 886-6840 fayoumi.nabil@epa.gov

You may also call the EPA toll-free at 800-621-8431, 9 a.m. to 5:30 p.m., weekdays.

# **Indictments**

CONTINUED FROM PAGE 1A

one count of third-degree felony tampering with evidence, one count of third-degree felony having a weapon while under disability, one count of fourth-degree felony improper handling a firearm in a motor vehicle, one count of first-degree misdemeanor child endangering and one count of first-degree misdemeanor driving while under the influence of alcohol or drugs.

- Anthony D. Gue, Huntington, West Virginia, one count of fifth-degree felony identity fraud.
- Ryan Goodpaster, Proctorville, one count of fifth-degree felony possession of heroin and one count of first-degree misdemeanor driving while under the influence of alcohol or drugs.
- Tracy A. Porter, 50, Troy, one count of first-degree misdemeanor unauthorized use of a motor vehicle and one count of fourth-degree felony theft.
- · Homer. W. Anson, 32, Ironton, one count of fourth-degree improper handling a firearm in a motor vehicle and one count of third-degree felony having a weapon while under disability.
- · Kevin Allen Newcomb, 33, Ironton, one count of fifth-degree
- felony possession of drugs. · Taylor P. Willis, Ashland, Kentucky, one count of fourth-de-

gree felony improper handling a firearm in a motor vehicle.

- · Brock C. Smith, 38, Ironton, one count of fourth-degree felony possession of a controlled substance.
- Brad A. Jenkins, 31, Ironton, one count of third-degree felony tampering with evidence, one count of fifth-degree felony possession of heroin, one count of fifth-degree felony aggravated possession of drugs and two counts of fifth-degree felony possession of drugs.
- Travis R. Crum, 23, Raceland, Kentucky, one count of fourth-degree felony unlawful sexual conduct with a minor.
- George D. Bowen, 42, Ironton, one count of fifth-degree felony aggravated possession of drugs, one count of fifth-degree felony possession of a controlled substance and one count of third-degree felony intimidation.
- Melissa K. Lyons, 44, Ironton, one count of fifth-degree felony possession of drugs and one count of fifth-degree felony possession of drugs.
- Jessy Stapleton, 35, one count of fifth-degree felony possession of a controlled substance and one count of first-degree misdemeanor possession of a controlled substance.
- · Jonathan W. Rayburn, 35, Ironton, one count of fifth-degree felony possession of a con-

trolled substance and one count of fourth-degree misdemeanor criminal trespassing, and one count of fifth-degree felony illegal conveyance of prohibited items onto the grounds of a detention facility.

- · Gary W. Munyan, 50, Ironton, one count of fifth-degree felony aggravated possession of drugs.
- Steven D. Edwards Jr., 25, Detroit, Michigan, one count of fourth-degree felony failure to appear.
- · Torrey J. Baker Jr., 25, Proctorville, one count of first-degree felony aggravated burglary.
- Teaven M. Hay, 26, Huntington, West Virginia, one count of fourth-degree felony failure to appear.
- · William Grant, 41, Mount Airy, one count of fourth-degree felony failure to appear.
- Dakota W. Potter, 29, Ashland, Kentucky, one count of third-degree felony possession of drugs, one count of fifth-degree felony possession of heroin, one count of first-degree misdemeanor theft and one count of second-degree misdemeanor possession of drug abuse instrument.
- · Jeremey A. Dickess, 44, Ironton, one count of fifth-degree felony aggravated possession of drugs.
- Elvis Rister, 45, Garrison, Kentucky, one count of second-degree felonious assault.

## Attachment 2

# On-Site Inspection of the South Point Superfund Site Lawrence County, Ohio

Date/Time of Inspection: 10-21-2020 / 0900

Inspection Personnel: Charlie Miller (Jacobs)

Observed Weather Conditions: Temp. Sky: Wind: 0 MPH Precip. 0

Code: X= Checked and OK **N= Not OK Requires Comments** M= Maint. Performed, See Comments **Cap And Cap Area Inspection Comments** Evidence of subsidence or settling: <u>X</u> Seepage of leachate: <u>X</u> Evidence of burrowing animals: X Presence and location of erosion rills: X Damage to vegetation/vegetation height: <u>X</u> Presence of woody plants: <u>X</u> Observable irregularities such as bulges, bumps. Slumps, or cracks: <u>X</u> Damage/Destruction/Gas vent system: <u>X</u> Additional Comments: **Drainage System** Drainage system flow problems: <u>X</u> Drainage system functioning: X Channel lining: <u>X</u> Evidence of overflow, rerouting, or obstruction of drainage: <u>X</u> Other irregularities: <u>X</u> Additional comments: Revegetated remeditated areas Condition of vegetation in vegetated areas: <u>X</u> Disposal area D, including the relocated creek: <u>X</u> Mid-Plant area: <u>X</u> Coke-Oven gas blow down area: <u>X</u> North (uncapped) side of the Eastern Disposal Area: <u>X</u> Erosion of Embankment/Relocated Solida Cr.: Additional comments:

#### On-Site Inspection of the South Point Superfund Site Lawrence County, Ohio

Date/Time of Inspection: 10/21/2020 - 0900

		Code: X= Checked and OK N= Not OK Requires Comments M= Maint. Performed, See Comments
Northern Fly Ash Pond Area		Comments
Presence and location/ Erosion Rills:	<u>x</u>	
Erosion Protection along Solida Creek		
at Disposal Area D:	<u>X</u>	
Berm condition along lower perimeter of pond:	<u>X</u>	
Signs of slope instability:	<u>x</u>	
Damage to vegetation on Dike Area:	<u>x</u>	
Additional comments		
Security Fencing and Access Roads		
Fences/Gates/Locks/Chains:	Х	
Warning Signs:	Х	
Evidence of unauthorized access:	<u>X</u>	
Foreign objects on site:	<u>X</u>	
Evidence of burrowing animals:	<u>X</u>	
Condition of access roads: Additional comments:		
Restrictive Covenants/Deed Restrictions		
Unauthorized groundwater wells installed:	<u>x</u>	
Unauthorized construction:	<u>x</u>	
Reports of contaminant exposure/releases:	<u>x</u>	
Additional comments:		
Pumping well performance		
SPIS- 23 GPM 0 PSIG: 0		TotalLizer-
SPIS- 24 GPM: 0 PSIG: 0		TotalLizer-
Other Comments: Shut Down SPIS Pumpin	g Well #	23 on 10-14-11
Shut Down SPIS Pumpin	g Well #	24 on 1-1-13 Power was reconnected.

**On-Site Maintenance** Date/Time of Inspection: 10-21-2020 / 0900 **Inspection Personnel:** of the **South Point Superfund Site** Charlie Miller Lawrence County, Ohio Photographs Documenting Maintenance **Location of Photographs:** Pic# 1 Northwest Cap Drain (Flex) 2 SPMW-01 3 Gate on South End of Cap Looking West South Side of Cap 4 5 Ditch Line on South Side of Cap 6 North Side of Cap Looking West 7 Northeast Cap Drain (Flex) 8 Cap Drain on North Side of Cap 9 Ditch Line on North Side looking Uphill 10 SPMW-10R2 11 Dich Line on North Side looking Downhill 12 Vents on Top of the Cap 13 Drain on North Side of the Cap 14 Fly Ash Pond Gate 15 Fly Ash Pond looking Southeast 16 Fly Ash Pond looking Northwest SPMW-08 17 Chain Gate to SPMW-09 18 SPMW-09 19 20 SPIS-23 SPIS-24 21 SPMW-12 22 SPMW-13 23

24

25

26 27 SPMW-04

SPIS-10



PHOTO 1:

Northwest Cap Drain (Flex)



**PHOTO 2:** SPMW-01



**PHOTO 3:** 

Gate on South End of Cap looking West



PHOTO 4:

South Side of Cap



**PHOTO 5:** 

Ditch Line on South Side of Cap



PHOTO 6:

North Side of Cap looking West



PHOTO 7:

Northeast Cap Drain (Flex)



### **PHOTO 8:**

Cap Drain on North Side of Cap



**PHOTO 9:** 

Ditch Line on North Side looking Uphill



**PHOTO 10:** 

SPMW-10R2



**PHOTO 11:** 

Ditch Line on North Side looking Downhill



**PHOTO 12:** 

Vents on Top of the Cap



**PHOTO 13:** 

Drain on North Side of the Cap



### **PHOTO 14:**

Fly Ash Pond Gate



**PHOTO 15:** 

Fly Ash Pond looking Southeast



**PHOTO 16:** 

Fly Ash Pond looking Northwest



**PHOTO 17:** 

SPMW-08



### **PHOTO 18:**

Chain Gate to SPMW-09



**PHOTO 19:** SPMW-09



PHOTO 20:

SPIS-23



PHOTO 21:

SPIS-24



PHOTO 22:

SPMW-12



**PHOTO 23:** SPMW-13



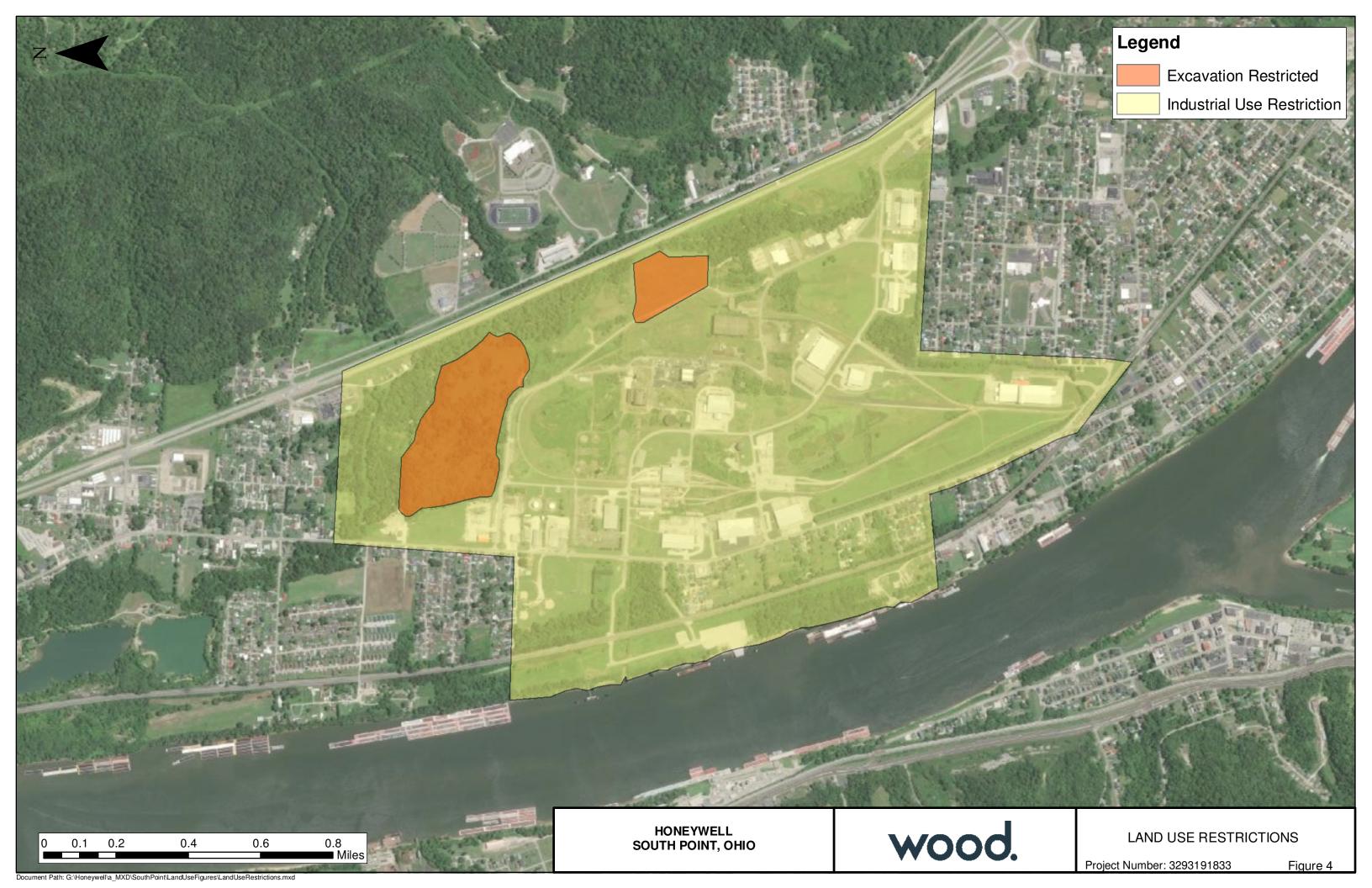
**PHOTO 24:** SPMW-04

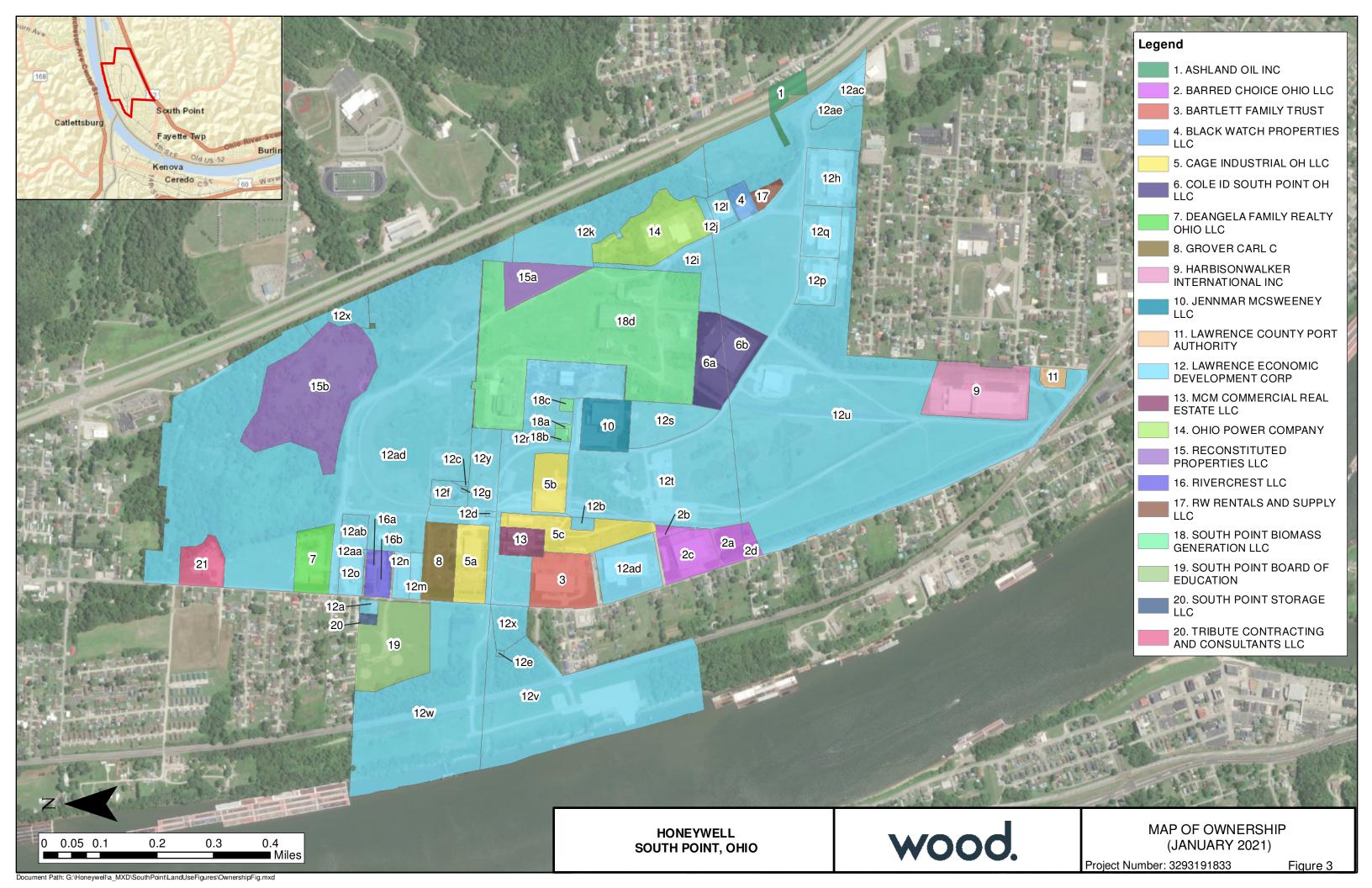


**PHOTO 25:** 

SPIS-10

## Attachment 3





#### Map of Ownership Parcel Information South Point Superfund Site South Point, Ohio

Map of Ownership ID	TAX ID	OWNER	ADDRESS	ACRES
1	16-070-1000.000	ASHLAND OIL INC	0 HWY EAS SOUTH POINT OH 45680	1.93
	39-001-0300.013	BARRED CHOICE OHIO LLC	TWP RD 1189 SOUTH POINT OH 45680	2.23
	39-001-0300.012	BARRED CHOICE OHIO LLC	TWP RD 1189 SOUTH POINT OH 45680	0.57
	39-001-0300.009	BARRED CHOICE OHIO LLC	TWP RD 1189 SOUTH POINT OH 45680	4.9
	16-070-0100.011	BARRED CHOICE OHIO LLC	0 COMMERCE DRIVE SOUTH POINT OH 45680	0.7
	39-001-0300.010	BARTLETT FAMILY TRUST	2825 CO RD 1 SOUTH POINT OH 45680	6.8
	16-070-0100.008 39-001-0100.003	BLACK WATCH PROPERTIES LLC CAGE INDUSTRIAL OH LLC	403 TECHNOLOGY DR SOUTH POINT OH 45680 101 COMMERCE DR SOUTH POINT OH 45680	1.48 5
	39-001-0100.003	CAGE INDUSTRIAL OF LLC	210 COMMERCE DR SOUTH POINT OH 45680	4
	39-001-0300.003	CAGE INDUSTRIAL OH LLC	108 COMMERCE DR SOUTH POINT OH 45680	6.79
	39-001-0300.007	COLE ID SOUTH POINT OH LLC	TWP RD 1189 SOUTH POINT OH 45680	6.04
	16-070-0100.005	COLE ID SOUTH POINT OH LLC	COLLINS AVE SOUTH POINT OH 45680	3.37
	39-001-0100.001	DEANGELA FAMILY REALTY OHIO LLC	2393 CO RD 1 SOUTH POINT OH 45680	4.75
	39-001-0100.002	GROVER CARL C	2689 CO RD 1 SOUTH POINT OH 45680	5
	16-070-0100.009	HARBISONWALKER INTERNATIONAL INC	500 HWI WAY SOUTH POINT OH 45680	10.6
10	39-001-0300.006	JENNMAR MCSWEENEY LLC	235 COMMERCE DR SOUTH POINT OH 45680	5
11	16-070-0102.000	LAWRENCE COUNTY PORT AUTHORITY	205 6TH ST SOUTH POINT OH 45680	1
12a	15-139-0800.001	LAWRENCE ECONOMIC DEVELOPMENT CORP	2474 CO RD 1 SOUTH POINT OH 45680	0.5
	15-145-1504.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	0.52
	15-123-0203.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	1.71
	15-123-0204.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	0.12
	15-145-1601.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	0.09
	15-123-0203.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	1.71
Ü	15-123-0200.003	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	0.15
	16-070-0100.007	LAWRENCE ECONOMIC DEVELOPMENT CORP	414 COMMERCE DR SOUTH POINT OH 45680	5.92
	39-001-0300.000 39-001-0300.000	LAWRENCE ECONOMIC DEVELOPMENT CORP LAWRENCE ECONOMIC DEVELOPMENT CORP	0 TWP RD 1189 SOUTH POINT OH 45680 0 TWP RD 1189 SOUTH POINT OH 45680	68.44 68.44
,	39-001-0300.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 TWP RD 1189 SOUTH POINT OH 45680	68.44
	39-001-0300.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	405 TECHNOLOGY DR SOUTH POINT OH 45680	1.5
	15-123-0200.001	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	1.14
	15-123-0200.005	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	1.54
	15-123-0200.006	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	2.1
12p	16-070-0100.003	LAWRENCE ECONOMIC DEVELOPMENT CORP	410 COMMERCE DR SOUTH POINT OH 45680	3.75
12q	16-070-0100.010	LAWRENCE ECONOMIC DEVELOPMENT CORP	412 COMMERCE DR SOUTH POINT OH 45680	4
12r	39-001-0300.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 TWP RD 1189 SOUTH POINT OH 45680	68.44
12s	39-001-0300.011	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 TWP RD 1189 SOUTH POINT OH 45680	5.77
12t	39-001-0300.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 TWP RD 1189 SOUTH POINT OH 45680	68.44
	16-070-0100.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	412 COMMERCE DR SOUTH POINT OH 45680	117.34
	39-001-0400.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	CO RD 1 SOUTH POINT OH 45680	28.27
	39-001-0200.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	26.32
	39-001-0100.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	118.52
	39-001-0100.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	118.52
	39-001-0400.000 15-123-0200.009	LAWRENCE ECONOMIC DEVELOPMENT CORP LAWRENCE ECONOMIC DEVELOPMENT CORP	CO RD 1 SOUTH POINT OH 45680 0 CO RD 1 SOUTH POINT OH 45680	28.27 0.16
	15-123-0200.003	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	1.79
	16-070-0100.002	LAWRENCE ECONOMIC DEVELOPMENT CORP	216 COLLINS AVE SOUTH POINT OH 45680	1.73
	39-001-0300.008	LAWRENCE ECONOMIC DEVELOPMENT CORP	TWP RD 1189 SOUTH POINT OH 45680	6.5
	16-070-0100.001	LAWRENCE ECONOMIC DEVELOPMENT CORP	COLLINS AVE SOUTH POINT OH 45680	1.56
	39-001-0100.000	LAWRENCE ECONOMIC DEVELOPMENT CORP	0 CO RD 1 SOUTH POINT OH 45680	118.52
	39-001-0300.001	MCM COMMERCIAL REAL ESTATE LLC	104 & 106 COMMERCE DR SOUTH POINT OH 456	2.5
14	39-001-0300.005	OHIO POWER COMPANY	409 TECHNOLOGY DR SOUTH POINT OH 45680	10.1
15a	15-123-0201.000	RECONSTITUTED PROPERTIES LLC	0 CO RD 1 SOUTH POINT OH 45680	4.5
15b	15-123-0202.000	RECONSTITUTED PROPERTIES LLC	0 CO RD 1 SOUTH POINT OH 45680	23.69
	15-123-0200.010	RIVERCREST LLC	2489 CO RD 1 SOUTH POINT OH 45680	0.87
	15-123-0200.008	RIVERCREST LLC	2489 CO RD 1 SOUTH POINT OH 45680	1.56
	16-070-0100.004	RW RENTALS AND SUPPLY LLC	401 TECHNOLOGY DR SOUTH POINT OH 45680	1
	15-145-1500.002	SOUTH POINT BIOMASS GENERATION LLC	0 CO RD 1 SOUTH POINT OH 45680	0.23
	15-145-1503.000	SOUTH POINT BIOMASS GENERATION LLC	0 CO RD 1 SOUTH POINT OH 45680	0.33
	15-145-1502.000	SOUTH POINT BIOMASS GENERATION LLC	0 CO RD 1 SOUTH POINT OH 45680	0.35
	15-123-0201.001 15-139-0600.001	SOUTH POINT BOARD OF EDUCATION	0 CO RD 1 SOUTH POINT OH 45680	49.02
10		SOUTH POINT BOARD OF EDUCATION	0 CO RD 1 SOUTH POINT OH 45680	10.82
	15-139-0800.000	SOUTH POINT STORAGE LLC	43 PVT RD 2482 SOUTH POINT OH 45680	0.4