FIFTH FIVE-YEAR REVIEW REPORT FOR
CRAIG FARM DRUM SUPERFUND SITE
ARMSTRONG COUNTY, PENNSYLVANIA

Prepared by

U.S. Environmental Protection Agency
Region 3
Philadelphia, Pennsylvania

MAR 22 2019

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Date

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LIST OF ABBREVIATIONS & ACRONYMS

BCACS	Bear Creek Area Chemical Site
BMDSA	Benzene Meta Disulfonic Acid
BSA	Benzene Sulfonic Acid
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Contaminant of Concern
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FFS	Focused Feasibility Study
FYR	Five-Year Review
GPRA	Government Performance Results Act
ICs	Institutional Controls
MCL	Maximum Contaminant Level
MSC	Medium Specific Concentration
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PADEP	Pennsylvania Department of Environmental Protection
p-PSA	Para-Phenolsulfonic Acid
PRP	Potentially Responsible Party
RAO	Remedial Action Objectives
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation and Feasibility Study
ROD	Record of Decision
SHS	State-Wide Health Standard
THD	Trihydroxydiphenyl
µg/L	Micrograms per liter

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 five-year review reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this five-year review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the fifth FYR for the Craig Farm Drum Superfund Site (the 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.

The Site consists of three operable units (OUs). This FYR includes a review of OU-1 that addresses resorcinol residue material in the former disposal pits and soils contaminated with resorcinol and OU-3 that addresses two contaminated seeps, identified as Seeps A and B, located downgradient of the former disposal pits. The FYR does not include a review of OU-2 that addressed temporary stockpiled clean soils because no remedial action was conducted on this OU.

Site Background

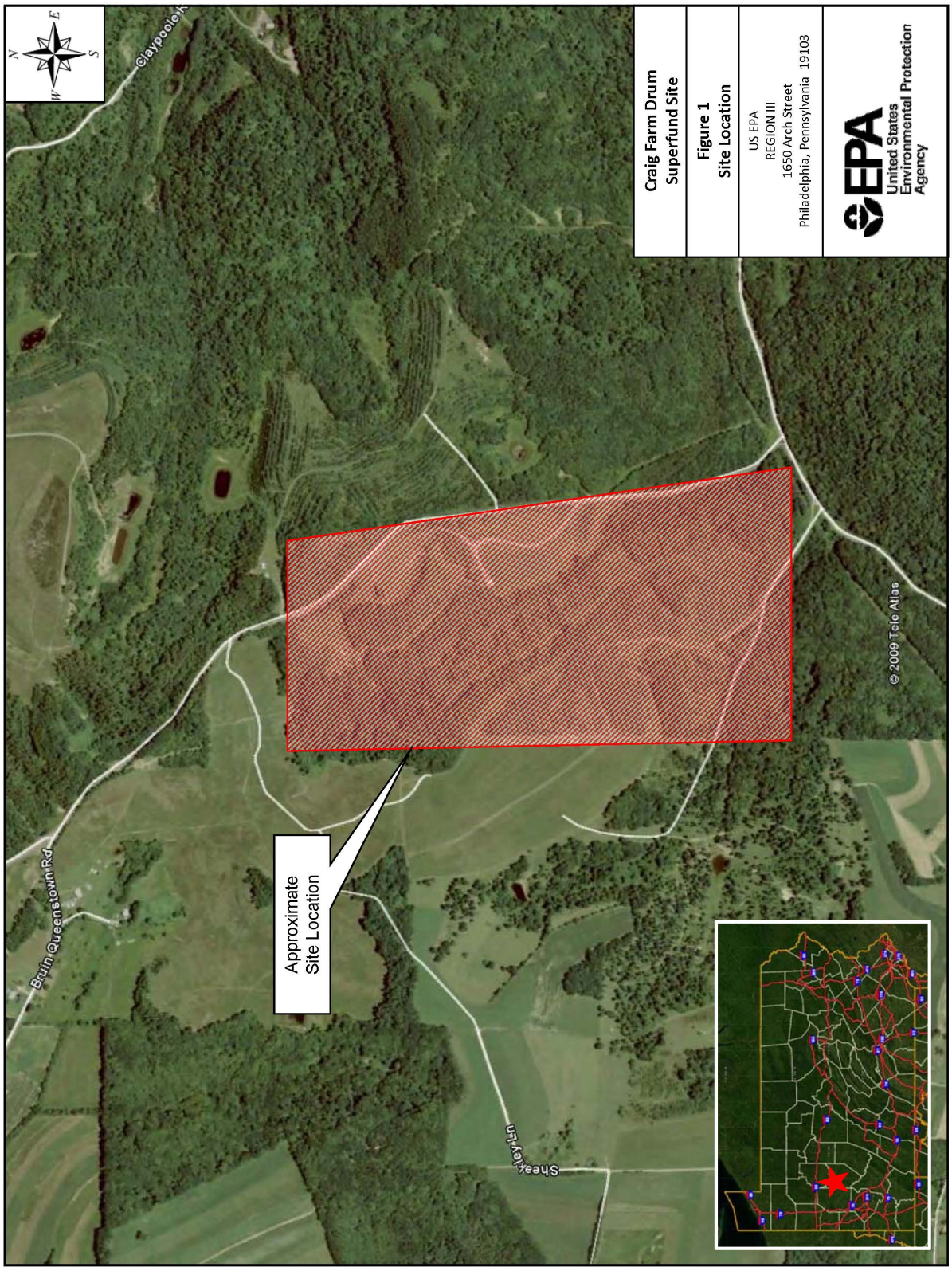
The Site consists of approximately 117 acres located in Parker, Armstrong County, Pennsylvania about two miles east of the Borough of Petrolia and four miles south of the Allegheny River (Figure 1). Land use surrounding the Site is agricultural and limited residential. Currently, the Site is undeveloped and consists of the components of the remedy including a landfill, seep interceptor system, impermeable cap, and drainage swales.

From 1958 through 1963, drums containing still bottoms from resorcinol production at the nearby Koppers Chemical Company, Inc. (Koppers) facility were disposed in two abandoned strip mining pits. Koppers, now Beazer East, Inc. (Beazer), was identified as the Potentially Responsible Party (PRP) for the Site.

The Site is located within the Bear Creek Area Chemical Site (BCACS). The BCACS consists of multiple sites that are impacted by contaminants primarily related to resorcinol manufacturing and are being addressed by either EPA or Pennsylvania Department of Environmental Protection (PADEP). As a result, residents within the BCACS are connected to public water.

Surface water is present at the Site in the form of ditches, forested wetlands, and an unnamed creek. The unnamed creek flows from the northwest to southeast of the Site. Groundwater is present at the Site in the unconsolidated materials and generally flows to the west-southwest toward the unnamed creek.

Figure 1: Site Location



FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Craig Farm Drum		
EPA ID: PAD980508527		
Region: 3	**State:** PA	**City/County:** Parker / Armstrong

SITE STATUS	
NPL Status: Deleted	
Multiple OUs? Yes	**Has the site achieved construction completion?** Yes

REVIEW STATUS
Lead agency: EPA
Author name (Federal or State Project Manager): Aaron Mroz
Author affiliation: Remedial Project Manager
Review period: 11/14/2017 - 4/7/2019
Date of site inspection: 6/12/2018
Type of review: Statutory
Review number: 5
Triggering action date: 4/7/2014
Due date *(five years after triggering action date)*: 4/7/2019

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

EPA first discovered the contamination at the Site during an inspection in December 1980. As a result of drum disposal, soil, surface water, and groundwater were impacted by compounds, primarily resorcinol and related polymers. Approximately 2,500 tons of material had been placed in the disposal pits. Resorcinol is an organic compound used as an adhesive enhancer in the production of automobile tires and in pharmaceuticals. The Site was added to the National Priorities List (NPL) on September 8, 1983.

EPA performed an environmental assessment in 1983 and installed test pits in 1984 in the vicinity of the disposal pits to determine the extent and condition of the drums containing still-bottom residue. The investigation indicated that the majority of the drums were crushed, broken, or without lids.

The Remedial Investigation and Feasibility Study (RI/FS) was conducted from February 1986 through November 1987 to evaluate the nature and extent of contamination. The biological survey conducted during the RI/FS indicated that macroinvertebrate communities located downstream from the Site in the unnamed creek were stressed due to Site-related compounds.

Based on the analysis of groundwater, surface water, sediments during the RI/FS and then refined during a Groundwater Verification Study, the following compounds have been identified as Contaminants of Concern (COCs):

- Resorcinol
- Trihydroxydiphenyl (THD)
- Para-phenolsulfonic acid (p-PSA)
- Benzene sulfonic acid (BSA)
- Benzene meta disulfonic acid (BMDSA)
- Benzene

Response Actions

EPA issued the Record of Decision (ROD) for the Site on September 29, 1989. The remedy was based on the Site's impact on the environment rather than on a risk to human health. The following Remedial Action Objectives (RAOs) were identified:

- Minimize risk to public health and the environment from direct contact with contaminated material;
- Control the migration of contaminants into nearby surface waters;
- Control the migration of contaminants into groundwater.

In order to meet the RAOs, the remedy selected in the ROD consisted of the following components:

- Excavation of approximately 32,000 cubic yards of material from the disposal pits and surrounding areas;
- Onsite solidification of excavated material;
- Placement of the solidified material in an onsite Resource Conservation and Recovery Act (RCRA) equivalent, double lined, fenced landfill (referred to as the Onsite Disposal Unit);
- Wetland delineation and subsequent construction of a one-acre onsite wetland to replace wetlands destroyed in construction of the onsite landfill;
- Implementation of institutional controls (ICs);
- Passive collection of groundwater using a seep interceptor system with offsite treatment;
- Monitoring of both onsite and offsite groundwater and surface water; and
- Groundwater Verification Study.

The Groundwater Verification Study and wetland delineation were performed during the remedial design. Based on the results of the Groundwater Verification Study no additional groundwater remediation was required. The ROD also stated that the timeframe for the collection of groundwater would be based on bioassay testing and the bioassay testing procedure would be approved by EPA.

Because of the anticipated closure of the local PRP-owned disposal facility to which collected groundwater was transported, a Focused Feasibility Study (FFS) was completed in 2009. Capping of the Former North Pit was recommended in order to reduce surface water infiltration and thus limit the amount of leachate from Seep A. Included in the FFS were the results of bioassay testing from Seep A and B that indicated collection from Seep B was no longer required. EPA modified the remedy in an Explanation of Significant Differences (ESD) dated September 18, 2009 and consisted of the following components:

- Installation of an impermeable cap on the 3-acre, former north pit area to reduce infiltration of clean water through north pit materials (referred to as the Cap Area);
- Excavation/fill of existing ground surface in vicinity of former north pit to required grade;
- Installation of bio swales or other infiltration features to direct clean surface water flow from the capped area;

- Installation of groundwater infiltration system into deep bedrock upgradient of the former north pit to prevent upgradient groundwater from flowing through north pit materials if it is determined feasible during a preliminary design investigation;
- Continued maintenance of the Seep A collection trench, piping, and storage tank to collect contaminated overburden groundwater;
- Treatment of collected Seep A water at an alternative offsite treatment facility; and
- The Seep B collection trench would remain in place but valves would be closed so that the system no longer collected water.

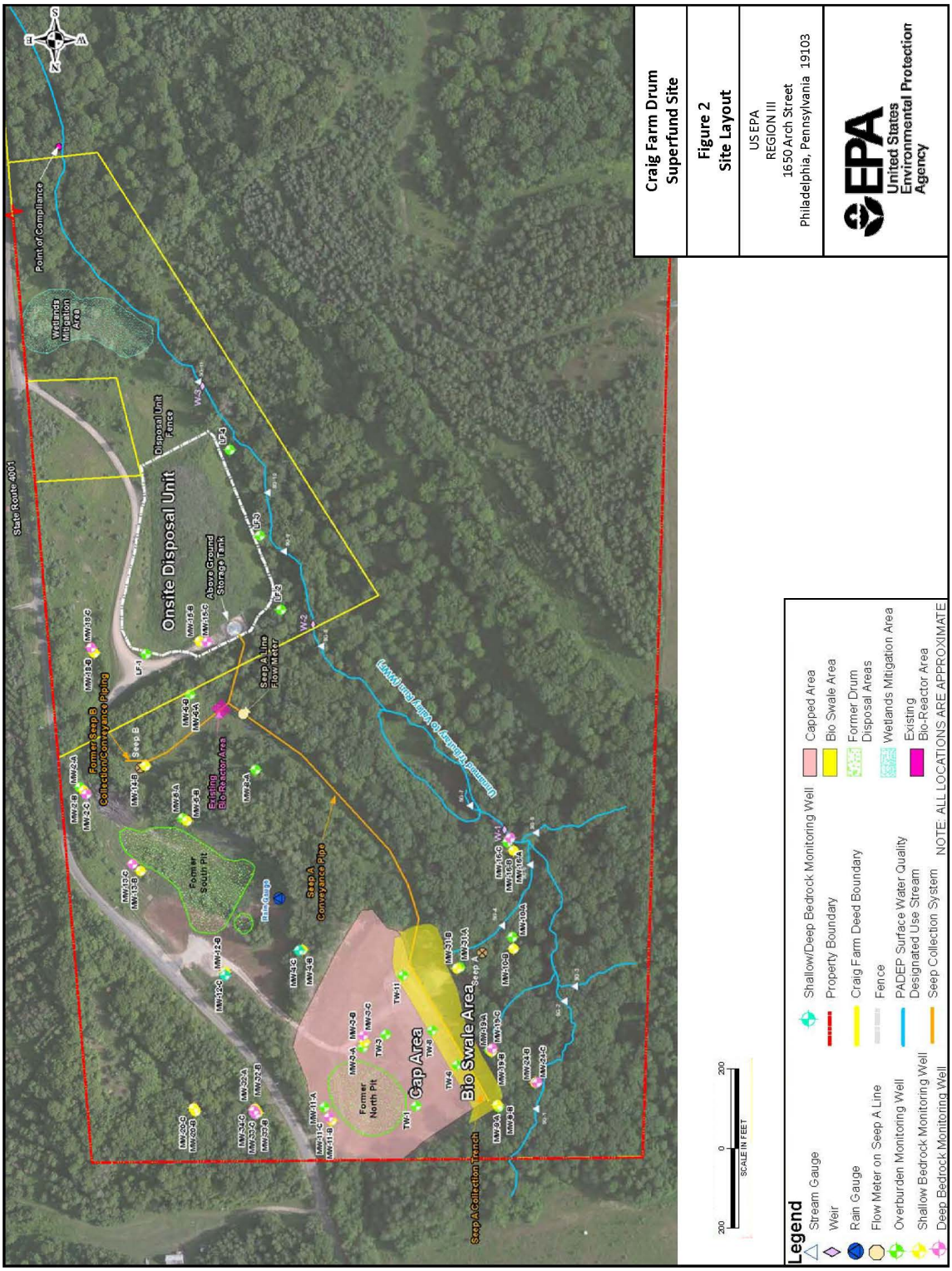
The ESD also clarified that institutional controls are required as part of the selected remedy because the ROD only required institutional controls in the declaration portion of the ROD and not in the remedy selection portion of the ROD. The installation of a groundwater infiltration system into deep bedrock upgradient of the former north pit to prevent upgradient groundwater from flowing through the north pit materials was not completed because the preliminary design investigation determined it would not be feasible.

Status of Implementation

From May 1994 through December 1995, the waste material was excavated from the former north and south disposal pits, then solidified and placed in the Onsite Disposal Unit. A wetland area was constructed southeast of the Onsite Disposal Unit. To collect the groundwater from Seep A and Seep B a seep interceptor system was constructed. The seep interceptor system is comprised of collection trenches that contain perforated pipe buried in gravel that collects the groundwater and gravity feeds it to an above ground storage tank via a solid conveyance pipe.

The collection of groundwater from Seep A continues while collection from Seep B stopped in 2010. Also, in 2010, the Cap Area and bio swale were installed. The Cap Area is constructed of two feet of vegetated clean fill that overlays three sythenic membranes. The purpose of the bioswale is to collect surface runoff from Cap Area. All the components of the remedy are included on Figure 2. The Cap Area and stopping collection from Seep B has reduced the amount of groundwater collected for offsite treatment by approximately 80 percent.

Figure 2: Site Layout



Institutional Controls

As required in the ROD and ESD, institutional controls have been implemented in the form of a deed restriction on the property. The deed restriction is summarized in Table 1. Historically, groundwater at the Site and immediately adjacent to the Site has not been used for drinking water or irrigation purposes due to poor water quality from historic mining operations. Onsite groundwater use is restricted by institutional controls and is restricted in the surrounding area due to the Site's location within the BCACS. PADEP constructed a public water supply to serve the BCACS between 2003 and 2007 and also required communities therein to implement a model ordinance prohibiting the use of groundwater wells for potable water and to required property owners to connect to the public water system. All known residents within the vicinity of the Site are currently connected to the system.

Table 1: Summary of Implemented ICs

Media	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date
Soil and Groundwater	Yes	Yes	Sitewide	Restricts extraction or use of groundwater Prohibits constructing any structure that would disturb the cap Prohibits the Site from being used for the purposes of living, dwelling, or overnight accommodations of any type Restricts action that will interfere with, obstruct, or disturb the performance of any remedial response, including O&M Requires any Site owner to provide any purchaser with notice of the terms of the Consent Decree prior to transferring any interest in the Site	Declaration of Restrictions (September 2004)

Based on completion of the response actions, EPA determined that the Site was eligible for deletion from the NPL. PADEP concurred with the deletion on May 1, 2013 and the Site was deleted from the NPL on September 30, 2013.

Systems Operations/Operation & Maintenance (O&M)

The O&M Plan was revised in 2013. The PRP performs the O&M activities which consist of an annual inspection, leachate collection, annual groundwater elevation gauging, groundwater and surface water sampling conducted every five years in support of the upcoming five-year review, off-site treatment of leachate collected in

the above ground storage tank as needed and monthly tank inspections. O&M activities are summarized in a report which is submitted to the EPA and PADEP.

From 2014 to 2017 the average flow rate of groundwater collected from Seep A has been approximately 734,000 gallons per year. The collection rate has been generally consistent since the Cap Area was installed and collection from Seep B was stopped. Leachate is also collected from the Onsite Disposal Unit at a rate of approximately 29,000 gallons per year from 2014 to 2017. Before the Cap Area installation, the groundwater collection rate was approximately 3,600,000 gallons per year.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the **last** five-year review as well as the recommendations from the **last** five-year review and the current status of those recommendations.

Table 2: Protectiveness Determinations/Statements from the 2014 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Protective	The remedy for OU-1 – Disposal Pits is protective of human health and the environment in both the short and long term due to excavation of contaminated material from the disposal pits, onsite solidification of the material, and placement of the material in the onsite landfill. Institutional controls have been implemented providing notice that hazardous substances are present at the Site, prohibiting disturbance of the landfill and restricting use of the Site.
3	Protective	The Remedy for OU-3 – Contaminated Seeps is protective of human health and the environment in both the short and long term due to the installation of the seep interceptor system with offsite treatment and installation of the Seep A Cap. Additionally, protection of human health is enhanced due to the location of the Site within the BCACS, in which all residents are required to connect to public water. Institutional controls have been implemented restricting groundwater use at the Site.
Sitewide	Protective	The Site-wide remedy at the Site is protective of human health and the environment in the short and long term. The Site has achieved Site Completion and has been deleted from the NPL. Construction of the remedy at the Site has been completed in accordance with the 1989 ROD and 2009 ESD, institutional controls are in place, and O&M is being conducted in accordance with the O&M Plan. All RAOs, performance standards, and cleanup goals established in the 1989 ROD have been achieved. No further Superfund response, other than operation, maintenance, and Five-Year Reviews, is necessary to protect human health and the environment.

Table 3: Status of Recommendations from the 2014 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
Sitewide	Onsite rain gauge damaged and non-functional.	Repair or replace onsite rain gauge.	Completed	Rain gauge replaced.	5/16/2014

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice was published in the Butler Eagle newspaper on Febraury 22, 2018. The public notice explained the FYR process, contained the expected completion date of the FYR, provided point of contact information for EPA, and identified the location of the information repositories for the Site. No questions or comments were received as a result of the public notice. The public notice is included as Attachment A.

Data Review

Since the fourth five-year review was completed, samples were collected in March of 2014 and June of 2018. Groundwater samples were collected from monitoring wells LF-01, LF-02, LF-03 and LF-04 surrounding the Onsite Disposal Unit, and monitoring wells M-03B, TW-1, TW-3, TW-6, TW-8, TW-11, MW-19C and MW-31B in the vicinity of the north pit. A surface water sample was collected from the point of compliance in the unnamed creek. All sample locations are presented on Figure 2. All samples were analyzed for benzene, resorcinol, THD, p-PSA, BSA and BMDSA. The results are summarized in Appendix B. No significant groundwater trends were noted when comparing the 2014 and 2018 results, but concentrations in groundwater have significantly decreased, in most cases by an order of magnitude, since the 1989 ROD.

While there is a Maximum Contaminant Level for benzene, there are no Maximum Contaminant Levels (MCLs) for other site COCs. Benzene was not detected in any of the groundwater samples. Since the ROD was issued, PADEP promulgated a State-Wide Health Standard (SHS) Medium Specific Concentration (MSC) for resorcinol in groundwater of 83,000 micrograms per liter (µg/L) for residential use and 230,000 µg/L for non-residential use. In the last five years the highest resorcinol concentration was 21,000 µg/L. Resorcinol has never been detected at the Site at concentrations above the PADEP SHS MSC.

Resorcinol, BMDSA, BSA, and p-PSA now have surface water standards. The current Pennsylvania surface water standards are presented in Table 4. The June 2018 surface water sampling event was nondetect for all the COCs with the detection limit of 1 µg/L for benzene and estimated at 50 µg/L for resorcinol. These nondetect values are below PADEP surface water standards.

Table 4: Pennsylvania Surface Water Standards

Compound	Fish and Aquatic Life Criteria		Human Health Criteria (µg/L)
	Criterion Continuous Concentration (µg/L)	Criterion Maximum Concentration (µg/L)	
Benzene	130	640	1.2
Resorcinol	7,200	28,000	2,700
BMDSA	1,600,000	2,600,000	N/A
BSA	1,200,000	2,000,000	N/A
p-PSA	1,400,000	3,500,000	N/A

Site Inspection

The inspection of the Site was conducted on June 12, 2018 and consisted of a visual inspection of the Onsite Disposal Unit, Cap Area, seep interceptor system, onsite storage tank, fencing, and bio swale area. All of the inspected components appeared to be in good condition and no issues or deficiencies were observed that would compromise the protectiveness of the remedy. The inspection team observed several invasive shrubs at the Site. The Unnamed Creek was inspected, and macroinvertebrates were observed under rocks in the unnamed creek. Based on this quick assessment it was noted that the number of organisms seem to be increasing.

V. TECHNICAL ASSESSMENT

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

Question A Summary:

Yes, based on a review of documents and the inspection, the remedy is functioning as intended by the decision documents. The Onsite Disposal Unit eliminated the direct contact exposure pathway to contaminated soils. The capping of the north disposal pit area has reduced the amount of Seep A groundwater that is collected in an aboveground storage tank and treated of offsite. Approximately 5 times less groundwater is collected now than before the installation of the Cap Area. All nearby residents are connected to public water and a deed notice for the Site is in place restricting site activities to minimized exposure to contamination and protect the integrity of the remedy.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

Question B Summary:

The RAOs stated in the ROD remain valid. While there have been significant changes in the risk assessment methodology, toxicity factors and exposure factors since the ROD was issued, these changes do not affect the protectiveness of the remedy. Since the ROD was issued several of the COCs now have surface water and groundwater standards. As part of the data review section of this FYR, groundwater and surface water concentrations were compared to these new standards and no concentration exceeded any current standard.

QUESTION C: Has any **other** information come to light that could call into question the protectiveness of the remedy?

No.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the Five-Year Review:
OU-1, OU-2 and OU-3

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)	
Operable Unit: OU-1	*Protectiveness Determination:* Protective
Protectiveness Statement: The remedy for the disposal pits is protective of human health and the environment due to the excavation of contaminated material from the disposal pits, solidification of the material, and placement of the material in the Onsite Disposal Unit. Institutional controls have been implemented, prohibiting disturbance of the components of the remedy and restricting use of the Site.	

Protectiveness Statement(s)	
Operable Unit: OU-3	*Protectiveness Determination:* Protective
Protectiveness Statement: The remedy for the contaminated Seeps is protective of human health and the environment due to the installation of the seep interceptor system with offsite treatment and installation of the Cap Area. Institutional controls have been implemented restricting groundwater use at the Site.	

Sitewide Protectiveness Statement
Protectiveness Determination: Protective
Protectiveness Statement: The remedy at the Site is protective of human health and the environment. Construction of the remedy has been completed in accordance with the ROD and ESD, institutional controls are in place, and O&M is being conducted in accordance with the O&M Plan. All RAOs, performance standards, and cleanup goals established in the ROD have been achieved.

Government Performance and Results Act (GPRA) Measure Review
As part of this FYR the GPRA Measures have also been reviewed. The GPRA Measures and their status are provided as follows:

Environmental Indicators
Human Health: Human Health Under Control
Groundwater Migration: Groundwater Migration Under Control

Sitewide Ready for Anticipated Use
The Site achieved Sitewide Ready for Anticipated Use on June 27, 2008.

VIII. NEXT REVIEW

The next five-year review report for the Craig Farm Drum Superfund Site is required five years from the completion date of this review.

APPENDIX A – PUBLIC NOTICE

Cruelty

From Page 1

way was unable to speak to the homeowner. He then notified the county's animal response team, which recommended an immediate rescue of the dogs and cats.

Treadway got a first-hand look at the conditions in the home, which had a temperature reading of 38 degrees, police said.

"The floor in every room in the residence was covered in feces and urine," the trooper said in his affidavit.

There was no food for any of the animals. Only the cats could access water from a small bowl on the kitchen counter.

The animals were taken to the Butler County Humane Society and tested. All six dogs, documents said, were found to be infected with giardia, an intestinal parasite.

The disease, authorities said, is transmitted through exposure to the feces of an exposed animal.

Treadway eventually tracked down and spoke to Murphy on Jan. 24. She admitted taking the dogs and cats to the trailer home Jan. 10 and leaving them.

She returned Jan. 13 to check on them, but acknowledged that she had not been back since then.

According to police, she was unaware that the animals had been removed and were in the custody of the state.

"When questioned about leaving the animals without food, water or heat," Treadway's affidavit said, "Murphy had no response."

A preliminary hearing was not immediately scheduled.

Online court records did not list an attorney for Murphy, who could not be reached for comment.

Fraud

From Page 1

told the insurance card had expired, and when she asked Collins about it, he asked for her to "wait until later" before submitting a claim.

The driver told Collins she would not wait to file the claim, and that she had called the police. He reportedly told her that he did not have time to wait and left the scene.

Police later spoke to Collins, who showed them a valid insurance card via his cell phone.

Collins told insurance agents the accident had occurred after he had changed his policy. The complaint notes more than $2,000 in damage was done to the two vehicles, and the insurance company denied the claim. The other driver paid a $500 deductible for the approximately $4,000 worth of work for her car.

In an interview with investigators, Collins allegedly told police he had changed the insurance coverage after the accident.

Collins was arraigned Thursday and released on $10,000 unsecured bond. A May 15 preliminary hearing is scheduled.

Crash

From Page 1

Bowser, a 2011 graduate of Karns City High School, started with the department as a junior firefighter and had recently served as a line officer.

He moved with his family from Bruin in 2018 and was employed at Steris Applied Sterilization Technology in Saxonburg.

State police said Bowser was traveling north on Seybertown Road when he lost control of his 2008 Jeep Compass. The vehicle went off the road and continued for about 110 feet before hitting the guardrail.

The SUV became airborne and hit the tree. He was not wearing a seat belt. The crash remains under investigation.

The Hile Funeral Home in Karns City is handling the funeral arrangements, which are available in his obituary on Page 6.

CYCLING TOWARD BETTER HEALTH

Butler YMCA Executive Director Sandra Ihlenfeld heads up a group cycling class Thursday evening at the North Washington Street facility. More than a dozen students biked their way to better health during the 45-minute workout. The YMCA offers four different types of cycling classes throughout the week.

ANDIE HANNON/BUTLER EAGLE

Pope seeks sex abuse solutions

4-day summit held at Vatican

By Tribune News Service

Pope Francis speaks with the Rev. Federico Lombardi, left, the former Vatican spokesman, at the opening of a sex abuse prevention summit at the Vatican Thursday. Lombardi is moderating the summit.

ASSOCIATED PRESS

VATICAN CITY — Pope Francis warned top Roman Catholic leaders Thursday that they would need to emerge with more than just "predictable" statements as he opened a highly anticipated summit aimed at defining a worldwide response to clergy sex abuse.

To back up his call for "concrete" solutions, the pontiff offered 21 proposals to punish predators and keep children safe, including expanding roles for lay experts in investigations and requiring prelates to report abuse to civil authorities in their countries.

"The holy people of God are looking at us, expecting not only simple and predictable condemnations but concrete and effective measures to put in place," he said. "We need to be concrete."

The assertive tone Francis set at the start of the unprecedented four-day gathering of bishops he summoned from more than 100 countries came as something of a surprise even to some of the meeting's organizers. For weeks, the pope has been downplaying expectations that the global summit would end with the implementation of any specific reforms.

Still, there was skepticism among the victims and their advocates — who have flocked to St. Peter's Square as the conference plays out behind closed doors.

"First, they said this meeting was going to be serious. Then they said it was only going to be a teaching lesson. Now they say there will be concrete action," said Mark Rozzi, an abuse victim and state legislator from Berks County, Pa., who met Thursday with Italian lawmakers and victims. "When I heard that there was going to be a meeting to have a meeting, as a Harrisburg politician I laughed at that. It basically means we're kicking the can down the road."

The outcome of this week's summit could shape the legacy of Francis' papacy — one that has become overwhelmed by an issue that plagued the church for decades.

In less than a year, the United States alone has seen the defrocking of top Cardinal Theodore McCarrick for his alleged abuse of seminarians and minors and the scathing Pennsylvania grand jury report that has since spawned similar investigations in more than a dozen states.

On the eve of this historic meeting, some took offense at his remarks to a group of pilgrims from an Italian archdiocese.

"Those who spend their life accusing, accusing, accusing are, friends, cousins, relatives of the devil," he said. "This is not good. Flaws must be indicated so they can be corrected, but at the moment that flaws are noted, flaws are denounced, one loves the Church. Without love, that is of the devil."

Others questioned why Francis has no meetings with victims on his schedule during the conference.

A handful of survivors from across the globe have been invited to share their accounts during the opening and closing prayers of each day's session.

Zoning ordinance 'follow up' passed

Jackson board gives approval

By Alexandria Mansfield
Eagle Staff Writer

JACKSON TWP — A "follow up" to the adoption of the township's new zoning ordinance was approved at Thursday night's board of supervisors meeting.

Township Manager Chris Rearick explained that a proposed subdivision and land development ordinance amendment would act to complement information in the zoning ordinance, including requirements for traffic impact studies and general requirements for streets, driveways, pedestrian easements and stormwater and surface water easements. It also inserted requirements for street trees.

The township's zoning ordinances were overhauled at the beginning of the year.

As an example of one of the updated amendments, Rearick explained that the current turning radius for residential streets will move from a 35 foot radius, which he called "somewhat excessive," to a 25 foot radius. This will change the standard so the board won't have to waive as many individual exceptions for the rule, which it was doing previously.

"In terms of the traffic study standards," Rearick said, "what we have currently is probably 15 years old. The old model required the developer to address things that, in some respects, we've already addressed via the impact studies."

The board also approved a conditional use application for Seneca Landfill to extract minerals. The primary purpose of the operation is to "support the landfill" for structural fills.

The landfill needs final approval from the Department of Environmental Protection before proceeding with its plans to dig up soil.

Look to the Community section for news about clubs and civic groups

Scores

From Page 1

standardized testing throughout the country. Bob Schaeffer, the group's public education director, said Pennsylvania is a good example of a state where universities are placing less importance on test scores. Outside of public universities, "the majority of colleges in Pennsylvania are test score optional," he said.

SAT scores are a poor measure of educational quality, Schaeffer said. Good scores correlate more closely to income levels than they do to college success.

"It tells you nothing about the quality of education, it's merely a measure of the level of wealth," Schaeffer said. "They shouldn't put much stock into the SAT."

The high-score earners in Butler County appear to reflect that notion. The Mars and Seneca Valley School Districts have the highest average SAT scores in the county, and both districts cover areas with higher median incomes than the northern parts of the county, according to U.S. Census data.

In the Butler School District, the school board is about to begin an informal, ongoing discussion of standardized testing. It is holding regular discussions of a book titled "Beyond Test Scores" by Jack Schneider during upcoming board meetings. Schneider writes that "ample research indicates that standardized tests are a poor way to measure a school's performance."

SAT scoring has changed in recent years. Starting in 2017, the test switched from a 600 to 2400 score range to a 400 to 1600 range. The new test combines the reading and writing sections and separates the essay into its own, optional test portion. Both versions have a math section.

Mike Wick, a father of three students at Center Township Elementary, said he doesn't see the test he took when he was young going away by the time his children have to take it. Still, he doesn't like the tests.

"I feel they're not for every kid," Wick said. "Some kids just don't test well."

That opinion aside, he said he hopes that schools in Butler County give options for SAT preparedness when it's their time.

"It can be a lot of pressure on a kid," Wick said.

APPENDIX B – ANALYTICAL RESULTS

Table B-1: 2018 Sampling Event Results

		LF-01	LF-01 DUP	LF-02	LF-03	LF-04	M-03B	M-19C
		6/12/2018	6/12/2018	6/12/2018	6/12/2018	6/12/2018	6/12/2018	6/12/2018
Benzene	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene meta disulfonic acid	µg/L	17 J	22 J	26 J	20 J	13 J	51 J	46 J
Benzene sulfonic acid	µg/L	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ
Para-phenolsulfonic acid	µg/L	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	77 J	210 J
Resorcinol	µg/L	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	900 J	140 J
Trihydroxydiphenyl	µg/L	43 J	40 J	50 UJ	50 UJ	50 UJ	120,000 J	170,000 J

		M-31B	TW-01	TW-03	TW-06	TW-08	TW-11	Unnamed Creek
		6/13/2018	6/12/2018	6/12/2018	6/13/2018	6/13/2018	6/12/2018	6/13/2018
Benzene	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene meta disulfonic acid	µg/L	35 J	36 J	30 J	33 J	74 J	23 J	50 UJ
Benzene sulfonic acid	µg/L	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ
Para-phenolsulfonic acid	µg/L	99 J	50 UJ	50 UJ	14 J	9.5 J	50 UJ	50 UJ
Resorcinol	µg/L	4.9 J	18 J	22 J	140 J	800 J	50 UJ	50 UJ
Trihydroxydiphenyl	µg/L	9,200 J	14,000 J	10,000 J	20,000 J	77,000 J	1,200 J	50 UJ

Legend:
µg/L - micrograms per liter
U - not detected
J - estimated value

Table B-2: 2014 Sampling Event Results

		LF-01	LF-02	LF-03	LF-04	M-03B	M-19C	M-19C DUP
		3/5/2014	3/5/2014	3/5/2014	3/5/2014	3/5/2014	3/5/2014	3/5/2014
Benzene	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene meta disulfonic acid	µg/L	36 J	45 J	41 J	032 J	110	120	110
Benzene sulfonic acid	µg/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Para-phenolsulfonic acid	µg/L	50 U	50 U	50 U	50 U	160	330	270
Resorcinol	µg/L	50 U	50 U	50 U	50 U	11,000	19,000	21,000
Trihydroxydiphenyl	µg/L	50 U	50 U	50 U	50 U	130,000	160,000 J	240,000 J

		M-31B	TW-01	TW-03	TW-06	TW-08	TW-11	Unnamed Creek
		3/5/2014	3/5/2014	3/5/2014	3/5/2014	3/5/2014	3/5/2014	3/5/2014
Benzene	µg/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene meta disulfonic acid	µg/L	120	49 J	51	64	97	31 J	120
Benzene sulfonic acid	µg/L	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Para-phenolsulfonic acid	µg/L	220	8 J	21 J	45 J	15 J	11 J	50 U
Resorcinol	µg/L	240	39 J	120	950	800	50 U	50 U
Trihydroxydiphenyl	µg/L	28,000	12,000	20,000	50,000	59,000	690	50 U

Legend:
µg/L - micrograms per liter
U - not detected
J - estimated value