

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider MGP Rates.)	
	)	Case No. 14-375-GA-RDR
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No. 14-376-GA-ATA
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider MGP Rates.)	
	)	Case No. 15-452-GA-RDR
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No.15-453-GA- ATA
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider MGP Rates.)	
	)	Case No. 16-542-GA-RDR
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No. 16-543-GA- ATA
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider MGP Rates.)	
	)	Case No.17-596-GA-RDR
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No.17-597-GA- ATA
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider MGP Rates.)	
	)	Case No.18-283-GA-RDR
)	
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	)	Case No.18-284-GA- ATA
)	

In the Matter of the Application of Duke)
Energy Ohio, Inc., for an Adjustment to) Case No. 19-174-GA-RDR
Rider MGP Rates.)

In the Matter of the Application of Duke)
Energy Ohio, Inc., for Tariff Approval.) Case No. 19-175-GA-ATA

SUPPLEMENTAL TESTIMONY OF

TODD L. BACHAND

ON BEHALF OF

DUKE ENERGY OHIO, INC.

October 4, 2019

TABLE OF CONTENTS

	<u>PAGE</u>
I. INTRODUCTION AND PURPOSE	1
II. THE STAFF REPORTS	4
III. EAST END AND WEST END SITES	10
IV. CONCLUSION.....	24

ATTACHMENT:

TLB-1: East End and West End Site Investigation and Remediation Timeline

TLB-2: East End Site Map/ Phase 2 Area

TLB-3: Photos of tar tank foundation in Area West of the West Parcel

TLB-4: 1962 Ohio River Water Edge

TLB-5: Response to STAFF-DR-04-001

TLB-6: Cost Calculation by for Area West of the West Parcel and Ohio River

TLB-7: Remedial Design Drawing for Phases 1-5

I. INTRODUCTION AND PURPOSE

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Todd L. Bachand, and my business address is 139 East Fourth Street,
3 Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as a Lead
6 Environmental Specialist for the Remediation Group, which is part of
7 Environmental Services at Duke Energy Corporation (Duke Energy). DEBS
8 provides various administrative and other services to Duke Energy Ohio, Inc.,
9 (Duke Energy Ohio or Company) and other affiliated companies of Duke Energy.

10 **Q. ARE YOU THE SAME TODD BACHAND THAT PROVIDED DIRECT**
11 **TESTIMONY IN THESE CONSOLIDATED PROCEEDINGS?**

12 A. Yes.

13 **Q. PLEASE SUMMARIZE YOUR EXPERIENCE WITH THE COMPANY'S**
14 **INVESTIGATION AND REMEDIATION OF ITS TWO CINCINNATI**
15 **MANUFACTURED GAS PLANT (MGP) SITES, THE EAST END SITE**
16 **AND WEST END SITE.**

17 A. Since 2014, I have been a Lead Environmental Specialist with Duke Energy in the
18 Remediation Group and, in my role, I have been the project manager for the
19 investigation and remediation of the East End site and West End site since 2014. I
20 am responsible for managing remediation projects within the states of Ohio,
21 Kentucky, and Indiana. I have been providing testimony in each of the previously
22 filed cases since 2015 wherein Duke Energy Ohio is seeking approval for recovery

1 of costs related to investigation and remediation of impacts associated with the
2 former MGP operations at the East End and West End sites. I previously provided
3 testimony in this proceeding that details my responsibilities and my experience with
4 respect to the remediation of the East End and West End sites at issue in these
5 proceedings.

6 **Q. PLEASE SUMMARIZE YOUR EXPERIENCE WITH MGP SITES.**

7 A. In addition to being the project manager for the remediation of the East End and
8 West End sites, I also participate and serve in organizations dedicated to addressing
9 environmental conditions at former MGP sites. In particular, I am currently Vice
10 Chair of the MGP Consortium, and a member of the technical review committee
11 for the GEI MGP Conferences.

12 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY IN**
13 **THESE PROCEEDINGS?**

14 A. The purpose of my testimony is to respond to the recommendations contained in
15 the two reports issued in 2018 and 2019 by the Staff of the Public Utilities
16 Commission of Ohio (Staff) regarding the Company's annual applications for
17 recovery of MGP investigation and remediation expenses in these proceedings
18 (collectively, the Staff Reports).¹ I summarize and explain how Staff's
19 recommendations for disallowances of costs that were incurred at the East End and
20 West End sites are both unreasonable and not supportable under the facts. My
21 testimony explains why the recovery of all MGP investigation and remediation

¹ In the Matter of the Application of Duke Energy Ohio, Inc for an Adjustment to its Rider MGP Rates, Case No. 14-0375-GA-RDR *et al.*, Staff Report (September 28, 2018); In the Matter of the Application of Duke Energy Ohio, Inc for an Adjustment to its Rider MGP Rates, Case No. 14-0375-GA-RDR *et al.*, Staff Report (July 12, 2019).

1 costs incurred to date included in Duke Energy Ohio's requested updates to Rider
2 MGP are reasonable and consistent with what was previously authorized for
3 recovery by the Commission and the Ohio Supreme Court.²

4 First, my testimony explains that Duke Energy Ohio is liable under state
5 and federal environmental laws, including the Comprehensive Environmental
6 Response, Compensation and Liability Act (CERCLA) for impacts associated with
7 the former MGP operations regardless of property boundaries and is obligated to
8 investigate and address these impacts to resolve that liability. Under CERCLA,
9 Duke Energy Ohio is legally responsible for impacts not only within the boundaries
10 of the historical MGP operations, but also for any cleanup required of impacts
11 linked to the operations conducted at the MGP sites while under the ownership
12 and/or operation of Duke Energy Ohio or its predecessors.

13 Second, I explain that, since I have been involved with the East End and
14 West End sites, Duke Energy Ohio has continued the iterative and prudent
15 investigation and remedial approach described in the original testimony filed in the
16 Case No. 12-1685-GA-AIR, *et al.*, (2012 Natural Gas Rate Case) by Duke Energy
17 Ohio's witnesses Jessica Bednarcik and Shawn Fiore.³ And my testimony also
18 corrects Staff's erroneous understanding of the East End and West End site property
19 boundaries and explains how the investigation and remediation work performed
20 since 2013 at both the East End site and West End site were performed in areas that

² *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 12-1685-GA-AIR, *et al.*, Opinion and Order (November 13, 2013), at p. 73; *In re Application of Duke Energy Ohio, Inc.*, 150 Ohio St. 3d 437, pp. 441-443 (June 29, 2017).

³ *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 12-1685-GA-AIR, *et al.*, Direct Testimony of Shawn Fiore (April 22, 2013), at p. 20; *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 12-1685-GA-AIR, *et al.*, Direct Testimony of Jessica Bednarcik (July 20, 2012), at pp. 7-17.

1 were part of the sites during their operation as MGPs.

2 Lastly, my testimony provides additional background regarding the
3 invoices produced to the Staff supporting the costs that were submitted in these
4 consolidated proceedings and explains how the Staff's calculations for its
5 recommended disallowances are improper and otherwise unreasonable.

II. THE STAFF REPORTS

6 **Q. ARE YOU FAMILIAR WITH THE STAFF REPORTS FILED IN THESE**
7 **PROCEEDINGS?**

8 A. Yes. The first Staff Report, filed September 28, 2018, addressed the Company's
9 MGP investigation and remediation expenses from 2013 through 2017 (Staff
10 Report I).⁴ The second Staff Report (Staff Report II) was filed on July 12, 2019
11 and, among other things, summarized the Staff's findings in Staff Report I, and also
12 recommended disallowances for investigation and remediation expense incurred in
13 calendar year 2018.⁵

14 **Q. PLEASE SUMMARIZE THE RECOMMENDATIONS IN THE STAFF**
15 **REPORTS.**

16 A. In Staff Report I, Staff recommends a significant disallowance of costs incurred
17 investigating and remediating MGP impacts at both the East End and West End
18 sites as is depicted in a chart on page 7 of Staff Report I. Specifically, Staff is
19 proposing a disallowance of \$11,228,268 of the total \$15,999,621 in investigation
20 and remediation costs that were incurred at the East End site for the period of

⁴ In the Matter of the Application of Duke Energy Ohio, Inc for an Adjustment to its Rider MGP Rates, Case No. 14-0375-GA-RDR *et al.*, Staff Report (September 28, 2018).

⁵ In the Matter of the Application of Duke Energy Ohio, Inc for an Adjustment to its Rider MGP Rates, Case No. 14-0375-GA-RDR *et al.*, Staff Report (July 12, 2019).

1 January 1, 2013 through December 31, 2017. Staff also recommends disallowance
2 of \$639,632 of the total \$10,042,391 related to West End site costs. Combined,
3 Staff recommends a total disallowance of \$11,867,900, of the total \$26,042,012 in
4 investigation and remediation costs incurred during calendar years 2013 through
5 2017, which is approximately 46 percent of the total MGP investigation and
6 remediation costs incurred in those years.⁶

7 With respect to Staff Report II, in 2018, Duke Energy Ohio incurred
8 \$17,022,972 in MGP investigation and remediation expenses at the East End site
9 and \$2,781,055 at the West End site. Of the approximately \$19.8 million in total
10 costs incurred in 2018 that were submitted for recovery, Staff is recommending
11 disallowance of approximately \$11.4 million, or 58 percent of the costs incurred in
12 2018.

⁶ *Id.*

Table 1 below shows the adjustments recommended by Staff for the East End site by year:

Table 1

Year	Company filing	Staff Recommendation		
		Disallowance	Recovery	Disallowance % of Total
2013	\$482,455	\$274,321	\$208,134	57%
2014	\$240,810	\$135,380	\$105,430	56%
2015	\$329,992	\$222,780	\$107,212	68%
2016	\$1,120,402	\$561,999	\$558,403	50%
2017	\$13,825,962	\$10,033,787	\$3,792,175	72%
2018	\$17,022,876	\$9,366,276	\$7,656,700	55%
TOTAL	\$33,022,597	\$20,594,543	\$12,428,054	62%

Table 2 shows the following adjustments recommended by Staff for the West End site by year:

Table 2

Year	Company filing	Staff Recommendation		
		Disallowance	Recovery	Disallowance % of Total
2013	\$7,864,242	\$22,456	\$7,841,786	0%
2014	\$445,221	\$328,299	\$116,922	74%
2015	\$731,064	\$97,728	\$633,336	13%
2016	\$175,758	\$0	\$175,758	0%
2017	\$826,106	\$191,149	\$634,957	23%
2018	\$2,781,055	\$1,999,967	\$781,088	72%
TOTAL	\$12,823,446	\$2,639,599	\$10,183,847	21%

Q. WHAT IS YOUR UNDERSTANDING OF THE STAFF'S RATIONALE FOR THE RECOMMENDED DISALLOWANCES WITH RESPECT TO THE EAST END SITE?

A. Staff Report I states that the reason for the recommended disallowances were to remove costs related to: "(1) costs associated with remediation of the parcel of land adjacent to the East End site that the Commission denied for recovery (known as

1 the "Purchased Parcel" in the Duke Gas Rate Case or the "Area West of the West
2 Parcel" or "WOW"), or (2) costs associated with investigation or remediation of
3 soil, water or any other tracts of land located outside the original footprint of the
4 East End site."⁷ Additionally, Staff recommends adjusting the proposed recovery
5 to "remove a portion of all remaining costs that could not be tied to any particular
6 parcel of land at the East End site in order to fairly apportion costs associated with
7 the WOW. "⁸ Staff explains that "[f]or costs incurred from 2013 through 2016,
8 Staff removed 50 percent of the remaining costs, based on activities recorded on
9 invoices, contracts submitted by vendors, and over-all dollars spent, at least half of
10 the costs were equitably assignable to the WOW parcel."⁹ With respect to 2017,
11 Staff recommends removal of over 70 percent of costs based on "Company
12 testimony and discussions with Staff indicat[ing] Duke's increased spending
13 attributed to the WOW parcel aligned with this apportionment level."¹⁰

14 Staff Report II applies the same apportioning method to the MGP
15 investigation and remediation costs incurred in 2018, taking the position that
16 recovery of costs is "limited to any investigation or remediation costs incurred
17 within the two original MGP site footprints."¹¹ Staff defines the original MGP site
18 footprints as being limited to the current boundaries of the two MGP sites and that
19 the southern borders are "defined by the water's edge of the Ohio River."¹² Once
20 again, Staff recommends disallowances for work at the East End site based upon

⁷ Staff Report I at 3.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ Staff Report II at 5.

¹² *Id.*

1 work it believes should be assigned or allocated to the Area West of the West
2 Parcel.¹³ Staff reportedly recommends removal of all costs directly associated with
3 the Area West of the West Parcel in 2018. According to Staff Report II, in cases
4 where invoices were clearly marked and included work not located on the Area
5 West of the West Parcel, Staff does not make an adjustment. However, Staff
6 recommends removing 50 percent of the remaining costs on the basis that, in its
7 view, at least half of the costs were equitably assignable to the WOW parcel based
8 on activities recorded on invoices, contracts submitted by vendors, and total dollars
9 spent. Finally, Staff recommends removing all costs associated with the
10 investigation in the Ohio River based on its position that the work was conducted
11 outside the current East End property boundaries.¹⁴

12 Neither of the Staff Reports provide enough detail to determine how the
13 various invoices were actually allocated. As shown in Table 1 above, Staff has
14 recommended disallowance of at least 50 percent of the requested costs in each
15 year, and an overall disallowance of 62 percent of the total requested costs. The
16 magnitude of the recommended disallowances strongly suggests that the Staff
17 incorrectly attributed the vast majority of the East End site project invoices to the

¹³ *Id.*

¹⁴ *Id.*

1 investigation and remediation of the Area West of the West Parcel and to the
2 investigation of the Ohio River sediments and bank.¹⁵

3 **Q. WHAT IS YOUR UNDERSTANDING OF THE STAFF'S RATIONALE**
4 **FOR THE RECOMMENDED DISALLOWANCES WITH RESPECT TO**
5 **THE WEST END SITE?**

6 A. Staff Report I states that Staff recommended adjustments to remove "costs
7 associated with the relocation of an electric substation on the site to accommodate
8 the Brent Spence Bridge replacement project and investigation and remediation
9 work that was performed outside the West End site boundaries."¹⁶ Staff Report I
10 does not identify the invoices that were determined to include costs that should be
11 disallowed.

12 In Staff Report II, Staff recommends disallowances of 2018 MGP
13 investigation and remediation costs incurred at the West End site on the basis of
14 activities that it believes were "offsite costs," which were specifically identified as
15 "costs that were associated with investigation and remediation in the Ohio River."
16 Staff also recommended disallowance of costs associated with the relocation of
17 nitrogen tanks and the construction of a new metal staircase to access the building,
18 which totaled \$226,091, as it believed that these were more properly characterized

¹⁵ Note, Staff also states that it discovered that in 2014, Duke Energy Ohio "removed certain costs that were directly identified on the invoices as costs for activities associated with the WOW parcel," but "did not remove all such costs in 2014 or similar costs associated with the WOW parcel incurred in all other years audited." It is unclear what Staff is referring to with respect to these "removed costs." In calendar year 2014, Duke Energy Ohio credited \$63,808 in charges that had erroneously been included in the 2013 MGP Rider unrelated to remediation efforts. Duke Energy Ohio also did not include costs associated with what is referred to as the Riverside Drive Property, which is part of the Purchased Parcel, beginning in 2014, when it was determined that, unlike the Area West of the West Parcel, the Riverside Drive Property had not been impacted by the former MGP operations.

¹⁶ Staff Report I at 5.

1 as capital costs.¹⁷

2 As with the recommended disallowances related to the East End site, neither
3 Staff Report I or Staff Report II provide enough detail to understand exactly how
4 the recommended disallowances related to the West End site were calculated.

III. EAST END AND WEST END SITES

5 **Q. WHAT IS YOUR UNDERSTANDING OF THE SCOPE OF THE**
6 **COMMISSION'S AUTHORIZATION FOR DUKE ENERGY OHIO TO**
7 **RECOVER MGP INVESTIGATION AND REMEDIATION COSTS AS SET**
8 **FORTH IN THE 2012 NATURAL GAS RATE CASE OPINION AND**
9 **ORDER?**

10 **A.** Based on my review of the Commission's 2012 Natural Gas Rate Case Opinion and
11 Order, Duke Energy Ohio was (and continues to be) authorized to defer for
12 recovery prudently incurred investigation and remediation costs that are related to
13 its statutorily mandated remediation efforts at the East End and West End sites. The
14 Commission did not authorize Duke Energy Ohio to recover the cost of acquiring
15 the Purchased Parcel from DCI, the 2008 costs for the West End site, or any
16 carrying costs.¹⁸ The Commission did not require Duke Energy Ohio to remove or
17 exclude from recovery any of the costs of the investigation that had been performed
18 in the Purchased Parcel. Thus, Duke Energy Ohio has continued to defer and apply
19 to recover prudently incurred costs at the East End and West End sites for work that
20 is required to (1) address the Company's MGP-related liability under state and

¹⁷ Staff Report II at 6.

¹⁸ *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 12-1685-GA-AIR, *et al.*, Opinion and Order (Nov. 13, 2013) at 60.

1 federal environmental laws, including the CERCLA, and (2) to meet applicable
2 Ohio Voluntary Action Program (VAP) requirements.

3 **Q. WHAT IS THE SCOPE OF DUKE ENERGY OHIO'S LIABILITY AND**
4 **OBLIGATION TO INVESTIGATE AND REMEDIATE THE**
5 **ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE FORMER**
6 **MGP OPERATIONS AT THE EAST END AND WEST END SITES?**

7 Based on my more than thirty years of experience as an environmental remediation
8 professional, review of the record in the 2012 Natural Gas Rate Case and the input
9 from legal counsel, the Company is liable under state and federal environmental
10 laws for the remediation of all impacts associated with the former MGP operations
11 at the East End and West End sites, regardless of the precise location of those
12 impacts.¹⁹ This means that the Company has an legal and societal obligation to
13 remediate areas that have been contaminated by the former MGP operations even
14 when those impacts extend beyond Duke Energy Ohio's property. This liability is
15 not limited to current or historical property boundaries, as Duke Energy Ohio is
16 legally responsible for any cleanup required on-site or off-site that can be causally
17 linked to the former MGP operations conducted under the ownership of Duke
18 Energy Ohio or its predecessors.

19 As approved by the Commission, Duke Energy Ohio is addressing its
20 liability under these state and federal environmental laws by investigating and
21 remediating the consequences of MGP operations at the East End and West End
22 sites under the Ohio VAP. Duke Energy Ohio has continued its approach of

¹⁹ *Id.*

1 investigating and remediating MGP impacts from the sites in the same iterative
2 manner that was determined by the Commission to be reasonable and prudent in
3 the Opinion and Order in the 2012 Natural Gas Rate Case.²⁰ The costs to investigate
4 and remediate contamination from the Company's former MGP operations is a cost
5 to the Company of doing business regardless of whether the contamination occurs
6 inside or outside some arbitrary geographic boundary. The contamination,
7 wherever it exists, was created because of the operation of those MGP facilities
8 that, at one time, served customers. As Duke Energy Ohio witnesses Brown and
9 Fiore describe in their respective direct testimonies, Duke Energy Ohio has
10 performed its investigation and remediation in accordance with the Ohio VAP
11 under the guidance and oversight of a VAP Certified Professional (CP).

12 **Q. PLEASE SUMMARIZE THE INVESTIGATION AND REMEDIATION**
13 **ACTIVITIES THAT DUKE ENERGY OHIO HAS ALREADY**
14 **PERFORMED AT THE EAST END AND WEST END SITES FROM 2013**
15 **THROUGH 2018.**

16 **A.** Remediation activities at the East End and West End sites were sequenced, as is
17 typical for remediation of MGP impacts at similar sites and to facilitate on-site
18 utility operations. I have prepared Attachment TLB-1, which is a summary timeline
19 of the investigation and remediation activities conducted at the East End and West
20 End sites for each year from 2013 through 2018.

²⁰ *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 12-1685-GA-AIR, *et al.*, Opinion and Order (Nov. 13, 2013) at 73.

1 **Q. WHY DID DUKE ENERGY OHIO INVESTIGATE AND REMEDIATE**
2 **THE AREA WEST OF THE WEST PARCEL AT THE EAST END SITE?**

3 A. As Duke Energy Ohio is responsible for the contamination associated with the
4 former MGP operations at the East End site, regardless of whether the
5 contamination occurs inside or outside some geographic boundary, it is required
6 under CERCLA and the VAP to investigate and address such impacts, including
7 the impacts in the area referred to as the “Area West of the West Parcel.” In 2014,
8 Duke Energy Ohio completed environmental investigations that determined MGP
9 impacts and equipment (iron tar tank) had been present at the site and that
10 remediation was necessary in parts of the Area West of the West Parcel (referred
11 to as “Phase 2 Area”).

12 **Q. WHY IS DUKE ENERGY OHIO INVESTIGATING THE OHIO RIVER AT**
13 **THE EAST END AND WEST END SITES?**

14 A. As with the Area West of the West Parcel, since Duke Energy Ohio is legally
15 responsible for any required cleanup of contamination from the former MGP
16 operations, this responsibility does not end at the river bank. Under CERCLA and
17 the VAP, the Company is required to evaluate whether the former MGP operations
18 have impacted the Ohio River and whether there is a risk to human health and the
19 environment associated with any such impacts. If the results of the required
20 investigations demonstrate that remediation is necessary, the Company will need to
21 address these impacts. Duke Energy Ohio’s liability is not based on current or
22 historical property boundaries, but is based on where the contamination migrated
23 and whether there is an unacceptable level of risk to human health or the

1 environment associated with that contamination.

2 **Q. DO YOU AGREE WITH STAFF'S CHARACTERIZATION OF THE AREA**
3 **WEST OF THE WEST PARCEL BEING OUTSIDE OF THE "ORIGINAL**
4 **FOOTPRINT" OF THE EAST END SITE?**

5 A. No. Purely as a matter of geography, Staff's characterization is incorrect. Even if
6 Duke Energy Ohio could ignore impacts that are outside of the "original footprint"
7 of the former East End site, the remediated portion of the Area West of the West
8 Parcel is actually within the historical "original footprint" of the East End site.

9 Attachment TLB-2 identifies the portion that was remediated within the
10 Area West of the West Parcel, which is referred to as the Phase 2 Area, as labeled
11 in the figure. Attachment TLB-2 also depicts the approximately 9-acres that was
12 purchased from DCI Properties, Inc. (DCI) in 2011, which is referred to by the
13 Commission in the 2012 Natural Gas Rate Case as the "purchased parcel"
14 (Purchased Parcel).²¹ As shown in Attachment TLB-2, the Purchased Parcel is
15 comprised of the Area West of the West Parcel and the Riverside Drive Property.²²

16 As shown in the figure, the Phase 2 Area is located mostly on the Area West
17 of the West Parcel (although it extends into the West Parcel) and within property
18 that had been owned by Duke Energy Ohio's predecessors from 1928 until it was
19 sold to DCI in 2006, when DCI was attempting to consolidate a number of adjoining
20 parcels for residential development.²³ Since MGP operations took place at the East

²¹ *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in its Natural Gas Distribution Rates*, Case No. 12-1685-GA-AIR, *et al.*, (Opinion and Order, at 41-42) (November 13, 2013).

²² The Riverside Drive Property has also historically been referred to as the Keck Street Property.

²³ Deed from the Cincinnati Street Railway Company to The Cincinnati Gas & Electric Company, recorded *circa* 1928, in Deed Book 1473, Page 384, and Deed to Duke Energy Ohio, Inc. recorded *circa* 2011, in Deed Book 11730, Page 1072.

1 End site from 1884 to 1909, and again from 1925 to 1963, the Phase 2 Area was
2 part of the East End site for thirty-five years of the site's operation as an MGP.

3 The presence of actual MGP operations in the of the Area West of the West
4 Parcel has been confirmed by reviewing old maps, including Sanborn fire safety
5 maps from the time period of the original operations. Additionally, the investigation
6 and remediation work performed in 2017 confirmed that the Area West of the West
7 Parcel was impacted by the former MGP operations at the East End site. In
8 addition, the remnants of a tar tank were encountered during work in the Phase 2
9 Area, confirming what was shown in the Sanborn maps and what was observed
10 during remediation of the West Parcel. Attachment TLB-3 includes photographs of
11 the foundations of a former tar tank that was uncovered during remediation at the
12 Area West of the West Parcel, proving the presence of former MGP facilities within
13 the Area West of the West Parcel.

14 Based on the investigations conducted at the East End site, as required by
15 the VAP, the Company determined that there were MGP impacts in the Area West
16 of the West Parcel, similar in nature to the impacts that were present in other areas
17 of the property, including in areas that were remediated and addressed prior to 2013.
18 As such, Duke Energy Ohio followed remedial approaches to address the impacts
19 in the Area West of the West Parcel consistent with the approach utilized across the
20 entire East End site, which included excavation and treatment (*i.e., in situ*
21 solidification) of contamination in source areas, where mobile oil-like material and
22 tar-like material were present.

1 **Q. DO YOU AGREE WITH STAFF’S CHARACTERIZATION OF THE OHIO**
2 **RIVER AS BEING OUTSIDE OF THE “ORIGINAL FOOTPRINTS” OF**
3 **THE EAST END AND WEST END SITES?**

4 A. No. Again, Staff is incorrect, purely as a matter of geography. Even if the property
5 boundaries were relevant to determining which costs are recoverable—which is not
6 the case—Staff’s characterization would be incorrect. Staff Report II states “the
7 boundaries were defined by property maps provided by the Company during the
8 Duke Gas Rate Case, identified in detail by Staff in its Staff Report in the 2012
9 Natural Gas Rate Case, and affirmed by a Company witness in testimony and filed
10 in the 2012 Natural Gas Rate Case.”²⁴ Although Staff Report II provides citations
11 in footnote 6, the maps and property figures referenced in the 2012 Natural Gas
12 Rate Case clearly depict the East End site “boundary” as including the Purchased
13 Parcel and extending into the Ohio River²⁵ and the testimony described by Staff
14 appears to simply generally describe the location of the “East End site” as being
15 located along the Ohio River.²⁶

16 Moreover, part of the riverbed that is currently under the Ohio River
17 waterline was formerly part of the East End and West End sites during their
18 operation as MGPs. The low-water mark of the Ohio River was historically at the
19 Kentucky and Ohio border, which is as much as 200 feet south of the current
20 riverbank. The East End site operated as an MGP from 1884 to 1909, and again

²⁴ *Id.* at 5, fn. 6.

²⁵ In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates, Case No 12-1685-GA-AIR, *et al.*, Staff Report (Jan. 4, 2013) at pp. 53-64.

²⁶ In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates, Case No 12-1685-GA-AIR, *et al.*, Second Supplemental Direct Testimony of Gary J. Hebbeler (April 22, 2013) at pp. 2-3.

1 from 1925 to 1963. The West End site operated as an MGP from 1843 to 1909,
2 and again from 1918 to 1928. The southern boundary of the East End and West
3 End sites changed significantly following the completion of the construction of the
4 Markland locks in 1959 and the dam in 1964. The construction of the Markland
5 locks and dam significantly raised the Ohio River water level after the MGP
6 operations ceased at East End and West End sites. Attachment TLB-4 shows the
7 historical water edge in 1962, which was located to the south in what is the current
8 Ohio River.

9 **Q. DID STAFF REPORT I OR STAFF REPORT II RECOMMEND**
10 **DISALLOWANCES OF ANY COSTS IN THE UPLAND PORTION OF THE**
11 **WEST END SITE ON THE BASIS OF BEING OUTSIDE OF THE**
12 **“ORIGINAL FOOTPRINT” OF THE WEST END SITE?**

13 A. It is unclear, but neither Staff Report I or Staff Report II describe upland costs that
14 were recommended for disallowance as being outside of the West End boundaries.
15 It appears that the only costs characterized by Staff as being outside of the “original
16 footprint” of the West End site are the costs associated with the investigation in the
17 Ohio River. In Staff Report I, Staff recommends disallowance of costs associated
18 with: the installation of new poles and footings for the new substation, disposal of
19 previously solidified soil, and unspecified substation cost.²⁷ In Staff Report II, Staff
20 recommends disallowance of costs associated with the relocation of nitrogen tanks
21 and the construction of a new metal staircase to access the building.²⁸

²⁷ Staff Report I at 5.

²⁸ Staff Report II at 6.

1 **Q. WAS STAFF CORRECT TO RECOMMEND DISALLOW THESE COSTS?**

2 A. No. First, Staff was mistaken on a key factual point: costs associated with the
3 relocation of the substation at the West End site were not included for recovery in
4 Rider MGP. The costs referred to by Staff were associated with the management
5 of soil and waste generated during the installation of new poles and footings for the
6 new substation. The soils that were removed and disposed in connection with this
7 work were contaminated as a result of the former MGP operations. While soils in
8 this area were previously solidified, which prohibits the contamination from
9 migrating or otherwise leaching further into the environment, if the soils are
10 disturbed, proper handling and disposal activities are required.

11 Second, Staff appears to have misunderstood the reasons for relocating the
12 nitrogen tank system, piping, and metal stairs. Relocation of this equipment was
13 required in order for Duke Energy Ohio to access the Phase 3 Area. This equipment
14 was located directly in the footprint of the remediation area.

15 The costs recommended to be disallowed by Staff are costs that were
16 incurred to remediate the impacts of MGP operations at the West End site and are
17 directly related to such work. As such, these costs should be allowed for recovery.

18 **Q. WITH RESPECT TO THE EAST END SITE, DO YOU AGREE WITH THE**
19 **STAFF'S RECOMMENDED ALLOCATION OF COSTS TO THE AREA**
20 **WEST OF THE WEST PARCEL AND THE OHIO RIVER?**

21 A. No. Even using the methodology described in the Staff Reports, the disallowances
22 recommended by Staff far exceed the costs that could possibly be attributed to the
23 Area West of the West Parcel and the Ohio River. For example, in 2018, the

1 Company's Rider MGP update requested \$17,022,976 for work performed at the
2 East End site. The Staff recommended an adjustment of \$9,366,376, which is more
3 than half of what Duke Energy Ohio had requested in that year for the entire East
4 End site. In response to the Staff's Data Request, STAFF-DR-04-001, attached as
5 TLB-5, Duke Energy Ohio explained that "[t]here was no active remediation
6 activities conducted in the Area West of the West Parcel requiring construction
7 management/detailed design in 2018." The Data Request response also stated
8 "[s]oils were not excavated from the Area West of the West Parcel in 2018."

9 Even though the only investigation and remediation costs that could be
10 attributed to the Area West of the West Parcel in 2018 were a portion of the costs
11 of the site-wide air monitoring, groundwater monitoring, and installation of soil
12 borings along the top of the riverbank, Staff recommended disallowance of more
13 than \$9.3 million from the Company's request of \$17 million.²⁹ As the actual costs
14 of the Ohio River investigation at the East End site in 2018 were only \$1.7 million
15 as shown in Attachment TLB-6, Staff's recommended disallowance for the Area
16 West of the West Parcel would be approximately \$7.6 million,³⁰ when in reality,
17 there was no active remediation in the Area West of the West Parcel in that year.³¹

18 The Staff's recommended disallowances in the other years appear to be
19 similarly flawed. I have reviewed the project invoices and prepared a reasonable
20 calculation of the costs that can be reasonably attributed to the Area West of the

²⁹ Staff Report II, pg. 9, Table 2.

³⁰ \$9.3 million – 1.7 million = \$7.6 million

³¹ See Attachments TLB-5 and TLB-6.

1 West Parcel and the Ohio River at the East End site. Attachment TLB-6 provides
2 the calculation of costs by area.

3 **Q. DID DUKE ENERGY OHIO PROVIDE STAFF WITH INVOICES FOR**
4 **THE MGP INVESTIGATION AND REMEDIATION WORK**
5 **PERFORMED IN EACH CALENDAR YEAR FROM 2013 THROUGH**
6 **2018?**

7 A. Yes.

8 **Q. DID THESE INVOICES INDICATE THE PHASE OF WORK FOR WHICH**
9 **COSTS WERE INCURRED AND THE AREA IN WHICH THE WORK**
10 **WAS PERFORMED?**

11 A. Many of the invoices specifically reference the phase of work that was being
12 performed or referenced the contract or scope of work that described the specific
13 phase of work or area in which the work was performed. The only remediation
14 work in the Area West of the West Parcel was performed in the Phase 2 Area. Most
15 of the costs associated with the Phase 2 Area can be expressly identified from the
16 description in the invoices. There are a number of tasks that were performed on a
17 site-wide basis, including groundwater monitoring, ambient air monitoring, and
18 vibration monitoring, which could not as easily be identified by specific area or
19 phase, but can be reasonably allocated based upon the nature and scope of the work
20 being performed.

21 Additionally, many of the investigation and remedial activities involved the
22 entire East End site or multiple "Parcels" of the East End site. As is customary with

1 environmental projects such as this, the invoices are structured to coincide with the
2 contracts, which were broken out by task.

3 **Q. STAFF REPORT II STATES THAT THE COMPANY HAD STATED THAT**
4 **IT WAS “IMPRACTICAL TO SEGREGATE COSTS OUT BY PARCEL.”**
5 **WILL YOU PLEASE EXPLAIN WHAT THE COMPANY MEANT BY**
6 **THAT STATEMENT?**

7 A. The Company responded to the Staff’s data request that it was impractical to
8 segregate costs out by parcel because the work was invoiced by task, and therefore
9 the Company was not budgeting and recording expenses based on the geographic
10 locations of the work at the sites.

11 As is typical in the industry and for similar remediation sites, the project
12 was divided into tasks. These tasks were not necessarily based on “Parcel” and
13 many of the tasks are scoped and performed on a site-wide basis. In other instances,
14 some of the work performed in the Phase 2 Area of the Area West of the West
15 Parcel was scoped and budgeted with the work that was performed in the Middle
16 Parcel, as it was performed during the same mobilization of contractors.
17 Sequencing the work that needed to be done in the Area West of the West Parcel
18 with the work required in the Middle Parcel allowed Duke Energy Ohio to complete
19 the work more efficiently and cost-effectively. Segregating costs associated with
20 the Area West of the West Parcel is further complicated by the fact that the Phase
21 2 Area is largely within the Area West of the West Parcel, but is also partially within
22 the West Parcel. The percentage of the Phase 2 Area that is located within the Area
23 West of the West Parcel is unknown as the boundaries of these locations have not

1 been surveyed. Attachment TLB-7 is the remedial design drawing, which shows
2 the locations of the phases that were planned in the Area West of the West Parcel
3 and the Middle Parcel.

4 While it is impractical to segregate all costs out by "Parcel," it is possible
5 to prepare a reasonable calculation of costs attributed to the Area West of the West
6 Parcel. I have reviewed relevant invoices from 2013 to 2018 and prepared the
7 calculation summarized in Attachment TLB-6. Invoices that included references
8 to specific parcels were identified based upon the phases indicated on the invoices.
9 Invoices that specifically referenced work in the Phase 2 Area was clearly for the
10 Area West of the West Parcel. As shown in Attachment TLB-7, the only
11 remediation work in the Area West of the West Parcel would have been related to
12 the Phase 2 Area.³² For invoices that did not include any specific phase reference,
13 I compared the invoices to the scope of work was performed in the various parcels
14 during those years. For example, in 2018, there was an invoice for ground water
15 monitoring that involved the sampling of 14 total wells across the entire East End
16 site. Based upon the location of the East End site monitoring well network, it is
17 easy to determine where all the wells were actually drilled and could confirm that
18 only two of those wells were in the Area West of the West Parcel. Therefore, two-
19 fourteenths of those costs could be attributed to that work.

³² Duke Energy Ohio provided the OCC and the Staff copies of the final remedial design package for the Middle Parcel and Area West of the West Parcel on July 3, 2017 in response to OCC-POD-02-007 in Case No. 17-596-GA-RDR. The final remedial design package included the figure provided in Attachment TLB-7. The locations of the phases were also described in my previously filed testimony. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 18-284-GA-RDR, et al., Direct Testimony of Todd Bachand (March 28, 2018), at p. 9; *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates*, Case No 19-174-GA-RDR, et al., Direct Testimony of Todd Bachand (March 29, 2019), at p. 10.

1 **Q. DOES ATTACHMENT TLB-6 REPRESENT THE AMOUNT THAT DUKE**
2 **ENERGY OHIO BELIEVES SHOULD BE DISALLOWED?**

3 A. Absolutely not. The Company maintains that all of the submitted costs for the
4 investigation and remediation work at the East End and West End sites are
5 recoverable. The contamination, wherever it exists, was created because of the
6 operation of those MGP facilities that, at one time, served customers. As I
7 previously stated, the work performed at the Area West of the West Parcel was in
8 fact in areas that were part of the original footprint. Thus, all investigation and
9 remediation work performed in this area was related to the East End site.

10 Attachment TLB-6 simply provides a more realistic calculation of costs
11 associated with the Area West of the West Parcel that is supportable based upon
12 the actual investigation and remediation work that occurred in that area over the
13 last six years at issue. At most, only \$4.6 million in costs is reasonably attributed
14 to the Area West of the West Parcel from 2013 through 2018. Similarly, based
15 upon actual invoices for work performed in investigation of areas in and along the
16 Ohio river, the cost of the Ohio River investigation is \$1.69 million at the East End
17 site and \$1.18 million at the West End site. Even if the Commission were to adopt
18 the Staff's erroneous interpretation of the 2013 Opinion and Order, no more than
19 \$7.46 million in recommended disallowed costs could reasonably be supported as
20 related to the Ohio River investigation or attributed to the Area West of the West
21 Parcel based on the actual invoices for the project. This is far below the nearly
22 \$23.2 million that Staff is recommending be disallowed from recovery.

IV. CONCLUSION

1 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

2 **A. Yes.**

Year	East End Site
2007	<ul style="list-style-type: none"> • In summer, began initial soil and groundwater investigations on “West Parcel” based on historical review of MGP operations and proposed residential development on western adjoining property to generally assess environmental conditions. Work included test pits, NAPL (tars and oils) fingerprinting and a geophysical survey of the tar lagoon. • Investigation extended to “East Parcel” based on historical review of MGP operations and proposed residential development on eastern adjoining property.
2008	<ul style="list-style-type: none"> • Additional forensic analysis of NAPL (tars and oils) samples. • Development of VAP approach to addressing contamination at site. • Commencement of VAP Phase I Property Assessment on East Parcel and West Parcel. • Indoor air sampling in buildings at East End related to MGP contamination.
2009	<ul style="list-style-type: none"> • Performed VAP Phase II Property Assessment work on East Parcel and West Parcels. • Continued groundwater monitoring at site. • Development of Human Health Risk Assessment in accordance with VAP. • Evaluation of options for remediation and preparation of Remedial Action Plan (RAP) for East Parcel and West Parcel.
2010	<ul style="list-style-type: none"> • Design work for implementation of RAP for East and West Parcels. • Development of Ambient Air Monitoring Plan for remedial work. • Obtained permits for remedial activities from Ohio EPA and City of Cincinnati and bond to secure work required by City. • Began remedial activities at West Parcel.
2011	<ul style="list-style-type: none"> • Continued remedial activities, which included excavation on West Parcel, and excavation and ISS on East Parcel. • Duke Energy Ohio acquired the “Purchased Parcel” from DCI Properties, Inc. (“DCI”) and began soil sampling in the “Area West of the West Parcel” as an extension of work on the West Parcel. • VAP Phase I Property Assessment on “Middle Parcel.” • VAP Phase I Property Assessment of Purchased Parcel.
2012	<ul style="list-style-type: none"> • Completed excavation on West Parcel. • Completed excavation and ISS on East Parcel. • Performed VAP Phase II Property Assessment on Middle Parcel, including soil sampling, NAPL delineation and groundwater monitoring. • Began VAP Phase II Property Assessment on the Purchased Parcel. • Completion of West Parcel Remediation Construction Summary Report.
2013	<ul style="list-style-type: none"> • Continued Phase II Property Assessment soil and groundwater sampling on Middle Parcel, including installation of additional wells. • Continued VAP Phase II Property Assessment soil and groundwater sampling on the Purchased Parcel (which was later refined to include only what became known as the “Riverside Drive Property” a/k/a “Keck Street Property”).

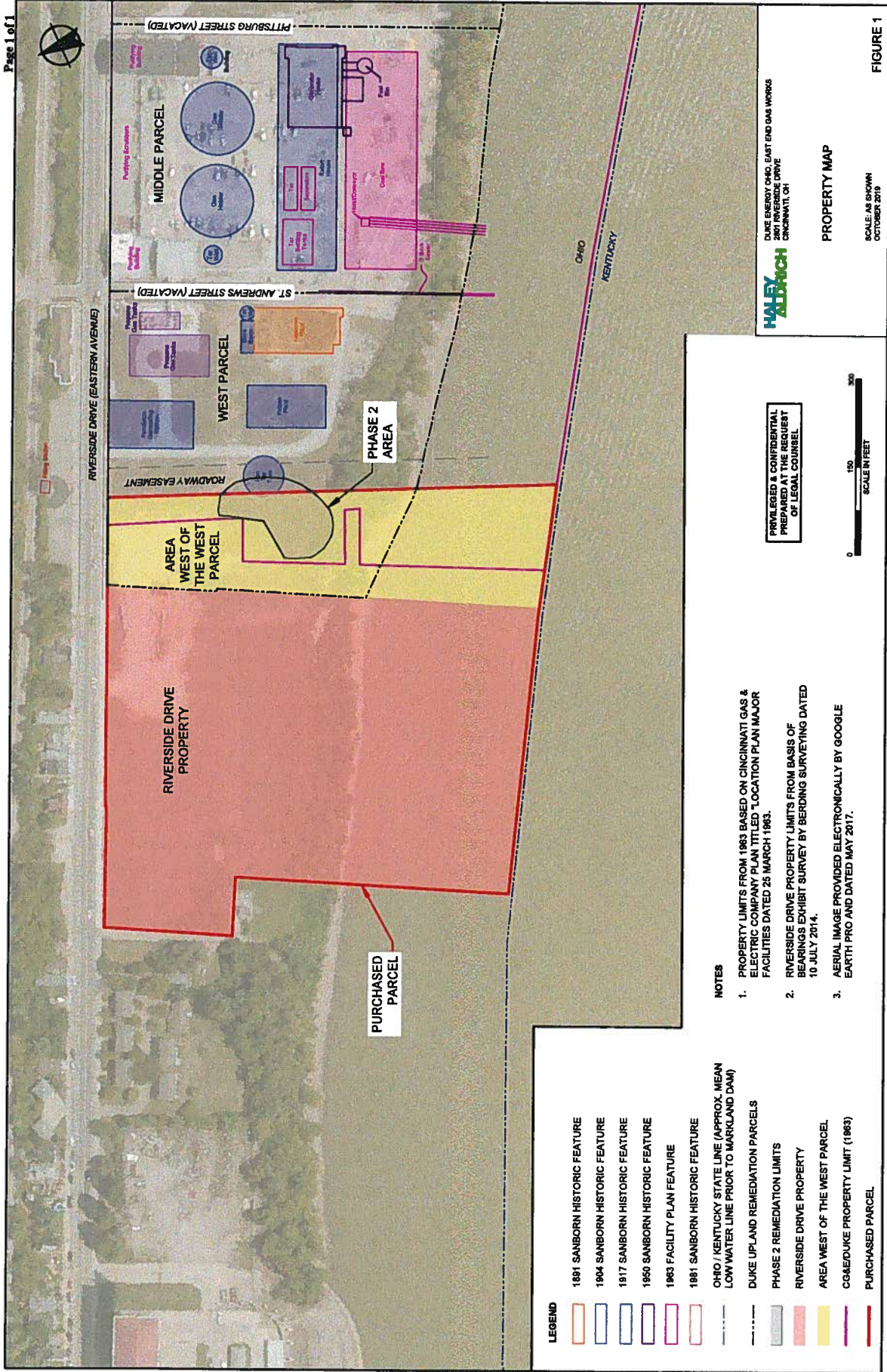
	<ul style="list-style-type: none"> • Requested Technical Assistance from Ohio EPA related to the Riverside Drive Parcel, which was determined to not have MGP impacts based on VAP Phase II Property Assessment of Purchased Parcel. • Performed initial remedial activities in areas where Duke Gas Department was planning to install new vaporizers (West Parcel) and where new gas line was anticipated (East Parcel).
2014	<ul style="list-style-type: none"> • Performed a forensic analysis on DNAPL (tars and oils) in deep wells. • Continued performance of groundwater monitoring across the East End site. • Completion of VAP Phase II Property Assessment report on Middle Parcel, which included identifying remedial technologies to be implemented on the Middle Parcel and the portion of the Purchased Parcel, referred to as the "Area West of the West Parcel," where MGP contaminants were present in concentrations that exceeded applicable standards. • Completed Focused Remedial Alternatives Analysis (RAA) Report on the Middle Parcel and the Area West of the West Parcel.
2015	<ul style="list-style-type: none"> • Began Pre-Design Investigation for remediation focused on the Middle Parcel and Area West of the West Parcel. • Initiated Remedial Design for Middle Parcel and Area West of the West Parcel. • Continued groundwater sampling across East End site.
2016	<ul style="list-style-type: none"> • Completed Pre-Design Investigation for remediation focused on the Middle Parcel and Area West of the West Parcel, including investigation of SBK01/02 in the Area West of the West Parcel. • Completed Remedial Design for Middle Parcel and Area West of the West Parcel. • Obtained all necessary permits for the remediation work in Middle Parcel and Area West of the West Parcel. • Performed excavation and ISS in Phase 1 Area (Middle Parcel) and Phase 2 Area (Area West of the West Parcel). • Continued groundwater sampling across East End site.
2017	<ul style="list-style-type: none"> • Completed soil excavation, ISS and backfilled the Phase 2 Area (Area West of the West Parcel) in July 2017. • Installed shoring in Phase 3 Area (Middle Parcel). • High Pressure Gas Line "E" taken out of service in Phase 3 Area (Middle Parcel). • Began excavation and ISS activities in Phase 3 Area (Middle Parcel). • Continued groundwater sampling and further evaluation of NAPL conditions across the East End site. • Prepared work plan for sediment investigation in Ohio River at the East End site.
2018	<ul style="list-style-type: none"> • Completed excavation and ISS activities in Phase 3 Area (Middle Parcel). • Installed shoring in Phase 4 Area (Middle Parcel). • Initiated excavation and ISS activities in Phase 4 Area (Middle Parcel). • Completed excavation and ISS activities in Phase 6 Area (Middle Parcel). • Initiated top of riverbank soil investigation along the upland border at the East End site. • Continued groundwater sampling and further evaluation of NAPL conditions across the East End site.

2019 to Date	<ul style="list-style-type: none"> • Initiated sediment investigation in the Ohio River at the East End Site. • Completed excavation and ISS activities in Phase 4 Area (Middle Parcel). • Completed restoration of the Middle Parcel and Area West of the West Parcel. • Continuing groundwater sampling and further evaluation of NAPL conditions across the East End site. • Initiating TarGOST sediment investigation and sediment borings in Ohio River at the East End site.
--------------	---

Year	West End Site
2009	<ul style="list-style-type: none"> • Notified by ODOT and KY DOH that preferred route for the new Brent Spence Bridge Corridor Project crosses part of the West End site. The preferred route would require, among other things, the relocation of a major electric substation and other structures on the West End site. • Began collecting background information on site.
2010	<ul style="list-style-type: none"> • Conducted VAP Phase I Property Assessment of the entire West End site. • Conducted VAP Phase II Property Assessment involving soil and groundwater investigation on accessible portions of West End site. • Continued groundwater monitoring across West End site. • Performed Pre-Design Investigation of subsurface conditions for remedial activities. • Obtained permits for remedial activities from Ohio EPA and City of Cincinnati for performance of the remedial action.
2011	<ul style="list-style-type: none"> • Began implementation of remedial activities on Phase 1 and Phase 2 Areas. • Performed excavation and off-site disposal of MGP impacted materials in Phase 1 Area. • Began ISS and backfilling of Phase 1 Area. • Performed Tar-specific Green Optical Screening Tool (TarGOST) investigations to assess the extent of tar-like material (TLM) and oil-like material (OLM) in the subsurface for remedial action in Phase 1 Area. • Performed asphalt milling and demolition activities in Phase 2 Area. • Performed excavation and off-site disposal of MGP impacted materials in Phase 2 Area. • Continued performance of groundwater monitoring across the site.
2012	<ul style="list-style-type: none"> • Performed Pre-Design Investigation for remediation of the Phase 2A area and Geotechnical Supplemental Investigation needed for design of earth retention system. • Performed PCB investigation in southwest corner of Phase 2A Area to define limits of PCB-impacted materials that were required to be removed and managed separately from the remainder of the MGP impacted materials. • Performed TarGOST investigation of Phase 2A Area and Phase 3 Area. • Completed ISS and backfilling for Phase 1 Area. • Performed jet grouting on Phase 2 Area (to treat areas impacted with TLM/OLM that could not be accessed with auger during ISS activities).

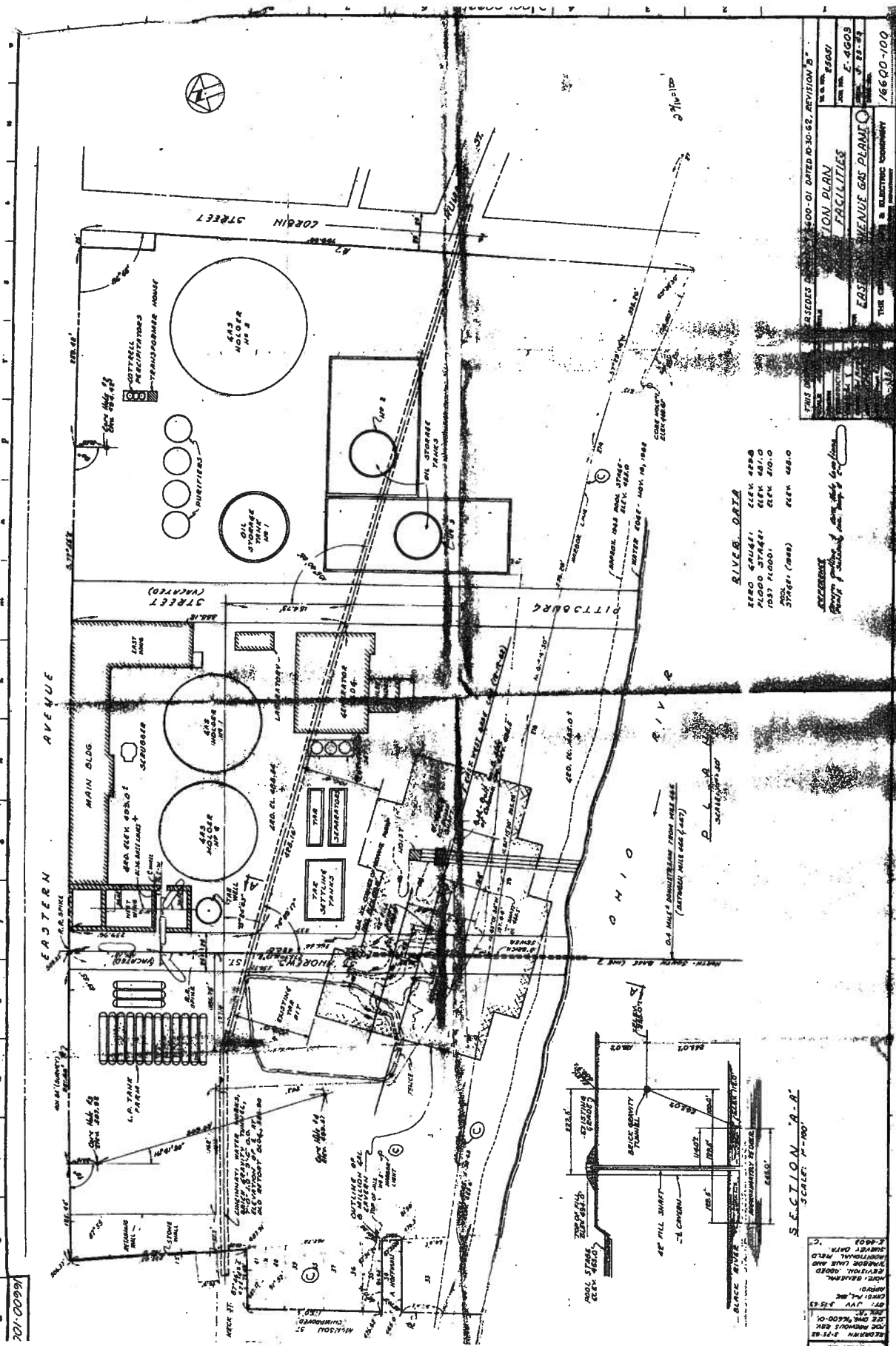
	<ul style="list-style-type: none"> • Began ISS and backfilling for Phase 2 Area. • Excavated and disposed of MGP-impacted materials in Phase 2A Area.
2013	<ul style="list-style-type: none"> • Performed jet grouting in Phase 2A Area (to treat areas impacted with TLM/OLM that could not be accessed with auger during ISS activities) and backfilling. • Conducted remediation of areas where new electrical equipment would be installed to replace equipment that would be impacted by the construction of the new Brent Spence Bridge ("BSB") Corridor Project. • Obtained permits and authorizations and perform limited sediment sampling to evaluate whether MGP impacts may be present in areas of the Ohio River associated with the West End site and in the footprint of proposed bridge. Work included forensic evaluation of selected sediment samples. • Continued performance of groundwater monitoring across the West End site.
2014	<ul style="list-style-type: none"> • Completed Remedial Action Completion Report for Phase 1, 2, and 2A Area. • Continued performance of groundwater monitoring. • Performed soil assessment along the eastern side of the Brent Spence Bridge right-of-way in the location of a new gas line which was expected to be installed in June 2015. • Conducted limited sediment investigation in the proposed new Brent Spence Bridge location.
2015	<ul style="list-style-type: none"> • Installed three additional monitoring wells on the northern "Front and Rose Parcel" to further evaluate groundwater impacts in that area of the site and conducted groundwater monitoring across the West End site.
2016	<ul style="list-style-type: none"> • Continued groundwater sampling and further evaluation of NAPL conditions across the entire West End site.
2017	<ul style="list-style-type: none"> • VAP Phase II Property Assessment of Phase 3 Area (areas that were not previously accessible, including under eastern substation and area on north side of Mehring Way) and Tower Areas. • Completed Remedial Alternatives Analysis Report for the the Phase 3 and Tower Areas. • Continued groundwater sampling and further evaluation of NAPL conditions across the West End site. • Initiated sediment and surface water investigation in the Ohio River portion of the West End site.
2018	<ul style="list-style-type: none"> • Developed remediation design package for the Phase 3 and Tower Areas. • Developed Ambient Air Monitoring Plan for remedial activities. • Obtained all necessary permits for remedial activities. • Obtained bids from contractors for the remedial activities in the Phase 3 and Tower Areas. • Completed the VAP Phase II Property Assessment of Phase 4 Area at the West End site. • Continued groundwater sampling and further evaluation of NAPL conditions across the West End site. • Continued sediment and surface water investigation in the Ohio River portion of the West End site.

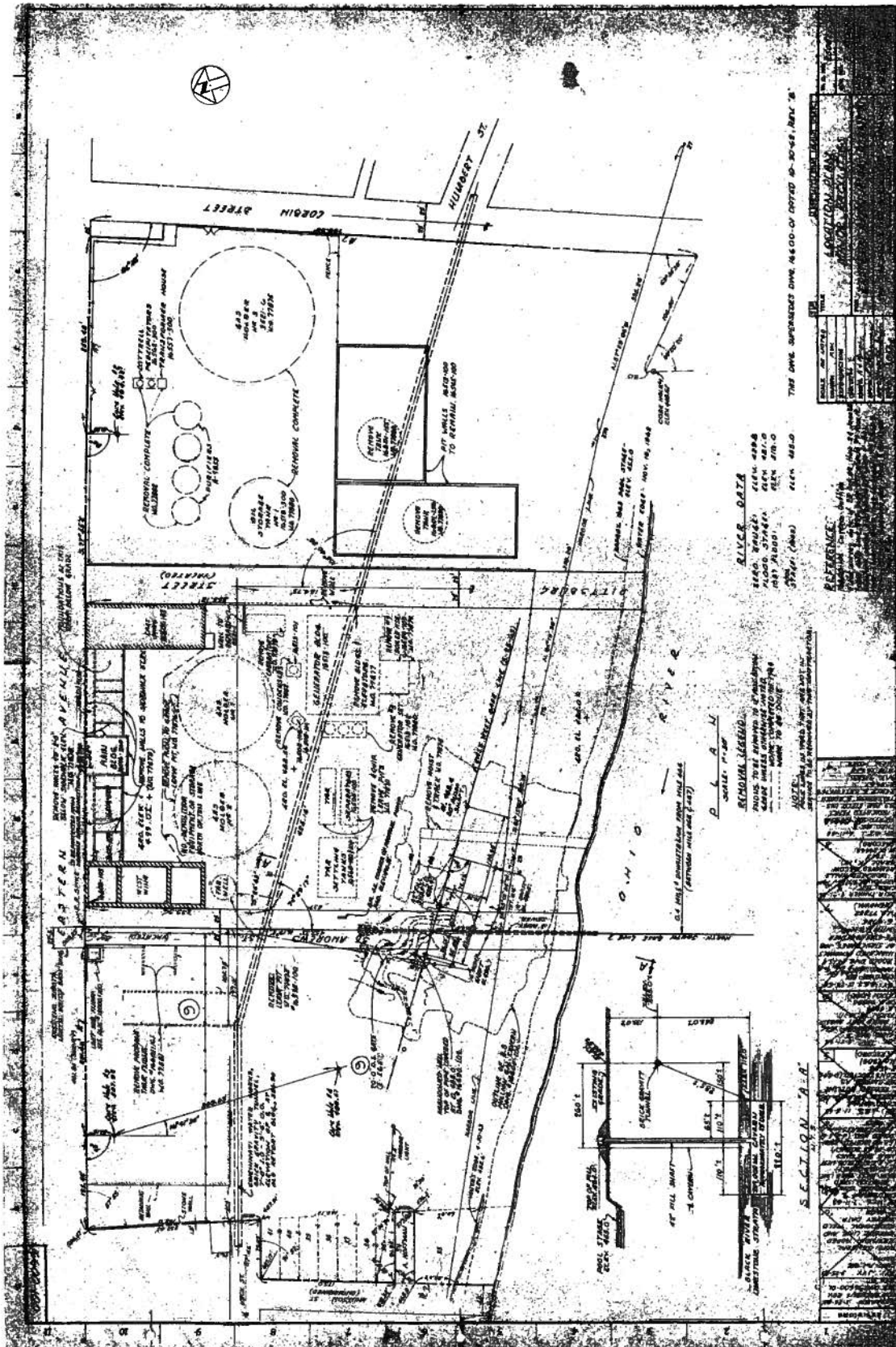
2019 to Date	<ul style="list-style-type: none">• Conducting excavation and ISS activities in the Phase 3 Area.• Conducting excavation activities in the Tower Area.• Continued groundwater sampling and further evaluation of NAPL conditions across the West End site.• Initiating additional sediment sampling for toxicity analysis at the West End site.
-----------------	--











Duke Energy Ohio
Case No. 19-0174-GA-RDR
Staff Fourth Set Data Requests
Date Received: April 2, 2019

STAFF-DR-04-001

REQUEST:

Please provide Staff with the following information:

Pertaining to case No 19-174-GA-RDR, for the East End, Area West of the West Parcel - list and describe in detail the projects and associated costs for any work completed in this parcel by the categories listed below:

1. Investigation
2. Air Monitoring
3. Analytical Laboratory
4. Contractor Support
5. Construction Management/Detailed Design
6. Vibration Monitoring
7. Miscellaneous
8. Soil Disposal/Landfill
9. Duke Energy Internal Expenses
10. Duke Energy Laboratory Labor
11. Duke MGP PM/Construction Oversight

RESPONSE:

East End MGP – Area West of the West Parcel

- 1. Investigation** – During 2018, Haley Aldrich conducted an annual site-wide groundwater sampling event. Groundwater samples were collected from all 21 monitoring wells at the East End site; 2 of which are located in the Area West of the West Parcel.
- 2. Air Monitoring** - AECom conducted ambient air monitoring activities associated with the remediation construction activities at the East End site. One air monitoring station is located in the Area West of the West Parcel; however, it is used in combination with the other air monitoring stations to monitor whether construction/remediation activities (which in 2018 would have been the work in the Middle Parcel) are impacting ambient air off-site.
- 3. Analytical Laboratory** - Pace Laboratory performed analysis of the annual groundwater samples collected by Haley Aldrich associated with the East End remediation construction project.
- 4. Contractor Support** – Altamont Environmental provided support to Duke Energy on the evaluation of project costs and controls for the entire East End site.
- 5. Construction Management/Detailed Design** –There were no active remediation activities conducted in the Area West of the West parcel requiring construction management/detailed design in 2018.

6. Vibration Monitoring – No vibration monitoring activities were conducted in 2018 in the Area West of the West Parcel.

7. Miscellaneous – AON provided performance bonding for Duke Energy to the City of Cincinnati for the entire East End remediation construction project.

8. Soil Disposal/Landfill – Soils were not excavated from the Area West of the West Parcel in 2018.

9. Duke Energy Internal Expenses – Expenses associated with Project Manager while conducting project oversight and technical research for the investigation and remediation of the entire East End site.

10. Duke Energy Laboratory Labor – Duke Energy Laboratory personnel managing laboratory services and providing data management support on analytical data for samples collected from the entire East End site.

11. Duke MGP PM/Construction Oversight – Duke Energy Project Manager labor expense associated with project management tasks for the entire East End site.

NOTE– The investigation and remediation activities are being performed to address liability associated with the former MGP operations at the East End site, which is not limited to a particular parcel. Due to the site-wide nature of many of the above tasks, it is impracticable to segregate costs out by parcel. All associated fees are provided on the SEL-1 attachment previously provided to STAFF.

PERSON RESPONSIBLE:

Todd Bachand

Investigation and Remediation Costs for Recovery - Purchased Parcel/Area West of the West Parcel

Date	Invoice #	Description	Cost of Task	Allocated Cost	Explanation
2013	IN194172	Phase II Property Assessment of Purchased Parcel	\$66,826.15	\$66,826.15	All work in Purchased Parcel.
	IN194170				
	IN194189				
	IN194187				
	IN194175				
	IN194176				
	IN194177				
	IN194178				
	IN767853				
	IN194182				
IN194186					
IN194185				Subtotal	\$66,826.15
2014	IN806188	Focused RAA (Middle Parcel and Area West of the West Parcel).	\$30,104.85	\$15,052.43	Pro-rated by 1/2 of total invoice because for both Middle Parcel and Area West of the West Parcel.
	IN784011				
	IN786327				
	IN789193				
	IN792260				
	IN793673				
	IN797561				
	IN802836				
	IN804841				
	IN806188				
				Subtotal	\$19,526.43
2015	IN822348	Pre-Design Investigation Involving (Middle Parcel and Area West of the West Parcel)	\$149,481.02	\$74,740.51	Pro-rated by 1/2 of total invoiced cost because for both Middle Parcel and Area West of the West Parcel.
	IN824122				
	IN825178				
	IN819117				
	IN822348	Remedial Design (Middle Parcel and Area West of the West Parcel).	\$24,662.39	\$4,932.48	Pro-rated by 1/5 because 1 of the planned 5 phases of work planned in accessible areas of Middle Parcel and Area West of the West Parcel was located in the Area West of the West Parcel (Phase 2 Area).
	IN824122				
	IN825178				
	IN819117				
	IN822348	Site-wide Groundwater Monitoring	\$9,271.77	\$883.03	Pro-rated based on wells in the Area West of the West Parcel as percentage of total wells sampled. 2 of 21 wells sampled were located in the Area West of the West Parcel.
	IN824280				
IN825180					
				Subtotal	\$80,556.01

IN6931 IN5732 IN4832 IN9883520 IN834410 IN832375 IN830506 IN828749 IN826588 IN832375	Remedial Design (Middle Parcel and Area West of the West Parcel).	\$224,862.00	\$44,972.40	Pro-rated by 1/5 because 1 of the planned 5 phases of work planned in accessible areas of Middle Parcel and Area West of the West Parcel was located in the Area West of the West Parcel (Phase 2 Area).
	Completion of Pre-Design Investigation Involving (Middle Parcel and Area West of the West Parcel)	\$1,797.75	\$898.88	Pro-rated by 1/2 of total invoiced cost because for both Middle Parcel and Area West of the West Parcel.
IN832375 IN834410 IN9883529	Investigation of S8K01/02 in the Area West of the West Parcel	\$29,669.14	\$29,669.14	All work in Area West of the West Parcel
T845702	Installation of Vibration Monitor	\$34,920.00	\$19,890.00	Pro-rated to include the actual cost associated with the installation of the vibration monitor (Telitale) in the Phase 2 Area.
T855440	Vibration Monitoring Plan and Installation of Vibration Monitor	\$15,987.00	\$2,743.00	Pro-rated to include the actual cost associated with the installation of the vibration monitor (Telitale) in the Phase 2 Area.
IN830508 IN836419 IN00004831 IN00005724 IN00008118 IN00011552 IN59301 IN59449	Site-wide Groundwater Monitoring Soil Disposal Costs - Rumpke	\$34,366.22	\$3,600.27	Pro-rated based on wells in the Area West of the West Parcel as percentage of total wells sampled. In the first three quarters, 2 out of 21 wells sampled were located in the Area West of the West Parcel. In the fourth quarter, 2 out of 15 wells sampled were located in the Area West of the West Parcel.
		\$93,058.65	\$83,957.79	Pro-rated to only include costs associated with the Area West of the West Parcel ; Invoice 59301 includes \$9,100.86 associated with Phase 1 Area which is not included in the total cost for the Phase 2 Area.
			Subtotal	\$185,731.48
IN00010597	Hayley Aldrich Oversight and Insurance	\$974,500.61	\$169,930.51	Pro-rated to include only costs of the Phase 2 Area.
IN00011730	Hayley Aldrich Oversight; GSI Remediation work, Cascade sonic borings	\$1,625,293.29	\$1,625,293.29	Includes Cascade costs. All work in Phase 2 Area.
IN00013207	Hayley Aldrich Oversight; GSI Remediation work, Cascade sonic borings	\$671,394.67	\$671,394.67	Includes AST Enterprises, Cascade, and Oceans Surveys costs. All work in Phase 2 Area.
IN00014923	Hayley Aldrich Oversight; GSI Remediation work; soil disposal costs	\$515,314.65	\$515,314.65	Includes SGS Galson Labs, and TMI Electrical Costs. All work in Phase 2 Area.
IN00015833	Hayley Aldrich Oversight; GSI Remediation work	\$637,088.71	\$637,088.71	Includes EMS costs. All work in Phase 2 Area.
IN00016718	Hayley Aldrich Oversight; GSI Remediation work	\$215.00	\$215.00	All work in Phase 2 Area.
IN00019499-B	GSI Retainage	\$314,981.78	\$202,615.95	Pro-rated to include the actual cost of GSI Retainage in Phase 2 Area. Subtracted \$112,365.83 from the total because these costs were GSI Retainage in the Phase 1 Area.
37880015	Perimeter Air Monitoring Phase 2 Area	\$28,500.00	\$28,500.00	All work in the Phase 2 Area

2016

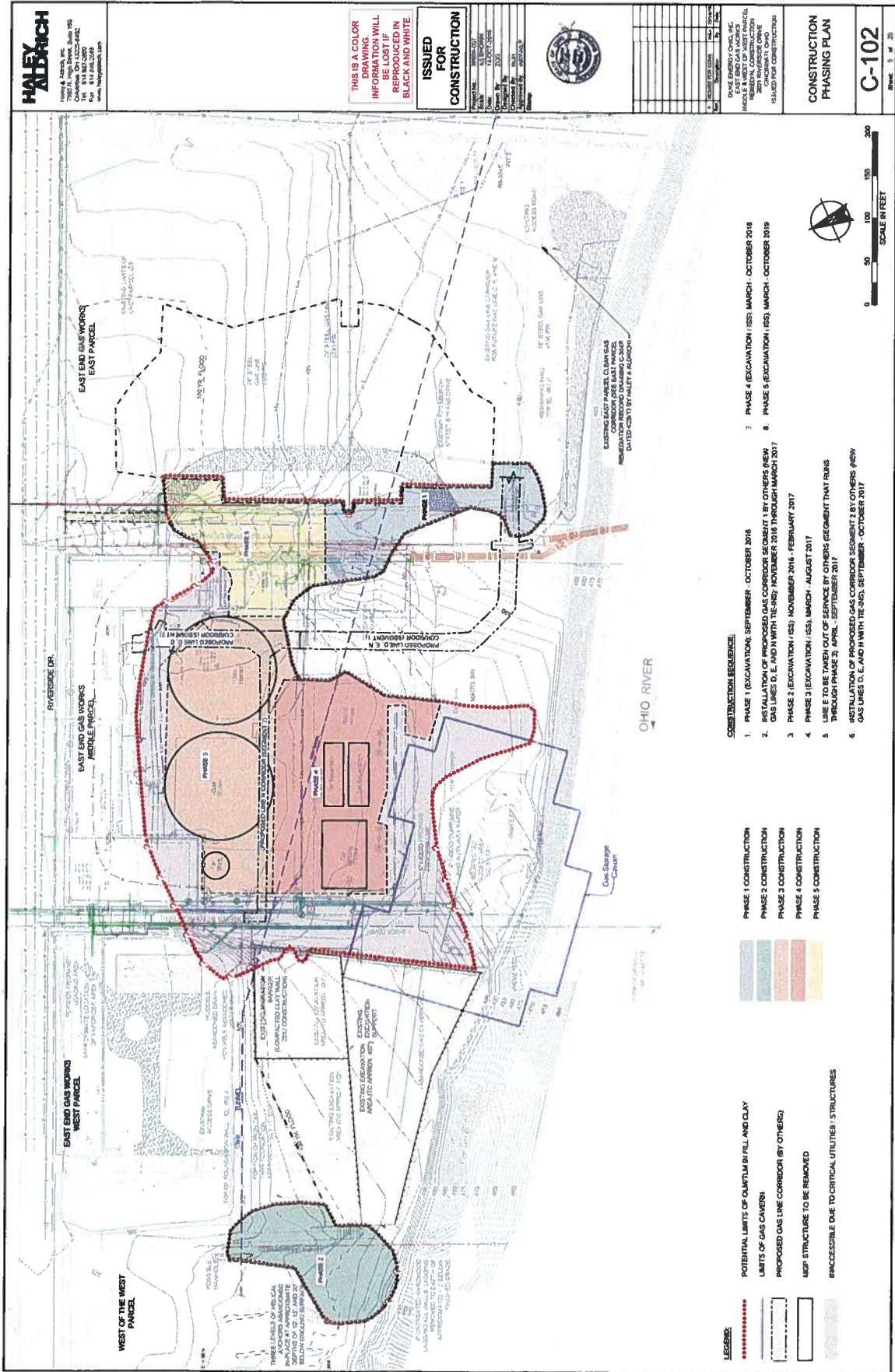
37886526	Perimeter Air Monitoring Phase 2 Area	\$22,800.00	\$22,800.00	All work in the Phase 2 Area
37898395	Perimeter Air Monitoring Phase 2 Area	\$25,393.50	\$22,800.00	Pro-rated to include the actual cost associated with the Perimeter Air Monitoring in the Phase 2 Area.
T865313	Vibration Monitoring	\$14,892.00	\$1,648.00	Pro-rated to include the 1 vibration monitor in Phase 2 for 4 weeks.
T873964	Vibration Monitoring	\$14,892.00	\$1,648.00	Pro-rated to include 1 vibration monitor in Phase 2 for 4 weeks.
T882551	Vibration Monitoring	\$10,436.00	\$6,720.00	Pro-rated to include 4 vibration monitors in Phase 2 for 4 weeks.
T893775	Vibration Monitoring	\$27,368.40	\$8,368.00	Pro-rated to include 2 vibration monitors in Phase 2 for 4 weeks and project management.
IN00013583				
IN00015042				
IN00021912	Site-wide Groundwater Monitoring			Pro-rated based on wells in the Area West of the West Parcel as percentage of total wells sampled. In the first and third quarters, no wells located in the Area West of the West Parcel were sampled. In the second quarter, 2 out of 15 wells sampled were located on the Area West of the West Parcel. In the fourth quarter, 2 out of 16 wells sampled were located in the Area West of the West Parcel.
IN00023058			\$2,320.81	
IN00024343		\$34,366.22		
IN59547				
IN59692				
IN59770				
IN59817				
IN59955				
IN60061				
IN60122				
IN60295	Soil Disposal Costs - Rumpke			All work in Phase 2 Area.
IN60348				
IN60414				
IN60471				
IN60530				
IN60587				
IN60661		\$300,943.73	\$300,943.73	
			Subtotal	\$4,217,601.32
IN00025328				
IN00028478				
IN00090923				
IN00034246	Site-wide Groundwater Monitoring			Pro-rated based on borings in the Area West of the West Parcel as percentage of total borings installed. 2 out of 14 borings installed were located in the Area West of the West Parcel.
IN00034890				
IN00037560		\$72,858.00	\$10,408.29	
IN00039227				
IN00034894	Top of Bank Investigation			Pro-rated based on wells in the Area West of the West Parcel as percentage of total wells sampled. 1 out of 7 wells sampled were located in the Area West of the West Parcel.
IN00037561		\$102,108.68	\$14,586.95	
			Subtotal	\$24,995.24
			Total Cost	\$4,595,236.63

Investigation and Remediation Costs Submitted for Recovery - Ohio River at East End Site

Date	Vendor	Invoice Number	Date	Total Invoice
2017	Anchor QEA	671	8/22/2017	\$ 9,689.75
		730	9/28/2017	\$ 16,096.14
		801	10/30/2017	\$ 6,929.50
		882	11/29/2017	\$ 17,427.50
		974	12/8/2017	\$ 40,789.50
		Subtotal		\$ 90,932.39
2018	Anchor QEA	1060	1/30/2018	\$ 39,303.20
		1144	2/27/2018	\$ 140,591.71
		1224	6/21/2018	\$ 249,575.21
		1676	9/21/2018	\$ 333,137.60
		1795	10/17/2018	\$ 84,028.08
		1905	12/4/2018	\$ 53,731.34
		1983	12/31/2018	\$ 65,577.93
	EMS Inc.	14148	2/28/2018	\$ 225,755.00
		16010	8/29/2018	\$ 369,895.25
	GeoSyntec	122339511	1/19/2018	\$ 4,255.28
		122341312	2/20/2018	\$ 4,572.94
		122343057	3/20/2018	\$ 7,337.06
		122350652	7/20/2018	\$ 19,923.04
		122352518	8/20/2018	\$ 270.08
		Subtotal		\$ 1,597,953.72
		TOTAL		\$ 1,688,886.11

Investigation and Remediation Costs for Recovery - Ohio River at West End Site

Date	Vendor	Invoice Number	Date	Total Invoice
2017	Anchor QEA	672	8/22/2017	\$ 10,022.75
		731	9/28/2017	\$ 17,880.15
		802	10/30/2017	\$ 37,719.41
		883	11/29/2017	\$ 16,634.00
		973	12/8/2017	\$ 4,430.18
		975	12/8/2017	\$ 263,134.39
	EMS Inc.	13735	12/22/2017	\$ 296,944.00
	GeoSyntec	122337901	12/18/2017	\$ 6,977.56
		Subtotal		\$ 653,742.44
2018	Anchor QEA	1061	1/30/2018	\$ 63,150.34
		1146	2/27/2018	\$ 44,546.31
		1225	5/9/2018	\$ 81,009.25
		1379	6/22/2018	\$ 44,397.45
		1677	9/21/2018	\$ 75,010.41
		1796	10/17/2018	\$ 32,755.74
		1906	12/6/2018	\$ 61,210.50
		1984	12/31/2018	\$ 37,136.61
	EMS Inc.	16011	8/29/2018	\$ 73,884.00
	GeoSyntec	122339510	1/19/2018	\$ 251.00
		122348773	6/20/2018	\$ 854.85
		122350651	7/20/2018	\$ 3,807.67
		122352517	8/20/2018	\$ 3,770.06
		Subtotal		\$ 521,784.19
		TOTAL		\$ 1,175,526.63



This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

10/4/2019 4:25:10 PM

in

Case No(s). 14-0375-GA-RDR, 14-0376-GA-ATA, 15-0452-GA-RDR, 15-0453-GA-ATA, 16-0542-GA-RD

Summary: Testimony Supplemental Testimony of Todd L. Bachand on behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H