2019 Investigation and Remediation Costs for Recovery - Area West of the West Parcel

	on and Remediation Costs				I	P	
3/7/2019	Vendor Haley Aldrich	Invoice # IN00037560	Description/Task Groundwater Monitoring	\$ 1,869.25	Allocated Cost	Explanation Site-wide Groundwater Monitoring; Tech Staff preparing 2018 groundwater report. Prorated based upon 2 of 14 wells in the Area West of the West Parcel.	
4/29/2019	Haley Aldrich	IN00039227	Groundwater Monitoring	\$ 1,441.25	s \$ 205.89	Site-wide Groundwater Monitoring: Tech Staff preparing 2018 groundwater report. Prorated based upon 2 of 14 wells in the Area West of the West Parcel.	
4/29/2019	Haley Aldrich	IN00039231	Groundwater Monitoring	\$ 16,465.00	\$ 2,352.14	Site-wide Groundwater Monitoring; Tech Staff conducting field work. Pro-rated based upon 2 of 14 wells in the Area West of the West Parcel.	
6/20/2019	Haley Aldrich	IN00040907	Groundwater Monitoring	\$ 16,222.75	\$ 2,317.54	Site-wide Groundwater Monitoring; Tech Staff conducting field work. Pro-rated based upon 2 of 14 wells in the Area West of the West Parcel.	
8/23/2019	Haley Aldrich	IN00043096	Groundwater Monitoring	\$ 15,685.50	\$ 2,240.79	Site-wide Groundwater Monitoring; Tech Staff conducting field work. Pro-rated based upon 2 of 14 wells in the Area West of the West Parcel.	
12/20/2019	Haley Aldrich	IN00046999	Groundwater Monitoring	\$ 17,112.29	\$ 2,444.61	Site-wide Groundwater Monitoring; Tech Staff conducting field work. Pro-rated based upon 2 of 14 wells in the Area West of the West Parcel.	
3/7/2019	Haley Aldrich	IN00037561	Riverbank Investigation	\$ 3,409.25	\$ 681.85	Riverbank investigation field work. Pro-rated based upon 2 of 10 borings located in the Area West of the West Parcel.	
11/22/2019	Haley Aldrich	IN00046030	Riverbank Investigation	\$ 111,455.11	\$ 22,291.02	Riverbank investigation field work. Pro-rated based upon 2 of 10 borings located in the Area West of the West Parcel.	
12/10/2019	EMS Inc/HEPACO	FY19-011531REV	Riverbank Investigation	\$ 175,000.00	\$ 35,000.00	Riverbank investigation field work. Pro-rated based upon 2 of 10 borings located in the Area West of the West Parcel.	
12/20/2019	Haley Aldrich	IN00047006	Riverbank Investigation	\$ 16,584.40	\$ 3,316.88	Riverbank investigation field work. Pro-rated based upon 2 of 10 borings located in the Area West of the West Parcel.	
11/8/2019	Pace Analytical Services LLC	1950124891	Riverbank Investigation	\$ 5,820.00	\$ 1,444.00	Riverbank investigation analytical samples for Borings SB19-51 and SB19-44 which were ocated in the Area West of the West Parcel. Allocation amount is equal to the charges onl associated with these two borings.	
11/15/2019	Pace Analytical Services LLC	1950125544	Riverbank Investigation	\$ 5,391.24	\$ 5,391.24	Riverbank investigation analytical sample for Boring SB19-51 which was located in the Area West of the West Parcel.	
11/21/2019	Pace Analytical Services LLC	1950126093	Riverbank Investigation	\$ 8,908.68	\$ 8,908.68	Riverbank investigation analytical sample for Boring SB19-44 which was located in the Area West of the West Parcel.	
8/6/2019	Haley Aldrich	IN00042448	Phase 2 Area Restoration	\$ 530,970.22	\$ 40,934.58	Total invoice is for remedial construction and site restoration in Phases 1, 4, and 5 (Middle Parcel) and Phase 2 (Area West of the West Parcel); allocation costs only include the costs (less retainage) associated with Phase 2 in the Area West of the West Parcel as shown on the invoice.	
10/2/2019	Haley Aldrich	IN00044331	Phase 2 Area Restoration	\$ 564,937.08	\$ 27,869.57	Total invoice is for remedial construction and site restoration in Phases 1, 3, 4, and 5 (Middle Parcel) and Phase 2 (Area West of the West Parcel); allocation costs only include the costs (less retainage) associated with Phase 2 in the Area West of the West Parcel as shown on the invoice.	
11/5/2019	Haley Aldrich	IN00045385	Phase 2 Area Restoration	\$ 327,961.07	7 \$ 1,201.20	Total invoice is for remedial construction and site restoration in Phases 1, 3, 4, and 5 (Middle Parcel) and Phase 2 (Area West of the West Parcel); allocation cost only include the costs associated with Phase 2 in the Area West of the West Parcel as shown on the invoice.	
12/10/2019	Haley Aldrich	IN00045385-RET	Phase 2 Area Restoration	\$ 1,109,649.38	\$ 6,037.78	Total invoice is for remedial construction and site restoration in Phases 1, 3, 4, and 5 (Middle Parcel) and Phase 2 (Area West of the West Parcel); allocation cost includes the retainage release associated with Phase 2 in the Area West of the West Parcel as shown on the invoice	
8/2/2019	Lewis Tree Service	181689	Limited Riverbank Remediation	\$ 3,715.02	\$ 3,715.02	Removal of trees and brush to facilitate the installation of the Reactive Core Mat on the riverbank within the Area West of the West Parcel.	
8/20/2019	EMS Inc/HEPACO	FY19-007720	Limited Riverbank Remediation	\$ 155,507.21	\$ 155,507.21	Contractor's purchase of Reactive Core Mat materials and installation activities along riverbank area of the Area West of the West Parcel to perform limited remediation.	
8/28/2019	EMS Inc/HEPACO	FY19-008077	Limited Riverbank Remediation	\$ 120,228.24	\$ 120,228.24	Contractor installation of Reactive Core Mat along riverbank area of the Area West of the West Parcel.	
8/23/2019	Haley Aldrich	IN00043105	Limited Riverbank Remediation	\$ 53,864.03	\$ 53,864.01	Engineering fee for design services associated with the limited remediation of the riverbank area of the Area West of the West Parcel to perform limited remediation.	
9/27/2019	Haley Aldrich	IN00044229	Limited Riverbank Remediation	\$ 7,930.27		Technical fee associated with sample data review associated with the limited remediation of the riverbank area of the Area West of the West Parcel.	
				Total	\$ 504,149.55		

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2019 Investigation and Remediation Costs Submitted for Recovery- Ohio River at East End Site

Date	Vendor	Invoice #	Description		Total Invoice	
8/30/2019	PACE ANALYTICAL SERVICES LLC	1950119398	East End MGP Sediment Sample Analysis	\$	4,481.25	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119042	East End MGP Sediment Sample Analysis	\$	1,861.92	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119043	East End MGP Sediment Sample Analysis	\$	700.00	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119044	East End MGP Sediment Sample Analysis	\$	1,400.00	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119045	East End MGP Sediment Sample Analysis	\$	280.00	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119136	East End MGP Sediment Sample Analysis	\$	2,100.00	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119380	East End MGP Sediment Sample Analysis	\$	1,820.00	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119489	East End MGP Sediment Sample Analysis	\$	1,039.44	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119502	East End MGP Sediment Sample Analysis	\$	8,875.80	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119611	East End MGP Sediment Sample Analysis	\$	2,380.00	
9/4/2019	PACE ANALYTICAL SERVICES LLC	1950119612	East End MGP Sediment Sample Analysis	\$	1,260.00	
9/1/2019	PACE ANALYTICAL SERVICES LLC	1950119613	East End MGP Sediment Sample Analysis	\$	280.00	
9/2/2019	PACE ANALYTICAL SERVICES LLC	1950119614	East End MGP Sediment Sample Analysis	\$	1,820.00	
9/5/2019	PACE ANALYTICAL SERVICES LLC	1950119812	East End MGP Sediment Sample Analysis	\$	980.00	
9/9/2019	PACE ANALYTICAL SERVICES LLC	1950120083	East End MGP Sediment Sample Analysis	\$	11,812.68	
9/9/2019	PACE ANALYTICAL SERVICES LLC	1950120084	East End MGP Sediment Sample Analysis	\$	18,986.16	
9/10/2019	PACE ANALYTICAL SERVICES LLC	1950120213	East End MGP Sediment Sample Analysis	\$	8,748.36	
9/10/2019	PACE ANALYTICAL SERVICES LLC	1950120146	East End MGP Sediment Sample Analysis	\$	6,465.48	
9/11/2019	PACE ANALYTICAL SERVICES LLC	1950120328	East End MGP Sediment Sample Analysis	\$	3,641.76	
10/2/2019	PACE ANALYTICAL SERVICES LLC	1950121907	East End MGP Sediment Sample Analysis	\$	901.80	
10/2/2019	PACE ANALYTICAL SERVICES LLC	1950121908	East End MGP Sediment Sample Analysis	\$	879.48	
10/2/2019	PACE ANALYTICAL SERVICES LLC	1950121909	East End MGP Sediment Sample Analysis	\$	645.84	
10/2/2019	PACE ANALYTICAL SERVICES LLC	1950121910	East End MGP Sediment Sample Analysis	\$	326.64	
10/3/2019	PACE ANALYTICAL SERVICES LLC	1950122003	East End MGP Sediment Sample Analysis	\$	619.80	
11/7/2019	PACE ANALYTICAL SERVICES LLC	1950124773	East End MGP Sediment Sample Analysis	\$	16,332.60	
1/3/2020	PACE ANALYTICAL SERVICES LLC	1950129687	East End MGP Sediment Sample Analysis	\$	18.60	
1/3/2020	PACE ANALYTICAL SERVICES LLC	2050129688	East End MGP Sediment Sample Analysis	\$	14.88	
11/26/2019	PACIFIC ECORISK INC	15938	East End MGP Sediment Sample Analysis	\$	36,412.14	
12/4/2018	Anchor QEA	1905	East End MGP Sediment Investigation Work	\$	53,731.34	
12/31/2018	Anchor QEA	1983	East End MGP Sediment Investigation Work	\$	65,577.93	
1/23/2019	Anchor QEA	2056	East End MGP Sediment Investigation Work	\$	71,903.50	
2/15/2019	Anchor QEA	2080	East End MGP Sediment Investigation Work	\$	18,461.50	
7/16/2019	EMS Inc	20426	East End MGP Sediment Investigation Work - Field Boats & Barge		131,774.93	
7/16/2019	EMS Inc	20592	East End MGP Sediment Investigation Work - Field Boats & Barge		355,942.00	
10/22/2019	EMS Inc	20804	East End MGP Sediment Investigation Work - Field Boats & Barge		220,369.78	
	EMS Inc/HEPACO	FY19-011526	East End MGP Sediment Investigation Work - IDW Disposal Costs	\$	2,584.00	
12/6/2019 12/17/2019	EMS Inc/HEPACO	FY19-011953	East End MGP Sediment Investigation Work - Field Boats & Barge		5,112.19	
	· '			\$ \$		
4/29/2019	Haley Aldrich Inc.	IN00039232	East End Sediment Investigation - Data Review		14,602.75	
6/3/2019	Haley Aldrich Inc.	IN00040435	East End Sediment Investigation - Data Review	\$	42,220.25 22,298.25	
6/10/2019	Haley Aldrich Inc.	IN00040620	East End Sediment Investigation - Data Review	\$		
6/20/2019	Haley Aldrich Inc.	IN00040908	East End Sediment Investigation - Data Review	\$	14,372.25 17,819.97	
6/20/2019	Haley Aldrich Inc.	IN00040910	East End Sediment Investigation - Data Review	\$		
7/26/2019	Haley Aldrich Inc.	IN00042181	East End Sediment Investigation - Field Work TarGOST Drilling		145,699.76	
8/23/2019	Haley Aldrich Inc.	IN00043101	East End Sediment Investigation - Field Work TarGOST Drilling		159,515.93	
8/23/2019	Haley Aldrich Inc.	IN00043110	East End Sediment Investigation - Field Work Sonic Drilling		299,297.03	
9/27/2019	Haley Aldrich Inc.	IN00044231	East End Sediment Investigation - Field Work Sonic Drilling		157,188.42	
9/27/2019	Haley Aldrich Inc.	IN00044225	East End Sediment Investigation - Data Review	\$	6,191.00	
11/1/2019	Haley Aldrich Inc.	IN00045263	East End Sediment Investigation - Field Work Sonic Drilling	\$	21,116.42	
11/1/2019	Haley Aldrich Inc.	IN00045261	East End Sediment Investigation - Data Review	\$	10,142.00	
11/22/2019	Haley Aldrich Inc.	IN00046028	East End Sediment Investigation - Field Work Boring Log Development	\$	38,721.19	
11/22/2019	Haley Aldrich Inc.	IN00046027	East End Sediment Investigation - Data Review	\$	10,883.75	
12/20/2019	Haley Aldrich Inc.	IN00047003	East End Sediment Investigation - Field Work Data Development	\$	35,828.00	
		ĺ	Total	\$ 2,	,051,957.52	

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Investigation and Remediation Costs - Ohio River at West End Site

	U	a nemealation		
Date	Vendor	Invoice Number	Description	Total Invoice
01/03/2020	PACE ANALYTICAL SERVICES LLC	2050129686	West End MGP Sediment Sample Analysis	\$ 7.44
09/10/2019	PACE ANALYTICAL SERVICES LLC	1950120133	West End MGP Sediment Sample Analysis	\$ 290.00
09/11/2019	PACE ANALYTICAL SERVICES LLC	1950120220	West End MGP Sediment Sample Analysis	\$ 700.00
09/13/2019	PACE ANALYTICAL SERVICES LLC	1950120462	West End MGP Sediment Sample Analysis	\$ 1,705.00
09/13/2019	PACE ANALYTICAL SERVICES LLC	1950120463	West End MGP Sediment Sample Analysis	\$ 915.00
09/17/2019	PACE ANALYTICAL SERVICES LLC	1950120612	West End MGP Sediment Sample Analysis	\$ 13,321.56
09/19/2019	PACE ANALYTICAL SERVICES LLC	1950120868	West End MGP Sediment Sample Analysis	\$ 12,747.84
09/20/2019	PACE ANALYTICAL SERVICES LLC	1950120977	West End MGP Sediment Sample Analysis	\$ 2,598.60
09/20/2019	PACE ANALYTICAL SERVICES LLC	1950121000	West End MGP Sediment Sample Analysis	\$ 2,400.00
09/23/2019	PACE ANALYTICAL SERVICES LLC	1950121092	West End MGP Sediment Sample Analysis	\$ 10,607.52
09/23/2019	PACE ANALYTICAL SERVICES LLC	1950121093	West End MGP Sediment Sample Analysis	\$ 1,270.00
10/01/2019	PACE ANALYTICAL SERVICES LLC	1950121581	West End MGP Sediment Sample Analysis	\$ 4,157.76
10/01/2019	PACE ANALYTICAL SERVICES LLC	1950121763	West End MGP Sediment Sample Analysis	\$ 594.00
10/02/2019	PACE ANALYTICAL SERVICES LLC	1950121899	West End MGP Sediment Sample Analysis	\$ 6,236.64
10/02/2019	PACE ANALYTICAL SERVICES LLC	1950121900	West End MGP Sediment Sample Analysis	\$ 8,315.52
10/02/2019	PACE ANALYTICAL SERVICES LLC	1950121901	West End MGP Sediment Sample Analysis	\$ 4,157.76
10/03/2019	PACE ANALYTICAL SERVICES LLC	1950122004	West End MGP Sediment Sample Analysis	\$ 6,876.36
10/04/2019	PACE ANALYTICAL SERVICES LLC	1950122111	West End MGP Sediment Sample Analysis	\$ 8,304.36
10/22/2019	PACE ANALYTICAL SERVICES LLC	1950123442	West End MGP Sediment Sample Analysis	\$ 582.60
10/22/2019	PACE ANALYTICAL SERVICES LLC	1950123443	West End MGP Sediment Sample Analysis	\$ 1,209.84
10/22/2019	PACE ANALYTICAL SERVICES LLC	1950123444	West End MGP Sediment Sample Analysis	\$ 660.72
10/22/2019	PACE ANALYTICAL SERVICES LLC	1950123445	West End MGP Sediment Sample Analysis	\$ 304.32
10/22/2019	PACE ANALYTICAL SERVICES LLC	1950123446	West End MGP Sediment Sample Analysis	\$ 1,465.80
10/22/2019	PACE ANALYTICAL SERVICES LLC	1950123447	West End MGP Sediment Sample Analysis	\$ 326.64
10/30/2019	PACE ANALYTICAL SERVICES LLC	1950124106	West End MGP Sediment Sample Analysis	\$ 337.80
10/30/2019	PACE ANALYTICAL SERVICES LLC	1950124107	West End MGP Sediment Sample Analysis	\$ 901.80
10/30/2019	PACE ANALYTICAL SERVICES LLC	1950124108	West End MGP Sediment Sample Analysis	\$ 586.32
10/30/2019	PACE ANALYTICAL SERVICES LLC	1950124109	West End MGP Sediment Sample Analysis	\$ 883.20
10/30/2019	PACE ANALYTICAL SERVICES LLC	1950124114	West End MGP Sediment Sample Analysis	\$ 1,168.92
11/07/2019	PACE ANALYTICAL SERVICES LLC	1950124774	West End MGP Sediment Sample Analysis	\$ 5,586.60
01/10/2020	PACE ANALYTICAL SERVICES LLC	1950124988	West End MGP Sediment Sample Analysis	\$ 5,633.00
01/10/2020	PACE ANALYTICAL SERVICES LLC	1950124990	West End MGP Sediment Sample Analysis	\$ 6,772.00
01/10/2020	PACE ANALYTICAL SERVICES LLC	1950124991	West End MGP Sediment Sample Analysis	\$ 12,207.00
01/10/2020	PACE ANALYTICAL SERVICES LLC	1950125045	West End MGP Sediment Sample Analysis	\$ 7,175.00
12/18/2019	PACE ANALYTICAL SERVICES LLC	1950128325	West End MGP Sediment Sample Analysis	\$ 17,251.0
12/19/2019	PACE ANALYTICAL SERVICES LLC	1950128423	West End MGP Sediment Sample Analysis	\$ 9,940.00
12/19/2019	PACE ANALYTICAL SERVICES LLC	1950128424	West End MGP Sediment Sample Analysis	\$ 4,345.00
12/19/2019	PACE ANALYTICAL SERVICES LLC	1950128425	West End MGP Sediment Sample Analysis	\$ 6,405.00
01/02/2020	PACE ANALYTICAL SERVICES LLC	1950129299	West End MGP Sediment Sample Analysis	\$ 3,471.00
01/27/2020	PACE ANALYTICAL SERVICES LLC	2050131300	West End MGP Sediment Sample Analysis	\$ 210.00
11/26/2019	PACIFIC ECORISK INC	15976	West End Sediment Investigation	\$ 85,750.90
12/04/2018	Anchor QEA	1906	West End Sediment Investigation	\$ 61,210.50
12/31/2018	Anchor QEA	1984	West End Sediment Investigation	\$ 37,136.6
1/23/2019	Anchor QEA	2057	West End Sediment Investigation	\$ 50,446.2
1/29/2019	Anchor QEA	2073	West End Sediment Investigation	\$ 9,969.7
2/15/2019	Anchor QEA	2079	West End Sediment Investigation	\$ 23,724.7
3/14/2019	Anchor QEA	2147	West End Sediment Investigation	\$ 7,457.2
9/25/2019	EMS Inc./HEPACO	FY19-009515	West End MGP Sediment Investigation Work - Field Boats & Barge	\$ 240,870.0
12/6/2019	EMS Inc./HEPACO	FY19-011529	West End MGP Sediment Investigation Work - IDW Disposal Costs	\$ 2,584.0
4/29/2019	Haley Aldrich	IN00039224	West End Sediment Investigation	\$ 28,587.5
6/3/2019	Haley Aldrich	IN00040433	West End Sediment Investigation	\$ 35,064.2
6/10/2019	Haley Aldrich	IN00040613	West End Sediment Investigation -Risk Analysis	\$ 2,761.0
6/10/2019	Haley Aldrich	IN00040617	West End Sediment Investigation	\$ 43,548.2
6/20/2019	Haley Aldrich	IN00040903	West End Sediment Investigation -Risk Analysis	\$ 1,099.5
6/20/2019	Haley Aldrich	IN00040905	West End Sediment Investigation	\$ 8,484.0
7/26/2019	Haley Aldrich	IN00042173	West End Sediment Investigation	\$ 6,977.5
9/27/2019	Haley Aldrich	IN00044219	West End Sediment Investigation Field Work	\$ 331,796.4
11/1/2019	Haley Aldrich	IN00045256	West End Sediment Investigation Field Work	\$ 31,281.8
11/22/2019	Haley Aldrich	IN00046023	West End Sediment Investigation Field Work	\$ 27,774.1
12/20/2019	Haley Aldrich	IN00046994	West End Sediment Investigation Field Work	\$ 44,516.0
. ,			Total	\$ 1,253,669.3
			,	