#### A. Summary of Abatement Costs

1. The following summary presents the estimated cost for partial abatement and treatment of the acid mine drainage of the Chartiers Creek Drainage Basin:

Phase A: Restoration of natural drainage as shown in

the Cost Summary for Major Sources of

Pollution

Phase B: Restoration of natural drainage through strip

mines affecting minor sources

Phase C: Cost of treatment plant, based on one year's operation

and assuming the minimum percentage reduction shown for each source, is included in Cost Summary, Phase C, Page X-11. The price, therefore, will vary if more than the estimated percentage reduction occurs. Based on this, Phase C should not be implemented until results of Phase A and Phase B are known.

Major <u>Tributaries</u>	Phase A	Phase B	Phase C
Chartiers	\$180,600	\$142,000	\$112,500
Campbells	181,200	72,000 1	5,500
Robinson	1,113,400	557,000	106,500
North BranchRobinsons Run	582,000	29,000	102,000
Millers	225,000	6,000	88,000
Total:	\$2,282,200	\$806,000	\$424,500
Total Percent Abatement of Acid Drainage in the Basin:*	40%	10%	40%

<sup>\*</sup>The above percentage of abatement is based on theoretical estimates and recognizes the fact that 100% actual abatement may never be achieved.

2. Since House Bill 561 (1969 Session) was adopted, the strip mines can be completely reclaimed and reforested rather than simply improving the drainage through them as recommended in Phases A and B of this cost summary. The additional cost to totally reclaim the strip mines is approximately \$2,500,000. The cost of total reclamation for each of the strip mines is included on the enclosed charts. It is estimated that this work will abate an additional 10% of the pollution.

#### B. Stream Benefits

- I. Physical abatement of the major sources would significantly improve water quality in the lower reach of Chartiers Creek. The resultant water quality can be predicted on the basis of anticipated pollution reduction of approximately 40%.
- 2. The reduction in acid loads from the major sources from 30 thousand to 17 thousand pounds per day would effect a similar acid load reduction in Chartiers Creek.
- 3. The funds expended in the various phases of cleanup of the Chartlers Creek Drainage Basin should result in the following benefits to Main Stem Chartiers Creek:
  - a. Decrease in the slugging effect of mine acid drainage from the sub-tributaries.
  - b. A more uniform year-round balance of alkalinity.
  - c. Significant decrease in iron and sulfide.
  - d. Addition of unpolluted waters to the tributaries, thus assisting in further dilution of existing acids.
  - e. Reduction of siltation from strip mines and mine dumps.
- 4. The foregoing benefits are related to the abatement of mine acid drainage and its effect on Chartiers Creek; however, the stream waters are constantly being affected by other pollutants such as raw sewage, industrial wastes, and siltation.

# COST SUMMARY PHASE A

COST SUMMARY FOR PHASE A
MAJOR SOURCES OF POLLUTION
CHARTIERS CREEK BASIN

					,		•
Priorit Number	•	Per Cent Pollution	Mothodo of Abatamat	Estimated	Per Cent	% Pollution	-
Number	95 11 - 19	FOITUITOR	Methods of Abatement	Cost	Abatement	Abated	Tributary
1	4971- <del>4967</del>	28.5	Surface Drainage Restoration Fill in Sink Holes & Seal Mine Openings	\$ <del>225 ;000</del> 765, 2 92 e	<b>39</b> £(1) (1) ⟨x + 7	12.0	Millers Run
2	4041	9.0	Fill in Sink Holes Surface Drainage Restoration Reclamation of a Strip Mine	126,200	60	5.4	North Branch Robinsons Run
3	6005	7.0	Improve Drainage Through Strip Mines & Seal Mine Opening 0-19	<del>110,9</del> 00 /\$\$,330	20	1.4	Campbells Run
4 4 ×	4805-4804-4824 65-8-192-8-5	3.5	Surface Drainage Restoration Cover Up Openings into	<b>77,500</b>	26	0.9	North Branch Robinsons Run
5	6048		Seal Mine Entries Drainage Restoration	24,500	23	0.8	North Branch Robinsons Run
6	4952-4951		Improve Natural Drainage Through Strip Mine & Reduce Infiltration of Surface Water into Deep Mine	154,000	38	1.3	Robinson Run
7	4654		Improve Drainage Through Strip Mines	75,000	48	1.2	Robinson Run
8	4962-4963 4034 95-3 102-3-2		Fill Sink Holes Provide Drainage Through Sink Hole Area & Strip Mines	39,000	18	0.5	Robinson Run
9	4972 \$45-4 102-3-1	2.5	Surface Drainage Restoration	<del>98</del> ,500 2/,500	100	2.5	Chartiers Creek
10	4810		Seal Air Shaft & Mine Openings; Surface Drainage Restoration	79,000	53	1.3	North Branch Robinsons Run

Cost Summary for Phase A Priority Source Per Cent Estimated Per Cent % Pollution Pollution Methods of Abatomont Abatamant T-15...

	Number	Number	Pollution	Methods of Abatement	Cost	Abatement	Abated	Tributary
	11	4801-4802	2.5	Cover Openings into Deep Mines; Surface Drainage	\$107,000	42	1.0	North Branch Robinsons Run
	12	4055	2.0	Surface Drainage Restoration	24,000	20	0.4	Robinson Run
	13	4034	2.0	Surface Drainage Restoration	65,000	40	0.8	Robinson Run
	14	4834	2.0	Fill Opening into Deep Mine Surface Drainage Restoration	22,000	30	0.6	North Branch Robinsons Run
	15	4019	1.5	Grout Sealing	15,000	100	1.5	Robinson Run
	16	6022	1.5	Fill in Sink Holes Drainage Restoration	69,700	64	1.0	Campbells Run
	17	4957-4956	1.5	Fill in Sink Holes Surface Drainage Restoration	81,600	46	0.7	Robinson Run
× <del>-</del> 5	18	4816-4815	1.5	Surface Drainage Restoration	38,800	60	0.9	North Branch Robinsons Run
	19	4153	1.5	Surface Drainage Restoration Seal Mine Opening 0-12 Fill in Strip Mines	30,800	22	0.3	Robinson Run
	20	6002	1.5	See 6005		20	0.3	Campbells Run
	21	4006	1.0	Surface Drainage Restoration	87,000	70	0.7	Robinson Run
	22	4031	1.0	Surface Drainage Restoration	421,800	100±	1.0	Robinson Run
	23	4845	1.0	See 4952-4951		40	0.4	Robinson Run

Prio. y Number	Source Number	Per Cent Pollution	Methods of Abatement	Est <b>imat</b> ed Cost	Per Cent Abatement	% Pollution Abated	Tributary
24	05-22-102- 4829	-2-1	See 4041		60	0.6	North Branch Robinsons Run
25	4688	1.0	Improve Surface Drainage Seal Opening 0-16	\$80,700	67	0.7	North Branch Robinsons Run
26	6001	1.0	See 6005		20	0.2	Campbells Run
27	4838	1.0	See 4952-4951		40	0.4	Robinson Run
28	4820	1.0	Surface Drainage Restoration	17,000	35	0.4	North Branch Robinsons Run
29	4045	1.0	Surface Drainage Restoration	13,000	50	0.5	Robinson Run
30	6034-6035	1.0	See 4972		55	0.5	Chartiers Cre
31	4655	0.5	Surface Drainage Restoration	82,700	82	0.4	Chartiers Cre
32	4039	0.5	Surface Drainage Restoration	69,500	75	0.4	North Branch Robinsons Run
33	4850	0.5	Restoration of Natural Drainage	26,500	43	0.2	Robinson Run
34	4808	0.5	Surface Drainage Restoration	20,500	30	0.2	North Branch Robinsons Run
	TOTAL:		\$2,	282,200		41.4	

## COST SUMMARY PHASE B

### COST SUMMARY FOR PHASE B STRIP MINES ASSOCIATED WITH MINOR SOURCES CHARTIERS CREEK BASIN

Strip Mine No.	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Costs Improve Drainage	Remarks
PITTSBURGH WE	ST QUADRANGLE:					
PGW I	4965	South of Ewingville	URC	12	\$18,500	
PGW 8	6013	North of Parkway West	DAH	13		
PGW 9	6012	Between Parkway West & Zimmer Road	RND	24	19,700	
PGW 10	6015	North of Zimmer Road	RND	34	36,500	IIA Reclaimed
PGW 18	6042	Around Moon Run	URC	36	56,000	
PGW 19	6012 and 6015	South of Zimmer Road	See PGW 9			
PGW 21	6015	North of Campbells Run	See PGW 10			
OAKDALE QUADRA	ANGLE:					
OAK 7	4657	Updip of 4972, South of Rennerdale	URC	44	67,200	
OAK II	4959,4960, 4961	West of Sturgeon	DAH	33	<del>, -</del>	
OAK 15	4847	North of Noblestown	DAH	H		
OAK 18	4689 and 4684	North of Oakdale	URC	29	43,500	
OAK 22	4685 and 4687	East of McKee Road	DAH	16		
OAK 23	4683	Between McKee & Gambel Rds.	RND	40	17,500	

Strip Mine	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Costs Improve Drainage	Remarks
OAK 24	<b>4</b> 677 and <b>4</b> 678	Northeast of Oakdale	RND	Combined w	ith OAK 25	
OAK 25	4676,4674,4673	West of Gregg	RND	162	\$118,000	
OAK 27	4668,4669,4670	Between McKee Rd. & Count Regional Park #6	ry RND	48		
OAK 28	4671 and 4672	Inside County Regional Park #6	DTH	6	3,600	
OAK 29	4671 and <b>4</b> 672	Inside County Regional Park #6, Updip of 4971 & 4972 on Pinkertons Run	DTH	25	15,000	
OAK 32	6029	Between Pinkertons & Lintons Run	RND	101	54,400	
OAK 35	4665 and 4666	On Both Sides of Cowan Ro	I. RND	102	61,000	
OAK 36	4664, 4667,4662 4661, 4660	Northwest of Rennderdale & South of Baldwin Rd.	RND	59	17,000	
OAK 37	<b>4</b> 659 and <b>4</b> 665	Northeast of Rennersdale & West of Scotts Run	RND	86	77,500	
0AK 36	4659 and 4665	N. of Baldwin Rd. Betweer Ridge Rd. & McMichael Rd.		70	24,000	
OAK 43	6025, 6026, 6024, 6023	Between McMichael Rd. & Glass Rd.	RND	55	26,500	
OAK <b>4</b> 5	6011, 6000	Between Glass Rd. & Pa. 60	URC	10	15,500	
OAK 55	4819, 4818, 4817, 4821	Between W. Allegheny High School & Fayetteville South of Rts. 22-30	RND	65	29,000	

Cost Summary for Phase B

Strip Mine	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Costs Improve Drainage	Remarks
OAK 57	4694 and 4693	South of Fayetteville	DAH	10	<b></b>	
CLINTON QUADR	ANGLE:					
CLN 4	4005, 4012, 4013, 4014, 4015	Northeast of Bulger	URC	48	\$72,000	
MIDWAY QUADRA	NGLE:					
MID IO	<b>4</b> 058	Southeast of Westland	RND	. 14	6,500	
MID 14	4004	Northwest of Midway	URC	18	27,000	
TOTAL:					\$805,900	

## COST SUMMARY PHASE C TREATMENT PLANTS

COST SUMMARY FOR PHASE C
PLANT TREATMENT OF ACID MINE WATER

Source	Flow (gpm)	Percent Reduction	Remaining Flow (gpm)	GPD	Est. Cost 1000/gal.	Est. Cost Year	Location
6034-6035	1800	55	810	1,160,000	\$ .20	\$ 85,000	Main Stem Chartiers Creek
4654-4655	289		170	250,000	.30	27,500	"
Sub-To	otal:					\$112,500	
6005	158	20	125	150,000	.30	15,500	Campbells Run
Sub-To	otal:					\$ 15,500	
4045	30	50	15				Robinson Run
4153	76	22	62	86,500	.30	10,000	**
4838	55	See 4951-	4952		<b></b> .	,	. "
4845	95	40	60	86,500	.30	10,000	<b>"</b>
4850	54	43	33				
4956-4957	148	46	130	153,000	.30	16,500	"
4654	See Mai	n Stem Chartiers	Creek				
4019	81	100	0				
4006	48	70	45				"
4952-4951	218	38	135	200,000	.30	21,500	"
4031	21	100					"

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Source	Flow (gpm)	Percent Reduction	Remainin Flow (gpm		Est. Cost 1000/gal.	Est. Cost Year	Location
4962-4963	279	18	220	316,800	\$ .30	\$ 34,500	Robinson Run
4034	56	40					11
4055	111	20	88	127,000	.30	14,000	"
Sub-To	otal:					\$106,500	
4802-4801	129	43	73	105,000	.30	11,000	North Branch Robinsons Ru
4815-4816	70	60	20		<b>-</b> -		11
4808	28	30	21			-	"
4820	32	35	21				<b>11</b>
4039	31	75	8				"
4041	248	60	100	144,000	.35	19,000	"
4688	85	67	26				"
4834	120	30	72	105,000	.30	11,000	. "
6048	234	23	180	259,000	.30	28,500	. #
4810	145	53	75	105,000	.30	11,000	. 11
4805,4804, 4824	175	26	135	200,000	.30	21,500	**
Sub-To	tal:					\$102,000	
4971	1400	40	840	1,210,000	.20	\$ 88,000	Millers Run
Sub-To	tal:					\$ 88,000	
	TOTAL:					\$190,000	

## TOTAL RECLAMATION OF STRIP MINE ASSOCIATED WITH MAJOR SOURCES

### COST ESTIMATE FOR TOTAL RECLAMATION OF STRIP MINES ASSOCIATED WITH MAJOR SOURCES CHARTIERS CREEK BASIN

Strip Mine	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Costs Reclaim	Associated Minor Sources and Remarks
CANONSBURG QUA	ADRANGLE:					
CAN I	4971 and 4967	Upper Mohawk Valley	DAH	45	\$45,500	
CAN 3	4971 and 4967	Lower Mohawk Valley	RND	24	27,200	4968, 4969
CAN 4	4967 and 4972	Upper Dolphin Run	DAH	23	8,400	
CAN 5	4967 and 4972	Lower Dolphin Run	DAH .	16	37,100	
CAN 6	4971 and 4967	Laurel Hill	URC	25	56,000	
CAN 17	4971 and 4967	Laurel Hill	URC	18	30,600	•
CAN 18	4971 and 4967	East of Gladden	URC	5	16,500	
CAN 19	4971 and 4967	Northeast of Morgan	RND	12	21,200	
PITTSBURGH WES	ST QUADRANGLE:					
PGW 2	4654	Northwest of Ewingville	DTH	16	29,000	4650
PGW 3	4654	North of Ewingville	DTH	37	58,000	4651,4652,4653
PGW 4	4655	Ewing Road	RND	48	29,000	4659
PGW 5	4655	Northwest of Carnegie	URC	10	24,500	
PGW 6	4655	Northwest of Carnegie	RND	25	35,000	
PGW 7	4655	Between Baldwin Road & Parkway West	See OAK 8			

Cost Estimate for Total Reclamation of Strip Mines Associated with Major Sources

Strip Mine	Pollution	Strip Mine	Strip Mine	Estimated	Estimated Costs	Associated Minor Sources
No.	Source	Location	Condition	Acreage	Reclaim	and Remarks
PGW 11	6001	North of Zimmer Road	RND	19	\$45,200	
PGW 12	6002	North of Zimmer Road	RND	46	20,800	6003,6004,6006
PGW 13	6005	West of Beacon Road	URC	17	48,200	6007
PGW 15	6001	West of Thornburg	URC	17	49,000	6043, 6047
PGW 16	6005	South of Moon Run	RND	14	20,900	
PGW 20	6005	South of McKees Rocks Rd	. URC	8	25,750	
AKDALE QUADRA	NGLE:					
OAK I	4971 and 4967	Updip of 4971, South of Noblestown	RND	38	43,700	4966
DAK 2	4971 and 4967	Updip of 4971, South of Oakdale	RND	37	33,700	8 acres Reclaimed
OAK 3	4971 and 4967	Updip of 4971, East of Oakdale	RND	13	4,900	
OAK 4	4972	Updip of 4971, Northwest of Hickman	DTH	6	10,100	6037,6038,6039
OAK 5	4972	Updip of 4971, South of Gregg	DAH	25	8,000	
OAK 6	4972	Updip of 4972, Southeast of Gregg	DTH	17	25,800	
AK 8	4655	Updip near Parkway West	DTH	24	48,000	Combined w/PGW
OAK 9	4962 and 4963	East of McDonald	RND	108	41,000	84 acres Reclaimed

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Cost Estimate for Total Reclamation of Strip Mines Associated with Major Sources

Strip Mine	Pollution Source		Strip Mine Condition	Estimated Acreage	Estimated Costs Reclaim	Associated Minor Sources and Remarks
OAK 12	4956 and 4957	Northwest of Sturgeon	RND	62	\$83,400	4955,4958
OAK 14	4850	North of Noblestown & Sturgeon	RND	108	141,600	4848,4849
OAK 16	4851,4952,4845	West of Oakdale	RND	90	128,500	4846,4847
OAK 19	4956 and 4957	South of North Branch Robinsons Run	RND	44	59,900	4822,4830
OAK 20	4952, 4951, 4838, 4845	South of North Branch Robinsons Run	URC	37	101,500	4803
OAK 21	4688	West of McKee Road	DAH	12	13,000	4691,4693
OAK 30	4688	North of County Regional Park on Pinkertons Run	RDN	29	69,500	
OAK 39	4654	Between Scotts Run Rd. & Ft. Pitt Rd.	URC	30	79,500	4658
OAK 40	4655	Between Parkway & Ridge R	d.URC	15	59,400	6029
OAK 41	4655	Between Parkway & Ridge R	d.RND	6	4,500	6029, 3A Re- claime
OAK 42	6022	Between Church Hill Rd. & Campbells Run Rd.	RND	17	17,200	6021
OAK 46	6022	Holy Trinity School Towards Parkway	RND	58	20,500	30A Reclaimed
OAK 47	6022	North of Intersection Pa. 60 and U.S. 22 & 30	RND	39	47,500	19A Reclaimed
OAK 48	4688	Between McKee & Gamble Rd	. RND	28	52,600	
OAK 50	4804,4805,4808, 4824,6048	Between Half Crown Run & North Branch Robinsons Run	DTH	26	31,000	<b>4</b> 829

Cost Estimate for Total Reclamation of Strip Mines Associated with Major Sources

Strip Mine	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Costs Reclaim	Associated Minor Sources and Remarks
OAK 51	6048	Between North Branch & Half Crown Run	RND	189	\$145,000	4698, 62A Récim 47A Active
OAK 52	4801 and 4802	South of imperial	RND	51	11,200	17A Reclaimed
OAK 53	4801 and 4802	Southeast of Imperial	RND	102	196,200	4697,4699
OAK 54	4815 and 4816	Southeast of Imperial	RND	68	92,500	4814,4820,4696
OAK 58	4688	E. Beechcliff	RND	49	49,700	
OAK 59	4688		RND	133	109,000	
OAK 62	4820	Updip South of Imperial	DAH	32	19,600	
OAK 63	4055	Northwest of McDonald	RND	57	2,000	52A Reclaimed
CLINTON QUADRA	ANGLE:					
CLN I	4810	South of Santiago	URC	35	52,500	4811
CLN 2	4034	Southeast of McAdams	See MID 4			4050
CLN 3	4006	Northwest of McAdams	RND	40	57,500	IOA Reclaimed
CLN 5	4031	West of McAdams	URC	170	225,000	4001,4007,4008 4009,4010,4021 4022,4023
CLN 6	4045	Northwest of McAdams	DAH	6	9,600	4044,4046
CLN 7	4031	West of McAdams	DTH	58	52,800	4047,4048
CLN 8	4153	East of McAdams	URC	6	12,700	4054

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Cost Estimate for Total Reclamation of Strip Mines Associated with Major Sources

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Strip Mine No.	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Costs Reclaim	Associated Minor Sources and Remarks
CLN 9	4153	Northeast of McAdams	RND	69	\$29,100	37A Reclaimed
CLN 10	4045	North of McAdams	RND	40	19,400	7A Reclaimed
CLN II	4039	On North Branch Robinsons Run	RND	76	81,900	4040,4043
CLN 12	4041	Southeast of Champion	RND	23	32,700	6A Reclaimed
CLN 13	4041,4829	Northeast of McAdams	RND	106	185,800	4826,4827,4832
CLN 14	4808	South of 4810 & 4811	RND	176	57,800	4812,150A Re-
CLN 15	4820	East of Santiago	DTH	33	37,500	claimed
CLN 18	4834 and 4808	South of Santiago	RND	43	47,800	
CLN 19	4041	South of Santiago	URC	5	8,500	
CLN 20	4153	Southeast of McAdams	See MID 5			
CLN 25	4006	Northeast of Candor	URC	28	61,000	
CLN 26	4153	Southeast of McAdams	URC	8	12,000	
11DWAY QUADRAN	NGLE:					
11D 2	4031	Northwest of Primrose	URC	44	87,000	4026
11D 3	4031	North of Primrose	RND	98	157,700	4025,4029,4030
11D 4	4034	Northeast of Primrose	RND	151	68,450	18A Reclaimed 4032,4035,
					\$3,674,600	4036 ,4037 ,4038

### TOTAL RECLAMATION OF STRIP MINE

### ASSOCIATED WITH MINOR SOURCES

### ESTIMATED COST FOR TOTAL RECLAMATION OF STRIP MINES ASSOCIATED WITH MINOR SOURCES CHARTIERS CREEK BASIN

Strip Mine No.	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated C Reclaim	ost Remarks
PITTSBURGH WES	T QUADRANGLE:					
PGW I	4965	South of Ewingville	URC	12	\$32,500	
PGW 8	6013	North of Parkway West	DAH	13	4,400	
PGW 9	6012	Between Parkway West & Zimmer Road	RND	24	39,800	
PGW 10	6015	North of Zimmer Road	RND	34	63,800	II Acres Reclaime
PGW 18	6042	Around Moon Run	URC	.36	109,000`	
PGW 19	6012,6015	South of Zimmer Road	See PGW 9			
PGW 21	6015	North of Campbells Run	See PGW 10			
OAKDALE QUADRA	NGLE:					
OAK 7	4657	Updip of 4972, South of Rennerdale	URC	44	143,500	
OAK II	4959,4960 4961	West of Sturgeon	DAH	33	30,900	
OAK 15	4847	North of Noblestown	DAH	11	12,500	
OAK 18	4689,4684	North of Oakdale	URC	29	43,500	
OAK 22	4685,4687	East of McKee Road	DAH	16	15,800	
OAK 23	4683	Between McKee & Gambel Rds.	RND	40	54,600	
OAK 24	4677,4678	Northeast of Oakdale	RND	Combined	with OAK 25	

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DAK 25 DAK 27 DAK 28	4676,4674 4673 4668,4669 4670 4671,4672	West of Gregg  Between McKee Rd. & County Regional Park #6  Inside County Regional	RND RND	162	\$242,000 45,500	
	4670	Regional Park #6	RND	48	45,500	
)AK 28	4671,4672	Inside County Regional				
		Park #6	DTH	6	14,100	
OAK 29	4671,4672	Inside County Regional Park #6 Updip of 4971 & 4972 on Pinkerton Run	, DTH	25	39,000	
OAK 32	6029	Between Pinkerton & Lintons Run	RND	101	107,000	
AK 35	4665,4666	On Both Sides of Cowan Road	RND	102	130,100	•
OAK 36		Northwest of Rennerdale & South of Baldwin Rd.	RND	59	79,700	
DAK 37	4659,4665	Northeast of Rennerdale & West of Scotts Run	RND	86	133,500	
AK 38	4659,4665	N. of Baldwin Rd. Between Ridge Rd. & McMichael Rd.	RND	70	47,000	
AK 43	6025,6026 6024,6023	Between McMichael Rd. & Glass Rd.	RND	55	33,900	
AK 45	6011,6000	Between Glass Rd. & Pa. 60	URC	10	37,500	
AK 55	4819,4818, 4817,4821	Between W. Allegheny High School & Fayetteville South of Rts. 22-30	RND	65	33,600	

Estimated Cost for Total Reclamation of	Strip Mines Associated with Minor Sources	

Strip Mine No.	Pollution Source	Strip Mine Location	Strip Mine Condition	Estimated Acreage	Estimated Cost Reclaim	Remarks
OAK 57	4694,4693	South of Fayetteville	DAH	10	\$25,500	
CLINTON QUADRA	NGLE:					
CLN 4	4005,4012 4013,4014, 4015	Northeast of Bulger	URC	48	81,600	
MIDWAY QUADRAN	GLE:	•				
MID 10	4058	Southeast of Westland	RND	14	27,000	
MID 14	4004	Northwest of Midway	URC	18	52,000	
	TOTAL:				\$1,679,300	
		:,				