

Mahanoy Creek Watershed Association



... working to restore and protect Mahanoy Creek

420 Dutchtown Road
Ashland, PA

17921
February 8, 2006

Dear Ms.

Please accept these comments on behalf of the Mahanoy Creek Watershed Association.

In section 3, on the Existing Environment, under 3.1.3, it is stated that there are several other power plants within a 20-mile radius of the proposed coal to oil plant and that the winds come in a W, or SW direction running parallel to the ridges and valleys in the area. That being stated, and as this project is of epic proportions and funded largely by tax dollars, it would be in the best interests of all parties living in the area who may be recipients of toxic outfall, to perform a serious study of airborne pollutants. Attainment status for NAAQS should be gleaned from monitoring stations located within the proposed direction of winds blowing W – SW along the northeast trending linear ridges and valleys. In addition, cumulative pollutant loadings from existing facilities should be considered.

42-1

42-2

On page 3-7, it is stated that there are pillars of coal holding the coal shafts up. Anyone with any knowledge of historic local mining practices knows that it was a common practice to “rob the pillars” as a method of extracting the most coal from the mine. This has severely compromised structural integrity of the “mine rooms”. Dewatering of mine pools at the rate suggested by WMPI should be a serious concern, as it is likely to lead to mine subsidence, as the water helps support structures above the “mine room”, which includes private residences. In addition, the mapping of old mine workings is inaccurate; many miners and companies did not adequately record tunneling efforts. The potential for geologic hazards (4-1.3.3) are likely with the proposed removal of mine pool water and the unpredictable structure of underground mine workings

42-3

The USGS, under the capable direction of Dr. Charles Cravotta, did a Watershed Assessment for MCWA. It is completed and should be reviewed by your office before any work commences on this project. On page 3-12, it is stated that the water is acidic. A quick look over Attachment 1 will contradict this statement.

42-4

With regard to the statement on 3-12 that aquatic life is severely diminished, please refer to Attachment 2. } 42-5

On page 3-16, it is stated that the mine pool water has an iron content of 30 mg/L, which is much higher than that found in the creek. As remediation efforts have been planned for the Mahanoy Creek, it seems counterproductive to add more iron to water as we are trying to remove it through various projects. In addition, varying chemistry of pumped mine pool water is unacceptable. } 42-6

On page 3-20, it is stated that aquatic life is absent or severely reduced. Attachments 1 and 2 are in direct contradiction to that statement. } 42-7

On page 4-15, it is stated that the only in-stream uses for the Mahanoy Creek are to receive treated sewage and that no impacts on water quality should be expected. That statement shows a total disrespect for the efforts of our organization and the remediation efforts we have historically been attempting. "Probably" removing pollutants is unacceptable. It is apparent from the discussion on page 4-16 that the wastewater is destined to become yet another nonpoint source of pollution in the creek. } 42-8

The statement that adverse effects from the operation of the coal to oil plant would be undetectable because of the existing pollution in the creek is unacceptable. Human exposure to any toxins is unavoidable as we are in the creek throughout the year doing various cleanups. If it is necessary, I will provide news articles to that effect. } 42-9

In conclusion, the proposed plant may provide jobs for the short term, but the long-term environmental impacts are likely to be severe, with negative impacts on the health of the surrounding communities for decades to come. The people of Schuylkill County have paid the price for our nation's industrialization, with lost lives, scarred mountains and polluted streams. We have received no thank yous from anyone for our sacrifices, only a demand to endure more for the sake of short-term progress. Certainly, the btu value of culm banks will not sustain the plant for 25 years; what WILL be the btu source when the culm is gone or needs enhancement? How can this plant improve the lives of an area rife with poverty, except for the few construction jobs it will bring? One last note, the "union forever" battle cry is weak, as Mr. Rich busted the UMWA in the mid 80s at his Locust Summit Coal Plant, and is just using the construction union for the short term, as he will surely hire at the prevailing wage of \$8.50/hour when the plant is in operation. } 42-10
} 42-11
} 42-12

Thank you for the opportunity to comment on this most important issue.

Yours in Environmental Integrity,
Roseann Weinrich

Table 3. Values of selected constituents for streamwater and abandoned mine drainage samples collected for the Mahanoy Creek, Pennsylvania, watershed assessment during March 26-28 and August 20-22, 2001.
 [ID No., identification number; 0, not flowing or dry; n.d., no data; <, less than; ft³/s, cubic feet per second; L/min, liters per minute; mg/L, milligrams per liter; Mg/yr, megagrams per year; µm, micrometer]

Local site ID No. ¹	Flow rate (ft ³ /s) ²		Flow rate (L/min)		Dissolved oxygen (mg/L)		pH		Net alkalinity ³ (mg/L CaCO ₃)		Dissolved ⁴ iron (mg/L Fe)		Dissolved aluminum (mg/L Al)		Dissolved manganese (mg/L Mn)		Dissolved sulfate (mg/L SO ₄)		Dissolved nitrate (mg/L N)		Dissolved phosphorus (mg/L P)		Dissolved Fe, Al, and Mn load (Mg/yr)			
	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug	Mar	Aug
Streamwater (SW, SW-AMD)																										
S01	n.d.	0	n.d.	0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0
S03	0.67	0	1,140	0	10.1	n.d.	4.0	n.d.	-11	n.d.	0.04	n.d.	0.96	n.d.	0.31	n.d.	34	n.d.	0.40	n.d.	<0.01	n.d.	0.8	0	0	
S04	8.90	0	15,100	0	2.5	n.d.	4.8	n.d.	-20	n.d.	3.2	n.d.	2.0	n.d.	1.1	n.d.	105	n.d.	.40	n.d.	<0.01	n.d.	50.1	0	0	
S05	n.d.	0.04	n.d.	68	n.d.	7.9	n.d.	4.9	n.d.	-1	n.d.	<0.01	n.d.	0.09	n.d.	0.06	n.d.	6	n.d.	<0.01	n.d.	<0.01	n.d.	<0.01	<0.01	
S06	8.70	0	14,800	0	11.1	n.d.	5.6	n.d.	1	n.d.	.01	n.d.	.06	n.d.	.02	n.d.	5	n.d.	.05	n.d.	.01	n.d.	.8	0	0	
S07	1.33	.11	2,260	187	10.8	6.5	6.1	6.5	3	6	.01	.02	.03	.03	.01	.04	4	5	.04	.06	<0.01	<0.01	.1	<0.01		
S08	0	0	0	0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0	0	
S09	n.d.	2.80	n.d.	4,760	n.d.	6.7	n.d.	5.0	n.d.	-6	n.d.	.41	n.d.	.21	n.d.	1.8	n.d.	256	n.d.	2.0	n.d.	.06	n.d.	6.1	6.1	
S10	32.1	7.84	54,500	13,300	9.1	6.9	5.9	6.3	-3	9	2.9	6.8	.18	.01	1.7	2.6	138	203	.11	.66	.10	<0.01	137	65.9		
S11	1.56	.17	2,650	289	11.3	6.8	4.7	4.8	-3	-2	.08	.18	.43	.09	.10	.09	7	5	<10	.05	<0.01	<0.01	.8	<0.01		
S12	1.03	.11	1,750	187	12.2	7.5	6.2	6.3	3	3	.05	.03	.06	.02	.09	.18	10	12	.20	.13	.03	.02	.2	<0.01		
S13	3.00	.20	5,100	340	13.1	4.9	7.4	7.0	13	26	.41	.09	.05	.01	.87	1.8	74	166	2.0	3.3	.30	.33	3.6	.3		
S14	12.1	5.50	20,600	9,340	9.8	5.8	6.7	6.9	43	68	3.1	.76	.01	.01	4.0	6.9	421	553	.60	.27	.03	.03	76.9	37.7		
M14	10.27	9.42	17,400	16,000	3.3	2.0	6.4	6.4	95	76	13	21	.02	.01	6.2	9.2	597	595	<1	<0.05	<0.01	<0.01	176	254		
S15	3.86	2.43	6,560	4,130	9.6	9.7	3.7	3.6	-60	-79	5.8	3.1	5.6	8.9	4.8	6.0	482	524	.50	<10	<0.01	<0.01	55.9	39.1		
S16	87.7	30.2	149,000	85,300	9.4	9.0	7.0	7.0	35	42	4.8	5.7	.02	.02	3.4	6.5	321	491	.16	.30	.03	.04	644	548		
S17	112	46.2	190,000	78,500	9.7	8.3	7.0	6.9	32	51	4.2	2.1	.02	.04	3.3	6.0	295	480	.30	.45	.04	.04	753	336		
S18	9.61	1.99	16,300	3,380	12.3	8.3	5.7	6.5	3	n.d.	.01	.01	.14	.01	.09	.01	7	6	.10	.18	.03	<0.01	2.1	<0.01		
S19	30.1	6.80	51,100	11,600	13.1	8.3	7.0	7.0	11	20	.10	.08	.11	.01	.05	.02	10	11	.55	.52	.03	.07	7	.7		
S20	6.08	1.33	10,300	2,260	10.6	9.6	8.2	8.0	108	178	.12	.22	.03	.01	.90	.75	286	508	.80	.50	<0.01	<0.01	5.7	1.2		
S21	n.d.	.61	n.d.	1,040	n.d.	7.2	n.d.	7.1	n.d.	n.d.	.15	n.d.	n.d.	.01	n.d.	.05	n.d.	9	n.d.	3.3	n.d.	.08	n.d.	n.d.	1.1	
S22	107	51.4	182,000	87,300	10.4	8.4	7.0	7.6	23	47	1.6	.12	<0.01	.04	2.3	4.6	227	427	.70	.76	.03	.04	373	219		
S23	239	65.5	406,000	111,000	11.0	8.9	7.3	7.6	21	58	.76	.11	.01	.02	1.8	3.3	190	409	1.0	.73	.03	<0.01	549	201		
S24	7.99	.62	13,600	1,050	11.6	9.5	7.0	7.2	11	49	.14	.21	.04	.02	.06	.02	10	8	.51	.72	.01	<0.01	1.7	.1		
S25	6.68	2.79	11,300	4,740	10.2	10.5	6.3	6.3	-6	-6	8.1	11	.05	.04	2	2.4	253	304	.07	<0.01	<0.01	<0.01	60.6	33.5		
S26	30.2	4.36	51,300	7,410	11.5	8.8	6.0	4.3	-3	-20	1.5	.15	.10	2.3	.93	2.7	99	264	.50	.60	.04	.02	68.2	20.1		
S27	277	71.2	471,000	121,000	11.7	8.4	6.7	6.9	17	38	.28	.08	.02	.04	1.3	9.0	152	382	.66	.80	.02	<0.01	396	65.1		
S28	28.4	1.66	48,300	2,820	12.6	8.4	7.3	7.5	14	54	.03	.06	.01	.02	.01	.02	12	11	6.0	1.9	.01	.03	1.4	.1		
S29	4.28	.52	7,270	883	11.9	9.4	8.4	7.7	52	120	.05	.06	.02	.01	.01	.01	16	17	2.8	2.8	.01	.02	.3	<0.01		
S30	320	76.6	544,000	130,000	12.2	8.8	7.1	7.2	24	21	.11	.08	.01	.03	1.2	.54	132	363	1.8	.77	.01	<0.01	378	44.7		
S31	n.d.	76.3	n.d.	130,000	n.d.	8.7	n.d.	7.3	n.d.	43	n.d.	.08	n.d.	.02	n.d.	.23	n.d.	361	n.d.	.71	n.d.	<0.01	n.d.	n.d.	22.2	
Abandoned Mine Drainage (GW, GW-AMD)																										
M01	0	0	0	0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0	0	
M02	8.79	0	14,900	0	0.2	n.d.	4.7	n.d.	-21	n.d.	3.4	n.d.	2.1	n.d.	1.2	n.d.	104	n.d.	0.01	n.d.	<0.01	n.d.	52.6	0		
M03	5.28	2.64	8,970	4,490	.1	.2	4.9	4.8	-18	-18	3.6	6.3	1.6	1.1	1.2	1.2	105	111	.01	<0.01	<0.01	<0.01	30.2	20.3		
M04	0	0	0	0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0	0	
M05	.01	0	17	0	9.7	n.d.	6.4	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0	0	
M07	.38	.03	646	51	.3	.4	6.1	6.1	57	11	14	33	<0.01	<0.01	6.4	8.9	582	561	.40	<0.05	<0.01	<0.01	6.9	1.2		
M08	.27	0	459	0	.5	n.d.	6.6	n.d.	164	n.d.	5.2	n.d.	<0.01	n.d.	3.5	n.d.	450	n.d.	.40	n.d.	<0.01	n.d.	2.1	0		
M11	4.10	2.73	6,970	4,640	2.2	.3	6.1	6.0	51	15	18	24	<0.01	<0.01	3.8	4.4	218	228	<10	<0.01	<0.01	<0.01	79.9	69.3		
M12	5.27	3.62	8,950	6,150	.2	.3	6.3	6.3	108	96	12	21	<0.01	<0.01	5.9	9.0	600	596	.40	<0.05	<0.01	<0.01	84.3	97.1		
M13	5.00	5.80	8,500	9,850	.1	.4	6.3	6.2	95	94	13	22	.01	.01	6.3	9.2	600	595	<10	<10	<0.01	<0.01	86.3	162		
M17	2.23	.67	3,790	1,140	.4	.2	6.3	6.2	59	72	4.8	4.7	.04	<0.01	.95	.99	62	74	.01	.01	<0.01	<0.01	11.5	3.4		
M18	.67	.40	1,140	680	8.3	8.8	5.8	5.7	-2	-24	7.7	19	.35	.47	2.5	4.2	434	578	.40	<0.05	<0.01	<0.01	6.3	8.5		
M19	3.86	2.43	6,560	4,130	7.4	8.4	3.9	3.6	-59	-80	7.6	4.6	5.5	8.7	4.9	5.9	483	520	.40	<0.05	<0.01	<0.01	62.1	41.7		
M20	2.23	0	3,790	0	3.1	n.d.	6.5	n.d.	80	n.d.	8.4	n.d.	.04	n.d.	2.7	n.d.	372	n.d.	<10	n.d.	<0.01	n.d.	22.2	0		
M21	4.00	2.30	6,800	3,910	3.8	5.2	6.3	6.4	74	79	7.3	14	.05	.08	2.6	3.1	360	351	<10	<0.01	<0.01	<0.01	35.6	35.3		
M22	n.d.	.03	n.a.	51	n.d.	5.5	n.d.	4.1	n.d.	-109	n.d.	2.3	n.d.	15	n.d.	9.7	n.d.	696	n.d.	<0.05	n.d.	<0.01	n.d.	n.d.	.8	
M23	n.d.	.03	n.a.	51	n.d.	.1	n.d.	5.9	n.d.	55	n.d.	.03	n.d.	<0.01	n.d.	2.7	n.d.	203	n.d.	<0.01	n.d.	<0.01	n.d.	n.d.	.1	
M24	.09	.13	153	221	8.9	.9	7.4	6.1	218	54	.24	14	<0.01	.05	.82	2.7	181	221	<10	<0.01	<0.01	<0.01	.1	2		
M25	n.d.	.04	n.a.	68	n.d.	1.5	n.d.	5.6	n.d.	21	n.d.	.04	n.d.	.17	n.d.	.82	n.d.	106	n.d.	<0.01	n.d.	<0.01	n.d.	n.d.	<0.01	
M26	1.44	.36	2,450	612	.2	1.7	6.6	6.4	245	216	16	30	<0.01	.24	3.6	5.1	787	785	<10	<0.05	.01	<0.02	25.2	11.4		
M27	.22	.29	374	493	.6	2.5	6.7	6.5	190	202	8.9	13	<0.01	.01	2.1	2.3	329	347	<10	<0.05	<0.01	<0.01	2.2	4.0		
M28	.23	.01	391	17	.5	1.0	3.9	4.3	-20	-32	2.2	10	1.3	1.5	1.6	1.8	77	94	.05	<0.01	<0.01	<0.01	1.0	.1		
M29	17.2	7.29	29,200	12,400	8.8	9.1	6.7	6.5	34	29	6.7	11	.05	.05	2.3	3.8	424	506	<10	<10	<0.01	<0.01	139	96.7		
M30	.09	<0.01	153	2	3.7	2.8	5.5	6.1	8	13	.01	1.9	<0.01	.01	<0.01	.93	18	20	.06	<0.01	<0.01	.01	<0.01	<0.01		
M31	3.52	.99	5,980	1,680	9.3	9.6	5.0	6.1	-17	9	2.1	3.4	1.8	.34	1.3	1.5	181	239	<10	<0.01	<0.01	<0.01	16.4	4.6		
M32	6.45	2.56	11,000	4,350	4.6	4.4	5.9	5.2	5	3	11	13	.32	.51	1.9	2.3	297	307	<10	<0.01	<0.01	<0.01	76.2	36.2		
M33	.03	0	51	0	4.8	n.d.	3.1	n.d.	-110	n.d.																

30 Effects of Abandoned Coal-Mine Drainage on Streamflow and Water Quality in the Mahanoy Creek Basin

Table 4. Fish species identified and number of individuals counted during ecological survey of Mahanoy Creek and selected tributary streams, Pennsylvania, October 2001¹

Taxa		Minimum pH in Pa. ²	Pollution tolerance ³	Mahanoy Creek				Schwabens Cr nr Red Cross (S28)	
ORDER Family Genus species	Common name			Girardville (S10)	Ashland (S16)	Gowen City (S23)	Kneass (S30)		
CYPRINIFORMES									
Cyprinidae									
	<i>Camptostoma anomalum</i>	Stoneroller	6.0	M	0	0	0	4	36
	<i>Cyprinella analostana</i>	Spotfin shiner	6.4	M	0	0	1	9	308
	<i>Exoglossum maxillingua</i>	Cutlips minnow	6.1	I	0	0	0	0	12
	<i>Luxilus cornutus</i>	Common shiner	6.0	M	0	0	0	0	4
	<i>Nocomis micropogon</i>	River chub	6.0	I	0	0	1	0	0
	<i>Notropis hudsonius</i>	Spottail shiner	6.4	M	0	0	2	232	350
	<i>Notropis procne</i>	Swallowtail shiner	6.5	I	0	0	0	4	0
	<i>Notropis rubellus</i>	Rosyface shiner	6.0	I	0	0	0	8	21
	<i>Pimephales notatus</i>	Bluntnose minnow	5.6	T	0	0	0	13	40
	<i>Pimephales promelas</i>	Fathead minnow	6.5	T	1	0	0	0	0
	<i>Rhinichthys atratulus</i>	Blacknose dace	5.6	T	0	0	39	0	1
	<i>Rhinichthys cataractae</i>	Longnose dace	5.9	I	0	0	3	0	15
	<i>Semotilus atromaculatus</i>	Creek chub	5.2	T	0	4	11	0	15
	<i>Semolilus corporalis</i>	Fallfish	6.1	M	0	0	2	0	24
Catostomidae									
	<i>Catostomus commersoni</i>	White sucker	4.6	T	19	18	51	40	23
	<i>Hypentelium nigricans</i>	Northern hog sucker	6.0	I	0	0	0	0	1
SILURIFORMES									
Ictaluridae									
	<i>Noturus insignis</i>	Margined madtom	5.9	M	0	0	0	0	5
SALMONIFORMES									
Salmonidae									
	<i>Salmo trutta</i>	Brown trout	5.9	M	0	0	2	0	0
PERCIFORMES									
Centrarchidae									
	<i>Ambloplites rupestris</i>	Rock bass	6.0	M	0	0	0	4	6
	<i>Lepomis cyanellus</i>	Green sunfish	6.4	T	0	0	1	3	0
	<i>Micropterus dolomieu</i>	Smallmouth bass	6.0	M	0	0	9	163	60
Percidae									
	<i>Etheostoma olmstedi</i>	Tessellated darter	5.9	M	0	0	9	19	16
	<i>Etheostoma blennioides</i>	Greenside darter	6.0	M	0	0	3	24	34
	<i>Etheostoma zonale</i>	Banded darter	6.0	I	0	0	0	21	31
	<i>Percina peltata</i>	Shield darter	6.5	I	0	0	0	1	1
Total number of individuals collected:					20	22	134	545	1,003
Total number of species identified:					2	2	13	14	20

1. Fish collected by electrofishing, identified, and released by U.S. Geological Survey on October 10-11, 2001. Counts are indicated below site heading.

2. Minimum pH of occurrence in freshwater in Pennsylvania as reported by Butler and others (1973).

3. Pollution tolerance: I (intolerant), M (moderate), T (tolerant), adapted from Barbour and others (1999).

Table 2. Description of stream sites in the Mahanoy Creek Basin, Pennsylvania, surveyed in 2001. [Cr, Creek; Unn., Unnamed; Trib., Tributary; nr, near; bl, below; n.a., not applicable; latitude and longitude listed without degree, minute, and second symbols; 404934.9 represents 40°49'34.9" north latitude and 760521.4 represents 76°05'21.4" west longitude]

Site name and local identification number ¹	Abandoned mine drainage sources ²	Scariff site number ³	U.S. Geological Survey station identification number	Latitude	Longitude	Sample ⁴			
						High	Low	Fish	Bugs
Mahanoy Cr. nr Buck Mountain (S01)	n.a.	n.a.	0155521012	404934.9	760521.4	No	Dry	No	No
Unn. Trib. to Mahanoy Cr. nr Mahanoy City (S02)	n.a.	n.a.	n.a.	404856.7	760723.5	Yes	Dry	No	No
Mahanoy Cr. nr Mahanoy City (S03)	M01	n.a.	0155521021	404856.7	760723.5	Yes	Dry	No	Yes
Mahanoy Cr. at Mahanoy City (S04)	(S01),S02	n.a.	0155521023	404855.8	760731.2	Yes	Dry	No	No
Unn. Trib. to N. Mahanoy Cr. nr Shoemakers (S05)	n.a.	n.a.	0155521037	404804.0	760637.0	No	Yes	No	No
N. Mahanoy Cr. at Mahanoy City (S06)	n.a.	3	0155521049	404856.2	760825.8	Yes	Dry	No	Yes
Waste House Run at Yatesville (S07)	n.a.	6	0155521080	404956.0	760950.0	Yes	Yes	No	Yes
Waste House Run at St. Nicholas (S08)	n.a.	n.a.	015552111	404817.2	761036.8	Dry	Dry	No	No
Mahanoy Cr. at Gilberton (S09)	(S01-S08),M03	8	0155521140	404759.0	761230.0	No	Yes	No	Yes
Mahanoy Cr. at Girardville (S10)	(S01-S09),M04,M11	14	01555212	404732.0	761624.0	Yes	Yes	Yes	Yes
Kelly Run nr Shenandoah (S11)	n.a.	n.a.	0155521206	405009.9	761149.2	Yes	Yes	No	Yes
Loss Cr. nr Lost Creek (S12)	M06	22	0155521332	404853.3	761430.4	Yes	Yes	No	Yes
Shenandoah Cr. at Lost Creek (S13)	(S11,S12)	24	0155521334	404874.6	761448.4	Yes	Yes	No	Yes
Shenandoah Cr. nr Girardville (S14)	(S13),M05-M10	30	0155521339	404745.1	761633.6	Yes	Yes	No	Yes
Unn. Trib. to Mahanoy Cr. "Big Mine Run" nr Girardville (S15)	M19	n.a.	0155521346	404714.4	761904.5	Yes	Yes	No	No
Packer #5 Mine Breach and Borehole at Mahanoy Cr. (M14) ^b	M12-M13	n.a.	0155521341	404739.9	761643.3	Yes	Yes	No	No
Mahanoy Cr. nr Ashland (S16)	(S10,S14),M14-M25	43	0155521356	404635.1	762021.7	Yes	Yes	Yes	Yes
Mahanoy Cr. nr Gordon (S17)	(S16)	n.a.	0155521369	404524.3	762024.9	Yes	Yes	No	No
Rattling Run at Gordon (S18)	n.a.	45	0155521486	404457.5	762016.7	Yes	Yes	No	No
Little Mahanoy Cr. at Gordon (S19)	(S18)	46	0155521488	404514.6	762032.8	Yes	Yes	No	Yes
Unn. Trib. to Mahanoy Cr. "Big Run" nr Lavelle (S20)	M26,M27	51	01555228	404512.9	762221.2	Yes	Yes	No	Yes
Crab Run nr Taylorville (S21)	n.a.	n.a.	01555232	404446.4	762329.4	No	Yes	No	Yes
Mahanoy Cr. nr Lavelle (S22)	(S17,S19,S20,S21)	52	01555234	404509.0	762350.0	Yes	Yes	No	No
Mahanoy Cr. nr Gowen City (S23)	(S22),M28-M31	58	01555240	404425.4	763255.1	Yes	Yes	Yes	Yes
Zerbe Run at Trevorton (S24)	n.a.	61	0155524529	404652.8	764058.1	Yes	Yes	No	Yes
Unn. Trib. to Zerbe Run at Trevorton (S25)	M32-M34	n.a.	0155524538	404646.4	764101.3	Yes	Yes	No	Yes
Zerbe Run nr Dorcasife (S26)	(S24,S25),M35	56	01555246	404521.0	764117.0	Yes	Yes	No	Yes
Mahanoy Cr. nr Dornasife (S27)	(S23,S26)	67	0155525004	404354.0	764738.7	Yes	Yes	No	No
Schwaben Cr. nr Red Cross (S28)	n.a.	68	0155525061	404257.7	764645.9	Yes	Yes	Yes	Yes
Mouse Cr. nr Urban (S29)	n.a.	70	0155525069	404122.0	764617.1	Yes	Yes	No	Yes
Mahanoy Cr. at Kneass (S30)	(S27,S28,S29)	71	01555251	404328.8	764855.4	Yes	Yes	Yes	Yes
Mahanoy Cr. nr Henson (S31)	(S31)	n.a.	01555252	404334.0	765016.0	No	Yes	No	No

1. Local site identification numbers, in parentheses, used to indicate site location in figure 1.
 2. The Packer #5 borehole and breach (M14) was assigned a surface-water station number (0155521341) and is treated as surface water in subsequent figures and tables. However, this site consists entirely of mine drainage from the Packer #5 borehole (M12) and breach (M13) and, hence, was given a local number with prefix "M".
 3. AMD sources identified by local site numbers in table 1. If the site is downstream from another stream monitoring site(s), the AMD associated with the upstream site, in parentheses, also applies.
 4. Scariff site numbers based on report of Stauders & Brown, Inc. (1975).
 5. Water-quality and flow data collected for high base-flow conditions on March 26-28, 2001, and for low base-flow conditions on August 20-22, 2001. Streambed chemistry samples collected at all surface water and ground water stations during August 2001. Fish were collected during low base-flow conditions on October 10-11, 2001. Macroinvertebrates, or "bugs," collected and identified by Martin A. Endrey of the Pennsylvania Department of Environmental Protection during July 2000 to May 2002 at sites indicated plus additional sites in the watershed.

Weinrich, Mahanoy Creek Watershed Association (42)

Comment 42-1 and 42-2

In section 3, on the Existing Environment, under 3.1.3, it is stated that there are several other power plants within a 20-mile radius of the proposed coal to oil plant and that the winds come in a W, or SW direction running parallel to the ridges and valleys in the area. That being stated, and as this project is of epic proportions and funded largely by tax dollars, it would be in the best interests of all parties living in the area who may be recipients of toxic outfall, to perform a serious study of airborne pollutants.

Attainment status for NAAQS should be gleaned from monitoring stations located within the proposed direction of winds blowing W – SW along the northeast trending linear ridges and valleys. In addition, cumulative pollutant loadings from existing facilities should be considered.

Response:

Sections 3.2.2 and 4.1.2.2 have been revised to clarify the source of air quality data for the region around the site and to explain more fully the reasons for selecting those data sources.

Comment 42-3

On page 3-7, it is stated that there are pillars of coal holding the coal shafts up. Anyone with any knowledge of historic local mining practices knows that it was a common practice to “rob the pillars” as a method of extracting the most coal from the mine. This has severely compromised structural integrity of the “mine rooms”. Dewatering of mine pools at the rate suggested by WMPI should be a serious concern, as it is likely to lead to mine subsidence, as the water helps support structures above the “mine room”, which includes private residences. In addition, the mapping of old mine workings is inaccurate; many miners and companies did not adequately record tunneling efforts. The potential for geologic hazards (4-1.3.3) are likely with the proposed removal of mine pool water and the unpredictable structure of underground mine workings.

Response:

See responses to comments P11-4, P11-5, and 41-15&16.

Comment 42-4

The USGS, under the capable direction of Dr. Charles Cravotta, did a Watershed Assessment for MCWA. It is completed and should be reviewed by your office before any work commences on this project. On page 3-12, it is stated that the water is acidic. A quick look over Attachment 1 will contradict this statement.

Response:

Data from the USGS study of Mahanoy Creek (Cravotta 2005) were reported and used in the draft EIS. (Attachment 1 to this comment is a copy of Tables 2 and 3 from that report. These tables list the stream locations sampled in the USGS study and water quality data for Mahanoy Creek and for abandoned mine drainage sites in the creek watershed.) The

final EIS has been revised to include additional information from the published report. Statements in the EIS to the effect that the stream's water is acidic, both near Gilberton (where the USGS measured a pH value of 5.0) and through most of the stream's length, are consistent with data and discussion in the USGS report. Although many Mahanoy Creek water samples obtained for the USGS study were in the near-neutral pH range (6.0 to 9.0) specified in the water-quality standards for aquatic life, the study report points out that the pH of acid mine drainage and water affected by acid mine drainage can be unstable due to continuing oxidation and hydrolysis of dissolved metals, and that samples in which acidity exceeds alkalinity tend to have acidic pH after complete oxidation. The report states that "the characterization of AMD [acid mine drainage] as acidic or neutral ... should consider the pH, acidity, alkalinity, and concentration of dissolved metals." Acidity exceeded alkalinity in many creek water samples with near-neutral pH, supporting the general characterization of the creek water as acidic.

Comment 42-5

With regard to the statement on 3-12 that aquatic life is severely diminished, please refer to Attachment 2.

Response:

Section 3.6.2 has been rewritten to incorporate information about creek biota reported by Cravotta (2005), and clarify the status of aquatic life in the reach of Mahanoy Creek in the vicinity of the project. (Attachments 1 and 2 to the comment are copies of Tables 2, 3, and 4 from Cravotta's report. These tables list the stream locations sampled in the USGS study, water quality data for Mahanoy Creek and for abandoned mine drainage sites in the creek watershed, and the fish species identified and counted during an ecological survey of the creek.) Although the Cravotta (2005) study found fish in the creek near Girardville, the study found only 20 fish representing only two species, both of which are tolerant of pollution. This finding does not alter the observation that aquatic life is severely reduced in the reach of Mahanoy Creek in the vicinity of the Gilberton Power Plant due to acid mine drainage. Cravotta (2005) stated, "The presence of any fish in Mahanoy Creek at Girardville was unexpected because of the poor water quality and iron-encrusted streambed at this location." Also see the response to comment 42-4.

Comment 42-6

On page 3-16, it is stated that the mine pool water has an iron content of 30 mg/L, which is much higher than that found in the creek. As remediation efforts have been planned for the Mahanoy Creek, it seems counterproductive to add more iron to water as we are trying to remove it through various projects. In addition, varying chemistry of pumped mine pool water is unacceptable.

Response:

The passage referred to by the commenter (in Section 3.4.3) describes the existing situation involving water in the Gilberton mine pool and Mahanoy Creek. As discussed in that section, Pennsylvania Department of Environmental Protection maintains a pump that withdraws water from the mine pool and discharges it to the creek. This mine pool water, which has a high iron content and varying chemistry, is a source of contamination in the creek. Because water from the mine pool would be used in the proposed facilities, the

proposed project would reduce the volume of mine pool water that Pennsylvania Department of Environmental Protection discharges to the creek (see Section 4.1.4), thus reducing the quantity of iron that enters the creek from the mine pool. Before being used in the proposed facilities, the mine pool water would be treated to remove most of the iron and other dissolved constituents. Wastewater effluents from the proposed facilities (which would be discharged to the mine pool) would have much lower iron concentrations than the mine pool water. The net effect of the proposed project on iron in Mahanoy Creek would be a reduction (not an increase) in the amount of iron released to the creek. See Section 4.1.4.1 for additional information.

Comment 42-7

On page 3-20, it is stated that aquatic life is absent or severely reduced. Attachments 1 and 2 are in direct contradiction to that statement.

Response:

See response to comment 42-5.

Comment 42-8

On page 4-15, it is stated that the only in-stream uses for the Mahanoy Creek are to receive treated sewage and that no impacts on water quality should be expected. That statement shows a total disrespect for the efforts of our organization and the remediation efforts we have historically been attempting. "Probably" removing pollutants is unacceptable. It is apparent from the discussion on page 4-16 that the wastewater is destined to become yet another nonpoint source of pollution in the creek.

Response:

As noted in Section 6.2, the proposed project is expected to contribute to achieving the objectives of ongoing watershed remediation projects by reducing the discharge of mine pool water to Mahanoy Creek, removing anthracite culm piles, and reclaiming mined lands. However, if effluents from the proposed facilities deplete dissolved oxygen in Mahanoy Creek and introduced other contaminants, the creek could remain unsuitable for aquatic life. Section 4.1.4.1 has been revised to present additional information on potential impacts to creek water quality from project effluents. Also, the text now identifies habitat for aquatic organisms as a second example of an in-stream water use. Owing to ongoing restoration efforts, potential future in-stream uses for Mahanoy Creek in the vicinity of the project may include recreational boating and fishing. (In-stream uses include support of aquatic organisms, swimming, drinking water for humans or animals, boating, fishing, hydroelectric power production, and waste assimilation. As opposed to "off-stream" uses like water withdrawals for industrial processes, power plant cooling, and irrigation.)

Comment 42-9

The statement that adverse effects from the operation of the coal to oil plant would be undetectable because of the existing pollution in the creek is unacceptable. Human exposure to any toxins is unavoidable as we are in the creek throughout the year doing various cleanups. If it is necessary, I will provide news articles to that effect.

Response:

Section 4.1.4.1 has been revised to present additional information and analysis on the potential impacts to creek water quality from facility effluents, which would introduce new contaminants to the mine pool system and thence to the creek. DOE does not have sufficient information about project effluents to assess their potential toxicity to creek volunteers, who possibly could be exposed through skin contact, inhalation, or accidental ingestion. Also see the response to comment S10-5.

Comment 42-10

Certainly, the Btu value of culm banks will not sustain the plant for 25 years; what WILL be the Btu source when the culm is gone or needs enhancement?

Response:

See the response to comment 41-14.

Comment 42-11

How can this plant improve the lives of an area rife with poverty, except for the few construction jobs it will bring?

Response:

As discussed in Section 4.1.7, the proposed project would have both adverse and beneficial effects on social and economic resources in the local community. The most noticeable adverse effects on social and economic resources would be the increased traffic and decreased safety on roads around the proposed project. The most noticeable beneficial effects on social and economic resources would be the increased employment, income, and, after 10 years, tax revenues.

Comment 42-12

One last note, the "union forever" battle cry is weak, as Mr. Rich busted the UMWA in the mid 80s at his Locust Summit Coal Plant, and is just using the construction union for the short term, as he will surely hire at the prevailing wage of \$8.50/hour when the plant is in operation.

Response:

See response to comment 30-1 concerning construction wages. The analysis presented in Section 4.1.7.2 assumes the average annual salary for a "power plant operator" in Schuylkill County as \$40,014 (PDLI 2003). However, there is no federal legislation requiring a specific wage rate for operations workers at the proposed project.

WMPI

Page 1 of 5

Subject: FW: Additional Comments on PM
From: "Miller, Robert L." <millerrl@ornl.gov>
To: "McCold, Lance Neil" <mccoldln@ornl.gov>

From: Janice Bell [mailto:Janice.Bell@NETL.DOE.GOV]
Sent: Friday, February 10, 2006 10:37 AM
To: Miller, Robert L.
Subject: Fwd: Additional Comments on PM

X-MIMEOLE: Produced By Microsoft Exchange V6.5
Received: by ORNLEXCHANGE.ornl.gov
id <01C62D3D.AAE49580@ORNLEXCHANGE.ornl.gov>; Thu, 9 Feb 2006 00:57:11 -0500
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="----=_NextPart_003_01C62D3D.AAE49580"
Content-class: urn:content-classes:message
Subject: Additional Comments on PM
Date: Thu, 9 Feb 2006 00:57:19 -0500
Message-ID: <6.2.3.4.2.20060209004945.074fa2a8@mail.actionpa.org>
X-MS-Has-Attach:
X-MS-TNEF-Correlator:
From: "Mike Ewall" <catalyst@actionpa.org>
To: <janice.bell@netl.doe.gov>
Cc: <catalyst@actionpa.org>

Janice,

Please also accept these comments relating to particulate matter emissions and health impacts.

Mike Ewall
1434 Elbridge St.
Philadelphia, PA 19149
215-743-4884
catalyst@actionpa.org

COMMENTS

The WMPI coal-to-oil refinery proposal and the Draft Environmental Impact Statement states on page 4-3:

The total concentrations, obtained by adding maximum modeled concentrations (adjusted by the conversion factors) to their corresponding background concentrations, were compared with the NAAQS (Section 3.2.2). The background concentrations used (i.e., 54 5g/m3 for the 24-hour averaging period and 25 5g/m3 for the annual average) were recorded in 2003 at the nearest PM-10 monitoring station, located in Reading (Section 3.2.2). Consequently, the maximum modeled 24-hour concentration should not exceed 96 5g/m3 because when it is added to the 54 5g/m3 background concentration, the sum should not exceed the NAAQS of 150 5g/m3 [96 (modeled) +54 (background) = 150 (total)]. Similarly, the maximum modeled annual concentration should not exceed 25 5g/m3 because when it is added to the 25 5g/m3 background concentration, the sum should not exceed the NAAQS of 50 5g/m 3 [25 (modeled) + 25 (background) = 50 (total)].

The daily emission limits suggested for particulate matter pollution from the WMPI refinery are not protective of public health.

The estimated emission limits for particulate emissions in the draft permit for the WMPI's proposed coal-to-oil refinery in the area of the Mahanoy and West Mahanoy Townships should be held to safer, lower emissions limits.

43-1

Particulate pollution from industrial plants has serious health impacts, leading to asthma attacks, heart attacks and to premature death. Particulate matter from industrial plants cuts short thousands of lives each year in Pennsylvania, taking 14 years on average from each life.

43-1

The WMPI plant would add to these health effects as well as deteriorating public health in and around the community area of the Mahanoy and West Mahanoy Townships.

Emergency Room Visits

Several other important studies tie fine particle levels to emergency room visits. For example, fine particles were associated with emergency room visits for asthma in Seattle, Washington; Barcelona, Spain; and Steubenville, Ohio. Studies have linked air pollution with both hospital admissions and emergency room visits. There is more data on hospital admissions that allows researchers to derive more complete estimates.

43-2

While these studies of hospital admissions and emergency room visits provide evidence that exposure to fine particles is directly associated with asthma attacks, researchers have also examined the relationship between air pollution and less severe asthma attacks that do not result in hospitalization. Studies in Denver, Los Angeles, and the Netherlands found that substantial increases in asthma attacks were linked with fine particle exposure.

Other Respiratory Symptoms

Many other studies have also found a link between fine particle pollution and a whole range of well-known upper and lower respiratory symptoms including: deep, wet cough; running or stuffy nose; and burning, aching, or red eyes. Associations between fine particles and more general measures of acute disease have also been found. For example, one study evaluated the impact of fine particle levels on lost work days from workers calling in sick, an association that suggests an impact of air pollution on the U.S. economy, while other studies link particles and non-work restricted activity.

Extensive new research published over the past year finds that fine particles at levels routinely found in many U.S. cities may trigger sudden deaths by changing heart rhythms in people with existing cardiac problems. While further research is needed, these early studies are extremely important because cardiovascular disease is the number one killer in the United States, responsible for nearly half of all deaths. While heart rhythms in healthy persons remain largely unaffected by fine particle pollution, for those with existing heart disease fine particle exposures could have deadly consequences. The threat seems particularly acute for elderly people who have existing heart arrhythmia (a life-threatening condition of rapid, skipped or premature beats) or the combination of a weak heart and lung disease such as asthma. The studies suggest that people are dying within 24 hours after elevated particulate matter exposures. About a dozen major scientific studies in the United States, recently completed or underway, are turning up evidence of heart pattern changes in animals exposed in laboratories and in elderly people tested in nursing homes.

Several PM10-health effects studies, published in 1994 and 1996, show associations between health effects and a small daily increase in PM as measured in micrograms per cubic meter (mg/m3).

According to a 1994 Harvard School of Public Health study, the potential maximum PM levels from the WMPI refinery will result in health effects. This study found a broad range of respiratory and cardiovascular effects from fine particulate matter. This Harvard study found the following increases in health impacts for every 10 mg/m3 increase in ambient PM10 levels.

Health Impacts: Effects associated with 10 mg/m3 Increase in daily Particulate Pollution

Increase in Daily Mortality

- Total Deaths - 1.0% increase
- Respiratory Deaths - 3.4% increase
- Cardiovascular Deaths - 1.4% increase

Increase in Hospital Usage (All respiratory)

- Admissions - 0.8% increase
- Emergency Room Visits - 1.0% increase

Exacerbation of Asthma

- Asthmatic Attacks - 3.0% increase
- Bronchodilator - 2.9% increase
- Emergency Room Visits - 3.4% increase
- Hospital Admissions - 1.9% increase

Increase in Respiratory Systems Reports

Lower Respiratory - 3.0% increase
Upper Respiratory - 0.7% increase
Cough - 1.2% increase

Decrease in Lung Function
Forced Expired Volume - 0.15% increase
Peak Expiratory Flow - 0.08% increase

Thus, the DOE and state DEP have considered a lethal daily increase in PM10 to be acceptable.

The modeled daily PM10 maximum pollution increase of 96 5g/m3 from the WMPI refinery is lethal since it will result in health effects including increased premature mortality from cardiovascular and respiratory deaths and other adverse health effects. 43-3

The PM10 modeling in the Environmental Consequences Section 4.0 (pp. 4.2 - 4.5 Part 4.1.2.1, Atmospheric Resources and Air Quality review - Modeling Discussion) presents the modeling results indicating the predicted increased daily PM10 emissions due to the WMPI plant. The modeled daily PM10 increase of 96 5g/m3 is listed as the possible GLCmax. This raises serious concerns that the WMPI plant will produce a range of adverse health effects from its maximum particulate matter emissions rate of 99.9 tons per year that DOE and DEP is proposing to approve in the draft air quality permit. Health effects studies published in peer-reviewed journals presented a strong association between a daily 10 5g/m3 increase in PM10 and particulate health effects including premature deaths. When WMPI is emitting a maximum allowable rate of 26.7 pounds per hour of PM10 (instantaneous pounds per hour emissions rate based on an annual maximum 99.9 tons per year), the plant's predicted daily PM10 increase of 96 5g/m3 is nearly ten times the daily 10 5g/m3 increase in PM10 recognized for health effects. 43-4

Health effects of PM10 pollution increases may be observed for several days after peak exposures, and detectable for up to several weeks after substantial air pollution episodes. At relevant concentrations the mortality dose response relationship is essentially linear, with increases in mortality seen even at very low exposures.

The DOE's review of the WMPI permit application does not appear to take into account either the health effects from a daily 10 5g/m3 increase in the the Mahanoy and West Mahanoy Townships community area from the plant's operations at less than the maximum WMPI refinery rates resulting in such a daily PM10 increase. The DOE also has not properly evaluated the health effects from WMPI's predicted daily increase of 96 5g/m3 increase at maximum plant operations, or the potential for additional health effects occurring for several days after peak exposures. The DOE has also not evaluated the additional impacts of daily PM2.5 emissions from diesel locomotives to the WMPI plant's maximum PM10 daily emissions, which will exacerbate the health effects from the modeled PM10 increase of 96 5g/m3. 43-5

Background daily PM10 pollution around the WMPI refinery plant site was considered by using 54 5g/m3 and combined with the modeled PM10 increase of 96 5g/m3 results in a Total PM10 Concentration [Background + GLCmax] of 96 5g/m3 at the WMPI plant's property line.

The modeled daily PM10 increase did not take into account secondary particulate formation from SO2 (99.9 tpy maximum) and NOx (99.9 tpy maximum) emissions between the stack exit points and the GLCmax area along the WMPI plant's property line. The modeled daily PM10 increase of 96 micrograms per cubic meter may therefore be an underestimation of the total daily PM10 increase at the GLCmax. 43-6

In the largest study of its kind published in JAMA, a group of 500,000 adults were followed for 16 years and PM2.5 monitoring data collected and 11 other cofounders compared. The study's objective was "To assess the relationship between long-term exposure to fine particulate air pollution and all-cause, lung cancer, and cardiopulmonary mortality." The researchers conclusion: "Long-term exposure to combustion-related fine particulate air pollution is an important environmental risk factor for cardiopulmonary and lung cancer mortality." In their results, they emphasized that "Fine particulate and sulfur oxide-related pollution were associated with all-cause, lung cancer, and cardiopulmonary mortality. Each 10-5g/m3 elevation in fine particulate air pollution was associated with approximately a 4%, 6%, and 8% increased risk of all-cause, cardiopulmonary, and lung cancer mortality, respectively. Measures of coarse particle fraction and total suspended particles were not consistently associated with mortality." 43-7

"Associations have been found between day-to-day particulate air pollution and increased risk of various adverse health outcomes, including cardiopulmonary mortality. However, studies of health effects of long-term particulate air pollution have been less conclusive."

The American Heart Association issued a Scientific Statement on Air Pollution and Cardiovascular Disease in June 2004 that focused on the association between cardiovascular morbidity and mortality and PM pollution.

According to this review of data on fine particles and health effects, the AHA determined that there is a clear potential to improve the national public health and to substantially reduce cardiovascular morbidity and mortality by reducing PM

levels to current EPA standards.

The AHA found that "...the existing body of evidence is adequately consistent, coherent, and plausible enough to draw several conclusions. At the very least, short-term exposure to elevated PM significantly contributes to increased acute cardiovascular mortality, particularly in certain-at-risk subsets of the population. Hospital admissions for several cardiovascular and pulmonary diseases acutely increase in response to higher ambient PM concentrations. The evidence further implicates prolonged exposure to elevated levels of PM in reducing overall life expectancy on the order of a few years."

43-7

"On the basis of these conclusions and the potential to improve the public health, the AHA writing group supports the promulgation and implementation of regulations to expedite the attainment of the existing National Ambient Air Quality Standards. Moreover, because a number of studies have demonstrated associations between particulate air pollution and adverse cardiovascular effects even when levels of ambient PM_{2.5} were within current standards, even more stringent standards for PM_{2.5} should be strongly considered by the EPA."

Another study done in 2001 studied the relationship between particulate pollution and the triggering of myocardial infarction. This study found a 44% increase in heart attacks within 2 hours of PM_{2.5} exposure and 33% increase within 4 hours of PM_{2.5} exposure.

This study suggests that elevated concentrations of fine particles in the air may transiently elevate the risk of myocardial infarctions within a few hours and 1 day after exposure.

Evidence shows that the EPA's PM10 standard is not protective of public health.

DOE relies on the EPA's national ambient air quality standards for PM₁₀ adopted in 1987. However, the EPA PM₁₀ NAAQS are less protective than the California PM₁₀ state AAQS and the comments here address why the California Air Resources Board relies on such protective PM₁₀ standards. As it turns out, the EPA, in setting the national annual PM₁₀ standard, did not consider the carcinogenic potential of long-term exposure to PM₁₀. In addition, in setting the national daily PM₁₀ standard, the EPA did not consider the premature deaths resulting from short-term exposure to PM₁₀. The presentation explains the significance of weak EPA PM₁₀ standards which fail to protect public health.

A 1991 report by the California Air Resources Board (CARB) states that CARB uses a daily PM₁₀ standard of 50 5g/m³, as opposed to the EPA's daily PM₁₀ standard of 150 5g/m³, because EPA's standard does not address premature death. This report states that the annual EPA standard of 50 5g/m³ (CARB uses 30 5g/m³) is also not protective of public health since it does not address the carcinogenic potential of long-term exposure to PM₁₀.

"In 1969, the Board established the standards for total suspended particulate matter or "TSP" which considered all the particles in the air. In December 1982, the Board rescinded the TSP standards and adopted standards for PM₁₀. The PM₁₀ standards are roughly equal in stringency to the previous TSP standards. However, the PM₁₀ standards are more closely related to the actual effects of particles on human health because the PM₁₀ standards address the particles small enough to reach the human lung. By expressing the standards in terms of PM₁₀, the Board directed that control efforts focus on reducing the ambient particles that are most damaging to human health.

43-8

The Board adopted the PM₁₀ standards to protect the public from the health effects of short-term exposure to ambient PM₁₀ (the 24-hour PM₁₀ standard) and long-term exposure (the annual PM₁₀ standard). The 24-hour standard [set at 50 5g/m³] is based on studies which show that people with serious respiratory illnesses suffer increased death rates when exposed to increase concentrations of ambient PM₁₀. The annual standard [set at 30 5g/m³ as an annual geometric mean] is based on studies which show that long-term exposure to PM₁₀ causes decrease breathing capability and increased respiratory illness in susceptible populations such as children. The annual standard is also based on a consideration of the substances in PM₁₀ that cause cancer.

The PM₁₀ standards are expressed as a weight of PM₁₀ particles per volume of air. There is no consideration of the size or the chemical make-up of the particles although these are important factors in terms of the health risks associated with PM₁₀ (see previous section). The state PM₁₀ standard is 50 5g/m³. The state annual PM₁₀ standard, calculated as the annual geometric mean of the 24-hour concentrations, is 30 5g/m³. The Board established both of the state PM₁₀ standards as concentrations not to be exceeded.

In addition to the state PM₁₀ standards, there are national PM₁₀ standards. The EPA established the national PM₁₀ standards during July 1987. The national 24-hour PM₁₀ standard is 150 micrograms per cubic meter. The national annual PM₁₀ standard is 50 micrograms per cubic meter, calculated as an annual arithmetic means.

Obviously, the state 24-hour PM₁₀ standard is substantially more stringent than the national 24-hour standard. The adverse health effects the Board considered during the adoption of the state standard were premature death and

respiratory illness. The populations at risk included individuals with prior respiratory health problems. The California Department of Health Services (the DHS) found that these serious health effects occur at PM10 levels well below what is now the national 24-hour PM10 standard.

In contrast, the national PM10 standard was based primarily on reversible decreases in respiratory function, and not premature death. The populations at risk were school aged children with normal health status, not necessarily individuals with prior respiratory health problems. The PM10 levels at which these health effects occurred were higher than those found by the DHS to cause premature death in sensitive segments of the population.

The results and analyses of studies published subsequent to the Board's adoption of the state 24-hour PM10 standard suggest strongly that the national 24-hour PM10 standard does not include any margin of safety, and therefore it does not adequately protect health.

The state 24-hour PM10 standard is primarily based on two studies. One study demonstrated increased illness in London patients with bronchitis. The other study showed that there were increased deaths in London during periods with high particle concentrations. The particle concentrations in both of these studies were reported as British Smoke and were mathematically converted to equivalent PM10 concentrations using a two-step conversion process. The British Smoke measurements were first converted to TSP concentrations, based on data from collocated instruments that measured British Smoke and TSP. (These instruments were operated in London.) The TSP concentrations were then converted to equivalent PM10 concentrations based on data that measured TSP and PM10. (These instruments were operated in the United States.) In adopting the state 24-hour PM10 standard, the Board also considered the recommendations of the California Department of Health Services.

The national 24-hour PM10 standard is based primarily on a study of decreased lung function in children living in Steubenville, Ohio. The study demonstrated that the decrease in lung function was closely associated with an increase in particle concentrations. The particle concentrations reported in this study were measured as TSP and were mathematically converted to equivalent PM10 concentrations. The conversion was based on collocated measurements of TSP and PM10 from Steubenville.

The state and national annual PM10 standard levels also differ. The state annual PM10 standard is based on studies which show adverse health effects associated with long-term exposure to particles at concentrations of approximately 50 5g/m³ and higher (ranging from about 50 to 177 5g/m³). The state annual standard is also based on a consideration of the lifetime risk of cancer from exposure to the carcinogenic compounds present in PM10. The state annual PM10 standard is approximately equivalent to the previous state annual TSP standard, converted to PM10. In adopting the state annual PM10 standard, the Board relied heavily on the recommendations of the California Department of Health Services.

The national annual PM10 standard is based on studies of respiratory effects and illness in children and adults. The particle concentrations cited in these studies were measured as TSP and were converted to equivalent PM10 concentrations. The conversion used was based on collocated instruments that measured TSP and PM10. The EPA, in setting the national annual PM10 standard, did not consider the carcinogenic potential of long-term exposure to PM10."

Conclusion from this Section

In reality, the DOE and state DEP need to require WMPI make a significant reduction of more than 50% in its proposed PM10 emissions in order to fully protect public health in the Pennsylvania community area. The DOE and DEP need to require WMPI to submit missing technical information on the daily PM2.5 emissions from diesel locomotives and re-model all particulate emissions. A daily PM10 pollution increase of 96 micrograms per cubic meter from the WMPI plant is not acceptable and fails to protect public health.

43-8

Ewall, Mike (43)

Comment 43-1

The estimated emission limits for particulate emissions in the draft permit for the WMPI's proposed coal-to-oil refinery in the area of the Mahanoy and West Mahanoy Townships should be held to safer, lower emissions limits.

Particulate pollution from industrial plants has serious health impacts, leading to asthma attacks, heart attacks and to premature death. Particulate matter from industrial plants cuts short thousands of lives each year in Pennsylvania, taking 14 years on average from each life.

The WMPI plant would add to these health effects as well as deteriorating public health in and around the community area of the Mahanoy and West Mahanoy Townships.

Response:

Many health agencies and organizations in the United States and around the world have concluded that the exposure response data from most air pollution studies to date have not demonstrated thresholds of exposure below which no adverse health effects are observed in the general population. This means that an incremental increase in an air pollutant concentration adds a corresponding incremental increase in risk for some members of the population to experience adverse health effects. Characteristically, the young, old, and those with underlying disease are likely to be those first affected by small concentration increases. An attempt to represent these impacts from the addition of the new operation singly and in combination with six other facilities in the area has been added to Sections 4.1.9.1 and 6. Also see the response to Comment 35-2.

Comment 43-2

Several other important studies tie fine particle levels to emergency room visits. For example, fine particles were associated with emergency room visits for asthma in Seattle, Washington; Barcelona, Spain; and Steubenville, Ohio. Studies have linked air pollution with both hospital admissions and emergency room visits. There is more data on hospital admissions that allows researchers to derive more complete estimates.

While these studies of hospital admissions and emergency room visits provide evidence that exposure to fine particles is directly associated with asthma attacks, researchers have also examined the relationship between air pollution and less severe asthma attacks that do not result in hospitalization. Studies in Denver, Los Angeles, and the Netherlands found that substantial increases in asthma attacks were linked with fine particle exposure.

Response:

See responses to 35-2 and 43-1. The tables added to section 4.1.9.1 present estimates of impacts from particulate emissions from the proposed facility alone and in combination with six other facilities in the area. In particular, Table 4.1.3 provides estimates of the increase in all cause mortality.

Comment 43-3

The modeled daily PM₁₀ maximum pollution increase of 96 µg/m³ from the WMPI refinery is lethal since it will result in health effects including increased premature mortality from cardiovascular and respiratory deaths and other adverse health effects.

Response:

See the responses to Comments 35-2 and 43-2. Note that the maximum modeled 24-hour PM-10 concentration of $96 \mu\text{g}/\text{m}^3$ (now changed to $90 \mu\text{g}/\text{m}^3$) discussed in Section 4.1.2.1 is associated with fugitive dust from clearing, excavation, and earthwork during construction. The temporary impacts of fugitive dust from construction activities on offsite particulate concentrations would be localized because of the relatively rapid settling of larger-size fugitive dust particles. No exceedances of the 24-hour and annual PM-10 NAAQS would be expected at any residential locations because no residences are within 0.5 mile of the main plant area. During operation of the proposed facilities, the maximum modeled 24-hour PM-10 concentration is predicted to be only $0.8 \mu\text{g}/\text{m}^3$. Additionally, note that the statement in Section 4.1.2.1 that reads “the maximum modeled 24-hour concentration should not exceed $96 \mu\text{g}/\text{m}^3$...” was intended to mean it would take an increase of $96 \mu\text{g}/\text{m}^3$ (now changed to $90 \mu\text{g}/\text{m}^3$) given the existing background to exceed the ambient air quality standard. The Pennsylvania Department of Environmental Protection (PA DEP) has recently installed a PM-10 monitor at the Mahanoy State Correctional Institution adjacent to the proposed facilities to measure ambient PM-10 concentrations. The sampler began running on May 9, 2006. After sufficient data are available from this monitor (around May 9, 2007), it will be used by the PA DEP to monitor PM-10 concentrations in the area, instead of the monitoring station located in Reading.

Comment 43-4

The PM₁₀ modeling in the Environmental Consequences Section 4.0 (pp. 4.2 - 4.5 Part 4.1.2.1, Atmospheric Resources and Air Quality review - Modeling Discussion) presents the modeling results indicating the predicted increased daily PM₁₀ emissions due to the WMPI plant. The modeled daily PM₁₀ increase of $96 \mu\text{g}/\text{m}^3$ is listed as the possible GLC_{max}. This raises serious concerns that the WMPI plant will produce a range of adverse health effects from its maximum particulate matter emissions rate of 99.9 tons per year that DOE and DEP is proposing to approve in the draft air quality permit. Health effects studies published in peer-reviewed journals presented a strong association between a daily $10 \mu\text{g}/\text{m}^3$ increase in PM and particulate health effects including premature deaths. When WMPI is emitting a maximum allowable rate of 26.7 pounds per hour of PM₁₀ (instantaneous pounds per hour emissions rate based on an annual maximum 99.9 tons per year), the plant's predicted daily PM₁₀ increase of $96 \mu\text{g}/\text{m}^3$ is nearly ten times the daily $10 \mu\text{g}/\text{m}^3$ increase in PM recognized for health effects.

Response:

See response to Comment 43-3. Section 4.1.9.1 has been expanded to include estimates of particulate emission mediated health impacts. The responses to Comments 35-2 and 40-2 also address the question of impacts from particulate emissions.

Comment 43-5

The DOE's review of the WMPI permit application does not appear to take into account either the health effects from a daily $10 \mu\text{g}/\text{m}^3$ increase in the Mahanoy and West Mahanoy Townships community area from the plant's operations at less than the maximum WMPI refinery rates resulting in such a daily PM₁₀ increase. The DOE also has not properly

evaluated the health effects from WMPI's predicted daily increase of 96 $\mu\text{g}/\text{m}^3$ increase at maximum plant operations, or the potential for additional health effects occurring for several days after peak exposures. The DOE has also not evaluated the additional impacts of daily $\text{PM}_{2.5}$ emissions from diesel locomotives to the WMPI plant's maximum PM_{10} daily emissions, which will exacerbate the health effects from the modeled PM_{10} increase of 96 $\mu\text{g}/\text{m}^3$.

Response:

The assessments of air quality impacts and human health impacts in EIS Sections 4.1.9.1 and 6 have been revised. Also, see response to Comment 43-3.

Comment 43-6

The modeled daily PM_{10} increase did not take into account secondary particulate formation from SO_2 (99.9 tpy maximum) and NO_x (99.9 tpy maximum) emissions between the stack exit points and the GLC_{max} area along the WMPI plant's property line. The modeled daily PM_{10} increase of 96 micrograms per cubic meter may therefore be an underestimation of the total daily PM_{10} increase at the GLC_{max} .

Response:

See response to comment 43-3.

Comment 43-7

In the largest study of its kind published in JAMA, a group of 500,000 adults were followed for 16 years and $\text{PM}_{2.5}$ monitoring data collected and 11 other cofounders compared. The study's objective was "To assess the relationship between long-term exposure to fine particulate air pollution and all-cause, lung cancer, and cardiopulmonary mortality." The researchers conclusion: "Long-term exposure to combustion-related fine particulate air pollution is an important environmental risk factor for cardiopulmonary and lung cancer mortality." In their results, they emphasized that "Fine particulate and sulfur oxide-related pollution were associated with all-cause, lung cancer, and cardiopulmonary mortality. Each 10-5 $\mu\text{g}/\text{m}^3$ elevation in fine particulate air pollution was associated with approximately a 4%, 6%, and 8% increased risk of all-cause, cardiopulmonary, and lung cancer mortality, respectively. Measures of coarse particle fraction and total suspended particles were not consistently associated with mortality."

"Associations have been found between day-to-day particulate air pollution and increased risk of various adverse health outcomes, including cardiopulmonary mortality. However, studies of health effects of long-term particulate air pollution have been less conclusive."

The American Heart Association issued a Scientific Statement on Air Pollution and Cardiovascular Disease in June 2004 that focused on the association between cardiovascular morbidity and mortality and PM pollution.

According to this review of data on fine particles and health effects, the AHA determined that there is a clear potential to improve the national public health and to substantially reduce cardiovascular morbidity and mortality by reducing PM levels to current EPA standards.

The AHA found that "...the existing body of evidence is adequately consistent, coherent, and plausible enough to draw several conclusions. At the very least, short-term exposure to elevated PM significantly contributes to increased acute cardiovascular

mortality, particularly in certain-at-risk subsets of the population. Hospital admissions for several cardiovascular and pulmonary diseases acutely increase in response to higher ambient PM concentrations. The evidence further implicates prolonged exposure to elevated levels of PM in reducing overall life expectancy on the order of a few years."

"On the basis of these conclusions and the potential to improve the public health, the AHA writing group supports the promulgation and implementation of regulations to expedite the attainment of the existing National Ambient Air Quality Standards. Moreover, because a number of studies have demonstrated associations between particulate air pollution and adverse cardiovascular effects even when levels of ambient PM_{2.5} were within current standards, even more stringent standards for PM_{2.5} should be strongly considered by the EPA."

Another study done in 2001 studied the relationship between particulate pollution and the triggering of myocardial infarction. This study found a 44% increase in heart attacks within 2 hours of PM_{2.5} exposure and 33% increase within 4 hours of PM_{2.5} exposure.

This study suggests that elevated concentrations of fine particles in the air may transiently elevate the risk of myocardial infarctions within a few hours and 1 day after exposure.

Response:

Table 4.1.4, Estimates of selected morbidity effects due to the combined particulate matter from six surrounding facilities and the proposed coal-to-oil project, has been added to section 4.1.9.1. Several of these estimates are based on exposure response functions to PM_{2.5}. For this assessment, the modeled PM-10 concentrations were adjusted using a PM_{2.5}/PM₁₀ ratio of 0.76 which was determined to be the average ratio from the annual fixed station monitoring points from Reading, Harrisburg, and Wilkes-Barre.

Comment 43-8

DOE relies on the EPA's national ambient air quality standards for PM₁₀ adopted in 1987. However, the EPA PM₁₀ NAAQS are less protective than the California PM₁₀ state AAQS and the comments here address why the California Air Resources Board relies on such protective PM₁₀ standards. As it turns out, the EPA, in setting the national annual PM₁₀ standard, did not consider the carcinogenic potential of long-term exposure to PM₁₀. In addition, in setting the national daily PM₁₀ standard, the EPA did not consider the premature deaths resulting from short-term exposure to PM₁₀. The presentation explains the significance of weak EPA PM₁₀ standards which fail to protect public health.

A 1991 report by the California Air Resources Board (CARB) states that CARB uses a daily PM₁₀ standard of 50 5g/m³, as opposed to the EPA's daily PM₁₀ standard of 150 5g/m³, because EPA's standard does not address premature death. This report states that the annual EPA standard of 50 5g/m³ (CARB uses 30 5g/m³) is also not protective of public health since it does not address the carcinogenic potential of long-term exposure to PM₁₀.

"In 1969, the Board established the standards for total suspended particulate matter or "TSP" which considered all the particles in the air. In December 1982, the Board rescinded the TSP standards and adopted standards for PM₁₀. The PM₁₀ standards are roughly equal in stringency to the previous TSP standards. However, the PM₁₀ standards are more closely related to the actual effects of particles on human health because the PM₁₀ standards address the particles small enough to reach the human lung. By expressing the standards in terms of

PM10, the Board directed that control efforts focus on reducing the ambient particles that are most damaging to human health.

The Board adopted the PM10 standards to protect the public from the health effects of short-term exposure to ambient PM10 (the 24-hour PM10 standard) and long-term exposure (the annual PM10 standard). The 24-hour standard [set at 50 $\mu\text{g}/\text{m}^3$] is based on studies which show that people with serious respiratory illnesses suffer increased death rates when exposed to increase concentrations of ambient PM10. The annual standard [set at 30 $\mu\text{g}/\text{m}^3$ as an annual geometric mean] is based on studies which show that long-term exposure to PM10 causes decrease breathing capability and increased respiratory illness in susceptible populations such as children. The annual standard is also based on a consideration of the substances in PM10 that cause cancer.

The PM10 standards are expressed as a weight of PM10 particles per volume of air. There is no consideration of the size or the chemical make-up of the particles although these are important factors in terms of the health risks associated with PM10 (see previous section). The state PM10 standard is 50 $\mu\text{g}/\text{m}^3$. The state annual PM10 standard, calculated as the annual geometric mean of the 24-hour concentrations, is 30 $\mu\text{g}/\text{m}^3$. The Board established both of the state PM10 standards as concentrations not to be exceeded.

In addition to the state PM10 standards, there are national PM10 standards. The EPA established the national PM10 standards during July 1987. The national 24-hour PM10 standard is 150 micrograms per cubic meter. The national annual PM10 standard is 50 micrograms per cubic meter, calculated as an annual arithmetic means.

Obviously, the state 24-hour PM10 standard is substantially more stringent than the national 24-hour standard. The adverse health effects the Board considered during the adoption of the state standard were premature death and respiratory illness. The populations at risk included individuals with prior respiratory health problems. The California Department of Health Services (the DHS) found that these serious health effects occur at PM10 levels well below what is now the national 24-hour PM10 standard.

In contrast, the national PM10 standard was based primarily on reversible decreases in respiratory function, and not premature death. The populations at risk were school aged children with normal health status, not necessarily individuals with prior respiratory health problems. The PM10 levels at which these health effects occurred were higher than those found by the DHS to cause premature death in sensitive segments of the population.

The results and analyses of studies published subsequent to the Board's adoption of the state 24-hour PM10 standard suggest strongly that the national 24-hour PM10 standard does not include any margin of safety, and therefore it does not adequately protect health.

The state 24-hour PM10 standard is primarily based on two studies. One study demonstrated increased illness in London patients with bronchitis. The other study showed that there were increased deaths in London during periods with high particle concentrations. The particle concentrations in both of these studies were reported as British Smoke and were mathematically converted to equivalent PM10 concentrations using a two-step conversion process. The British Smoke measurements were first converted to TSP concentrations, based on data from collocated instruments that measured British Smoke and TSP. (These instruments were operated in London.) The TSP concentrations were then converted to equivalent PM10 concentrations based on data that measured TSP and PM10. (These instruments were operated in the United States.) In adopting the state 24-hour PM10 standard, the Board also considered the recommendations of the California Department of Health Services.

The national 24-hour PM10 standard is based primarily on a study of decreased lung function in children living in Steubenville, Ohio. The study demonstrated that the decrease in lung function was closely associated with an increase in particle concentrations. The particle concentrations reported in this study were measured as TSP and were mathematically converted to equivalent PM10 concentrations. The conversion was based on collocated measurements of TSP and PM10 from Steubenville.

The state and national annual PM10 standard levels also differ. The state annual PM10 standard is based on studies which show adverse health effects associated with long-term exposure to particles at concentrations of approximately 50 $\mu\text{g}/\text{m}^3$ and higher (ranging from about 50 to 177 $\mu\text{g}/\text{m}^3$). The state annual standard is also based on a consideration of the lifetime risk of cancer from exposure to the carcinogenic compounds present in PM10. The state annual PM10 standard is approximately equivalent to the previous state annual TSP standard, converted to PM10. In adopting the state annual PM10 standard, the Board relied heavily on the recommendations of the California Department of Health Services.

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In reality, the DOE and state DEP need to require WMPI make a significant reduction of more than 50% in its proposed PM10 emissions in order to fully protect public health in the Pennsylvania community area. The DOE and DEP need to require WMPI to submit missing technical information on the daily PM2.5 emissions from diesel locomotives and re-model all particulate emissions. A daily PM10 pollution increase of 96 micrograms per cubic meter from the WMPI plant is not acceptable and fails to protect public health.

Response:

See the response to Comment 43-3. One of the concerns voiced in this comment relates to the inadequacy of the current particulate matter standards to protect public health. Data are presented to support recommendations for a lower National Ambient Air Quality Standard consistent with that of the California Air Resources Board (CARB). These comments have been noted in the record. Section 4.1.9.1 has been modified by adding some estimated health impacts from the anticipated increase in particulate matter.

Re-modeling of combined emissions and the consideration of the PM2.5 fraction of the particulate matter had been performed and included in the health impact analyses contained in Section 4.1.9.1.

BOB ALLEN, MEMBER
HOUSE BOX 202020
MAIN CAPITOL BUILDING
HARRISBURG, PENNSYLVANIA 17120-2020
PHONE: (717) 783-5293

DISTRICT OFFICES
11 WESTWOOD CENTRE
POTTSVILLE, PENNSYLVANIA 17901
PHONE: (570) 622-6629

61 NORTH THIRD STREET
HAMBURG, PA 19526
PHONE: (610) 562-3411

ROBERT TOBASH BLDG.
905 E. MAIN STREET
HEGINS, PENNSYLVANIA 17938
PHONE: (570) 682-3226



HOUSE OF REPRESENTATIVES
COMMONWEALTH OF PENNSYLVANIA
HARRISBURG

COMMITTEES
MAJORITY CHAIRMAN
LABOR RELATIONS COMMITTEE
COMMERCE COMMITTEE
COMMITTEE ON COMMITTEES
PA EAST CENTRAL CAUCUS

February 9, 2006

Ms. Janice Bell
NEPA Document Manager
National Energy Technology Laboratory
P. O. Box 10940
MS 58/247A
Pittsburgh, PA 15236

Dear Ms. Bell:

As state representative of the 125th Legislative District, I am writing to confirm my whole-hearted support to the Draft Environmental Impact Statement for the Gilberton Coal-to-Clean Fuels and Power Project.

I believe this initiative will be key in impacting our region economically through the creation of over 1,500 positions. It will benefit the country as a whole by introducing a concept that will play a vital role in our country's energy policy and help reduce dependence on foreign oil.

Should you have any questions, please feel free to contact me at (570) 622-6629.

With warmest regards,

Bob Allen
State Representative
125th Legislative District

cc: John W. Rich, Jr.
Senator James J. Rhoades
Representative David G. Argall
Representative Neal P. Goodman

44-1

Allen, Bob (44)

Comment 44-1

As state representative of the 125th Legislative District, I am writing to confirm my whole-hearted support to the Draft Environmental Impact Statement for the Gilberton Coal-to-Clean Fuels and Power Project.

I believe this initiative will be key in impacting our region economically through the creation of over 1,500 positions. It will benefit the country as a whole by introducing a concept that will play a vital role in our country's energy policy and help reduce dependence on foreign oil.

Response:

The comments have been noted.

Note: The commenter reports that the facility would create over 1,500 positions. Job creation would average 517 persons during construction and would be only about 150 persons after the three-year demonstration period (Section 4.1.7). However, induced and indirect jobs would substantially increase the employment effects of the proposal.



Received @ NETL
opened 2/6/06

February 1, 2006

Ms. Janice Bell
NEPA Document Manager
National Energy Technology Laboratory
P.O. Box 10940
MS 58/247A
Pittsburgh, PA 15236

Dear Ms. Bell:

At the January 26, 2006 Schuylkill Chamber of Commerce Board of Directors meeting, the board voted to formally endorse and support the Draft Environmental Impact Statement for the Gilberton Coal-to-Clean Fuels and Power Project.

We believe this initiative will be key in impacting our region economically through the creation of over 1,500 positions. It will benefit the country as a whole by introducing a concept that will play a vital role in our country's energy policy and help reduce dependence on foreign oil.

45-1

If you would like further information, please feel free to contact me at (570) 622-1942.

Sincerely,

A handwritten signature in cursive script that reads "Lori Kane".

Lori Kane
Executive Director

CC: Jack Rich, Inc.
Schuylkill County Commissioners
Schuylkill County Legislative Delegation

Schuylkill Chamber of Commerce (45)

Comment 45-1

At the January 26, 2006 Schuylkill Chamber of Commerce Board of Directors meeting, the board voted to formally endorse and support the Draft Environmental Impact Statement for the Gilberton Coal-to-Clean Fuels and Power Project.

We believe this initiative will be key in impacting our region economically through the creation of over 1,500 positions. It will benefit the country as a whole by introducing a concept that will play a vital role in our country's energy policy and help reduce dependence on foreign oil.

Response:

The comments have been noted.

Note: The commenter reports that the facility would create over 1,500 positions. We estimate that job creation would be an average of 517 persons during construction and would be only about 150 persons after the three-year demonstration period (Section 4.1.7). However, induced and indirect jobs would substantially increase the employment effects of the proposal.

From: "geronmo rafter" <geronimorafters@verizon.net>
To: <jbell@netl.doe.gov>
Date: 2/6/2006 6:39:55 PM
Subject: MONITOR MY BACKYARD

HELLO I WAS AT THE SHENANDOAH MEETING AND EXPLAINED HOW RIGHT NOW THE WASTE FROM THE PLANTS ARE DUMPING RIGHT IN MY BACKYARD TEN TIMES THE AMOUNT ALLOWED IN THE AIR. SO BAD THAT IT EATS MY CLOTHES LINES UP AND EATS AT THE BRASS ON MY DOORS THE PROOF IS RIGHT IN MY BACK YARD AT THE LAST MEETING THEY SAID THEY WERE GOING TO HAVE THE DOE GET IN TOUCH WITH ME AND SINCE THEN NO ONE HAS DONE ANYTHING. YOU PUT ONE OF THOSE MONITORS HERE AND YOU WILL GET A CORRECT READING. ALSO I READ THE DOE TOOK THE MONITOR OUT OF MAHANOHY CITY WHY DO YOU NOT CHECK WHERE THE DUMPING IS GOING ON LIKE MY BACKYARD AND NOW YOUR GOING TO PUT FIVE MORE STACKS UP . MY WIFE LIVED HERE FOR A COUPLE YEARS AND GOT CANCER FROM THIS STUFF, DOES MILLIONS OF DOLLARS MEAN MORE THEN OUR LIVES AND WHY DO YOU ALWAYS DUMP ON THE POOR. GERONIMO RAFTER

46-1

46-2

Rafter, Geronimo (46)

Comment 46-1

I was at the Shenandoah meeting and explained how right now the waste from the plants are dumping right in my backyard ten times the amount allowed in the air. So bad that it eats my clothes lines up and eats at the brass on my doors The proof is right in my backyard.

Response:

The EIS air quality analysis has been augmented to include an air dispersion modeling evaluation of the potential cumulative impacts resulting from the simultaneous operation of the proposed facilities with 6 existing power plants located within approximately 20 miles of the proposed facilities. The existing power plants included were Gilberton, Schuylkill, Wheelabrator, Northeastern, Mt. Carmel, and Panther Creek. Other existing emissions have been incorporated by adding background concentrations from air monitoring data to the cumulative ambient concentrations predicted for the power plants. The results of this analysis have been added to Section 6.

The additional air quality analysis was performed using the same ISCST3 air dispersion model, modeling procedures, and conservative assumptions described in Section 4.1.2.2. However, because this analysis evaluated the cumulative impacts of 6 existing power plants in the region added to the potential impacts of the proposed facilities, the total concentrations (the sum of modeled concentrations and background concentrations) were compared with the National Ambient Air Quality Standards (NAAQS) rather than the significant impact levels described in Section 4.1.2.2. The results indicate that the total concentrations would be no greater than 51% of their respective NAAQS (see Table 6.1.added to Section 6.1.1 Multiple Air Pollutant Sources). Maximum concentrations for all pollutants were predicted to occur at the same location on top of Locust Mountain, an undeveloped forested area about 3 miles north of the proposed site. Consequently, concentrations at other locations, including the backyard of the commenter, would be less than the predicted concentrations.

See response to Comment P5-4 regarding new ambient air quality monitoring equipment installed by the Pennsylvania Department of Environmental Protection and operating as of May 9, 2006.

Comment 46-2

Also I read the DOE took the monitor out of Mahanoy City why do you not check where the dumping is going on like my backyard and now your going to put five more stacks up.

Response:

See responses to P5-4 and 46-1.

Message

Page 1 of 1

Janice Bell - Wise use of Taxes?

From: "Tom & Diane Feeser" <feeflock@comcast.net>
To: <deiscomments@ultradirtyfuels.com>
Date: 2/6/2006 9:31:15 PM
Subject: Wise use of Taxes?

I have serious concerns about the wisdom of federal funding of the "coal-to-oil" project. It seems very unlikely that it will lead to the development of a technology that will help us achieve true energy independence. It is totally unrealistic to suggest that we could produce this 'clean' fuel in quantities that would come close to satisfying our appetites for oil. There is not enough coal in the ground.

} 47-1

I am concerned that this is just another "run" of the coal banks with the latest extractive technology available. This is not a clean process. The risks are on many fronts and there is a very poor track record of our government regulatory agencies providing careful, accurate and meaningful oversight. My concerns are only compounded in this era of deregulation.

} 47-2

Schuylkill County does not need this... we have had enough dirty air, foul water and spoiled land. What we could use is some truly clean, new technology. Let us host that experimental facility. Why not put these federal dollars toward that end. We would welcome the opportunity. This is what our government should have been doing 30 years ago. Coal-to-oil is no answer.

} 47-3

Feeser, Tom & Diane (47)

Comment 47-1

I have serious concerns about the wisdom of federal funding of the “coal-to-oil” project. It seems very unlikely that it will lead to the development of a technology that will help us achieve true energy independence. It is totally unrealistic to suggest that we could produce this ‘clean’ fuel in quantities that would come close to satisfying our appetites for oil. There is not enough coal in the ground.

Response:

The Gilberton Coal-to-Clean Fuels and Power Project was selected to receive financial assistance under the U.S. Department of Energy's (DOE's) Clean Coal Power Initiative (CCPI). The purpose of the CCPI is to assist technologies to bridge the gap from development to commercialization. The WMPI project is the first of its kind in the United States. In view of the technical and economic risks associated with the project, DOE believes financial support is appropriate.

Comment 47-2

I am concerned that this is just another “run” of the coal banks with the latest extractive technology available. This is not a clean process. The risks are on many fronts and there is a very poor track record of our government regulatory agencies providing careful, accurate and meaningful oversight. My concerns are only compounded in this era of deregulation.

Response:

In this EIS DOE has attempted to address all of the potential environmental impacts of the proposed project. If the proposed facilities are built and operated, WMPI would be required to comply with all applicable federal, state, and local environmental regulations.

Comment 47-3

Schuylkill County does not need this... we have had enough dirty air, foul water and spoiled land. What we could use is some truly clean, new technology. Let us host that experimental facility. Why not put these federal dollars toward that end. We would welcome the opportunity. This is what our government should have been doing 30 years ago. Coal-to-oil is no answer.

Response:

The comments have been noted. See response to 47-1.



PO Box 598
Camp Hill, Pennsylvania 17001-0598
(717) 975-4884

February 8, 2006

Ms. Janice L. Bell
NEPA Document Manager
National Energy Technology Laboratory
P.O. Box 10940
MS 58/247A
Pittsburgh, Pennsylvania 15236

Reference: Pennsylvania Department of Corrections Comments
Draft Environmental Impact Statement (EIS)
DOEIEIS-0357
Gilberton Coal-To Clean Fuels and Power Project
Gilberton, Pennsylvania

Dear Ms. Bell:

The Pennsylvania Department of Corrections (PaDOC) would like to submit record comments to the subject project Draft Environmental Impact Statement, DOEIEIA-0357, Gilberton, Pennsylvania.

The EIS identifies the location of the State Correctional Institution at Mahanoy to be located 2,600 feet east of the proposal main plant site. In addition, it is stated that "The Mahanoy State Correctional Institution is a sealed facility in which inmates and employees would not be exposed to outside air except during periods of outdoor activity." For the record, this statement is inaccurate. The Institutions heating, ventilation and air conditioning systems are of the type that require the need for outside make-up air. The make-up air quantities can range from a minimum of 20% on the coldest days to 100% on days the temperature outside matches the required temperature settings inside the building envelope. These systems are referred to as economizers that help with fresh air requirements in heated and cooled occupied buildings as well as reducing operational costs throughout the year.

48-1

"Our mission is to protect the public by confining persons committed to our custody in safe, secure facilities, and to provide opportunities for inmates to acquire the skills and values necessary to become productive law-abiding citizens while respecting the rights of crime victims."

February 8, 2006
PADOC Comments
(EIS) DOE/EIS-0357
Page 2

Another statement under Potential Impacts identifies a safety issue that is a concern to the PADOC. The statement is: "During occasional meteorological conditions when the atmosphere is nearly saturated, winds are light, and mixing is very low (i.e. during some early morning hours) condensation of water vapor from the cooling towers is possible, which would appear in the form of a cooling tower plume and/or fog." This safety and security concern is a major problem when this condition occurs. Fog hampers the visual need to observe all of the Institution at any one time, especially the secure perimeter. If a pattern occurs during the identified meteorological conditions, the inmate population will use this time to assist them in any potential security breach of the Institution.

48-2

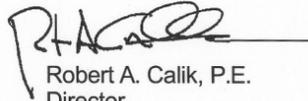
The draft identifies the working requirements of the proposed plant and the need for a new train of tank cars filled with liquid fuels leaving the proposed site every week, the potential for a hazardous spill, derailment, and/or explosion is possible. As the potential for any catastrophic accident would be possible, the draft states the probability of such an accident would be remote. The PADOC treats all potential hazards that may affect the lives of 2,000 plus inmates and employees as serious. The logistics of moving 2,000 plus inmates in a short time, not to mention the nature of security in attempting this task, is a major undertaking.

48-3

The PADOC is requesting that this letter of concerns be added to the record comments. It is this Agencies responsibility to protect the Institution from any outside interference to our operations and health and welfare of the inmates and employees.

It is requested that any and all documentation concerning this issue, ie hearings, meeting and/or decisions be forwarded to this office for review.

Sincerely,



Robert A. Calik, P.E.
Director
Bureau of Operations

cc:

Calik, Pennsylvania Department of Corrections (48)

Comment 48-1

The EIS identifies the location of the State Correctional Institution at Mahanoy to be located 2,600 feet east of the proposal main plant site. In addition, it is stated that "The Mahanoy State Correctional Institution is a sealed facility in which inmates and employees would not be exposed to outside air except during periods of outdoor activity." For the record, this statement is inaccurate. The Institutions heating, ventilation and air conditioning systems are of the type that require the need for outside make-up air. The make-up air quantities can range from a minimum of 20% on the coldest days to 100% on days the temperature outside matches the required temperature settings inside the building envelope. These systems are referred to as economizers that help with fresh air requirements in heated and cooled occupied buildings as well as reducing operational costs throughout the year.

Response:

EIS Section 4.1.2.1 has been revised to correct the inaccurate reference to a sealed facility. See response to comment 31-26.

Comment 48-2

Another statement under Potential Impacts identifies a safety issue that is a concern to the PADO. The statement is: "During occasional meteorological conditions when the atmosphere is nearly saturated, winds are light, and mixing is very low (i.e. during some early morning hours) condensation of water vapor from the cooling towers is possible, which would appear in the form of a cooling tower plume and/or fog." This safety and security concern is a major problem when this condition occurs. Fog hampers the visual need to observe all of the Institution at any one time, especially the secure perimeter. If a pattern occurs during the identified meteorological conditions, the inmate population will use this time to assist them in any potential security breach of the Institution.

Response:

The increase in frequency of fog, if any, is not expected to be great enough to result in a pattern that would be identified by the inmates to assist them in a potential security breach at the Mahanoy State Correctional Institution.

Comment 48-3

The draft identifies the working requirements of the proposed plant and the need for a new train of tank cars filled with liquid fuels leaving the proposed site every week, the potential for a hazardous spill, derailment, and/or explosion is possible. As the potential for any catastrophic accident would be possible, the draft states the probability of such an accident would be remote. The PADO treats all potential hazards that may affect the lives of 2,000 plus inmates and employees as serious. The logistics of moving 2,000 plus inmates in a short time, not to mention the nature of security in attempting this task, is a major undertaking.

Response:

See the responses to Comment S2-5 and Comment 28-5. Revised Section 4.1.9.1 describes procedures for evacuating the inmates in the event of an emergency.

**Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063**

Secretary

717-787-2814

Ms. Janice L. Bell
NEPA Document Manager
US DOE National Energy Technology Laboratory
626 Cochrans Mill Road
P.O. Box 10940
Pittsburgh, PA 15236-0940

Re: United States Department of Energy
Draft Environmental Impact Statement
Gilberton Coal-To-Clean Fuels and Power Project

Dear Ms. Bell:

Thank you for providing copies of the subject Draft Environmental Impact Statement, submitted for our review. The Department of Environmental Protection (DEP) recognizes this project as important development for the Commonwealth, and we offer our support and continued assistance throughout the permitting process as needed. As requested, DEP has reviewed the document and offers the following comments:

Waste Management

Section 2.1.6.3. - Solid Wastes: Operation.

- 1. It is recommended that if the Gilberton plant generates small amounts of RCRA hazardous waste, then WMPI should apply for an EPA Identification Number by completing EPA Form 8700. } 49-1
- 2. Regarding the materials description within the draft EIS document; several different waste streams to be produced are mentioned, such as coarse slag, gasification (molten) slag, fine solids, wastewater treatment plant sludge, iron sludge, elemental sulfur, and spent catalysts. In general, please provide more detail in the final EIS for materials such as "coarse slag" and "molten slag". Also suggested for the FEIS, it would assist the Department to have a physical and chemical characterization of the coarse slags, fine solids, wastewater treatment sludge, iron sludge, and spent catalysts. This additional description will allow the Department to better characterize the coarse and molten slag to be used in mine reclamation (back filling of mining pits) under the coal ash provisions of the residual waste regulations. } 49-2
} 49-3

Ms. Janice L. Bell

-2-

3. The draft EIS states that WMPI will attempt to sell the coarse slag that will be produced as a byproduct. As per the Department's current residual waste regulations, the coarse slag would have to be determined to be a "coproduct" or be covered by a general permit for beneficial use prior to its use.

49-4

Section 3.8. Waste Management

1. Pine Grove Landfill located in Schuylkill County is currently closed. Please note, Pine Grove has submitted an expansion application to the Department which is currently under review.

49-5

Section 4.1.2.1. - Construction

1. Open burning of cleared trees and other vegetation may require a permit. It is recommended that land clearing waste should be mulched and/or composted rather than burned.
2. The burial of non-hazardous construction and consumable waste (e.g., paints, greases, lubricants, and cleaning compounds, etc.) is prohibited pursuant to the Solid Waste Management Act (Act 97). This waste must be disposed at a municipal waste or construction/demolition waste landfill.

49-6

49-7

Section 4.1.8.1. Operation

1. To assist in project development, (see Section 7.2), the beneficial use of gasifier slag for aggregate, asphalt roofing, etc. would require either a coproduct determination, or a general permit from DEP's Waste Management Program. The use of this material for mine reclamation would likely require an approval from the DEP's Mining Program.
2. The landfill disposal of any of the waste streams (i.e., spent catalysts, wastewater treatment sludge and elemental sulfur, etc.) to be produced would require a

49-8

49-9

Ms. Janice L. Bell

-3-

Form U (Request to Process or Dispose of Residual Waste) approval from DEP's Waste Management Program, prior to disposal.

} 49-9

Section 7.2. State Requirements

1. A waste management permit may not be required for the use of slag or bottom ash produced as a construction aggregate, antiskid material, or road preparation material, provided it can be adequately demonstrated that these waste materials are chemically and physically similar to a typical coal ash produced in Pennsylvania. However, certain requirements outlined in the residual waste regulations will have to be met before this usage is allowed.

} 49-10

Mineral Resources Management

1. The DEIS implies that the discharge from the proposed plant will be routed to the tailing ponds on the BD Mining Company's Surface Mine Permit, and ultimately drain to the deep mine pool. This scenario is acceptable if the water meets baseline effluent criteria.

} 49-11

2. The DEIS implies that certain waste streams may be utilized for mine reclamation via the current coal ash beneficial use regulations. This may be allowable if the waste streams meet applicable requirements, and all other areas of concern outlined in the waste management comments are addressed. It should also be noted that if the waste streams meet the beneficial use guidelines and requirements, then the permits utilized will require some revisions (i.e., blending, tonnage, and placing, etc.) in order for DEP to approve such use.

} 49-12

3. Page 7-6 in the DEIS, paragraph one, states that the Department could waive a mine permit requirement for coal obtained from refuse material on abandoned mining property, and sign a government financed construction contract which would cover the mining and reclamation of the site. This is acceptable when the proposed project meets the respective applicable technical guidance document (see DEP website www.dep.state.pa.us; Final Technical Guidance, document ID# 563-2000-001)

} 49-13

Ms. Janice L. Bell

-4-

requirements and respective Federal Office of Surface Mining and DEP regulations. Those requirements should be noted in the final EIS.

49-13

Above-Ground Storage Tanks

1. On the plot plan, Section 2, page 2-11, there are storage tanks illustrated. If these tanks are aboveground storage tanks (AST's) as defined in 25 PA Code Chapter 245.1, and their aggregate capacity is over 21,000 gallons, then the facility would be defined as a new "large aboveground storage tank facility". Accordingly, a Site Specific Installation Permit would be required as per Chapter 245.231. Regardless of the tank capacities, if they are regulated storage tanks, they must be installed by certified installers and registered with DEP in accordance with all Chapter 245 regulations. Also, the draft EIS document mentions the subject of storage tanks; (i.e., a used oil tank) in Section 2.1.6, page 2-16 (Outputs, Discharges and Wastes; Liquid Discharges) making general statements regarding spill control/treatment (SPCC plans, spill control procedures, etc). Please note, within DEP's Storage Tank program, there are related "Site Specific Installation Permit" (SSIP) requirements set forth for tanks of certain specifications. DEP can provide additional regulatory requirement assistance with more detail on this particular area of the proposed project.
2. For large aboveground storage tank facilities (those with aggregate AST capacity over 21,000 gal), a Spill Prevention and Response Plan (SPRP) is required to be submitted to the DEP Northeast Regional Office, per Section 901 of the Storage Tank and Spill Prevention Act of 1989.

49-14

49-15

Air Quality

1. The DEIS is correct in stating that there are five (5) main stacks related to the combustion process. However, to be precise in the wording, the facility will have a total of thirteen (13) stacks. Please update this information for the FEIS, to state that the five (5) main stack consists of :
 - A CT/HRSG Stack, a Hydrocracker Reactor Stack, a Hydrocracker Fractionator, a Heater Stack, SRU/TGTU Thermal Oxidizer Stack and the Product Loading Vent Thermal Oxidizer Stack

49-16

Ms. Janice L. Bell

-5-

- There are also five (5) Baghouse stacks and one (1) stack for the emergency main flare, one (1) stack for an emergency engine and one (1) stack for a carbon adsorption unit. } 49-16
- 2. As related to “emissions” as described in the DEIS modeling, acidic deposition study, the document mentions 29 tons of SO2 emissions although the WMPI permit has a limitation of 34 tons per year; the EIS mentions 70 tons of NOx emissions when in fact the WMPI permit has a NOx limitation of 71.8 tons per year. The WMPI permit was issued on March 18, 2005 with Plan Approval # 54-399-034. The DEIS used values different than those contained in the application in completing their modeling. The application lists potential to emit (PTE) values for NOx at 71.8 TPY and the PTE for SO2 at 34.2 TPY. Again, it is unclear why the DEIS mentions 70 TPY of NOx and 29 TPY of SO2. In addition, the permit issued actually has a NOx limit of 99.0 TPY and a SO2 limit of 99.0 TPY. } 49-17
- 3. Mercury emissions, as well as other pollutants of concern, will be evaluated through stack testing to quantify emissions. In addition, the facility may be subject to the recently promulgated Clean Air Mercury Rule. } 49-18

Water Resources

- 1. An application for a water quality permit has been submitted and DEP is working with the applicant to address design loadings, size of the treatment units, expected removal efficiency and expected effluent quality. } 49-19
- 2. The EIS should describe the process followed that determined no watercourses or wetlands are located in the plant location/vicinity. The EIS should address any potentially adverse environmental effects to groundwater and surface water resources. } 49-20
} 49-21

Thank you for your consideration of these comments. If you have any further questions, please contact Joseph Sieber of the DEP Office of Field Operations at (717) 783-8697.

Sherman, Pennsylvania Department of Environmental Protection, Field Operations (49)

Comment 49-1

It is recommended that if the Gilberton plant generates small amounts of RCRA hazardous waste, then WMPI should apply for an EPA Identification Number by completing EPA Form 8700.

Response:

This requirement has been added to Section 7.1 Federal Requirements.

Comment 49-2

Regarding the materials description within the draft EIS document; several different waste streams to be produced are mentioned, such as coarse slag, gasification (molten) slag, fine solids, wastewater treatment plant sludge, iron sludge, elemental sulfur, and spent catalysts. In general, please provide more detail in the final EIS for materials such as “coarse slag” and “molten slag”.

Response:

As discussed in Sections 2.1.2.1 and 2.1.6.3, the mineral content of the gasifier feed would melt inside the gasifier, collect in a water-filled compartment at the bottom of gasifier vessel and cool, forming solid slag. The liquid form that would exist only inside the gasifier is referred to in the EIS text as “molten slag.” Solidified slag would be crushed; the resulting crushed slag is referred to in the EIS text as “coarse slag.”

Comment 49-3

[I]t would assist the Department to have a physical and chemical characterization of the coarse slags, fine solids, wastewater treatment sludge, iron sludge, and spent catalysts. This additional description will allow the Department to better characterize the coarse and molten slag to be used in mine reclamation (back filling of mining pits) under the coal ash provisions of the residual waste regulations.

Response: WMPI has not completed the detailed engineering and process testing necessary to allow detailed physical and chemical characterization of process solid wastes. Assessment of impacts in the EIS is based on estimated waste characteristics (Section 4.1.8.2). Before any project waste could be beneficially reused or disposed, comprehensive characterization data would need to be provided to the Pennsylvania Department of Environmental Protection as a basis for evaluation under the residual waste regulations.

No molten slag would be used in mine reclamation.

Comment 49-4

The draft EIS states that WMPI will attempt to sell the coarse slag that will be produced as a byproduct. As per the Department’s current residual waste regulations, the coarse slag would have to be determined to be a “coproduct” or be covered by a general permit for beneficial use prior to its use.

Response:

Sections 2.1.6.3 and 7.2 have been revised to include additional information about the Pennsylvania Department of Environmental Protection requirements for marketing and disposal of residual materials.

Comment 49-5

Pine Grove Landfill located in Schuylkill County is currently closed. Please note, Pine Grove has submitted an expansion application to the Department which is currently under review.

Response:

Updated information on the status of Pine Grove Landfill has been included in Section 3.8.

Comment 49-6

Open burning of cleared trees and other vegetation may require a permit. It is recommended that land clearing waste should be mulched and/or composted rather than burned.

Response:

As discussed in Section 7.3, any open burning for disposal of land-clearing debris would be subject to the requirements of Mahanoy Township Ordinance 2006-3, known as the Mahanoy Township Burning Ordinance, which regulates and restricts outdoor fires. Section 4.1.8.1 discusses the possibility of composting as an alternative to open burning.

Comment 49-7

The burial of non-hazardous construction and consumable waste (e.g., paints, greases, lubricants, and cleaning compounds, etc.) is prohibited pursuant to the Solid Waste Management Act (Act 97). This waste must be disposed at a municipal waste or construction/demolition waste landfill.

Response:

As discussed in Section 4.1.8.1, it is expected that any excess or surplus supplies of new materials would be returned to vendors or retained for future use by WMPI or its construction contractors. Materials not suitable for reuse could be disposed at one of the commercially available solid waste landfills in the region (Section 3.8).

Comments 49-8 and 49-9

To assist in project development, (see Section 7.2), the beneficial use of gasifier slag for aggregate, asphalt roofing, etc. would require either a coproduct determination, or a general permit from DEP's Waste Management Program. The use of this material for mine reclamation would likely require an approval from the DEP's Mining Program.

The landfill disposal of any of the waste streams (i.e., spent catalysts, wastewater treatment sludge and elemental sulfur, etc.) to be produced would require a Form U (Request to Process or Dispose of Residual Waste) approval from DEP's Waste Management Program, prior to disposal.

Response:

As a result of these comments, additional information about the Pennsylvania Department of Environmental Protection requirements has been included in Section 7.2.

Comment 49-10

A waste management permit may not be required for the use of slag or bottom ash produced as a construction aggregate, antiskid material, or road preparation material, provided it can be adequately demonstrated that these waste materials are chemically and physically similar to a typical coal ash produced in Pennsylvania. However, certain requirements outlined in the residual waste regulations will have to be met before this usage is allowed.

Response:

Clarification of the PDEP requirement has been added to Section 7.2.

Comment 49-11

The DEIS implies that the discharge from the proposed plant will be routed to the tailing ponds on the BD Mining Company's Surface Mine Permit, and ultimately drain to the deep mine pool. This scenario is acceptable if the water meets baseline effluent criteria.

Response:

The commenter's inference is correct. Discharge from the proposed facilities would be routed to the tailings pond on the site permitted under surface mining permit 54850202, issued to B-D Mining Company, and would ultimately seep to the underlying mine pool. Information about the Pennsylvania Department of Environmental Protection's criteria for determining the acceptability of a discharge has been incorporated in Sections 4.1.4.1 and 7.2. In addition, Section 4.1.4.1 has been revised to include assessments of the potential of (1) increased recycling of wastewaters within the proposed facility and (2) discharging facility effluents directly to Mahanoy Creek.

Comment 49-12

The DEIS implies that certain waste streams may be utilized for mine reclamation via the current coal ash beneficial use regulations. This may be allowable if the waste streams meet applicable requirements, and all other areas of concern outlined in the waste management comments are addressed. It should also be noted that if the waste streams meet the beneficial use guidelines and requirements, then the permits utilized will require some revisions (i.e., blending, tonnage, and placing, etc.) in order for DEP to approve such use.

Response:

The discussions in Section 7.2 concerning the Pennsylvania residual management and mining regulations have been expanded to incorporate the information provided in this comment.

Comment 49-13

Page 7-6 in the DEIS, paragraph one, states that the Department could waive a mine permit requirement for coal obtained from refuse material on abandoned mining

property, and sign a government financed construction contract which would cover the mining and reclamation of the site. This is acceptable when the proposed project meets the respective applicable technical guidance document (see DEP website www.dep.state.pa.us; Final Technical Guidance, document ID# 563-2000-001) requirements and respective Federal Office of Surface Mining and DEP regulations. Those requirements should be noted in the final EIS.

Response:

Information about the requirements for government-financed construction contracts has been added to Section 7.2 and Section 4.1.6.1.

Comment 49-14/15

On the plot plan, Section 2, page 2-11, there are storage tanks illustrated. If these tanks are aboveground storage tanks (AST's) as defined in 25 PA Code Chapter 245.1, and their aggregate capacity is over 21,000 gallons, then the facility would be defined as a new "large aboveground storage tank facility". Accordingly, a Site Specific Installation Permit would be required as per Chapter 245.231. Regardless of the tank capacities, if they are regulated storage tanks, they must be installed by certified installers and registered with DEP in accordance with all Chapter 245 regulations.

The draft EIS document mentions the subject of storage tanks; (i.e., a used oil tank) in Section 2.1.6, page 2-16 (Outputs, Discharges and Wastes; Liquid Discharges) making general statements regarding spill control/treatment (SPCC plans, spill control procedures, etc). Please note, within DEP's Storage Tank program, there are related "Site Specific Installation Permit" (SSIP) requirements set forth for tanks of certain specifications. DEP can provide additional regulatory requirement assistance with more detail on this particular area of the proposed project.

Response:

Information about these requirements has been added to Section 7.2. WMPI has applied for Site Specific Installation Permits; information from the permit applications is presented and discussed in Chapters 2 and 4.

Comment 49-16

The DEIS is correct in stating that there are five (5) main stacks related to the combustion process. However, to be precise in the wording, the facility will have a total of thirteen (13) stacks. Please update this information for the FEIS, to state that the five (5) main stack consists of:

A CT/HRSG Stack, a Hydrocracker Reactor Stack, a Hydrocracker Fractionator, a Heater Stack, SRU/TGTU Thermal Oxidizer Stack and the Product Loading Vent Thermal Oxidizer Stack

There are also five (5) Baghouse stacks and one (1) stack for the emergency main flare, one (1) stack for an emergency engine and one (1) stack for a carbon adsorption unit.

Response:

Sections 2.1.6.1 and 4.1.2.2 have been revised to incorporate the information provided in this comment.

Comment 49-17

As related to “emissions” as described in the DEIS modeling, acidic deposition study, the document mentions 29 tons of SO₂ emissions although the WMPI permit has a limitation of 34 tons per year; the EIS mentions 70 tons of NO_x emissions when in fact the WMPI permit has a NO_x limitation of 71.8 tons per year. The WMPI permit was issued on March 18, 2005 with Plan Approval # 54-399-034. The DEIS used values different than those contained in the application in completing their modeling. The application lists potential to emit (PTE) values for NO_x at 71.8 TPY and the PTE for SO₂ at 34.2 TPY. Again, it is unclear why the DEIS mentions 70 TPY of NO_x and 29 TPY of SO₂. In addition, the permit issued actually has a NO_x limit of 99.0 TPY and a SO₂ limit of 99.0 TPY.

Response:

The predicted SO₂ and NO_x values in the EIS were independently derived by the models described in the EIS. The predicted emissions of these compounds are lower than the permit limits, indicating that the plant is expected to operate in compliance with the PA DEP Air Quality Permit.

Comment 49-18

Mercury emissions, as well as other pollutants of concern, will be evaluated through stack testing to quantify emissions. In addition, the facility may be subject to the recently promulgated Clean Air Mercury Rule.

Response:

After the facility is built and operating, regulations require that continuous emission monitors (CEMs) be used to monitor SO₂, NO_x, and CO. In addition, Pennsylvania DEP plans to require stack testing for PM₁₀ (particulate matter) and mercury. The facility would be required to comply with the recently promulgated Clean Air Mercury Rule as it is an applicable regulation.

Comment 49-19

An application for a water quality permit has been submitted and DEP is working with the applicant to address design loadings, size of the treatment units, expected removal efficiency and expected effluent quality.

Response:

Sections 2.1.6.2 and 4.1.4.1 have been revised to incorporate and analyze information from the water quality permit application.

Comment 49-20

The EIS should describe the process followed that determined no watercourses or wetlands are located in the plant location/vicinity.

Response:

Section 4.1.5.2 has been modified to include and describe the results of a wetland survey conducted on the WMPI property from which the conclusions were drawn.

Comment 49-21

The EIS should address any potentially adverse environmental effects to groundwater and surface water resources.

Response:

Potential effects to groundwater and surface water resources are discussed in Section 4.1.4.

Received by NEIL
opened 2/17/06
COMMITTEES



House of Representatives
COMMONWEALTH OF PENNSYLVANIA
HARRISBURG

February 13, 2006

- GAME AND FISHERIES
- VICE CHAIRMAN
- INSURANCE
- LABOR RELATIONS
- POLICY
- VETERANS AFFAIRS AND EMERGENCY PREPAREDNESS

CAUCUSES

- COAL
- IRISH
- NORTHEAST DELEGATION
- PA FIREFIGHTERS AND EMERGENCY SERVICES
- SPORTSMEN'S

- NEAL P. GOODMAN, MEMBER
123RD LEGISLATIVE DISTRICT
109B EAST WING
HOUSE BOX 202020
HARRISBURG, PENNSYLVANIA 17120-2020
PHONE: (717) 787-2788
FAX: (717) 787-0861
- P.O. BOX 66
39 W. CENTRE STREET
MAHANAY CITY, PENNSYLVANIA 17948
PHONE: (570) 773-3075
FAX: (570) 773-3105
TOLL-FREE: (866) 861-1311
- P.O. BOX 97
18 NORTH 2ND STREET
ST. CLAIR, PENNSYLVANIA 17970
PHONE: (570) 429-1222
- 615 CENTRE STREET
ASHLAND, PENNSYLVANIA 17921
PHONE: (570) 875-2722

Ms. Janice Bell
NEPA Document Manager
National Energy Technology Laboratory
P.O. Box 10940, MS 58/247A
Pittsburgh, PA 15236

Dear Ms. Bell:

As State Representative of the 123rd Legislative District in which the Gilberton Coal-to-Clean Fuels and Power Project will be located, I am writing this letter in support of this project.

50-1

This project will create over 1,500 permanent jobs and will go a long way in reclaiming much of the scarred landscape left behind by earlier generations. It will improve our environment and at the same time, reduce dependency on foreign fuels. Coal has always been the industry that has fueled the economic industry of Schuylkill County. This new technology will provide the constituents of my district with cutting edge jobs while at the same time allowing many of our unionized craftsmen who live in the area the opportunity to work close to home.

50-2

Should you have any questions, please feel free to contact me at 570-773-3075.

Sincerely,

Neal P. Goodman
State Representative
123rd Legislative District

NPG/lar

cc: John W. Rich, Jr.

Governor Edward G. Rendell

Representative Bob Allen

Representative Dave Argall

Senator James Rhoades

Gary Martin

Frank Zukas

Goodman, Neal P. (50)

Comment 50-1

As State Representative of the 123rd Legislative District in which the Gilberton Coal-to-Clean Fuels and Power Project will be located, I am writing this letter in support of this project.

Response:

The comment has been noted.

Comment 50-2

This project will create over 1,500 permanent jobs and will go a long way in reclaiming much of the scarred landscape left behind by earlier generations. It will improve our environment and at the same time, reduce dependency on foreign fuels. Coal has always been the industry that has fueled the economic industry of Schuylkill County. This new technology will provide the constituents of my district with cutting edge jobs while at the same time allowing many of our unionized craftsmen who live in the area the opportunity to work close to home.

Response:

Please note that the commenter reports that the proposed project would create over 1,500 permanent jobs. However, we estimate that job creation would average 517 persons during construction and would be only about 150 persons after the three-year demonstration period (Section 4.1.7). Induced and indirect jobs would substantially increase the employment effects of the proposal.