-Booklet-

42-04

Ash Data Summary Report for Ash Disposal: Petroleum Coke Test Burn, Unit 1, Phase II Roanoke Valley Energy Facility

Oct. 1998

CF 42-04

LG&EPOWER SM

LG&E Power Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626
714-241-4700
714-241-4793 FAX

October 19, 1998

Ms. Sherri Coghill
Environmental Engineer
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
Post Office. Box 29603
Raleigh, North Carolina 27611-9603

Subject: Ash Data Summary Report for Ash Disposal
Petroleum Coke Test Burn, Unit I, Phase II
Roanoke Valley Energy Facility

Dear Ms. Coghill:

Please find enclosed compiled laboratory ash data for the petroleum coke test burn, Phase II, performed on the Unit I boiler at the Roanoke Valley Energy Facility. Although the ash disposal data has previously been submitted to you in various other correspondences during the test burn, we are providing the information in this document for easy reference and for record keeping purposes. The data is appropriately categorized with each section specifically identified. Each unique sample is labeled and numbered, and the ash type and analysis performed is also indicated. We have also prepared and included a summary table of all the fly ash and bottom ash disposal data. In addition, we have included the beneficial reuse ash data summary table for your information. Mr. Bill Hocutt will receive the complete document with all the laboratory data for his review and determination of the 25% mixed ash for beneficial reuse. We are also sending him a copy of the document we prepared for you for informational purposes and for determination of other beneficial uses of the bottom ash since it is no longer used for landfill daily cover.

We appreciate all your efforts regarding this project. Should you have any questions or require additional information, do not hesitate to call me at (714) 241-4773.

Sincerely,

Maggie T. Estrada
Senior Project Manager
Environmental Services

Enclosures

cc: C. Braun
B. Holden
Q. Morrison
B. Noble
esd/rvp.3.6

PET COKE

Disposal and Other Beneficial Uses
Summary Table

PETROLEUM COKE TEST BURN PHASE II
SUMMARY OF ASH DATA RESULTS FOR DISPOSAL AND OTHER BENEFICIAL USE
Roanoke Valley Energy Facility - Unit I

Parameter	Regulatory Level	Quantitative Limit (QL)	Pet Coke					
			15%		20%		25%	
			Fly Ash	Bottom Ash	Fly Ash	Bottom Ash	Fly Ash	Bottom Ash
			0	0	0	0	0	0
Metals								
TCLP (mg/l)								
Arsenic	5.0	0.002	0.364	0.025	0.131	0.017	0.021	0.010
Barium	100.0	0.005	1.93	1.50	2.99	1.50	2.00	1.52
Cadmium	1.0	0.0005	0.0008	<0.0005	0.0021	0.0028	<0.0005	<0.0005
Chromium	5.0	0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005
Lead	5.0	0.005	<0.005	0.007	0.006	0.010	<0.005	<0.005
Mercury	0.2	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Selenium	1.0	0.005	0.272	<0.005	0.053	0.007	0.047	<0.005
Silver	5.0	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	---	0.005	1.66	0.300	2.23	0.531	3.36	0.693
TCLP Organics								
Volatiles and Semi-volatiles (mg/l) (1)								
Benzene	0.5	0.001	---	<0.001	---	<0.001	---	<0.001
Carbon Tetrachloride	0.5	0.0005	---	<0.0005	---	<0.0005	---	<0.0005
Chlorobenzene	100.0	0.001	---	<0.001	---	<0.001	---	<0.001
Chloroform	6.0	0.0005	---	<0.0005	---	<0.0005	---	<0.0005
o-Cresol	200.0	0.005	---	<0.005	---	<0.005	---	<0.005
m-Cresol	200.0	0.001	---	<0.001	---	<0.001	---	<0.001
p-Cresol	200.0	0.001	---	<0.001	---	<0.001	---	<0.001
Cresol	200.0	0.005	---	<0.005	---	<0.005	---	<0.005
1,4-dichlorobenzene	7.5	0.001	---	<0.001	---	<0.001	---	<0.001
1,2-dichloroethane	0.5	0.0005	---	<0.0005	---	<0.0005	---	<0.0005
1,1-dichloroethylene	0.7	0.001	---	<0.001	---	<0.001	---	<0.001
2,4-dinitrotoluene	0.13	0.005	---	<0.005	---	<0.005	---	<0.005
Hexachlorobenzene	0.13	0.0001	---	<0.0001	---	<0.0001	---	<0.0001
Hexachloro-1,3-butadiene	0.5	0.0001	---	<0.0001	---	<0.0001	---	<0.0001

PETROLEUM COKE TEST BURN PHASE II
SUMMARY OF ASH DATA RESULTS FOR DISPOSAL AND OTHER BENEFICIAL USE
Roanoke Valley Energy Facility - Unit I

Parameter	Regulatory Level	Quantitative Limit (QL)	Pet Coke					
			15%		20%		25%	
			Fly Ash	Bottom Ash	Fly Ash	Bottom Ash	Fly Ash	Bottom Ash
			0	0	0	0	0	0
TCLP Organics (Continued) Volatiles and Semi-volatiles (mg/l) (1)								
Hexachloroethane	3.0	0.0001	---	<0.0001	---	<0.0001	---	<0.0001
Methyl ethyl ketone	200.0	0.100	---	<0.100	---	<0.100	---	<0.100
Nitrobenzene	2.0	0.005	---	<0.005	---	<0.005	---	<0.005
Pentachlorophenol	100.0	0.0002	---	<0.0002	---	<0.0002	---	<0.0002
Pyridine	5.0	0.500	---	<0.500	---	<0.500	---	<0.500
Tetrachloroethylene	0.7	0.0005	---	<0.0005	---	<0.0005	---	<0.0005
Trichloroethylene	0.5	0.001	---	<0.001	---	<0.001	---	<0.001
2,4,5-trichlorophenol	400.0	0.005	---	<0.005	---	<0.005	---	<0.005
2,4,6-trichlorophenol	2.0	0.005	---	<0.005	---	<0.005	---	<0.005
Vinyl Chloride	0.2	0.0005	---	<0.0005	---	<0.0005	---	<0.0005

Notes:

(1) No pesticides or herbicide.

15% PET COKE

15% PET COKE

Disposal Analysis (Fly Ash)

Sample No. 0
(98-8524)

TCLP Metals
Miscellaneous

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax		
ATTN:	Rob Reynolds				
ADDRESS:	Railroad Street, P.O. Box 351				
CITY:	Weldon, NC 27890				
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	7/7/98	TIME:	0930
FAX:					
		RECEIVED BY:	FPE		
		GRAB COLLECTION DATE:	7/2/98	GRAB TIME:	1200
SPECIAL NOTES: RE: Pet Cake Test Burn - 15% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time		
		COLLECTED BY:	LG&E Partners - Westmoreland		
		PICKED UP BY:	LG&E Partners - Westmoreland		
		NUMBER OF CONTAINERS:	4	Condition	(x)GOOD ( )OTHER
		EXPLAIN			

SAMPLE ID: Air Heater 2%/Surge Bin 98% (15% Ash)

SAMPLE NO: 98-8524

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.364	HS-07/10/98 @ 1215
Barium	D005	6010A	0.005	100.0		1.93	HS-07/10/98 @ 1215
Cadmium	D006	6010A	0.0005	1.0		0.0008	HS-07/10/98 @ 1215
Chromium	D007	6010A	0.005	5.0		0.025	HS-07/10/98 @ 1215
Lead	D008	6010A	0.005	5.0		<0.005	HS-07/10/98 @ 1215
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/10/98 @ 1030
Selenium	D010	6010A	0.005	1.0		0.272	HS-07/10/98 @ 1215
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/10/98 @ 1215
Vanadium		6010A	0.005			1.66	HS-07/10/98 @ 1215

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne
Laboratory Director

DATE: July 10, 1998

CLIENT: LG&E

SAMPLE ID: Air Heater 2%/Surge Bin 98% (15% Ash)

SAMPLE NO: 98-8524

Pres.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Carbon (Dry Basis)	ASTM D3178	N/A		7.05%	HRT-07/09/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		7.26%	HRT-07/09/98
	Nickel	6010A	0.248		51.0	HS-07/10/98 @ 1238
	Vanadium	6010A	0.248		445	HS-07/10/98 @ 1238
	pH	9045	N/A		12.3 @ 20°C	SKH-07/07/98 @ 1100

15% PET COKE

Disposal and Other Beneficial Use (Bottom Ash)

Sample No. 0
(98-8525)

TCLP Metals
Miscellaneous
TCLP Organics

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax		
ATTN:	Rob Reynolds				
ADDRESS:	Railroad Street, P.O. Box 351				
CITY:	Weldon, NC 27890				
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	7/7/98	TIME:	0930
FAX:					
		RECEIVED BY:	FPE		
		GRAB COLLECTION DATE:	7/2/98	GRAB TIME:	1200
SPECIAL NOTES: RE: Pet Cake Test Burn - 15% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time		
		COLLECTED BY:	LG&E Partners - Westmoreland		
		PICKED UP BY:	LG&E Partners - Westmoreland		
		NUMBER OF CONTAINERS:	3	Condition	(x)GOOD ( )OTHER
		EXPLAIN			

SAMPLE ID: Bottom (15% Ash)

SAMPLE NO: 98-8525

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.025	HS-07/10/98 @ 1220
Barium	D005	6010A	0.005	100.0		1.50	HS-07/10/98 @ 1220
Cadmium	D006	6010A	0.0005	1.0		<0.0005	HS-07/10/98 @ 1220
Chromium	D007	6010A	0.005	5.0		<0.005	HS-07/10/98 @ 1220
Lead	D008	6010A	0.005	5.0		0.007	HS-07/10/98 @ 1220
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/10/98 @ 1030
Selenium	D010	6010A	0.005	1.0		<0.005	HS-07/10/98 @ 1220
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/10/98 @ 1220
Vanadium		6010A	0.005			0.300	HS-07/10/98 @ 1220

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne
Laboratory Director

DATE: July 10, 1998

CLIENT: LG&E	
SAMPLE ID: Bottom (15% Ash)	
SAMPLE NO: 98-8525	

Pres.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Carbon (Dry Basis)	ASTM D3178	N/A		0.11%	HRT-07/09/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		2.79%	HRT-07/09/98
	Nickel	6010A	0.481		16.6	HS-07/10/98 @ 1243
	Vanadium	6010A	0.481		74.0	HS-07/10/98 @ 1243
	pH	9045	N/A		9.5 @ 20°C	SKH-07/07/98 @ 1100

CLIENT: LG&E

SAMPLE ID: Bottom (15% Ash)

SAMPLE NO: 98-8525

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit (mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE (continued)							
Benzene	D018	8260	0.001	0.5		<0.001	TAG-07/11/98 @ 1144
Carbon Tetrachloride	D019	8260	0.0005	0.5		<0.0005	TAG-07/11/98 @ 1144
Chlorobenzene	D021	8260	0.001	100.0		<0.001	TAG-07/11/98 @ 1144
Chloroform	D022	8260	0.0005	6.0		<0.0005	TAG-07/11/98 @ 1144
o-Cresol	D023	8270	0.005	200.0		<0.005	CLH-07/16/98 @ 1714
m-Cresol	D024	8270	0.001	200.0		<0.001	CLH-07/16/98 @ 1714
p-Cresol	D025	8270	0.001	200.0		<0.001	CLH-07/16/98 @ 1714
Cresol	D026	8270	0.005	200.0		<0.005	CLH-07/16/98 @ 1714
1,4-dichlorobenzene	D027	8260	0.001	7.5		<0.001	TAG-07/11/98 @ 1144
1,2-dichloroethane	D028	8260	0.0005	0.5		<0.0005	TAG-07/11/98 @ 1144
1,1-dichloroethylene	D029	8260	0.001	0.7		<0.001	TAG-07/11/98 @ 1144
2,4-dinitrotoluene	D030	8270	0.005	0.13		<0.005	CLH-07/16/98 @ 1714
Hexachlorobenzene	D032	8270	0.0001	0.13		<0.0001	CLH-07/16/98 @ 1714
Hexachloro-1,3-butadiene	D033	8270	0.0001	0.5		<0.0001	CLH-07/16/98 @ 1714
Hexachloroethane	D034	8270	0.0001	3.0		<0.0001	CLH-07/16/98 @ 1714
Methyl ethyl ketone	D035	8260	0.100	200.0		<0.100	TAG-07/11/98 @ 1144
Nitrobenzene	D036	8270	0.005	2.0		<0.005	CLH-07/16/98 @ 1714
Pentachlorophenol	D037	8270	0.0002	100.0		<0.0002	CLH-07/16/98 @ 1714
Pyridine	D038	8270	0.500	5.0		<0.500	CLH-07/16/98 @ 1714
Tetrachloroethylene	D039	8260	0.0005	0.7		<0.0005	TAG-07/11/98 @ 1144
Trichloroethylene	D040	8260	0.001	0.5		<0.001	TAG-07/11/98 @ 1144
2,4,5-trichlorophenol	D041	8270	0.005	400.0		<0.005	CLH-07/16/98 @ 1714
2,4,6-trichlorophenol	D042	8270	0.005	2.0		<0.005	CLH-07/16/98 @ 1714
Vinyl Chloride	D043	8260	0.0005	0.2		<0.0005	TAG-07/11/98 @ 1144

20% PET COKE

20% PET COKE

Disposal Analysis (Fly Ash)

Sample No. 0
(98-9503)

TCLP Metals
Miscellaneous

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax		
ATTN:	Rob Reynolds				
ADDRESS:	Railroad Street, P.O. Box 351				
CITY:	Weldon, NC 27890				
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	7/22/98	TIME:	1300
FAX:					
		RECEIVED BY:	FPE		
		GRAB COLLECTION DATE:	7/16/98	GRAB TIME:	1200
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 20% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time		
		COLLECTED BY:	LG&E Partners - Westmoreland		
		PICKED UP BY:	LG&E Partners - Westmoreland		
		NUMBER OF CONTAINERS:	4	Condition	(x)GOOD ( )OTHER
		EXPLAIN			

SAMPLE ID: Air Heater 2%/Surge Bin 98% (20% Ash)

SAMPLE NO: 98-9503

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.131	HS-07/24/98 @ 2144
Barium	D005	6010A	0.005	100.0		2.99	HS-07/24/98 @ 2144
Cadmium	D006	6010A	0.0005	1.0		0.0021	HS-07/24/98 @ 2144
Chromium	D007	6010A	0.005	5.0		<0.005	HS-07/24/98 @ 2144
Lead	D008	6010A	0.005	5.0		0.006	HS-07/24/98 @ 2144
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/24/98 @ 1030
Selenium	D010	6010A	0.005	1.0		0.053	HS-07/24/98 @ 2144
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/24/98 @ 2144
Vanadium		6010A	0.005			2.23	HS-07/24/98 @ 2144

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: July 27, 1998

CLIENT: LG&E

SAMPLE ID: Air Heater 2%/Surge Bin 98% (20% Ash)

SAMPLE NO: 98-9503

Pres.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Nickel	6010A	0.247		112	HS-07/24/98 @ 1403
	Vanadium	6010A	0.247		800	HS-07/24/98 @ 1403
	pH	9045	N/A		12.2 @ 20°C	SKH-07/22/98 @ 1430
	Carbon (Dry Basis)	ASTM D3178	N/A		8.40%	HRT-07/24/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		7.61%	HRT-07/24/98

20% PET COKE

Disposal and Other Beneficial Use (Bottom Ash)

Sample No. 0
(98-9504)

TCLP Metals
Miscellaneous
TCLP Organics

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax				
ATTN:	Rob Reynolds						
ADDRESS:	Railroad Street, P.O. Box 351						
CITY:	Weldon, NC 27890						
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	7/22/98		TIME:	1300	
FAX:							
		RECEIVED BY:	FPE				
		GRAB COLLECTION DATE:	7/16/98		GRAB TIME:	1200	
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 20% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date	Start Time	End Date	End Time	
		COLLECTED BY:	LG&E Partners - Westmoreland				
		PICKED UP BY:	LG&E Partners - Westmoreland				
		NUMBER OF CONTAINERS:	3		Condition	(x)GOOD ( )OTHER	
		EXPLAIN					

SAMPLE ID: Bottom Ash (20% Ash)

SAMPLE NO: 98-9504

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.017	HS-07/24/98 @ 2149
Barium	D005	6010A	0.005	100.0		1.50	HS-07/24/98 @ 2149
Cadmium	D006	6010A	0.0005	1.0		0.0028	HS-07/24/98 @ 2149
Chromium	D007	6010A	0.005	5.0		<0.005	HS-07/24/98 @ 2149
Lead	D008	6010A	0.005	5.0		0.010	HS-07/24/98 @ 2149
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/24/98 @ 1030
Selenium	D010	6010A	0.005	1.0		0.007	HS-07/24/98 @ 2149
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/24/98 @ 2149
Vanadium		6010A	0.005			0.531	HS-07/24/98 @ 2149

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: July 27, 1998

CLIENT: LG&E

SAMPLE ID: Bottom Ash (20% Ash)

SAMPLE NO: 98-9504

Pres.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Nickel	6010A	0.476		40.0	HS-07/24/98 @ 1408
	Vanadium	6010A	0.476		5.62	HS-07/24/98 @ 1408
	pH	9045	N/A		9.3 @ 20°C	SKH-07/22/98 @ 1430
	Carbon (Dry Basis)	ASTM D3178	N/A		6.30%	HRT-07/24/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		0.13%	HRT-07/24/98
	% Solids	SM18 2540G	0.1%		52.2%	SKH-07/24/98 @ 1200

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax			
ATTN:	Rob Reynolds					
ADDRESS:	Railroad Street, P.O. Box 351					
CITY:	Weldon, NC 27890					
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	7/22/98	TIME:	1300	
FAX:						
		RECEIVED BY:	FPE			
		GRAB COLLECTION DATE:	7/16/98	GRAB TIME:	1200	
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 20% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time			
		COLLECTED BY:	LG&E Partners - Westmoreland			
		PICKED UP BY:	LG&E Partners - Westmoreland			
		NUMBER OF CONTAINERS:	3	Condition	(x)GOOD ( )OTHER	
		EXPLAIN				

SAMPLE ID: Bottom Ash (20% Ash)

SAMPLE NO: 98-9504

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Benzene	D018	8260	0.001	0.5		<0.001	TAG-07/31/98 @ 1844
Carbon Tetrachloride	D019	8260	0.0005	0.5		<0.0005	TAG-07/31/98 @ 1844
Chlorobenzene	D021	8260	0.001	100.0		<0.001	TAG-07/31/98 @ 1844
Chloroform	D022	8260	0.0005	6.0		<0.0005	TAG-07/31/98 @ 1844
o-Cresol	D023	8270	0.005	200.0		<0.005	CLH-08/05/98 @ 0816
m-Cresol	D024	8270	0.001	200.0		<0.001	CLH-08/05/98 @ 0816
p-Cresol	D025	8270	0.001	200.0		<0.001	CLH-08/05/98 @ 0816
Cresol	D026	8270	0.005	200.0		<0.005	CLH-08/05/98 @ 0816
1,4-dichlorobenzene	D027	8260	0.001	7.5		<0.001	TAG-07/31/98 @ 1844
1,2-dichloroethane	D028	8260	0.0005	0.5		<0.0005	TAG-07/31/98 @ 1844
1,1-dichloroethylene	D029	8260	0.001	0.7		<0.001	TAG-07/31/98 @ 1844

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: October 16, 1998

CLIENT: LG&E

SAMPLE ID: Bottom Ash (20% Ash)

SAMPLE NO: 98-9504

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit (mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE (continued)							
2,4-dinitrotoluene	D030	8270	0.005	0.13		<0.005	CLH-08/05/98 @ 0816
Hexachlorobenzene	D032	8270	0.0001	0.13		<0.0001	CLH-08/05/98 @ 0816
Hexachloro-1,3-butadiene	D033	8270	0.0001	0.5		<0.0001	CLH-08/05/98 @ 0816
Hexachloroethane	D034	8270	0.0001	3.0		<0.0001	CLH-08/05/98 @ 0816
Methyl ethyl ketone	D035	8260	0.100	200.0		<0.100	TAG-07/31/98 @ 1844
Nitrobenzene	D036	8270	0.005	2.0		<0.005	CLH-08/05/98 @ 0816
Pentachlorophenol	D037	8270	0.0002	100.0		<0.0002	CLH-08/05/98 @ 0816
Pyridine	D038	8270	0.500	5.0		<0.500	CLH-08/05/98 @ 0816
Tetrachloroethylene	D039	8260	0.0005	0.7		<0.0005	TAG-07/31/98 @ 1844
Trichloroethylene	D040	8260	0.001	0.5		<0.001	TAG-07/31/98 @ 1844
2,4,5-trichlorophenol	D041	8270	0.005	400.0		<0.005	CLH-08/05/98 @ 0816
2,4,6-trichlorophenol	D042	8270	0.005	2.0		<0.005	CLH-08/05/98 @ 0816
Vinyl Chloride	D043	8260	0.0005	0.2		<0.0005	TAG-07/31/98 @ 1844

25% PET COKE

25% PET COKE

Disposal Analysis (Fly Ash)

Sample No. 0
(98-10553)

TCLP Metals
Miscellaneous

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax		
ATTN:	Rob Reynolds				
ADDRESS:	Railroad Street, P.O. Box 351				
CITY:	Weldon, NC 27890				
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	8/10/98	TIME:	1155
FAX:					
		RECEIVED BY:	FPE		
		GRAB COLLECTION DATE:	8/7/98	GRAB TIME:	0800
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 25% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time		
		COLLECTED BY:	LG&E Partners - Westmoreland		
		PICKED UP BY:	LG&E Partners - Westmoreland		
		NUMBER OF CONTAINERS:	4	Condition	(x)GOOD ( )OTHER
		EXPLAIN			

SAMPLE ID: Air Heater 2%/Surge Bin 98% (25% Ash)

SAMPLE NO: 98-10553

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.021	HS-08/13/98 @ 1646
Barium	D005	6010A	0.005	100.0		2.00	HS-08/13/98 @ 1646
Cadmium	D006	6010A	0.0005	1.0		<0.0005	HS-08/13/98 @ 1646
Chromium	D007	6010A	0.005	5.0		<0.005	HS-08/13/98 @ 1646
Lead	D008	6010A	0.005	5.0		<0.005	HS-08/13/98 @ 1646
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-08/14/98 @ 1130
Selenium	D010	6010A	0.005	1.0		0.047	HS-08/13/98 @ 1646
Silver	D011	6010A	0.001	5.0		<0.001	HS-08/13/98 @ 1646
Vanadium		6010A	0.005			3.36	HS-08/13/98 @ 1646

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: August 14, 1998

CLIENT: LG&E

SAMPLE ID: Air Heater 2%/Surge Bin 98% (25% Ash)

SAMPLE NO: 98-10553

Pres.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Nickel	6010A	0.247		133	HS-08/13/98 @ 1631
	Vanadium	6010A	0.247		1150	HS-08/13/98 @ 1631
	pH	9045	N/A		12.0 @ 20°C	SKH-08/12/98 @ 1000
	Carbon (Dry Basis)	ASTM D3178	N/A		8.19%	HRT-08/13/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		8.25%	HRT-08/13/98

25% PET COKE

Disposal and Other Beneficial Use (Bottom Ash)

Sample No. 0
(98-10554)

TCLP Metals
Miscellaneous
TCLP Organics

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax		
ATTN:	Rob Reynolds				
ADDRESS:	Railroad Street, P.O. Box 351				
ITY:	Weldon, NC 27890				
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	8/10/98	TIME:	1155
FAX:					
		RECEIVED BY:	FPE		
		GRAB COLLECTION DATE:	8/7/98	GRAB TIME:	0800
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 25% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time		
		COLLECTED BY:	LG&E Partners - Westmoreland		
		PICKED UP BY:	LG&E Partners - Westmoreland		
		NUMBER OF CONTAINERS:	4	Condition	(x)GOOD ( )OTHER
		EXPLAIN			

SAMPLE ID: Bottom Ash (25% Ash)

SAMPLE NO: 98-10554

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.010	HS-08/13/98 @ 1651
Barium	D005	6010A	0.005	100.0		1.52	HS-08/13/98 @ 1651
Cadmium	D006	6010A	0.0005	1.0		<0.0005	HS-08/13/98 @ 1651
Chromium	D007	6010A	0.005	5.0		<0.005	HS-08/13/98 @ 1651
Lead	D008	6010A	0.005	5.0		<0.005	HS-08/13/98 @ 1651
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-08/14/98 @ 1130
Selenium	D010	6010A	0.005	1.0		<0.005	HS-08/13/98 @ 1651
Silver	D011	6010A	0.001	5.0		<0.001	HS-08/13/98 @ 1651
Vanadium		6010A	0.005			0.693	HS-08/13/98 @ 1651

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: August 14, 1998

CLIENT: LG&E

SAMPLE ID: Bottom Ash (25% Ash)

SAMPLE NO: 98-10554

Pres.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Nickel	6010A	0.247		62.5	HS-08/13/98 @ 1636
	Vanadium	6010A	0.247		308	HS-08/13/98 @ 1636
	pH	9045	N/A		9.5 @ 20°C	SKH-08/12/98 @ 1000
	Carbon (Dry Basis)	ASTM D3178	N/A		14.12%	HRT-08/13/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		0.32%	HRT-08/13/98

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax		
ATTN:	Rob Reynolds				
ADDRESS:	Railroad Street, P.O. Box 351				
ITY:	Weldon, NC 27890				
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	8/10/98	TIME:	1155
FAX:					
		RECEIVED BY:	FPE		
		GRAB COLLECTION DATE:	8/7/98	GRAB TIME:	0800
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 25% Pet Coke Ash		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time		
		COLLECTED BY:	LG&E Partners - Westmoreland		
		PICKED UP BY:	LG&E Partners - Westmoreland		
		NUMBER OF CONTAINERS:	3	Condition	(x)GOOD ( )OTHER
		EXPLAIN			

SAMPLE ID: Bottom Ash (25% Ash)

SAMPLE NO: 98-10554

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Benzene	D018	8260	0.001	0.5		<0.001	TAG-08/20/98 @ 2109
Carbon Tetrachloride	D019	8260	0.0005	0.5		<0.0005	TAG-08/20/98 @ 2109
Chlorobenzene	D021	8260	0.001	100.0		<0.001	TAG-08/20/98 @ 2109
Chloroform	D022	8260	0.0005	6.0		<0.0005	TAG-08/20/98 @ 2109
o-Cresol	D023	8270	0.005	200.0		<0.005	CLH-08/17/98 @ 1327
m-Cresol	D024	8270	0.001	200.0		<0.001	CLH-08/17/98 @ 1327
p-Cresol	D025	8270	0.001	200.0		<0.001	CLH-08/17/98 @ 1327
Cresol	D026	8270	0.005	200.0		<0.005	CLH-08/17/98 @ 1327
1,4-dichlorobenzene	D027	8260	0.001	7.5		<0.001	TAG-08/20/98 @ 2109
1,2-dichloroethane	D028	8260	0.0005	0.5		<0.0005	TAG-08/20/98 @ 2109
1,1-dichloroethylene	D029	8260	0.001	0.7		<0.001	TAG-08/20/98 @ 2109

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: September 11, 1998

CLIENT: LG&E

SAMPLE ID: Bottom Ash (25% Ash)

SAMPLE NO: 98-10554

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit (mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE (continued)							
2,4-dinitrotoluene	D030	8270	0.005	0.13		<0.005	CLH-08/17/98 @ 1327
Hexachlorobenzene	D032	8270	0.0001	0.13		<0.0001	CLH-08/17/98 @ 1327
Hexachloro-1,3-butadiene	D033	8270	0.0001	0.5		<0.0001	CLH-08/17/98 @ 1327
Hexachloroethane	D034	8270	0.0001	3.0		<0.0001	CLH-08/17/98 @ 1327
Methyl ethyl ketone	D035	8260	0.100	200.0		<0.100	TAG-08/20/98 @ 2109
Nitrobenzene	D036	8270	0.005	2.0		<0.005	CLH-08/17/98 @ 1327
Pentachlorophenol	D037	8270	0.0002	100.0		<0.0002	CLH-08/17/98 @ 1327
Pyridine	D038	8270	0.500	5.0		<0.500	CLH-08/17/98 @ 1327
Tetrachloroethylene	D039	8260	0.0005	0.7		<0.0005	TAG-08/20/98 @ 2109
Trichloroethylene	D040	8260	0.001	0.5		<0.001	TAG-08/20/98 @ 2109
2,4,5-trichlorophenol	D041	8270	0.005	400.0		<0.005	CLH-08/17/98 @ 1327
2,4,6-trichlorophenol	D042	8270	0.005	2.0		<0.005	CLH-08/17/98 @ 1327
Vinyl Chloride	D043	8260	0.0005	0.2		<0.0005	TAG-08/20/98 @ 2109

PET COKE

Beneficial ReUse
Summary Table

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
Metals														
TCLP (mg/l)														
Arsenic	5.0	0.002	0.392	0.638	0.469	0.094	0.117	0.139	0.014	0.005	0.008	0.062	0.189	0.053
Barium	100.0	0.005	0.738	2.41	0.899	1.43	1.24	1.36	1.94	2.90	2.13	0.892	2.16	0.825
Cadmium	1.0	0.0005	0.0014	0.0098	0.0017	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	0.0013	0.0010	0.0015
Chromium	5.0	0.005	0.042	0.043	0.047	0.006	0.008	0.007	<0.005	0.006	<0.005	0.010	0.029	0.006
Lead	5.0	0.005	0.007	<0.005	0.007	<0.005	<0.005	0.007	<0.005	0.036	<0.005	<0.005	<0.005	<0.005
Mercury	0.2	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Selenium	1.0	0.005	0.384	0.426	0.397	0.180	0.163	0.147	0.050	0.027	0.036	0.296	0.362	0.263
Silver	5.0	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	---	0.005	0.122	0.162	0.142	2.01	1.97	2.16	3.41	0.462	2.64	0.079	0.131	0.070
Total (mg/kg)														
Aluminum	---	2.49	12,400 (1.24%)	13,800 (1.38%)	12,100 (1.21%)	7,840 (0.784%)	7,840 (0.784%)	7,810 (0.781%)	9,060 (0.906%)	9,940 (0.994%)	9,330 (0.933%)	10,700 (1.07%)	11,100 (1.11%)	11,800 (1.18%)
Antimony	---	0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Arsenic	---	0.10	50.4	50.0	47.6	34.7	34.9	34.8	29.4	30.4	29.3	42.7	41.5	44.0
Barium	---	0.25	302	366	163	234	229	230	247	265	252	74.8	150	131
Beryllium	---	0.025	2.95	3.34	2.94	1.59	1.54	1.63	1.38	1.44	1.39	2.43	2.32	2.37
Cadmium	---	0.025	<0.025	<0.025	<0.025	0.079	0.089	0.094	<0.025	<0.025	<0.025	0.046	0.082	<0.025
Calcium	---	0.50	92,600 (9.26%)	82,300 (8.23%)	84,400 (8.44%)	47,600 (4.76%)	47,300 (4.73%)	48,200 (4.82%)	84,900 (8.49%)	87,200 (8.72%)	84,900 (8.49%)	59,800 (5.98%)	60,300 (6.03%)	59,100 (5.91%)
Chromium	---	0.25	16.7	18.3	16.5	10.2	10.1	10.2	10.4	11.2	10.7	14.8	14.3	14.9
Cobalt	---	0.25	7.86	9.16	7.98	6.07	5.82	6.08	6.14	6.36	6.06	7.09	6.96	7.08
Copper	---	0.25	40.3	42.1	38.0	23.9	24.2	24.3	20.7	21.7	20.7	29.0	28.6	29.9
Iron	---	1.25	8,220 (0.822%)	9,330 (0.933%)	8,460 (0.846%)	5,570	5,470	5,440	6,880	7,260	6,940	8,680	8,020	8,460
Lead	---	0.25	21.2	22.4	20.0	11.2	11.2	11.0	10.3	10.6	10.3	11.6	12.7	13.4
Magnesium	---	1.25	1,500	1,520	1,410	1,140	1,140	1,160	1,500	1,590	1,520	1,310	1,280	1,350
Manganese	---	0.25	30.6	32.6	32.4	33.1	33.2	31.7	35.6	38.0	36.2	28.7	28.2	31.2
Mercury	---	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	---	0.25	5.68	5.59	5.24	3.50	3.55	3.46	3.91	4.13	3.91	3.79	3.82	4.01

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
Metals (Continued) Total (mg/kg)														
Nickel	---	0.25	14.6	16.3	14.6	56.7	55.2	55.9	109	112	106	13.8	13.1	13.9
Potassium	---	1.25	1,410	1,510	1,350	1,020	1,010	1,030	1,360	1,490	1,390	1,310	1,400	1,510
Selenium	---	0.25	13.7	13.3	12.3	7.25	7.54	7.61	6.43	6.66	6.40	10.4	10.2	10.5
Silver	---	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sodium	---	24.9	587	601	564	377	370	374	421	431	416	425	427	405
Thallium	---	0.25	2.34	2.82	22.4	0.838	0.690	0.742	<0.25	<0.25	<0.25	1.15	1.26	<0.25
Titanium	---	0.25	480	538	491	291	292	295	318	337	320	378	381	377
Vanadium	---	0.25	44.4	47.4	42.8	513	518	519	911	905	864	38.0	37.5	40.6
Zinc	---	0.25	32.9	34.9	31.5	16.9	17.0	16.7	19.6	20.2	20.4	21.1	22.1	22.5
TCLP Organics Volatiles and Semi-volatiles (mg/l) (1)														
Benzene	0.5	0.001	---	<0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
Carbon Tetrachloride	0.5	0.0005	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---
Chlorobenzene	100.0	0.001	---	<0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
Chloroform	6.0	0.0005	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---
o-Cresol	200.0	0.005	---	<0.005	---	---	<0.005	---	---	<0.005	---	---	<0.005	---
m-Cresol	200.0	0.001	---	<0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
p-Cresol	200.0	0.001	---	<0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
Cresol	200.0	0.005	---	<0.005	---	---	<0.005	---	---	<0.005	---	---	<0.005	---
1,4-dichlorobenzene	7.5	0.001	---	0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
1,2-dichloroethane	0.5	0.0005	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---
1,1-dichloroethylene	0.7	0.001	---	<0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
2,4-dinitrotoluene	0.13	0.005	---	<0.005	---	---	<0.005	---	---	<0.005	---	---	<0.005	---
Hexachlorobenzene	0.13	0.0001	---	<0.0001	---	---	<0.0001	---	---	<0.0001	---	---	<0.0001	---
Hexachloro-1,3-butadiene	0.5	0.0001	---	<0.0001	---	---	<0.0001	---	---	<0.0001	---	---	<0.0001	---
Hexachloroethane	3.0	0.0001	---	<0.0001	---	---	<0.0001	---	---	<0.0001	---	---	<0.0001	---

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
TCLP Organics (Continued) Volatiles and Semi-volatiles (mg/l)														
Methyl ethyl ketone	200.0	0.100	---	<0.100	---	---	<0.100	---	---	<0.100	---	---	<0.100	---
Nitrobenzene	2.0	0.005	---	<0.005	---	---	<0.005	---	---	<0.005	---	---	<0.005	---
Pentachlorophenol	100.0	0.0002	---	<0.0002	---	---	<0.0002	---	---	<0.0002	---	---	<0.0002	---
Pyridine	5.0	0.500	---	<0.500	---	---	<0.500	---	---	<0.500	---	---	<0.500	---
Tetrachloroethylene	0.7	0.0005	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---
Trichloroethylene	0.5	0.001	---	<0.001	---	---	<0.001	---	---	<0.001	---	---	<0.001	---
2,4,5-trichlorophenol	400.0	0.005	---	<0.005	---	---	<0.005	---	---	<0.005	---	---	<0.005	---
2,4,6-trichlorophenol	2.0	0.005	---	<0.005	---	---	<0.005	---	---	<0.005	---	---	<0.005	---
Vinyl Chloride	0.2	0.0005	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---	---	<0.0005	---
8240 (8260) Scan Volatiles (mg/kg)			(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Dichlorodifluoromethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloromethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl Chloride	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Trichlorofluoromethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1-Dichloroethene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Acetone	---	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	---	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Disulfide	---	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Trans-1,2-Dichloroethene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Vinyl Acetate	---	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-Dichloroethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2,2-Dichloropropane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,2-Dichloroethene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
8240 (8260) Scan (Continued) Volatiles (mg/kg)														
2-Butanone (MEK)	---	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromochloromethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,1-Trichloroethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon Tetrachloride	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1-Dichloropropene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloroethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Trichloroethene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dibromomethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromodichloromethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2-Chloroethyl Vinyl Ether	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,3-Dichloropropene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Methyl-2-Pentanone (MIBK)	---	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Trans-1,3-Dichloropropene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2-Trichloroethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,3-Dichloropropane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2-Hexanone	---	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromochloromethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chlorobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,1,2-Tetrachlorethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
m&p-Xylene	---	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
o-Xylene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Styrene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
8240 (8260) Scan (Continued) Volatiles (mg/kg)														
Bromoform	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Isopropylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,1,2,2-Tetrachloroethane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
n-Propylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2,3-Trichloropropane	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2-Chlorotoluene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,3,5-Trimethylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Chlorotoluene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Tert-Butylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2,4-Trimethylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Sec-Butylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,3-Dichlorobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
4-Isopropyltoluene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,4-Dichlorobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
N-Butylbenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichlorobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2,3-Trichlorobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Naphthalene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2,4-Trichlorobenzene	---	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
8270 Scan Semi-volatiles (mg/kg)			(3)	(3)	(3)	(4)	(4)	(4)	(2)	(2)	(2)	(2)	(2)	(2)
Pyridine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
N-Nitrosodimethylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Picoline	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Methyl Methanesulfonate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Ethyl Methanesulfonate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Aniline	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
8270 Scan (Continued) Semi-volatiles (mg/kg)														
Phenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Chlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Bis(2-Chloroethyl)Ether	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1,3-Dichlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1,4-Dichlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1,2-Dichlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzyl Alcohol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
O-Cresol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Bis(2-Chloroisopropyl)Ether	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Hexachloroethane	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Nitrobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Acetophenone	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
m,p-Cresol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
N-Nitroso-di-n-Propylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
N-Nitrosopiperidine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Isophorone	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Nitrophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,4-Dimethylphenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Bis(2-Chloroethoxy) Methane	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,4-Dichlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1,2,4-Trichlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzoic Acid	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Naphthalene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,6-Dichlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
4-Chloroaniline	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Hexachlorobutadiene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
a,a-Dimethylphenethylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
n-Nitrosodibutylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
8270 Scan (Continued) Semi-volatiles (mg/kg)														
4-Chloro 3-Methylphenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Methylnapthalene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1,2,4,5-Tetrachlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Hexachlorocyclo-pentadiene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,4,6-Trichlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,4,5-Trichlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Chloronaphthalene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1-Chloronaphthalene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Nitroaniline	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Acenaphthylene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Dimethyl Phthalate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,6-Dinitrotoluene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Acenaphthene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
3-Nitroaniline	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
3,4-Dinitrophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
4-Nitrophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Pentachlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2-Naphthylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Dibenzofuran	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,4-Dinitrotoluene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1-Naphthylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,3,4,6-Tetrachlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Diethyl Phthalate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
4-Chlorophenyl Phenylether	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Fluorene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Thionazin	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
4,6-Dinitro-2-Methylphenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Diphenylamine & Nitrosodiphenylamine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
8270 Scan (Continued)														
Semi-volatiles (mg/kg)														
4-Nitroaniline	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
1,2-Diphenylhydrazine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Sulfotepp	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
4-Bromophenyl Phenylether	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Diallate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Phlorate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Hexachlorobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Phenacetin	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Dimethoate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
2,4-D	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
4-Aminobiphenyl	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Pentachlorophenol	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Pentachloronitrobenzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Phenanthrene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Pronamide	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Anthracene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Disulfoton	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Dinoseb	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Parathion	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
di-n-Butyl Phthalate	---	0.17	2.57	3.90	4.77	3.0	3.5	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Methyl Parathion	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Fluoranthene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzidine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Pyrene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Aramite	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Chlorobenzilate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
p-Dimethylaminoazo-benzene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Famphur	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17

PETROLEUM COKE TEST BURN - PHASE II
SUMMARY OF ASH DATA RESULTS FOR BENEFICIAL REUSE
Roanoke Valley Energy Facility
Unit I

Parameter	Regulatory Level	Quantitative Detection Limit	(Pre) 100% Coal (Fly Ash) Sample No.			15% Pet Coke (Fly Ash) Sample No.			25% Pet Coke (Fly Ash) Sample No.			(Post) 100% Coal (Fly Ash) Sample No.		
			1	3	5	1	3	5	1	3	5	1	3	5
8270 Scan (Continued) Semi-volatiles (mg/kg)														
Butylbenzylphthalate	---	0.17	0.46	0.50	<0.17	<0.17	0.23	1.63	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
3,3'-Dichlorobenzidine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Bis(2-ethylhexyl) Phthalate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.83	0.83	0.20	<0.17	<0.17	0.27
Benzo[a]Anthracene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Chrysene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
di-n-Octylphthalate	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzo[k]Fluoranthene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
7,12-Dimethylbenz[a] Anthracene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzo[b]Fluoranthene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzo[a]Pyrene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
3-Methylcholanthrene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Dibenz[a,J]Acridine	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Indeno[1,2,3-c,d]Pyrene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Dibenz[a,h]Anthracene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Benzo[g,h,i]Perylene	---	0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17

Notes:

(1) No pesticides or herbicides.

(2) Library Search showed no identifiable peaks.

(3) Library Search showed some identifiable peaks as follows: 1,2-Benzenedicarboxylic acid; butyl 2-methylpropl ester.

(4) Library Search showed some identifiable peaks as follows: Terbuthylazine; 1,2-Benzenedicarboxylic acid; butyl 2-methylpropl ester.

LG&EPOWER℠

LG&E Power Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626
714-241-4700
714-241-4793 FAX

July 27, 1998

Ms. Sherri Coghill
Environmental Engineer
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
401 Oberlin Road Building, Suite 150
Raleigh, North Carolina 27711

Subject: Submittal of 20% Mixed Ash Testing Results
Petroleum Coke Test Burn, Phase II
Roanoke Valley Energy Facility

Dear Ms. Coghill:

Please find enclosed the laboratory data results for the 20% petroleum coke ash generated during Phase II of the petroleum coke test burn performed at the Roanoke Valley Energy Facility. Both fly ash and bottom ash were tested for TCLP metals as required. The laboratory test data is attached for your review and record. Since the TCLP test results of the mixed ash at a blend of 20% are below the toxic characteristic regulatory levels, demonstrating non-toxic characteristics, the mixed ash can be designated non-hazardous. Due to this designation, the 20% mixed fly ash and bottom ash is acceptable for disposal in the Halifax County Landfill. We have also submitted these test results to Halifax County as we stated would be done in previous correspondences.

The petroleum test burn is continuing and when the 25% and 30% mixed ash test results become available, the data will be submitted to you and to the County. As agreed upon in previous correspondences, the TCLP organic testing will be performed as required and dictated in the beneficial use testing protocol for beneficial use determination purposes. The data for the various percentages will be compiled in a report and sent to you when all the data becomes available. This will allow for additional ash disposal information.

Permanent disposal of the ash will begin just after this information is faxed to you and Halifax County. Should you have any questions, do not hesitate to call me or Mr. Rob Reynolds, Plant Engineer, at the plant at (252) 536-3200.

Sincerely,

Maggie T. Estrada
Project Manager
Environmental Services

Enclosure
cc: Q. Morrison
B. Noble
G. Woods
R. Garner, Halifax County
esd/file/rvp.3.6

CLIENT:	LG&E Partners - Westmoreland	SUBMITTED BY:	James R. Reed & Associates 11864 Canon Blvd., Suite 103 Newport News, VA 23606 (757) 873-4703 phone (757) 873-1498 fax
ATTN:	Rob Reynolds		
ADDRESS:	Railroad Street, P.O. Box 351		
CITY:	Weldon, NC 27890		
PHONE:	919-536-3200	SAMPLE RECEIPT DATE:	7/22/98 TIME: 1300
FAX:		RECEIVED BY:	FPE
		GRAB COLLECTION DATE:	7/16/98 GRAB TIME: 1200
		COMPOSITE COLLECTION:	Start Date / Start Time / End Date / End Time
SPECIAL NOTES: RE: Pet Cake Test Burn (Disposal) - 20% Pet Coke Ash		COLLECTED BY:	LG&E Partners - Westmoreland
		PICKED UP BY:	LG&E Partners - Westmoreland
		NUMBER OF CONTAINERS:	4 Condition: (x)GOOD ( )OTHER
		EXPLAIN:	

SAMPLE ID: Air Heater 2%/Surge Bin 98% (20% Ash)

SAMPLE NO: 98-9503

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.131	HS-07/24/98 @ 2144
Barium	D005	6010A	0.005	100.0		2.99	HS-07/24/98 @ 2144
Cadmium	D006	6010A	0.0005	1.0		0.0021	HS-07/24/98 @ 2144
Chromium	D007	6010A	0.005	5.0		<0.005	HS-07/24/98 @ 2144
Lead	D008	6010A	0.005	5.0		0.006	HS-07/24/98 @ 2144
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/24/98 @ 1030
Selenium	D010	6010A	0.005	1.0		0.053	HS-07/24/98 @ 2144
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/24/98 @ 2144
Vanadium		6010A	0.005			2.23	HS-07/24/98 @ 2144

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: July 27, 1998

CLIENT: LG&E

SAMPLE ID: Air Heater 2%/Surge Bin 98% (20% Ash)

SAMPLE NO: 98-9503

Prep.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Nickel	6010A	0.247		112	HS-07/24/98 @ 1403
	Vanadium	6010A	0.247		800	HS-07/24/98 @ 1403
	pH	9045	N/A		12.2 @ 20°C	SKH-07/22/98 @ 1430
	Carbon (Dry Basis)	ASTM D3178	N/A		8.40%	HRT-07/24/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		7.61%	HRT-07/24/98

CLIENT:	LG&E Partners - Westmoreland
ATTN:	Rob Reynolds
ADDRESS:	Railroad Street, P.O. Box 351
CITY:	Weldon, NC 27890
PHONE:	919-536-3200
FAX:	

SUBMITTED BY: James R. Reed & Associates
11864 Canon Blvd., Suite 103
Newport News, VA 23606
(757) 873-4703 phone
(757) 873-1498 fax

SAMPLE RECEIPT DATE:	7/22/98	TIME:	1300
RECEIVED BY:	FPE		
GRAB COLLECTION DATE:	7/16/98	GRAB TIME:	1200

COMPOSITE COLLECTION:	Start Date	Start Time	End Date	End Time

COLLECTED BY:	LG&E Partners - Westmoreland		
PICKED UP BY:	LG&E Partners - Westmoreland		
NUMBER OF CONTAINERS:	3	Condition:	(x)GOOD ( )OTHER
EXPLAIN:			

SPECIAL NOTES:

RE: Pet Cake Test Burn (Disposal) - 20% Pet Coke Ash

SAMPLE ID: Bottom Ash (20% Ash)

SAMPLE NO: 98-9504

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analyst/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.017	HS-07/24/98 @ 2149
Barium	D005	6010A	0.005	100.0		1.50	HS-07/24/98 @ 2149
Cadmium	D006	6010A	0.0005	1.0		0.0028	HS-07/24/98 @ 2149
Chromium	D007	6010A	0.005	5.0		<0.005	HS-07/24/98 @ 2149
Lead	D008	6010A	0.005	5.0		0.010	HS-07/24/98 @ 2149
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/24/98 @ 1030
Selenium	D010	6010A	0.005	1.0		0.007	HS-07/24/98 @ 2149
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/24/98 @ 2149
Vanadium		6010A	0.005			0.531	HS-07/24/98 @ 2149

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne

Elaine Claiborne
Laboratory Director

DATE: July 27, 1998

CLIENT: LG&E

SAMPLE ID: Bottom Ash (20% Ash)

SAMPLE NO: 98-9504

Prefix	Parameter	Method Number	Method Detection Limit (mg/Kg)	Practical Quantitation Limit (mg/Kg)	Result (mg/Kg)	Analyst/Date/Time
	Nickel	6010A	0.476		40.0	HS-07/24/98 @ 1408
	Vanadium	6010A	0.476		5.62	HS-07/24/98 @ 1408
	pH	9045	N/A		9.3 @ 20°C	SKH-07/22/98 @ 1430
	Carbon (Dry Basis)	ASTM D3178	N/A		6.30%	HRT-07/24/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		0.13%	HRT-07/24/98
	% Solids	SM18 2540G	0.1%		52.2%	SKH-07/24/98 @ 1200

LG&EPOWER℠

LG&E Power Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626
714-241-4700
714-241-4793 FAX

July 13, 1998

Ms. Sherri Coghill
Environmental Engineer
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
401 Oberlin Road Building, Suite 150
Raleigh, North Carolina 27711

Subject: Submittal of 15% Mixed Ash Testing Results
Petroleum Coke Test Burn, Phase II
Roanoke Valley Energy Facility

Dear Ms. Coghill:

As required during the previous phases of the pet coke test burn performed at the Roanoke Valley Energy Facility, we were to submit the petroleum coke/coal mixed ash TCLP test data results to the NCDENR, Solid Waste Section. As we agreed upon in our recent meeting, we will also submit the mixed ash laboratory data obtained during Phase II of the petroleum coke test burn at 15%, 20%, 25% and 30% fuel mixtures. At this point of the test, we have sampled the mixed ash generated from a 15% fuel blend and analyzed the samples for TCLP metals. Both fly ash and bottom ash were tested for TCLP metals as required. The laboratory test data is attached for your review and record. Since the TCLP test results of the mixed ash at a blend of 15% are below the toxic characteristic regulatory levels, demonstrating non-toxic characteristics, the mixed ash can be designated non-hazardous. Due to this designation, the 15% mixed fly ash and bottom ash is acceptable for disposal in the Halifax County Landfill. We have also submitted these test results to Halifax County as we stated would be done in previous correspondences.

The petroleum test burn is continuing and when the 20%, 25% and 30% mixed ash test results become available, the data will be submitted to you and to the County. As agreed upon in previous correspondences, the TCLP organic testing will be performed as required and dictated in the beneficial use testing protocol for beneficial use determination purposes. This data will also be sent to you when it becomes available for additional ash disposal information.

Permanent disposal of the ash will begin just after this information is faxed to you and Halifax County. Should you have any questions, do not hesitate to call me or Mr. Rob Reynolds, Plant Engineer, at the plant at (252) 536-3200.

Sincerely,

Maggie T. Estrada
Project Manager
Environmental Services

Enclosure
cc: Q. Morrison
B. Noble
G. Woods
R. Garner, Halifax County
esd/file/rvp.3.6

CLIENT:	LG&E Partners - Westmoreland
ATTN:	Rob Reynolds
ADDRESS:	Railroad Street, P.O. Box 351
CITY:	Weldon, NC 27890
PHONE:	919-536-3200
FAX:	

SUBMITTED BY: James R. Reed & Associates
11864 Canon Blvd., Suite 103
Newport News, VA 23606
(757) 873-4703 phone
(757) 873-1498 fax

SAMPLE RECEIPT DATE:	7/7/98	TIME:	0930
RECEIVED BY:	FPE		
GRAB COLLECTION DATE:	7/2/98	GRAB TIME:	1200

COMPOSITE COLLECTION:	Start Date	Start Time	End Date	End Time

COLLECTED BY:	LG&E Partners - Westmoreland		
PICKED UP BY:	LG&E Partners - Westmoreland		
NUMBER OF CONTAINERS:	4	Condition:	(x)GOOD ( )OTHER
EXPLAIN:			

SPECIAL NOTES:

RE: Pet Cake Test Burn - 15% Pet Coke Ash

SAMPLE ID: Air Heater 2%/Surge Bin 98% (15% Ash)

SAMPLE NO: 98-8524

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analysis/Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.364	HS-07/10/98 @ 1215
Barium	D005	6010A	0.005	100.0		1.93	HS-07/10/98 @ 1215
Cadmium	D006	6010A	0.0005	1.0		0.0008	HS-07/10/98 @ 1215
Chromium	D007	6010A	0.005	5.0		0.025	HS-07/10/98 @ 1215
Lead	D008	6010A	0.005	5.0		<0.005	HS-07/10/98 @ 1215
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/10/98 @ 1030
Selenium	D010	6010A	0.005	1.0		0.272	HS-07/10/98 @ 1215
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/10/98 @ 1215
Vanadium		6010A	0.005			1.66	HS-07/10/98 @ 1215

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne
Laboratory Director

DATE: July 10, 1998

CLIENT: LG&E

SAMPLE ID: Air Heater 2%/Surge Bin 98% (15% Ash)

SAMPLE NO: 98-8524

Prel.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(mg/kg)	Result (mg/kg)	Analyst/Date/Time
	Carbon (Dry Basis)	ASTM D3178	N/A		7.05%	HRT-07/09/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		7.26%	HRT-07/09/98
	Nickel	6010A	0.248		51.0	HS-07/10/98 @ 1238
	Vanadium	6010A	0.248		445	HS-07/10/98 @ 1238
	pH	9045	N/A		12.3 @ 20°C	SKH-07/07/98 @ 1100

JUL-13-1998 12:51

CLIENT:	LG&E Partners - Westmoreland
ATTN:	Rob Reynolds
ADDRESS:	Railroad Street, P.O. Box 351
CITY:	Weldon, NC 27890
PHONE:	919-536-3200
FAX:	

SUBMITTED BY: James R. Reed & Associates
11864 Canon Blvd., Suite 103
Newport News, VA 23606
(757) 873-4703 phone
(757) 873-1498 fax

SAMPLE RECEIPT DATE:	7/7/98	TIME:	0930
RECEIVED BY:	FPE		
GRAB COLLECTION DATE:	7/2/98	GRAB TIME:	1200

COMPOSITE COLLECTION:	Start Date	Start Time	End Date	End Time

SPECIAL NOTES:

RE: Pet Cake Test Burn - 15% Pet Coke Ash

COLLECTED BY:	LG&E Partners - Westmoreland		
PICKED UP BY:	LG&E Partners - Westmoreland		
NUMBER OF CONTAINERS:	3	Condition	(x)GOOD ( )OTHER
EXPLAIN:			

SAMPLE ID: Bottom (15% Ash)

SAMPLE NO: 98-8525

Parameter	EPA HW No.	Method Number	Method Detection Limit (mg/L)	Regulatory Level (mg/L)	Practical Quantitation Limit(mg/L)	Result (mg/L)	Analysis Date/Time
TOXICITY CHARACTERISTIC LEACHING PROCEDURE							
Arsenic	D004	6010A	0.002	5.0		0.025	HS-07/10/98 @ 1220
Barium	D005	6010A	0.005	100.0		1.50	HS-07/10/98 @ 1220
Cadmium	D006	6010A	0.0005	1.0		<0.0005	HS-07/10/98 @ 1220
Chromium	D007	6010A	0.005	5.0		<0.005	HS-07/10/98 @ 1220
Lead	D008	6010A	0.005	5.0		0.007	HS-07/10/98 @ 1220
Mercury	D009	7470	0.0002	0.2		<0.0002	SKH-07/10/98 @ 1030
Selenium	D010	6010A	0.005	1.0		<0.005	HS-07/10/98 @ 1220
Silver	D011	6010A	0.001	5.0		<0.001	HS-07/10/98 @ 1220
Vanadium		6010A	0.005			0.300	HS-07/10/98 @ 1220

NOTES: cc: Maggie Estrada @ LG&E

RESPECTFULLY SUBMITTED BY:

Elaine Claiborne
Laboratory Director

DATE: July 10, 1998

CLIENT: LG&E

SAMPLE ID: Bottom (15% Ash)

SAMPLE NO: 98-8525

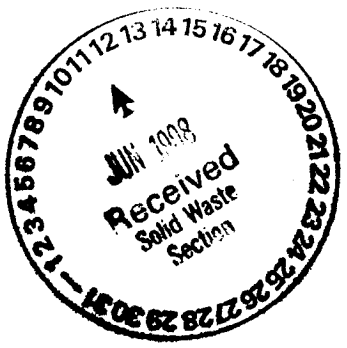
Prep.	Parameter	Method Number	Method Detection Limit (mg/kg)	Practical Quantitation Limit(ug/kg)	Result (mg/kg)	Analyst/Date/Time
	Carbon (Dry Basis)	ASTM D3178	N/A		0.11%	HRT-07/09/98
	Sulfur (Dry Basis)	ASTM D4239	N/A		2.79%	HRT-07/09/98
	Nickel	6010A	0.481		16.6	HS-07/10/98 @ 1243
	Vanadium	6010A	0.481		74.0	HS-07/10/98 @ 1243
	pH	9045	N/A		9.5 @ 20°C	SKH-07/07/98 @ 1100

LG&EPOWER SM

LG&E Power Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626
714-241-4700
714-241-4793 FAX

June 9, 1998

Ms. Sherri Coghill
Environmental Engineer
Solid Waste Section
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
P.O Box 27687
Raleigh, North Carolina 27611-7687



Subject: Continuation of Petroleum Coke Test Burn, Unit I
Roanoke Valley Energy Facility

Dear Ms. Coghill:

We wish to extend our appreciation to you, Bill and Dexter for meeting with us to discuss the previous petroleum coke test burn and the items related to the continuation of the petroleum coke test burn at the Roanoke Valley Energy Facility. We believe that because these items were discussed in detail, the next phase of the test burn should proceed with a better understanding of what should be provided to facilitate your determination. Therefore, this correspondence is being submitted to you for two important reasons. The first reason is to officially inform you that we intend to resume the petroleum coke test burn of Unit I, designated phase II, the end of June with an anticipated starting date of Monday, June 29, 1998. This delayed start date of June 29, 1998 allows the plant time to adjust the equipment/systems to ensure more efficient plant performance during the test burn. The intended test burn duration is anticipated to be 60 days. This will allow the most accurate evaluation of potential plant/equipment impacts on a simulated long term use basis. We have included a test burn schedule for your information. The second reason is to outline the commitments agreed upon during our recent meeting at your office. We also wish to inform you that all other agencies that were previously involved in the test burn, including the Halifax County, have also been notified of the commencement date and assured that similar testing will be performed for this second phase of the test burn.

The testing for ash disposal purposes will remain unchanged, as well as the previously approved temporary storage procedure at the Halifax County Landfill. The disposal testing will begin at 15% and continue at increased increments of 20%, 25% and then 30%, for both flyash and bottom ash. As before, the disposal testing will consist of TCLP metals analyses. Prior to receiving the test results from the laboratory, the ash will be temporarily stored in a designated area of the landfill. Upon review and evaluation of the test results, the fly ash and bottom ash will be classified by the plant to determine acceptability for final disposal in the landfill. The ash disposal data will be immediately submitted to you at the NCDENR and to the County of Halifax to demonstrate non-hazardous waste designation. This will be done for record keeping purposes.

The beneficial use testing will be performed per the protocol required by Bill Hocutt and discussed during our meeting. We intend to achieve 30% petroleum coke fuel blend, at which time beneficial use testing will be performed for the fly ash and bottom ash. The beneficial use testing protocol for the fly ash will remain unchanged with the exception of the lower quantitative levels. The bottom ash will be tested for TCLP metals and organics to provide data to Bill Hocutt for an "other beneficial uses" determination. If 30% can not be reached due to possible equipment limitations, the "highest achievable" petroleum coke percentage will be sampled and analyzed for beneficial use. As part of this beneficial use testing to be performed at a blend of 30% or the highest achievable, the fly ash and bottom ash will be analyzed for TCLP organics. This TCLP organics data will be submitted to you when available to supplement the TCLP metals data, and for record keeping purposes.

As we did during the previous test burns, we will keep you and the County informed of our test progress and will submit our test burn disposal data results, accompanied by a waste designation, as soon as it is available. The NCDENR will also be notified of the termination of the test burn. Should you have any questions regarding the petroleum coke test burn, do not hesitate to call me at (714) 241-4773.

Sincerely,

Maggie T. Estrada
Project Manager
Environmental Services

Enclosure

cc: R. Garner, Halifax County
B. Noble
Q. Morrison
G. Woods
esd/rvp.3.6

Roanoke Valley Energy Facility
Unit I Testing - June 1998
Petroleum Coke

6/2/98
Rev. 4

Day	Mixture	Test Parameters	Notes
6/29/98 Monday	Coal Only Pre-Petcoke	Stabilize unit at 100% load. Collect base line data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test. Fly ash samples for beneficial reuse 1-5 samples during 24hr. period.	Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one-eight hour performance tests collecting data per protocol. Pull baghouse bag sample for pre-petcoke analysis. Segregate RV1 and 2 Ash Silos.
6/30/98 Tuesday	10 to 15 % Petroleum Coke blend.	10% petroleum coke blend. Burn 12 hours and make adjustments as necessary and note adjustment changes. Continue to 15% petroleum coke blend if the boiler and scrubber is stable. Make adjustments as necessary and note adjustment changes.	Send coal only ash and fuel samples collected to lab for re-use and performance analysis, respectively.
7/01/98 Wednesday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

7/02/98 Thursday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. Fly-ash and bottom ash samples for disposal.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue. Send 15% ash samples to lab for disposal analysis.
7/03/98 Friday	15% Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send 15% fuel and ash samples to lab for performance analysis.
7/04/98 Saturday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/05/98 Sunday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

7/06/98 Monday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. Fly ash samples for beneficial reuse 1-5 samples during 24hr. period.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/07/98 Tuesday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	Send 15% ash samples collected to lab for re-use analysis.
7/08/98 Wednesday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. State required air emissions testing per Air Emissions Testing Protocol.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue. State NCDENR on site.

7/09/98 Thursday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. State required air emissions testing per Air Emissions Testing Protocol.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue. State NCDENR on site
7/10/98 Friday	15% Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send 15% fuel and ash samples to lab for performance analysis.
7/11/98 Saturday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and adjustment/changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/12/98 Sunday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/13/98 Monday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

7/14/98 Tuesday	15% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable increase to 20% petroleum coke blend.
7/15/98 Wednesday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/16/98 Thursday	20% Petroleum Coke blend.	Fly-ash and bottom ash samples for disposal. Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	Send fly-ash and bottom ash to lab for disposal analysis. PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/17/98 Friday	20% Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel and ash samples to lab for performance analysis.
7/18/98 Saturday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

7/19/98 Sunday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/20/98 Monday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/21/98 Tuesday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/22/98 Wednesday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/23/98 Thursday	20% Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel and ash samples to lab for performance analysis.

7/24/98 Friday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/25/98 Saturday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/26/98 Sunday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/27/98 Monday	20% Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel and ash samples to lab for performance analysis.
7/28/98 Tuesday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

7/29/98 Wednesday	20% Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable increase to 25% petroleum coke blend.
7/30/98 Thursday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
7/31/98 Friday	25 % Petroleum Coke blend.	Fly-ash and bottom ash samples for disposal. Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	Send fly-ash and bottom ash to lab for disposal analysis. PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/01/98 Saturday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/02/98 Sunday	25 % Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel and ash samples to lab for performance analysis.

8/03/98 Monday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/04/98 Tuesday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/05/98 Wednesday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/06/98 Thursday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/07/98 Friday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

8/08/98 Saturday	25 % Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel and ash samples to lab for performance analysis.
8/09/98 Sunday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/10/98 Monday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/11/98 Tuesday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/12/98 Wednesday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

8/13/98 Thursday	25 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable increase to 30% petroleum coke blend.
8/14/98 Friday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/15/98 Saturday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/16/98 Sunday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/17/98 Monday	30 % Petroleum Coke Blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel and ash samples for performance test. Fly-ash and bottom ash samples for disposal. Wastewater samples for permit compliance comparison.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fly-ash and bottom ash collected to lab for disposal analysis with wastewater sample. Send fuel and ash samples to lab for performance analysis.

8/18/98 Tuesday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. y. Fly ash samples for beneficial reuse 1-5 samples during 24hr. period.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/19/98 Wednesday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. State required air emissions testing per Air Emissions Testing Protocol.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue. Send 30% fly-ash samples to lab for beneficial reuse analysis. State NCDENR on site.
8/20/98 Thursday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes. Complete state required air emissions testing per Air Emissions Testing Protocol.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue. State NCDENR on site.

8/21/98 Friday	30 % Petroleum Coke blend.	Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel samples to lab for performance analysis.
8/22/98 Saturday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/23/98 Sunday	30 % Petroleum Coke blend.	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.
8/24/98 Monday	Coal Only	Flame Stability, scrubber performance, boiler optimization. Make adjustments as necessary and note adjustment changes.	PAMS and DCS recording plant data. If boiler and scrubber is stable continue.

8/25/98 Tuesday	Coal Only	Post fly ash samples for beneficial reuse 1-5 samples during 24hr. period. Collect data using portable combustion analyzer, CEMS, PAMS and DCS Petcoke Logs. Collect fuel samples for performance test.	PAMS and DCS recording plant data. Soot-blow prior to 6:00am. PAMS and DCS recording plant performance data. Commence performance test. Perform one four hour performance test collecting data per protocol. Send fuel samples to lab for performance analysis. Pull baghouse bag sample for post petcoke analysis.
8/26/98 Wednesday	Coal Only		Send coal only fly-ash samples to lab beneficial re-use analysis.

Note: The air emissions testing and fly ash samples for beneficial reuse will be taken at the maximum achievable petroleum coke blend. This test schedule will be revised as required by actual plant operations.

The flyash and bottom ash generated during the test burn cannot be used as a beneficial use.

Test duration is 55 days.

Estimated petcoke usage is 20000 tons.

LG&EPOWER SM

LG&E Power Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626
714-241-4700
714-241-4793 FAX

June 9, 1998

Mr. Richard Garner
Solid Waste Director
County of Halifax
921 Liles Road
Littleton, North Carolina 27850

Subject: Continuation of Petroleum Coke Test Burn, Unit 1
Roanoke Valley Energy Facility

Dear Mr. Garner:

As I informed you during our telephone conversation, we are intending to resume the petroleum coke test burn to be performed in the Unit I boiler at the Roanoke Valley Energy Facility. The anticipated start date is Monday, June 29, 1998. Although we had planned to begin sooner, this delayed start date allows the plant time to adjust the equipment/systems to ensure more efficient plant performance during the test burn. The intended test burn duration is anticipated to be 60 days, which will allow for the most accurate evaluation of potential plant/equipment impacts on a simulated long term use basis.

The intent of the petroleum coke test burn is to start at a 15% fuel blend and increase the percentage up to 30%. Based on the plant equipment/system improvements performed during the spring maintenance outage, we believe this percentage could be obtainable. The plant will begin the test using a blend of 15% petroleum coke and 85% coal. After the plant has been burning at a 15% fuel blend for 24 hours (to allow for a representative "mixed ash" sample), ash samples will be taken and analyzed for disposal purposes, acceptable at the Halifax County Landfill. The fuel blend will be increased and ash samples will be taken at 20%, 25% and 30% blends, for both flyash and bottom ash. Disposal testing for the flyash and bottom ash will consist of TCLP metals analyses. Prior to receiving the test results from the laboratory, the ash will be temporarily stored in a designated area of the landfill monocell, with a layer of lime separating the ash generated by varying fuel blends. Upon review and evaluation of the test results by the plant (considered the generator), the plant will designate/classify the solid waste to determine acceptability for final disposal in the landfill. The ash disposal data will be immediately submitted to the County of Halifax and to Sherri Coghill at the NCDENR to ensure and specify the non-hazardous status of the flyash and bottom ash.

In addition to the analysis performed for ash disposal, the flyash and bottom ash will also be analyzed for beneficial use, per the previously approved ash testing protocol prepared and required by the NCDENR. Since the flyash and bottom ash are intended for different types of beneficial uses, the testing varies for the two ash types. However, both testing requirements include TCLP organics. This data will also be sent to the County when available. The intent is

to reach 30% fuel blend prior to monitoring the generated ash for beneficial use purposes. If due to equipment/system limitations the 30% fuel blend can not be achieved, then the blend will be reduced to a "highest achievable percentage" and beneficial use ash testing will be performed at that percentage. Upon receipt of the beneficial use ash data from the laboratory, the data will be compiled, compared, evaluated for compliance, and then submitted to Bill Hocutt at the NCDENR for review and beneficial use determination. A summary of the TCLP data will also be sent to Sherri Coghill at the NCDENR for her information.

We recently had a meeting with Mr. Bill Hocutt and Ms. Sherri Coghill of the NCDENR to discuss resuming the petroleum coke test burn at the plant and to confirm the ash testing protocol for disposal and beneficial use purposes. During the meeting, we agreed upon the ash testing protocol, which varies only slightly from the previous protocol. The revised protocol is reflected in the discussions noted above.

We understand that you were not involved with the previous petroleum coke test burns, so if you have any questions regarding this phase or the previous phases, do not hesitate to call me at (714) 241-4773 or Rob Reynolds, Plant Engineer, at the Roanoke Valley Energy Facility at (919) 536-3200 x246. As we did with Hazen Blodgett during the previous test burns, we will keep you informed of the petroleum coke test burn status.

Sincerely,

Maggie T. Estrada
Project Manager
Environmental Services

cc:
Q. Morrison
B. Noble
G. Woods
S. Coghill, NCDENR
esd/rvp.3.6

bcc: C. Braun
T. Foster
R. Reynolds

Meeting Agenda
Petroleum Coke Test Burn
Roanoke Valley Energy Facility
May 6, 1998

I. Meeting Members:

NCDENR	LG&E
Bill Hocutt, Coordinator	Maggie Estrada, Environmental
Sherri Coghill, Engineer	Bob Noble, Venture Manager
~~Jim Coffey, Supervisor~~ Dexter Matthews	Rob Reynolds, RVEF Plant Engineer

II. Review of Previous Petroleum Coke Test Burn (Unit I):

1. Previous Ash Testing Protocol
   - Fly Ash - Disposal (TCLP Metals, TCLP Organics)
     Beneficial Use (TCLP Metals, Total Metals, TCLP Organics, 8240 [8260] Scan, 8270 Scan)
   - Bottom Ash - Disposal (TCLP Metals, TCLP Organics)
     Beneficial Use (not analyzed)
     Daily Landfill Cover (TCLP Metals, TCLP Organics)

2. Ash Data Summary Reports
   - Disposal - 5%, 10% and 12% Pet Coke
   - Beneficial Use - Pre 100% Coal, 12% Pet Coke, Post 100% Coal

3. Pet Coke Percentages
   - Intended 20%
   - Stopped Test due to SO_2 Emission Control System Limitations
   - To Resume after Maintenance Outage

III. Discussion of Alternative Fuel Requirements

1. Disposal - Unchanged

2. Beneficial Use
   - 2L Ground Water Standards
   - Lower detection levels for comparison
     - Achievability for lab
   - Future Fill Projects
     - Waste Characterization - Specific Sampling and Analytic Protocols
     - Specific Site Characterization - Possible Groundwater Modeling

Meeting Agenda
Petroleum Coke Test Burn
Roanoke Valley Energy Facility
May 6, 1998 (continued)

IV. Commencement of Pet Coke Test Burn (Unit 1)

1. Intended 30% Pet Coke
2. Percentage Limited by Plant Operation
3. Disposal Testing
   - Sample/Analyze 15%, 20%, 25% and 30%
   - Store at County Landfill
4. Beneficial Use Testing
   - Test for highest achievable percentage
   - Fly ash and Bottom ash

V. Revised Ash Testing Protocol

1. Sampling - Assume unchanged (0-6, over 24 hour period)
2. Analysis performed at lower detection level
   - Possible difficulties encountered by lab
3. Other possible changes

VI. Bottom Ash Uses

1. No longer Daily Cover at Landfill — LF closed
2. ? Use as Gravel for Local Roads
3. Beneficial Reuse Structural Fill Sites

LG&E Power, Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, CA 92626
714-241-4700
714-241-4793 (FAX)

LG&E POWER INC.
Environmental Services

Fax

Date: 4-28-98

To: Bill Hocutt

Company: NCDENR, Solid Waste

Fax #: (919) 733-4810

From: Maggie T. Estrada

Tel #: (714) 241-4773

Pages including cover: 4

- **Message:**

Bill,

See you on May 6th.

Maggie

Conf. Room #3 9:30 — 12:00
Mary G.

If you have difficulty receiving this transmission, please call Dee at (714) 241-4707

LG&EPOWER

LG&E Power Inc.
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626
714 241 4700
714-241-4793 FAX

April 28, 1998

Mr. Bill Hocutt
Waste Determination Coordinator
State of North Carolina
Department of Environment, Health and Natural Resources
Division of Waste Management
P.O Box 29603
Raleigh, North Carolina 27611-9603

Subject: Conformation of Meeting
Regarding Petroleum Coke Test Burn, Unit 1
Roanoke Valley Energy Facility

Dear Mr. Hocutt:

This letter is being sent to confirm our meeting with you, Jim Coffey, and Sherri Coghill, scheduled for Wednesday, May 6, 1998 at 9:30 a.m. at the NCDENR offices in Raleigh, NC. As we agreed, our discussions regarding coal/petroleum coke mixed ash generated during the test burn at the Roanoke Valley Energy Facility will be extremely helpful for clarification purposes for both the facility and the agency. To facilitate our meeting, we have prepared a meeting agenda. It is attached for your easy reference.

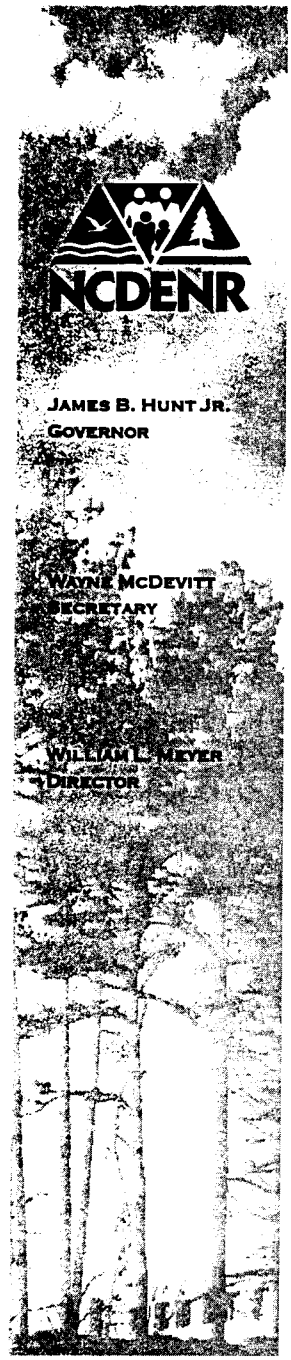
We look forward to meeting with you and discussing the petroleum coke testing issues. Should you have any questions, do not hesitate to call me at (714) 241-4773.

Sincerely,

Maggie T. Estrada
Project Manager
Environmental Services

Enclosure

cc: B. Noble
R. Reynolds
G. Woods
csd/rvp.3.6



NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

March 11,1998

Ms. Maggie Estrada, Environmental Services
LG&E Power Company
575 Anton Boulevard, Suite 250
Costa Mesa, California 92626

Subject: Revised North Carolina Characterization Requirements for Qualifying Wastes as **Recovered Materials**.

Dear Ms. Estrada:

I am enclosing a copy of the March 10, 1998 letter to Mr. Bob Waldrop of ReUse Technology that I described to you yesterday in our telephone conversation. The points and discussion presented in that letter we view as being also applicable to the coal:petroleum coke fuel blend tests you have already conducted and additional tests that your company is planning for the Weldon, NC facility.

Also enclosed is a tabulation of Drinking Water and Ground Water contamination limit thresholds for TCLP regulated constituents (not including herbicides and pesticides). The ground water 2L limits are the only values of interest to you on this table since these are the values to be used in evaluating the ash for recovered material qualification. Please note that there are constituents which do not have assigned 2L values within this TCLP regulated list. This table is not intended to be complete because any contaminant which is found to be present in any particular waste becomes a constituent of concern in the recovered material qualification process for that particular waste.

Please contact me with any questions that you might have on this matter. You have my telephone number, but to be sure it is available, it is 919-733-0692, extension 260.

Sincerely,

William R. Hocutt

William R. Hocutt

cc: Jim Coffey
Sherri Coghill

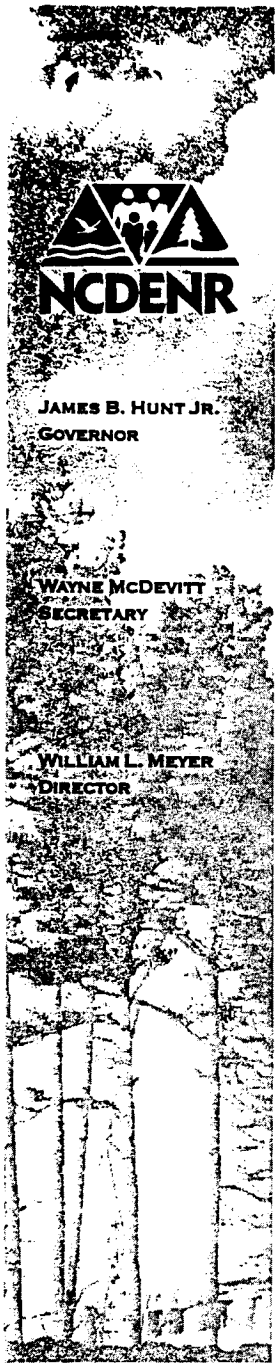
c:wp6doc/letter/lgepwr03.98

401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605

Thresholds as of 1/19/96 (ppm)	Drinking Water (MCL)	Ground Water (2L)
arsenic	0.050	0.050
barium	2.000	2.000
cadmium	0.005	0.005
chromium	0.100	0.050
lead	0.015 (al)	0.015
mercury	0.002	0.0011
selenium	0.050	0.050
silver	0.100 (s)	0.018
vanadium	-	-
benzene	0.005	0.001
carbon tetrachloride	0.005	0.0003
chlorobenzene	0.100	0.050
chloroform	0.080 (p)	0.00019
o-cresol(hazard./100)=2.0		
m-cresol(")=2.0		0.035*
p-cresol (")=2.0		0.0035*
cresol (")=2.0		-
1,4-dichlorobenzene	0.075	0.075
1,2-dichloroethane	0.005	0.00038
1,1-dichloroethylene	0.007	0.007
2,4-dinitrotoluene(")=0.0013		-
hexachlorobenzene	0.001	0.00002
hexachloro-1,3-buta diene (")=0.005		-
hexachloroethane(")=0.030		-
methyl ethyl ketone	-	0.170
nitrobenzene (")=0.020		-
pentachlorophenol	0.001	0.0003
pyridine (hazard./100)=0.050		-
tetrachloroethylene	0.005	0.0007
trichloroethylene	0.005	0.0028
2,4,5-trichlorophenol	-	-
2,4,6-trichlorophenol	-	-
vinyl chloride	0.002	0.000015

LEGEND:
(al) action level
(s) secondary drinking water standard
(p) proposed level

* recommended, but not approved to date



NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

March 10, 1998

Mr. Robert J. Waldrop
ReUse Technology, Inc.
100 Chastain Center Blvd., Suite 155
Kennesaw, Georgia 30144

Dear Mr. Waldrop:

This letter is a final response to your request dated March 22, 1996, for Division approval for the beneficial use of a combined coal/TDF ash. Bill Hocutt initially responded to this request in a letter sent to you June 26, 1996. His letter stated that the combined ash could not be managed under the coal ash rules and proposed a draft policy for the use of this material. The letter further stated that this draft policy would be reviewed one year from the date of issue for the purpose of instituting necessary changes and the development of a final policy.

Since that date, the Division has determined that the statutes for recovered materials detailed in the June 26, 1996 letter must be addressed either for proposed qualification as a recovered material or, otherwise, that a permit be issued for the site as a solid waste management facility. A rule effective in 1995 required operators of industrial landfills to demonstrate that their landfill design ensured compliance with the ground water standards. The Division has determined that a demonstration similar to the demonstration required in the industrial waste rules will be required for materials proposed for recovered material that leach above ground water standards. Additional information on the qualification of industrial by-products as recovered materials is provided in the discussion that follows.

The General Statutes state that it is solid waste management policy and goals to obtain, to the extent practicable, economic benefits from the **recovery** from solid waste and **reuse** of material and energy resources. The statutes also define a "recovered material" and provide the conditions under which the recovered material is not subject to regulation as a solid waste. The Division has used these statutes to develop a beneficial reuse program for specific wastes. This process allows any person who owns or has control over the material to propose qualification as a **recovered material** by demonstrating that the material meets the definition and its proposed reuse meets the following three requirements.

401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605

The statutes define a recovered material as a material that has a known recycling potential, can be feasibly recycled, and has been diverted or removed from the solid waste stream for sale, use, or reuse. In order for a material that would otherwise be regulated as solid waste to qualify as a recovered material, the Department may require any person who owns or has control over the material to demonstrate that the material and proposed use meet the following requirements:

(1) A majority of the recovered material at a facility shall be sold, used, or reused within one year;

(2) The recovered material or the products or the by-products of operations that process recovered material shall not be discharged, deposited, injected, dumped, spilled, leaked, or placed into or upon any land or water so that the products or by-products or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters including groundwater, or otherwise enter the environment or pose a threat to the public health and safety; and

(3) The recovered material shall not be a hazardous waste or have been recovered from a hazardous waste.

The Division will make a determination on the proposed qualification as a recovered material based upon a demonstration submitted by the owner. The demonstration required is not only dependent upon the characteristics of the material, but the nature of proposed use. The Division may prescribe requirements of the demonstration, including waste characterization with specific sampling and analytic protocols as well as site characterization for certain proposed uses such as structural fill. If the proposed use involves the placement of recovered material in such a manner that any constituent may enter into the land, emitted into the air, or discharged into the water including ground water, then extensive site characterization may be required, including fate and transport ground water modeling.

The Division has reviewed the information submitted to date and has determined that some of the proposed uses qualify as recovered materials under the three above conditions. Specifically, proposed uses that "bind" the material with a cementitious binder and ash used in other products such as concrete aggregate would qualify as a recovered material. This encapsulation significantly reduces the opportunity of contact occurring between the coal/TDF ash and soil, air, surface water or ground water. However, there is not sufficient information to demonstrate that Condition #2 has been met for other proposed uses. Concern for the "disposal" of coal ash has grown as a result of information submitted by operators of industrual waste coal ash landfills. This information became available

when those operators submitted the information required by the previously mentioned 1995 rule. Preliminary information from these landfills suggests that unlined coal ash landfills impact ground water. The degree to which these landsfills adversely impact ground water has not been determined.

The TCLP data submitted for the TDF (80% coal : 20% tires fuel) blend fly and bottom ashes has been evaluated vs the 2L ground water maximum contamination limits for the eight RCRA metals plus zinc. In the case of the bottom ash, the TCLP detection limits were too high on cadmium, lead, selenium and zinc to determine if the groundwater 2L limits were not exceeded. With that serious limitation in evaluating the bottom ash data, no exceedances of the 2L limits were indicated. On the fly ash, it was found that the detection limits for lead and mercury were also too high to allow determination if they leached to levels less than the 2L limits for those two constituents. However, it was found that arsenic, cadmium, selenium and zinc did leach at levels which exceeded their respective 2L limits. Arsenic exhibited an average TCLP value of 2.10 mg/l vs the 2L limit of 0.05 mg/l, cadmium measured an average of 0.066 mg/l in the TCLP vs a 2L limit of 0.005 mg/l, selenium leached at 0.64 mg/l vs a 2L maximum of 0.05 mg/l and zinc exhibited a TCLP of 308 mg/l vs a 2L limit of 2.1 mg/l. Please note that all four of these measured TCLP values were significantly higher than the "control" average values for 100% coal fly ash submitted with your request.

Since sampling has shown that the fly ash arsenic, cadmium, selenium and zinc leach above the 15 NCAC 2L ground water limits, additional demonstration will be required for proposed uses that request placing the TDF fly ash on or in the ground such as in structural fills. It will be necessary **on each** proposed project of this type that modeling be done to show that the separation from the high groundwater level **at that site** will be sufficient to prevent contamination of the ground water above the 2L limits for leachable constituents. This will require that the site soil type be factored into the model for the purpose of demonstrating adequate attenuation and adsorption capacity for prevention of groundwater contamination above the 2L limits. Dilution cannot be a factor utilized in the model since these projects cannot depend on this dilution occurring prior to leaving the site. The only means of having adequate protection for the groundwater is to have sites with a required type of native soil and to have sufficient separation distance between the TDF fly ash and the groundwater directly under the site.

In summary, based on the above findings, the June 26, 1996 draft policy allowing beneficial-use of TDF fly and bottom ash in structural fills is hereby canceled by this letter. New requirements are specified in this March 10, 1998 letter which are designed to protect the ground water at proposed structural fill projects utilizing materials which leach constituents above the Ground Water 2L maximums. Since the Division of Waste Management has not received a Notification for a planned structural fill using the test run TDF ash, it is assumed that this "test" ash has been disposed in a permitted sanitary landfill or utilized in some protective alternative way. If you have any questions about this matter, please telephone me at (919) -733- 0692 extension 255 or Bill Hocutt at extension 260.

Sincerely,

James C Coffey

James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

cc: Dexter Matthews
Phil Prete
Terry Dover
Julian Foscue
Bill Hocutt

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NCDENR

JAMES B. HUNT JR.
GOVERNOR

WAYNE MCDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

March 3, 1998

Mr. Charles B. Archer
Halifax County Manager
Historic Courthouse, P.O. Box 38
Halifax, N.C. 27839

Re: Implementation of Groundwater Assessment and Corrective Action Requirements (Permit #42-04).

Dear Mr. Archer,

Halifax County's Landfill has fulfilled the requirements of North Carolina Solid Waste Management Rules, 15A N.C.A.C. 13B, .1633 (Detection Monitoring Program) and .1634 (Assessment Monitoring Program), parts (a) and (b). Based on groundwater monitoring data from the facility the County is now required to proceed with the remaining requirements of .1634, .1635 (Assessment of Corrective Measures), .1636 (Selection of a Remedy), and .1637 (Implementation of the Corrective Action Program). These requirements are intended to be self-implementing. Please proceed to implement these requirements within sixty (60) days.

Groundwater protection standards have been established for most Appendix II constituents detected in assessment monitoring. In general, the groundwater protection standards conform to N.C. 2L Groundwater Standards or recommended health-based concentrations determined by the Division of Epidemiology. If needed, these groundwater protection standards are available upon request to the Division of Waste Management, Solid Waste Section.

If you have any questions, please contact Mark Poindexter at (919) 733-0692, extension 261.

Sincerely,

Dexter Matthews, Section Chief
Solid Waste Section
Division of Waste Management

c: Phil Prete
Terry Dover
Ben Barnes
central file

C:\WPDOCS\COUNTIES\HALIFAX\42-04AST.LET

401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605

State of North Carolina
Department of Environment
and Natural Resources
Division of Waste Management

James B. Hunt, Jr., Governor
Wayne McDevitt, Secretary
William L. Meyer, Director

January 6, 1998

Mr. Charles Archer, County Manager
County of Halifax
P.O. Box 327
Halifax, North Carolina 27839

Subject: Halifax County MSWLF Facility Transition Plan Modification for Permit #42-04

Dear Mr. Archer:

The Solid Waste Section hereby approves the modification of the referenced MSWLF Facility permit to allow the short term management of construction & demolition waste in the Phase 1 area of the proposed C&D area at the Halifax County Landfill in accordance with the letter dated 6 January 1998 from G.N. Richardson & Associates. The proposed activity is effective 6 Janauary 1998 unitl the C&D operations permit is issued, but no later than 15 February 1998, at the locations shown on the drawings submitted with the request.

If you have any questions about this approval letter, please contact me at (910) 486-1191 or James C. Coffey at (919) 733-0692 Ext. 255.

Sincerely,

Jim Barber
Eastern Area Engineer
Solid Waste Section

cc: Jim Coffey
Terry Dover
Ben Barnes
Raleigh Central Office: Halifax County MSW Facility Transition Plan Permit #42-04

P.O. Box 29603, Raleigh, North Carolina 27611-9603 Telephone 919-733-4996 FAX 919-715-3605

G.N. RICHARDSON & ASSOCIATES
Engineering and Geological Services

January 6, 1998

Mr. Terry Dover- Eastern Area Supervisor
NC DENR - Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

RE: Temporary Stockpile for C&D Wastes
Closed MSW Landfill
Halifax County, North Carolina
Permit No. 42-04

Dear Mr. Dover:

G.N. Richardson & Associates (GNRA) is pleased to present this letter on behalf of the Halifax County Solid Waste Department. This letter was prepared at the request of Messrs. Jim Barber and Phil Prete of the Solid Waste Section. The landfill stopped receiving MSW on December 31, 1997, per NC DWM regulations, and the County has submitted a plan to convert the facility to a CDLF unit. The permit application for the CDLF vertical expansion document was prepared and submitted in December 1997. We understand that the Section may not have had sufficient time to review this document.

Pending approval of the CDLF vertical expansion, the County wishes to temporarily store C&D wastes in a stockpile within the permitted facility boundary. The stockpile will be over a portion of the MSWLF which has not received final cover but is within the proposed CDLF vertical expansion area, as shown in the accompanying drawings. An adjacent area of the proposed CDLF expansion area is scheduled to receive final closure in accordance with the Transition Plan. Once that area, which covers approximately one-half acre, is certified as closed, the stockpiled C&D wastes will be transferred to the prepared area, which will become the first cell of the CDLF. The estimated C&D tonnage is 30 tons per day.

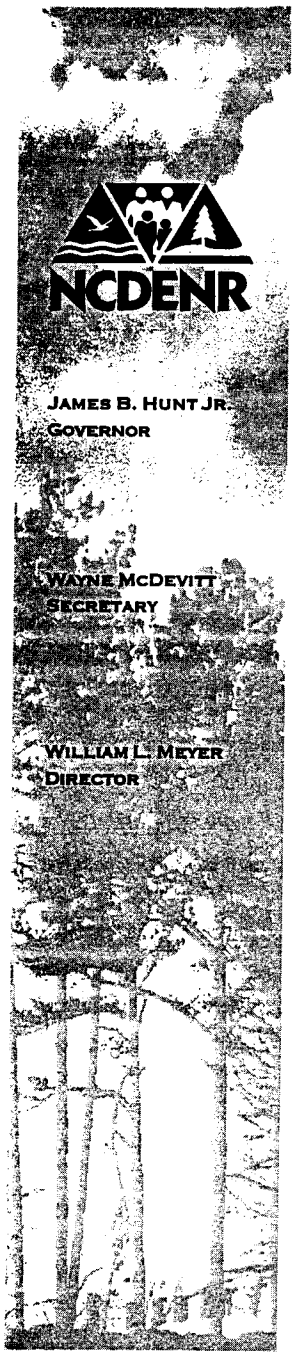
At present, we anticipate that preparation of the first cell of the CDLF, i.e. closure of that portion of the MSWLF landfill, will be completed within the next three weeks, or by the end of January 1998, weather permitting. The final cover construction on the side slopes in another portion of the landfill has made substantial progress, with all soil tests passing design criteria. We anticipate that the final cover of the MSWLF unit within the proposed CDLF unit will meet or exceed current NC DWM requirements. The temporary stockpiling of C&D wastes is not anticipated to affect the closure of the MSWLF unit nor adversely affect long-term surface water infiltration.

We appreciate the Division's past and continued efforts, and our cordial working relationship. Please contact us if we can provide any further information.

Sincerely,
G.N. Richardson & Associates

G. David Garrett, P.G.
Principal

cc: Mr. Richard Garner, Director
Halifax County Solid Waste Department



NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

January 5, 1998

Mr. Charles Archer
Halifax County Manager
P. O. Box 38
Halifax, NC 27839

Re: Halifax County Ash Monofill, Permit Number 42-04

Dear Mr. Archer:

This letter serves as formal acknowledgement of receipt by the Division of Waste Management, Solid Waste Section, of information required by Rule .0503(2)(d)(ii) submitted on behalf of the owner and operator of the referenced industrial landfill. The rule requires that the owner and operator of an industrial landfill receiving waste on or after January 1, 1998, submit a demonstration that the landfill design ensures compliance with the ground water standards of 15A NCAC 2L. This acknowledgement is given without Section review and evaluation of the submittal and does **not** constitute final determination by the Section that the design ensures compliance with the ground water standards established under 15A NCAC 2L.

The Section will review and evaluate the information submitted and determine if the landfill design ensures compliance with the ground water standards. If the Section determines that the landfill design does not ensure compliance with 2L, closure of the landfill will be required. The Section may take into consideration the time required to properly close the landfill and the time necessary to prepare for alternative waste management when considering an order to close. If the Section determines that the landfill design ensures compliance with 2L, a five-year permit will be issued. Additional requirements such as an enhanced final cap system and specific operational requirements may be made conditions of the permit.

If there are any questions, please contact me @ (919) 733-0692, ext 255.

Sincerely,

James C. Coffey

James C. Coffey, Head
Permitting Branch
Solid Waste Section

cc: Ben Barnes

C:\WRIGHT\PROJECTS\INDUSTRL\HALFX_42\ACKLET.WPD

401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605