



Permit / Application Information Sheet
Division of Environmental Protection
West Virginia Office of Air Quality

Company:	Ergon Corporation-West Virginia, Inc.	Facility:	Newell (Congo Plant)
Region:	1	Plant ID:	029-00008
Engineer:	Kessler, Joe	Application #:	13-2334Y
Physical Address:	9995 Ohio River Blvd. Newell WV 26050	Category:	Petrol
County:	Hancock	SIC: [2911] PETROLEUM REFINING AND RELATED INDUSTRIES - PETROLEUM REFINING NAICS: [324110] Petroleum Refineries SIC: [2992] PETROLEUM REFINING AND RELATED INDUSTRIES - LUBRICATING OILS AND GREASES NAICS: [324191] Petroleum Lubricating Oil and Grease Manufacturing	
Other Parties:	ENV_MGR - Neihaus, Jake 601-933-3123 VICE PRES - Young, Jr., Mr. Paul W. 601-933-3128		



Information Needed for Database and AIRS
 1. Need valid physical West Virginia address with zip

Regulated Pollutants

Summary from this Permit 13-2334Y		
Air Programs	Applicable Regulations	
Fee Program	Fee	Application Type
	\$1,000.00	MODIFICATION

Notes from Database

Activity Dates	
APPLICATION RECIEVED	09/14/2015
APPLICATION FEE PAID	09/16/2015
ASSIGNED DATE	09/16/2015

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Please note, this information sheet is not a substitute for file research and is limited to data entered into the AIRTRAX database.

Company ID: 029-00008
 Company: Ergon Corporation-West Virgini
 Printed: 09/16/2015
 Engineer: Kessler, Joe

IPR FILE INDEX

Applicant : Ergon - West Virginia, Inc. (Ergon)
Facility : Newell Refinery

Plant ID No.: 029-00008
R13-2334Y

Chronological Order - Add Index Pages As Necessary

Date	To	From	Subject	# of pages
9/16/15	Ergon	Sandie Ankins	48-Hour E-mail	
10/01/15	Joe Kessler	Ergon	Affidavit of Publication (incorrect, without Lat/Long)	
10/14/15	Ergon	Ed Andrews	Incompleteness Letter	
11/02/15	Joe Kessler	Ergon	Additional Fee Submission	
11/09/15	Joe Kessler	Ergon	Affidavit of Publication (incorrect, without Lat/Long)	
11/16/15	Joe Kessler	Ergon	Affidavit of Publication (correct, with Lat/Long)	
12/03/15	Ergon	Joe Kessler	Completeness Determination	
12/07/15	File	Joe Kessler	DAQ/Ergon E-mails w/ PSD Applicability Analysis Table and Heater Specification Sheet.	
12/07/15	File	Joe Kessler	Draft Permit R13-2334Y, Tracking Manifest	
12/07/15	File	Joe Kessler	Public Notice Documents	

JRK
12/07/2015

AIR QUALITY PERMIT NOTICE

Notice of Intent to Approve

On September 14, 2015, Ergon - West Virginia, Inc. applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to modify the Newell Refinery located at 9995 Ohio River Blvd Route 2 South, Newell, Hancock County, WV at latitude 40.609173 and longitude -80.629196. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the proposed modification. The DAQ is providing notice to the public of its preliminary determination to issue the permit as R13-2334Y.

The following changes in potential emissions will be authorized by this permit action: Particulate Matter less than 2.5 microns, -0.05 tons per year (TPY); Particulate Matter less than 10 microns, -0.05 TPY; Particulate Matter, -0.05 TPY; Sulfur Dioxide, 0.15 TPY; Oxides of Nitrogen, -2.91 TPY; Carbon Monoxide, -1.37 TPY; Volatile Organic Compounds, 1.79 TPY; Hazardous Air Pollutants, 0.13 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on **XXXXX**. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed modification will meet all State and Federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Joe Kessler, PE
WV Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Telephone: 304/926-0499, ext. 1219
FAX: 304/926-0478

Entire Document
NON-CONFIDENTIAL

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx

Kessler, Joseph R

From: Adkins, Sandra K
Sent: Thursday, December 03, 2015 4:45 PM
To: nkaufman@heraldstaronline.com
Cc: Kessler, Joseph R
Subject: Publication of Class I Legal Ad for the WV Division of Air Quality

Please publish the information below as a Class I legal advertisement (one time only) in the Tuesday, December 8, 2015, issue of the *Weirton Daily Times*. Please let me know that this has been received and will be published as requested. Thank you.

Send the invoice for payment and affidavit of publication to:

Sandra Adkins

**WV Department of Environmental Protection
DIVISION OF AIR QUALITY**

601- 57th Street

Charleston, WV 25304

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Kessler, Joseph R

From: Adkins, Sandra K
Sent: Thursday, December 03, 2015 4:47 PM
To: Kessler, Joseph R
Subject: FW: Publication of Class I Legal Ad for the WV Division of Air Quality

Please don't worry – I know the day is incorrect. The email immediately came back as undeliverable. I'll correct.

From: Adkins, Sandra K
Sent: Thursday, December 03, 2015 4:45 PM
To: 'nkaufman@heraldstaronline.com' <nkaufman@heraldstaronline.com>
Cc: Kessler, Joseph R <Joseph.R.Kessler@wv.gov>
Subject: Publication of Class I Legal Ad for the WV Division of Air Quality

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From: Adkins, Sandra K
Sent: Thursday, December 03, 2015 4:50 PM
To: nkaufmann@heraldstaronline.com
Cc: Kessler, Joseph R
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Kessler, Joseph R

From: Adkins, Sandra K
Sent: Friday, December 04, 2015 2:17 PM
To: pscheel@heraldstaronline.com; nkaufmann@heraldstaronline.com
Cc: Kessler, Joseph R
Subject: FW: Fw: Publication of Class I Legal Ad for the WV Division of Air Quality

Thank you!

From: Pat Scheel [<mailto:pscheel@heraldstaronline.com>]
Sent: Friday, December 04, 2015 1:38 PM
To: Adkins, Sandra K <Sandra.K.Adkins@wv.gov>
Subject: Re: Fw: Publication of Class I Legal Ad for the WV Division of Air Quality

Good Afternoon Sandra:
I received your email and processed the legal notice this morning and I just received your voice mail. This legal is scheduled to run Tuesday, December 8th in the Weirton Daily Times.
You originally sent this email to Nancy Kaufmann this morning. She is off today.
Thank you and have a good weekend!
Pat

Patricia "Pat" Scheel
Classified Supervisor
740-283-4711, Ext 222

-----Original Message-----

From: Nancy <nkaufmann@heraldstaronline.com>
To: "Pat Scheel" <pscheel@heraldstaronline.com>
Date: 12/04/15 09:43 AM
Subject: Fw: Publication of Class I Legal Ad for the WV Division of Air Quality

Thank You
nkaufmann

-----Original Message-----

From: "Adkins, Sandra K" <Sandra.K.Adkins@wv.gov>
To: nkaufmann@heraldstaronline.com
Cc: "Kessler, Joseph R" <Joseph.R.Kessler@wv.gov>
Date: 12/03/15 04:50 PM
Subject: Publication of Class I Legal Ad for the WV Division of Air Quality

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Kessler, Joseph R

From: Adkins, Sandra K
Sent: Friday, December 04, 2015 2:30 PM
To: wentworth.paul@epa.gov; bradley.megan@epa.gov; jake.neihaus@ergon.com
Cc: Durham, William F; McKeone, Beverly D; McCumbers, Carrie; Hammonds, Stephanie E; Rice, Jennifer L; Kessler, Joseph R; Taylor, Danielle R; Seevers, Sharon M
Subject: WV Draft Permit R13-2334Y for Ergon - West Virginia, Inc.; Newell Refinery
Attachments: 2334Y.pdf; Eval2334Y.pdf; notice.pdf

Please find attached the Draft Permit R13-2334Y, Engineering Evaluation, and Public Notice for Ergon – West Virginia, Inc.’s Newell Refinery located in Hancock County.

The notice will be published in the *Weirton Daily Times* on Tuesday, December 8, 2015, and the thirty day public comment period will end on Thursday, January 7, 2016.

Should you have any questions or comments, please contact the permit writer, Joe Kessler, at 304 926-0499 x1219.

*West Virginia Department of Environmental Protection
Division of Air Quality*

*Earl Ray Tomblin
Governor*

*Randy C. Huffman
Cabinet Secretary*

Permit to Modify

Entire Document
NON-CONFIDENTIAL



R13-2334Y

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:
Ergon - West Virginia, Inc.
Newell Refinery
029-00008

DRAFT

*William F. Durham
Director*

Issued: DRAFT

This permit will supercede and replace Permit R13-2334X issued on June 8, 2015.

Facility Location: Newell, Hancock County, West Virginia
Mailing Address: 9995 Ohio River Blvd
Newell, WV 26050
Facility Description: Petroleum Refinery
SIC/NAICS Codes: 2911/324110
UTM Coordinates: 531.0 km Easting • 4,495.1 km Northing • Zone 17
Latitude/Longitude: 40.609173/-80.629196
Permit Type: Modification
Description of Change: Modification for the installation of new equipment and an increase of throughputs in the catalytic reforming (platformer) unit.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

Unless otherwise stated, WVDEP DAQ did not determine whether the applicant is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart BBBBBB.

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1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed /Modified	Design / Permitted Capacity	Control Device
CDU	CDU	Crude Distillation Unit	1972/ 2015	839,500 bbls/mo	00A-01
001-01	H-101R	CDU Atmospheric Heater; refinery fuel gas/natural gas blend	2012	54.5 MMBtu/hr	n/a
001-02	H-102R	CDU Vacuum Heater; refinery fuel gas/natural gas blend	2012	29.4 MMBtu/hr	n/a
002-01	H-201	PDR Heater; refinery fuel gas/natural gas blend or fuel oil	1972	6.6 MMBtu/hr	n/a
003-01	MEK-TOL	Solvent Dewaxing Unit	1972	NA	n/a
004-01	H-500S	H500 Series Heaters Unifiner/Platformer Unit; refinery fuel gas/natural gas blend	1972/ 2015	59.6 MMBtu/hr	n/a
004-02	H-501R	Unifiner Charge Heater	2013	11.5 MMBtu/hr	n/a
005-01	H-600S	H600 Series Heaters, ISOMAX Unit; refinery fuel gas/natural gas blend	1972	41.6 MMBtu/hr	n/a
005-02	H-441	Hydrogen Plant Heater; natural gas	1972	12.3 MMBtu/hr	n/a
006-01	H-701	VFU Heater; refinery fuel gas/natural gas blend	1983	12.1 MMBtu/hr	n/a
007-01	Boiler A	Boiler A; refinery fuel gas/natural gas blend	1972	159.50 MMBtu/hr	n/a
007-02	Boiler B	Boiler B; refinery fuel gas/natural gas blend	1972	159.50 MMBtu/hr	n/a
007-03	Boiler C	Boiler C; refinery fuel gas/natural gas blend	2000	95 MMBtu/hr	n/a
009-01	T Load	Truck Loading	1972/ 2012/ 2013	397.8 MMgal/yr	00A-02*
009-02	MLD	Marine Barge Loading	1972/ 2012	460.7 MMgal/yr	00A-04**
00A-01	F1	Main/Sour Gas Flare	1972	NA	n/a
00A-02	OXIDIZER	Thermal Oxidizer.	1994/ 2012/ 2013	17,346 MMBtu/yr 98.7% min efficiency	n/a
00B-01	WWT	Wastewater Treatment Plant	1972	600 gpm	00A-03

00B-02	EQLEAKS	Equipment Leak Fugitives			NA	NA	n/a
00D-01	Dehy Htr	Dehydration Heater			1991	0.59 MMBtu/hr	n/a
00D-02	Still	Glycol Dehydration Still			1991	N/A	n/a
EPN 01	H-901	DHT Heater			2005	27.5 MMBtu/hr	n/a
EPN 03	H-1101	Hydrogen Plant Heater			2005	38.8 MMBtu/hr	n/a
00A-04	MLDOX	Barge Loading Thermal Oxidizer			2012	59.0 MMBtu/hr 98% min efficiency	n/a
Tanks							
Emission Unit ID	Emission Point ID	Emission Unit Description	Contents	Designation	Year Installed	Design / Permitted Capacity	Control Device
4000	TK-4000	External floating roof; mechanical shoe	crude oil	Kb	1992/ 2012	2,310,000 gallons	n/a
4001	TK-4001	External floating roof; mechanical shoe	crude oil	Kb	1973/ 2012	2,310,000 gallons	n/a
4002	TK-4002	External floating roof; mechanical shoe	heavy/ kerosene		1970	2,310,000 gallons	n/a
4003	TK-4003	External floating roof; mechanical shoe	heavy / kerosene		1970	2,310,000 gallons	n/a
4004	TK-4004	External floating roof; mechanical shoe	gasoline		1971/ 2013	1,050,000 gallons	n/a
4005	TK-4005	External floating roof; mechanical shoe	gasoline		1971	1,050,000 gallons	n/a
4006	TK-4006	External floating roof; mechanical shoe	gasoline		1971/ 2013	1,050,000 gallons	n/a
4007	TK-4007	Fixed roof	heavy		1971	2,310,000 gallons	n/a
4008	TK-4008	Fixed roof	heavy		1970	1,260,000 gallons	n/a

Emission Unit ID	Emission Point ID	Emission Unit Description	Contents	Designation	Year Installed	Design / Permitted Capacity	Control Device
4009	TK-4009	Fixed roof	heavy / kerosene		1971	1,260,000 gallons	n/a
4010	TK-4010	Fixed roof	heavy		1970	1,260,000 gallons	n/a
4011	TK-4011	Fixed roof	heavy / kerosene		1971	1,239,568 gallons	n/a
4012	TK-4012	Internal floating roof; mechanical shoe	gasoline		1971	630,000 gallons	n/a
4013	TK-4013	Internal floating roof; mechanical shoe	gasoline		1971	630,000 gallons	n/a
4014	TK-4014	External floating roof; mechanical shoe	gasoline		1971/ 2013	315,000 gallons	n/a
4015	TK-4015	External floating roof; mechanical shoe	gasoline		1971/ 2013	315,000 gallons	n/a
4016	TK-4016	External floating roof; mechanical shoe	gasoline		1971	315,000 gallons	n/a
4017	TK-4017	Fixed roof	heavy		1971	840,000 gallons	n/a
4018	TK-4018	Fixed roof	heavy		1971	704,970 gallons	n/a
4019	TK-4019	Fixed roof	heavy		1971	704,970 gallons	n/a
4020	TK-4020	Fixed roof	heavy		1971	840,000 gallons	n/a
4021	TK-4021	Fixed roof	heavy		1971	840,000 gallons	n/a
4022	TK-4022	Fixed roof	heavy		1971	571,200 gallons	n/a
4023	TK-4023	Fixed roof	heavy		1971	571,200 gallons	n/a
4024	TK-4024	Fixed roof	heavy		1970	840,000 gallons	n/a
4025	TK-4025	Fixed roof	heavy		1970	840,000 gallons	n/a
4026	TK-4026	Fixed roof	heavy		1970	840,000 gallons	n/a

Emission Unit ID	Emission Point ID	Emission Unit Description	Contents	Designation	Year Installed	Design / Permitted Capacity	Control Device
4027	TK-4027	Fixed roof	heavy		1971	840,000 gallons	n/a
4028	TK-4028	Fixed roof	heavy		1970	210,000 gallons	n/a
4029	TK-4029	Fixed roof	heavy		1971	65,100 gallons	n/a
4030	TK-4030	Fixed roof	heavy		1971	65,100 gallons	n/a
4031	TK-4031	Fixed roof	heavy		1971	315,000 gallons	n/a
4032	TK-4032	Fixed roof	heavy		1971	315,000 gallons	n/a
4033	TK-4033	Fixed roof	heavy		1970	315,000 gallons	n/a
4034	TK-4034	Fixed roof	heavy	Kb	1998	840,000 gallons	n/a
4035	TK-4035	Fixed roof	heavy	Ka	1983	840,000 gallons	n/a
4036	TK-4036	Fixed roof	heavy	K	1973	315,000 gallons	n/a
4037	TK-4037	Fixed roof	heavy	K	1973	315,000 gallons	n/a
4038	TK-4038	Fixed roof	heavy	K	1976	840,000 gallons	n/a
4039	TK-4039	Fixed roof	heavy	K	1977	1,260,000 gallons	n/a
4040	TK-4040	Fixed roof	heavy	Ka	1978	630,000 gallons	n/a
4041	TK-4041	Fixed roof	heavy		1973	630,000 gallons	n/a
4042	TK-4042	Fixed roof	heavy	Ka	1978	630,000 gallons	n/a
4043	TK-4043	Fixed roof	heavy	Ka	1978	630,000 gallons	n/a
4044	TK-4044	Fixed roof	heavy	Ka	1982	1,260,000 gallons	n/a
4045	TK-4045	Fixed roof	heavy	Ka	1982	630,000 gallons	n/a
4046	TK-4046	Fixed roof	heavy	Ka	1982	630,000 gallons	n/a

Emission Unit ID	Emission Point ID	Emission Unit Description	Contents	Designation	Year Installed	Design / Permitted Capacity	Control Device
4047	TK-4047	Fixed roof	heavy	Kb	1986	1,260,000 gallons	n/a
4048	TK-4048	Fixed roof	heavy	Kb	1986	504,000 gallons	n/a
4050	TK-4050	Internal floating roof; mechanical shoe	gasoline	Kb	1993/ 2013	630,000 gallons	n/a
4051	TK-4051	Fixed roof	heavy	Kb	1996	1,260,000 gallons	n/a
4052	TK-4052	Fixed roof	ethanol		1972	30,240 gallons	n/a
4053	TK-4053	Fixed roof	ethanol		1972	30,240 gallons	n/a
4054	TK-4054	Fixed roof	heavy / kerosene	Kb	1998	625,000 gallons	n/a
4055	TK-4055	Fixed roof	heavy / kerosene	Kb	1998	625,000 gallons	n/a
4056	TK-4056	Fixed roof	heavy / kerosene	Kb	1999	625,000 gallons	n/a
4057	TK-4057	Fixed roof	heavy / kerosene	Kb	1999	625,000 gallons	n/a
4060	TK-4060	Internal floating roof; mechanical shoe	crude oil	Kb	1999/ 2015	5,040,000 gallons	n/a
4061	TK-4061	Internal floating roof; mechanical shoe	crude oil	Kb	2008/ 2015	5,040,000 gallons	n/a
4062	TK-4062	Internal floating roof; mechanical shoe	light crude oil w/vapor pressure \leq 11.0 psia	Kb	2008/ 2012	5,040,000 gallons	n/a
4063	TK-4063	Internal floating roof; mechanical shoe	light crude oil w/vapor pressure \leq 11.0 psia	Kb	2012	5,040,000 gallons	n/a
4066	TK-4066	Fixed Roof	biodiesel		2011	40,000 gallon	n/a
4103	TK-4103	Fixed roof	heavy		1970	127,000 gallons	n/a
4104	TK-4104	Fixed roof	heavy		1970	127,000 gallons	n/a

Emission Unit ID	Emission Point ID	Emission Unit Description	Contents	Designation	Year Installed	Design / Permitted Capacity	Control Device
00A-03	CARBON BED	Carbon Bed Adsorber			2002	6,000 cfm	n/a
Process Vessels							
303	TK-303	Fixed roof	MEK		1970	7,875 gallons	n/a
304	TK-304	Fixed roof	Toluene		1970	7,875 gallons	n/a
NS-FUG	NS-FUG	Naphtha Splitter Fugitives	Naphtha		2011	Not Applicable	n/a
ISOM	ISOM	Processing Unit; Benzene Reduction	n/a		2012	21.6 Mmgal/yr	n/a
ADU	NH3OX	Ammonia Destruction Unit	N/A		2015	N/A	00A-05
00A-05	NH3OX	Ammonia Destruction Unit Thermal Oxidizer	N/A		2015	6.6 MMBtu/hr 99.9% DRE	N/A
ADUFUG	ADUFUG	Ammonia Destruction Unit Fugitives	N/A		2015	N/A	N/A
PL-FUG	PL-FUG	Platformer Expansion Fugitives	N/A		2015	N/A	N/A
YNGL-FUG	YNGL-FUG	Y-Grade NGL Fugitives	N/A		2015	N/A	N/A

* Control Device for Gasoline Loading Only

** Control Device for Gasoline and Light Crude Oil Loading Only

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	PM	Particulate Matter
CBI	Confidential Business Information	PM_{2.5}	Particulate Matter less than 2.5µm in diameter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement		
C.F.R. or CFR	Code of Federal Regulations	Ppb	Pounds per Batch
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	Ppmv or ppmv	Parts per million by volume
DEP	Department of Environmental Protection	PSD	Prevention of Significant Deterioration
dscm	Dry Standard Cubic Meter		
FOIA	Freedom of Information Act	psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	SIP	State Implementation Plan
lbs/hr	Pounds per Hour	SO₂	Sulfur Dioxide
LDAR	Leak Detection and Repair	TAP	Toxic Air Pollutant
M	Thousand	TPY	Tons per Year
MACT	Maximum Achievable Control Technology	TRS	Total Reduced Sulfur
MDHI	Maximum Design Heat Input	TSP	Total Suspended Particulate
MM	Million	USEPA	United States Environmental Protection Agency
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	UTM	Universal Transverse Mercator
MMCF/hr or mmcf/hr	Million Cubic Feet per Hour	VEE	Visual Emissions Evaluation
NA	Not Applicable	VOC	Volatile Organic Compounds
NAAQS	National Ambient Air Quality Standards	VOL	Volatile Organic Liquids
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		
NSPS	New Source Performance Standards		

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

2.4. Term and Renewal

- 2.4.1. This permit supercedes and replaces previously issued Permit R13-2334W. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

2.5. Duty to Comply

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Applications R13-2334 through R13-2334Y, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 13-10.3]
- 2.5.2. This permit supercedes and replaces R13-2334X. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13. [45CSR§13-4]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13. [45CSR§13-5.4.]

2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate. [45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,
 - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1]

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment

and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language;
 2. The result of the test for each permit or rule condition; and,
 3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State-Enforceable only.*]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

If to the USEPA:

Associate Director
Office of Air Enforcement and Compliance
Assistance
(3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee.

- 3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.
- 3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements [Fuel Burning Units (Boilers A, B, & C, Heaters H-101R, H-102R, H-201, H-501R, H-500s, H-600s, H-441, H-701, H-901, & H-1101)]

Emission Unit	Limits and Standards Section 4.1	Monitoring Section 4.2	Testing Section 4.3	Recordkeeping Section 4.4	Reporting Section 4.5
Boiler A	1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 26, 27	1, 2, 3	n/a	1, 2, 3, 4, 5, 6, 7, 8, 9, 14	1, 2
Boiler B	1,2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 26, 27	1, 2, 3	n/a	1, 2, 3, 4, 5, 6, 7, 8, 9, 14	1, 2
Boiler C	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 26, 27	1	n/a	1, 2, 3, 4, 5, 6, 7, 8, 10, 14	1, 3
H-101R	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19	1, 7	1	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 18	1, 2, 5
H-102R	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19	1, 7	1	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 18	1, 2, 5
H-201	1, 2, 3, 4, 5, 20, 21, 26, 27	1, 2, 3	n/a	1, 2, 3, 4, 11, 12, 13, 14	n/a
H-441	1, 2, 3, 4, 5, 6, 7, 8, 9, 20, 21	1	n/a	1, 2, 3, 4, 5, 6, 11, 12, 13	1
H-701	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 20, 21, 26, 27	1	n/a	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14	1
H-501R	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16, 17, 18, 19	1, 7	1	1, 2, 3, 4, 5, 6, 7, 8, 11, 18	1, 2, 5
H-500S	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17, 22, 26, 27	1, 2, 3, 7	n/a	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 18	1, 2, 5
H-600S	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 22, 26, 27	1, 2, 3	n/a	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14	1, 2

H-901	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 23, 24, 25, 26, 27	1, 4, 5, 6	n/a	1, 2, 3, 4, 5, 6, 14, 15, 16, 17	1, 2, 4
H-1101	1, 2, 3, 4, 5, 6, 7, 8, 9, 23, 24, 25	1, 4, 5, 6	n/a	1, 2, 3, 4, 5, 6, 15, 16, 17	1, 4

4.1. Limitations and Standards

All boilers and heaters

- 4.1. 1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.]

- 4.1. 2. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary for a fuel burning unit to comply with the visible emission standards set forth in 45CSR§2-3.1. or any emergency situation or condition creating a threat to public safety or welfare, the Director may grant an exception to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during the exception period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the emission standards under 45CSR§2-4.1.b. will not be exceeded during the exemption period.
[45CSR§2-10.1.]

- 4.1. 3. In the event a fuel burning unit employing a flue gas desulphurization system must by-pass such system because of necessary planned or unplanned maintenance, visible emissions may not exceed twenty percent (20%) opacity during such period of maintenance. The Director may require advance notice of necessary planned maintenance, including a description of the necessity of the maintenance activity and its expected duration and may limit the duration of the variance or the amount of the excess opacity exception herein allowed. The Director shall be notified of unplanned maintenance and may limit the duration of the variance or the amount of excess opacity exception allowed during unplanned maintenance.
[45CSR§2-10.2.]

- 4.1. 4. The facility shall not burn Fuel Oil in any combustion unit, except during periods of natural gas curtailment and/or during periods of DOT required maintenance of the natural gas pipeline in which the facility shall burn only LPG or low sulfur distillate (e.g. No. 2 oil at less than 0.5% sulfur). Note: Fuel Oil is defined as any liquid fossil fuel with sulfur content greater than 0.05% by weight.

- 4.1. 5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

All Boilers and Heaters Except H-201

4.1. 6. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air in excess of the following:

Emission Unit	PM Emission Limit
Boiler A	14.36 pounds per hour
Boiler B	14.36 pounds per hour
Boiler C	8.55 pounds per hour
H-101R	4.91 pounds per hour
H-102R	2.65 pounds per hour
H-501R	1.04 pounds per hour
H-500s	5.36 pounds per hour
H-600s	3.74 pounds per hour
H-441	1.11 pounds per hour
H-701	1.09 pounds per hour
H-901	2.48 pounds per hour
H-1101	3.49 pounds per hour

[45CSR§2-4.1.b.]

4.1. 7. The visible emission standards set forth in 45CSR§2-3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.

[45CSR§2-9.1.]

4.1. 8. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§2-9.2. , 45CSR§16, and §60.11(d), NSPS Subpart A]

4.1. 9. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The owner and/or operator of a fuel burning unit shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in this rule, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period said owner and/or operator shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of this rule. A continuous twenty-four (24) hour period is defined as one (1) calendar day.

[45CSR§10-3.8.]

Boilers A, B, and C, Heaters H-101R, H-102R, H-501R, H-500S, H-600S, H-701, H-901

- 4.1. 10. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of this rule. [45CSR§10-8.2.a.]
- 4.1. 11. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) shall demonstrate compliance with sections 3, 4 and 5 of 45CSR10 by testing and /or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit.
 [45CSR§10-8.2.c.]

Boilers A and B

- 4.1. 12. The permittee shall monitor compliance with 45CSR§2-3 in an approved monitoring plan (see Appendix A) for each emission unit. Such plans shall include, but not be limited to, one or more of the following: continuous measurement of emissions, monitoring of emission control equipment, periodic parametric monitoring, or such other monitoring as approved by the Director.
 [45CSR§2-8.2.]
- 4.1. 13. The combined emissions from Boiler A and Boiler B (Emission Point ID Nos. A & B, which is a common stack) shall not exceed those listed below. NO_x limits (based on a three hour averaging period) for each boiler shall be as follows: Boiler A - 0.058 lb/mmBTU and Boiler B - 0.058 lb/mmBTU. [Consent Decree Civil No. 3.03CV114010S, Section V.11.B]

Pollutant	Emission Rate	
	TPM	TPY
CO	11.51	115.07
NO _x	8.10	81.04
PM	1.04	10.42
SO ₂	0.81	8.06
VOC	0.75	7.53

Boiler C

- 4.1. 14. Boiler C shall be equipped with low NO_x burners. Emissions from Boiler C (Emission Point ID No. C) shall not exceed the limits in the following table. Compliance with the SO₂ limit shall demonstrate compliance with the less stringent limit of 45CSR§10-3.1.e.

Pollutant	Emission Rate	
	Tons per Month (TPM)	Tons per Year (TPY)
CO	3.43	34.27
NO _x	2.08	20.81
PM	0.31	3.10

SO ₂	0.24	2.41
VOC	0.22	2.24

Boiler C and Heater H-101R

4.1. 15. NO_x limits on heaters and boilers greater than 40 mmBTU/hr heat input capacity shall be as follows:

- i. Boiler C - 0.050 lb/mmBTU (based on a three-hour averaging period) and
- ii. H-101R - 0.040 lb/mmBTU (determined daily on a 30-day rolling average basis)
 [ii - 40 CFR § 60.102a (g)(2)(i)(B), NSPS Subpart Ja].

Heaters H-101R, H-102R, H-500S, and H-501R

4.1. 16. Process heaters H-101R, H-102R, and H-501R shall be equipped with low NO_x burners. Combined emissions from H-101R and H-102R shall not exceed those listed below. Emissions from H-501R shall not exceed those listed below.

Pollutant	H-101R and H-102R		H-501R	
	Emission Rate		Emission Rate	
	TPM	TPY	TPM	TPY
CO	1.11	11.02	0.15	1.50
NO _x	2.40	23.89	0.33	3.27
PM	0.63	2.76	0.04	0.38
PM10	0.60	2.62	0.04	0.35
PM2.5	0.59	2.56	0.04	0.35
SO ₂	0.75	7.43	0.11	1.12
VOC	0.19	1.84	0.03	0.25

4.1. 17. The permittee shall comply with the emission limitations set forth below on and after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated or 180 days after initial startup, whichever comes first. [40CFR §60.102a (a), NSPS Subpart Ja]

- i. The permittee shall not burn in any fuel gas combustion device any fuel gas that contains H₂S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H₂S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis. [40CFR §60.102a (g)(1)(ii), NSPS Subpart Ja]

4.1. 18. The permittee is subject to the design, equipment, work practice or operational standards as specified in 40 CFR §60.103a. [40CFR §60.103a, NSPS Subpart Ja]

4.1. 19. The permittee shall conduct a performance test to demonstrate initial compliance with each applicable emissions limit in §60.102a according to the requirements of §60.8. The notification requirements of §60.8(d) apply to the initial performance test and to subsequent performance tests, but does not apply to performance tests conducted for the purpose of obtaining supplemental data because of continuous

monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. [40CFR §60.104a, NSPS Subpart Ja]

Heaters H-201, H-441, and H-701

4.1. 20. Emissions from heaters H-201, H-701, and H-441 shall not exceed those listed in the following table. Compliance with the SO₂ limit for H-701 and H-441 shall demonstrate compliance with the less stringent limit of 45CSR§10-3.1.e.

Pollutant	H-201		H-701		H-441	
	TPM	TPY	TPM	TPY	TPM	TPY
CO	0.43	2.38	0.44	4.36	0.44	4.44
NO _x	0.28	2.76	0.11	1.06	0.53	5.28
PM	0.02	0.22	0.04	0.39	0.04	0.40
SO ₂	0.08	0.77	0.14	1.40	0.01	0.03
VOC	0.02	0.16	0.03	0.29	0.03	0.29

4.1. 21. Heaters H-441 shall be limited to combusting natural gas only.

Heaters H-500S and H-600S

4.1. 22. Emissions from H-500S and H-600S heaters shall not exceed those listed in the following table. Note: "S" means multiple heaters with emissions exiting a common emission point.

Pollutant	H-500S		H-600S	
	TPM	TPY	TPM	TPY
CO	2.02	20.16	1.5	15.01
NO _x	2.96	29.58	2.14	21.44
PM	0.19	1.90	0.14	1.36
PM ₁₀	0.18	1.80	n/a	n/a
PM _{2.5}	0.18	1.76	n/a	n/a
SO ₂	0.72	7.21	0.48	4.83
VOC	0.13	1.31	0.1	0.98

Heaters H-901 and H-1101

4.1. 23. Emissions from the DHT Heater (H-901) and Hydrogen Plant Heater (H-1101) shall not exceed those listed in the following table.

Pollutant	H-901		H-1101	
	TPM	TPY	TPM	TPY
CO	0.42	4.21	0.17	1.70
NO _x	0.30	3.01	0.68	6.80

PM	0.08	0.79	0.17	1.70
SO ₂	0.27	2.72	0.01	0.08
VOC	0.12	1.20	0.13	1.25

4.1. 24. Heater H-1101 shall be limited to combusting natural gas only.

Boilers A, B, and C, Heaters, H-201, H-500S, H-600S, H-701, and H-901

4.1. 25. No owner or operator shall burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph. The listed heaters and boilers are affected facilities, as that term is used in 40 CFR 60, Subparts A and J.

[40C.F.R.§60.104(a)(1), NSPS Subpart J]

4.1. 26. The permittee shall comply with the emission limitations set forth in 40 CFR 60 Subpart J on and after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after initial startup, whichever comes first. [40 C.F.R. § 60.104, NSPS Subpart J and 45CSR §16-4.1]

4.2. Monitoring Requirements

All Boilers and Heaters

4.2.1. Visual emission checks of each emission point subject to an opacity limit shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using 40 CFR 60 Appendix A, Method 22. If natural gas is being combusted, the visual emissions checks shall be conducted monthly. If fuel oil is being combusted, the visual emissions checks shall be conducted weekly. If visible emissions are identified during the survey, or at any other time, the permittee shall take corrective action to minimize the emissions immediately. If during these checks, or at any other time, visible emissions are observed, a visible emission evaluation shall be conducted in accordance with 40 CFR 60 Appendix A, Method 9. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, the name of the observer, and any data required by 40 CFR 60 Appendix A, Method 22 or Method 9.

Boilers A and B, H-201, H-600S

4.2.2. To demonstrate compliance with permit condition 4.1.25, the permittee shall install, certify, calibrate, maintain, and operate a fuel gas CEMS in accordance with the requirements of 40 CFR 60.11, 60.13, and Part 60 Appendices A and F, and the applicable performance specification test of 40 CFR Part 60 Appendix B. [40 C.F.R. § 60.105(1)(3), NSPS Subpart J and Consent Decree Civil No. 3:03SV114010S V.12]

4.2.3. To demonstrate compliance with the three-hour average NOx limit of permit condition 4.1.13 of this permit, the permittee shall install, certify, calibrate, maintain, and operate a CEMS on Boilers A and B to measure NOX and O2 in accordance with the requirements of 40 CFR 60.11, 60.13, and Part 60, Appendices A and F. [Consent Decree Civil No. 3.03CV114010S V.11.C.i]

Heater H-901 and H-1101

4.2.4. Compliance with the hydrogen sulfide concentration limit for H-901 of permit condition 4.1.25 shall be demonstrated using the continuous monitor as follows:

4.2.4.1. An instrument for continuously monitoring and recording the concentration (dry basis) of H₂S in fuel gases before being burned in any fuel gas combustion device.

4.2.4.2. The span value for this instrument is 425 mg/dscm H₂S.

4.2.4.3. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned.

4.2.4.4. The performance evaluations for this H₂S monitor under §60.13(c) shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

[40 C.F.R. §60.105(a)(4)(i)(ii)(iii) and 45CSR §16-4.1]

4.2.5. The permittee shall monitor the amount of natural gas consumed in H-1101 using flow meters.

4.2.6. The permittee shall monitor the amount of fuel gas consumed in H-901 using flow meters.

Heaters H-101R, H-102R, H-500S, and H-501R

4.2.7. To demonstrate compliance with the emissions limitations requirements of 40 CFR § 60.102a and permit condition 4.1.17, the permittee shall continuously monitor the concentration of H₂S in refinery fuel gas consumed by the heaters and meet the monitoring of emissions and operations for fuel gas combustion devices and flares requirements of 40 CFR §60.107a. **[40 CFR §60.107a, NSPS Subpart Ja]**

4.3. Testing Requirements

Heaters H-101R

4.3.1. The permittee is subject to the performance test requirements established in 40 CFR §60.104a. **[40 CFR §60.104a, NSPS Subpart Ja]**

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4. 2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4. 3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

All Boilers and Heaters

4.4. 4. To determine compliance with restrictions set forth in Section 4.1.4., the permittee shall document the frequency, length of time, amount of fuel oil consumed, and estimate of emissions during DOT maintenance and periods of natural gas curtailment in which fuel oil was combusted. To determine compliance with fuel oil sulfur content limits set forth in Section 4.1.4., the permittee shall keep records of the sulfur content of all fuel oil received for the purpose of combustion. Each batch of fuel oil shall have its sulfur content determined by test method ASTM D4294. This information along with appropriate emission factors from EPA's *AP-42 Fifth Edition, Volume I, Supplement E, Chapter 1.3* may be used to estimate emissions.

All Boilers and Heaters Except H-201

4.4. 5. The operators of fuel burning units shall maintain a periodic exception report for each unit. Such reports shall include, but may not be limited to the date and time of start-ups and shutdowns. All such requirements, including notification by telephone, telefax, or other such method determined by the Director, shall be deemed to be satisfied when the reports are maintained on site for a period of no less than five (5) years and shall be made available upon request to the Director or his/her duly authorized representative.

[45CSR§2-8.3.b.]

- 4.4. 6. The permittee shall maintain records of the operating schedule and the quantity of fuel consumed in each fuel burning unit monthly, at a minimum, but may record it more often at the discretion of the permittee.
[45CSR§2-8.3.c.]

Boilers A, B and C, Heaters H-101R, H-102R, H-501R, H-500S, H-600S and H-701

- 4.4. 7. The owner or operator of fuel burning unit(s), manufacturing process source(s) or combustion source(s) subject to 45CSR§§10-3, 4 or 5 shall maintain on-site a record of all required monitoring data as established in a monitoring plan pursuant to 45CSR§10-8.2.c. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. [45CSR§10-8.3.a.]

- 4.4. 8. The owner or operator of a fuel burning unit(s) or a combustion source(s) shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each unit in a manner specified by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request. [45CSR§10-8.3.c.]

Boilers A and B

- 4.4. 9. To determine compliance with the emission limits set forth for Boiler A and Boiler B set forth in Section 4.1.13, the permittee shall keep monthly records of the amount of fuel gas (refinery plus natural gas) consumed within the two boilers, individually. This information along with appropriate emission factors from EPA's Supplement D, Chapter 1.4 may be used to estimate monthly emissions of all pollutants except SO₂.

Boiler C

- 4.4. 10. To determine compliance with the emission limits for Boiler C, set forth in Section 4.1.14., the permittee shall keep monthly records of the amount of fuel gas (refinery plus natural gas) consumed within Boiler C and the hours of operation. This information along with appropriate emission factors from *EPA's Compilation of Air Pollutant Emission Factors AP-42 Fifth Edition, Volume I, Supplement D: Stationary Point and Area Sources (AP-42)*, Chapter 1.4. may be used to estimate monthly emissions of all pollutants except NO_x. The emission factor for NO_x shall be obtained from the Global Consent Decree (Civil No. 3:03CV114010S), which sets a limit of 0.050 lb/MMBtu. Compliance with the yearly limit shall be based on a 12-month rolling total.

Heaters H-101R and H-102R, H-701 and H-441, H-201, H-501R, H-500S, H-600S

- 4.4. 11. To determine compliance with the emission limits set forth for H-101R, H-102R, and H-501R set forth in Section 4.1.16, the permittee shall keep monthly records of the amount of fuel gas (refinery plus natural gas) consumed within both heaters for H-101R and H-102R and individually for H-501R. This information along with appropriate emission factors from *EPA's AP-42 Fifth Edition, Volume I, Supplement D, Chapter 1.4* may be used to estimate monthly emissions of all pollutants except NO_x and SO₂. SO₂ emission factors shall be based on the 1995 SO₂ SIP and heating value (HHV) of 1019 Btu/scf, which sets a limit of 0.13260 lb/MMBtu. Compliance with the yearly limit shall be based on a 12-month rolling total. Compliance with the SO₂ limit shall demonstrate compliance with the less stringent requirement of CO-SIP-95-1 - Condition IV.4. (SIPed) and 45CSR§10-3.1.e.
- 4.4. 12. To determine compliance with the emission limits set forth for H-441 set forth in Section 4.1.20., the permittee shall keep monthly records of the amount of natural gas consumed in the two heaters. This information along with appropriate emission factors from *EPA's AP-42 Fifth Edition, Volume I, Supplement D, Chapter 1.4* may be used to estimate monthly emissions.
- 4.4. 13. To determine compliance with the emission limits set forth for H-201, H-500 Series, H-600 Series, and H-701 set forth in Sections 4.1.20 and 4.1.22, the permittee shall keep monthly records of the

amount of fuel gas (refinery plus natural gas) consumed within the three heaters, individually. This information along with appropriate emission factors from EPA's *Supplement D, Chapter 1.4*, may be used to estimate monthly emissions of all pollutants except SO₂. SO₂ emission factors shall be based on the 1995 SIP and heating value (HHV), which sets a limit of 0.13260 lb/MMBtu. Compliance with the yearly limit shall be based on a 12-month rolling total.

All Boilers and Heaters Except H-441 and H-1101

- 4.4. 14. For any periods for which sulfur dioxide or oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
[40 C.F.R. §60.107(d), NSPS Subpart J and 45CSR §16-4.1]

Heaters H-901 and H-1101

- 4.4. 15. The permittee shall keep monthly records of the amount of refinery fuel gas consumed by H-901. To determine compliance with NO_x, SO₂, VOC, and CO emissions limits for the H-901, emission factors from manufacturer's specifications along with fuel gas consumption may be used. To determine compliance with the PM emission limits, AP-42 emission factors Table 1.4.-2 (1998) along with fuel gas consumption data may be used. Said records shall be maintained on-site for a period of (5) years. Said records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request and shall be certified by a responsible official upon the submittal.
- 4.4. 16. The permittee shall maintain continuous record for the H₂S concentration in the refinery fuel gas consumed by H-901. Said records shall be maintained on-site for a period of (5) years. Said records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request and shall be certified by a responsible official upon the submittal.
- 4.4. 17. The permittee shall keep monthly records of the amount of natural gas consumed by H-1101. To determine compliance with the NO_x, SO₂, and CO emission limits for the H-1101, the permittee may use manufacturer's specifications and natural gas consumption. To determine compliance with the VOC and PM emission limit, natural gas consumption data and AP-42 Table 1.4-2 (1998) using an average gas high heating value (HHV) of 1020 Btu/scf may be used. Said records shall be maintained on-site for a period of (5) years. Said records shall be made available to the Director of the Division of Air Quality or his/her duly authorized representative upon request and shall be certified by a responsible official upon the submittal.

Heaters H101R, H-102R, H-500S, and H-501R

- 4.4. 18. Each owner or operator subject to the emissions limitations in §60.102a shall comply with the notification, recordkeeping, and reporting requirements in §60.7 and other requirements as specified in this section. [40 CFR §60.108a, NSPS Subpart Ja]

4.5. Reporting Requirements

All Boilers, Heaters H-101R, H-102R, H-441, H-701, H-501R, H-500S, H-600S, H-901, H-1101

- 4.5.1. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in 45CSR§§2-3 and 4) as provided in one of the following subdivisions:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
- b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation. [45CSR§2-9.3.]

Boilers A and B, Heaters H-101R, H-102R, H-501R, H-500S, H-600S, H-901

- 4.5.2. The owner or operator shall submit a periodic exception report to the Director, in a manner specified by the Director. Such an exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan (see Appendix A) and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken. [45CSR§10-8.3.b.]

Boiler C

- 4.5.3. The permittee is responsible for submitting notification of the date of construction or reconstruction, anticipated startup, and actual startup and complying with 40 C.F.R. § 60.40c, 40 C.F.R. § 60.48c, and 40 C.F.R. § 60.8. The permittee has complied with this requirement by submitting notification. Renotification will be required if modifications are made. [40 C.F.R. § 60.48c and 45CSR§16-2.1.]

Heater H-901 and H-1101

- 4.5.4. For any periods for which sulfur dioxide or oxides emissions data are not available for H-901, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 C.F.R. §60.107(d), NSPS Subpart J and 45CSR §16-4.1]

Heaters H-101R, H-102R, H-500S, and H-501R

- 4.5.5. Each owner or operator subject to the emissions limitations in §60.102a shall comply with the notification, recordkeeping, and reporting requirements in §60.7 and other requirements as specified in this section. [40 C.F.R. §60.108a, NSPS Subpart Ja]

5.0. Source-Specific Requirements [Loading Operations, Flares and Thermal Oxidizers: F1, T Load, MLD, OXIDIZER, MLDOX, and NH3OX]

5.1. Limitations and Standards

5.1.1. Emissions shall not exceed those listed in the table below. Annual emission limits are based on a 12-month rolling basis.

Emission Point ID	Regulated Pollutant	Emission Limit	
		TPM	TPY
F1	CO	2.37	23.66
	NOX	0.44	4.42
	SO2	4.01	40.11
	VOC	0.89	8.93
	PM	0.50	0.48
	PM _{2.5}	0.50	0.48
TLOAD OXIDIZER	VOC	1.57	15.77
	Benzene	0.03	0.26
	Total HAPs	0.27	2.68
	CO	0.20	1.98
	NOX	0.04	0.36
	PM	0.01	0.04
	PM10	0.01	0.04
	PM2.5	0.01	0.04
	SO2	0.02	1.16
MLD MLDOX	VOC	1.09	10.86
	Benzene	0.01	0.05
	Total HAPs	0.11	1.05
	CO	0.27	2.63
	NOX	0.05	0.48
	PM	0.01	0.05
	PM10	0.01	0.05
	PM2.5	0.01	0.05
	SO2	0.08	0.72
	VOC	0.10	1.00

NH3OX

	NOX	0.05	0.50
	CO	0.80	7.96
	SO2	0.01	0.02
	PM	0.02	0.22
	PM10	0.02	0.22
	PM2.5	0.02	0.22

5.1.2. The permittee shall not exceed the annual limits in the table below that correspond to the emission limits established in requirement 5.1.1. Annual quantities are based on a 12-month rolling basis.

Throughput Limits		
Location	Product	Quantity (Mgal/year)
Marine Loading	Gasoline	40,387
	Light Crude Oil (including oil with a vapor pressure up to 11.0 psia)	306,600
	Diesel	37,065
	Kerosene	46,000
	Lube Oil/ Heavy Products	30,660
Truck Loading	Diesel	134,904
	Gasoline	96,960
	No. 6 Fuel Oil	13,650
	Kerosene	15,330
	Lube Oil/ Heavy Products	136,920
Operational Limits		
Location	Product	Quantity
Main/Sour Gas Flare [F1]	Non-Pilot emissions	250 hours

5.1.3. During truck loading of gasoline, VOC emissions shall be controlled by the Loading Rack Thermal Oxidizer [OXIDIZER/ 00A-02].

5.1.4. Marine Loading.

- a. During marine loading of gasoline and light crude oil, VOC emissions shall be controlled by the Marine Barge Loading Thermal Oxidizer [MLDOX/ 00A-04]. MLDOX shall be operated within the operating parameters established during testing and shall be maintained to achieve a minimum control efficiency of 98% for VOCs.

b. All vessels loaded from the Marine Loading Dock (MLD) shall be submerged filled.

5.1.5. Emissions from the Ammonia Destruction Unit (ADU) shall be routed to the ADU Thermal Oxidizer [NH3OX/00A-05] at all times that the ADU is in operation. The thermal oxidizer [NH3OX] shall be operated within the operating parameters established during testing and shall be maintained to achieve a minimum control efficiency of 99.9% for VOCs.

5.1.6. The Main Source Gas Flare [F1/00A-01], the Truck Loading Thermal Oxidizer [OXIDIZER/00A-02], the Marine Loading Thermal Oxidizer [MLDOX/00A-04], and the Ammonia Destruction Unit Thermal Oxidizer [NH3OX], are subject to the requirements of 45CSR6 including but not limited to the following:

a. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by the use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

where the factor, F, is as indicated in the table below:

<u>Incinerator Capacity</u>	<u>F Factor</u>
Less than 15,000 lbs/hr	5.43
15,000 lbs/hr or greater	2.72

Calculation for PM Emissions:

F1 [00A-01]:

$$(2.72) * \left(395,000 \frac{\text{lb}}{\text{hr}} \right) * \left(\frac{\text{ton}}{2000 \text{ lb}} \right) = 537.2 \text{ lb/hr}$$

OXIDIZER [00A-02]:

$$(5.43) * \left(64.8 \frac{\text{lb}}{\text{hr}} \right) * \left(\frac{\text{ton}}{2000 \text{ lb}} \right) = 0.176 \text{ lb/hr}$$

MLDOX [00A-04]:

$$(5.43) * \left(4600 \frac{\text{lb}}{\text{hr}} \right) * \left(\frac{\text{ton}}{2000 \text{ lb}} \right) = 12.5 \text{ lb/hr}$$

NH3OX [00A-05]:

$$(5.43) * (416.08 \text{ lb/hr}) * (\text{ton}/2000 \text{ lb}) = 1.13 \text{ lb/hr}$$

[45CSR§6-4.1]

b. No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.

[45CSR§6-4.3]

c. Incinerators, including all associated equipment and grounds, shall be designed, operated and

maintained so as to prevent the emission of objectionable odors.

[45CSR§6-4.6]

- 5.1.7. The permittee shall not cause, suffer, allow, or permit the emission into open air from any source operation an in-stack sulfur dioxide concentration exceeding 2000 ppm by volume from existing source operations. Note: "In-stack" concentration as interpreted for a flare means the exhaust concentration after combustion. **[45CSR§10-4.1]**
- 5.1.8. *Reserved*
- 5.1.9. For control devices F1, no owner or operator shall burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 gr/dscf). The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this paragraph. **[NSPS, Subpart J; 40CFR §60.104(a)(1)]**
- 5.1.10. *Reserved*
- 5.1.11. *Reserved*
- 5.1.12. *Reserved*
- 5.1.13. The Main/Sour Gas Flare [F1] is an affected facility as that term is used in 40 CFR Part 60 and shall be subject to comply with the requirements of 40 CFR Part 60, Subparts A and J for fuel gas combustion devices. The permittee shall comply with the NSPS obligation to implement good air pollution control practices as required by 40 CFR 60.11(d) to minimize Hydrocarbon and Acid Gas Flaring Incidents. **[Consent Decree Civil No. 3.03CV114010S V.14]**
- 5.1.14. The permittee shall implement a program to investigate the cause of Acid Gas Flaring Incidents, take reasonable steps to correct the conditions that have caused or contributed to Acid Gas Flaring Incidents, and minimize Acid Gas Flaring Incidents. The permittee shall evaluate whether Acid Gas Flaring Incidents are due to Malfunctions by conducting a detailed analysis that sets forth the Root Cause and all contributing causes of the Acid Gas Flaring Incident, to the extent determinable; and by conducting an analysis of the measures, if any, that are available to reduce the likelihood of a recurrence of an Acid Gas Flaring Incident resulting from the same Root Cause or contributing causes in the future. The analysis should evaluate the alternatives, if any, that are available, the probable effectiveness and the cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation, and maintenance changes shall be evaluated.
- "Acid Gas Flaring Incident" means the continuous or intermittent combustion of Acid Gas and/or Sour Water Stripper Gas that results in the emission of sulfur dioxide equal to, or in excess of five-hundred (500) pounds in any twenty-four (24) hour period; provided, however, that if five-hundred (500) pounds or more of sulfur dioxide have been emitted in a twenty-four (24) hour period and Flaring continues into subsequent, contiguous, non-overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of five-hundred (500) pounds of sulfur dioxide, then only one AG Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the AG Flaring Incident. "Acid Gas" means any gas that contains hydrogen sulfide and is generated at a refinery by the regeneration of amine solution.
 - "Acid Gas Flaring" means the combustion of Acid Gas and/or Sour Water Stripper Gas in

an Acid Gas Flaring Device. "Acid Gas Flaring Device" shall mean any device at EWVI that is used for the purpose of combusting Acid Gas and/or Sour Water Stripper Gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid. The Acid Gas Flaring Device currently in service at EWVI is 00A-01.

- "Sour Water Stripper Gas" shall mean the gas produced by the process of stripping refinery sour water.
- "Root Cause" means the primary cause(s) of an AG Flaring Incident(s) and/or Hydrocarbon Flaring Incident(s) as determined through a process of investigation.
- "Malfunction" means, as specified in 40 CFR Part 60.2, any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[Consent Decree Civil No. 3.03CV114010S IV and V,15.A]

5.1.15. In response to any Acid Gas or Hydrocarbon Flaring Incident, the permittee shall take, as expeditiously as practicable, such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of that Acid Gas or Hydrocarbon Flaring Incident. **[Consent Decree Civil No. 3.03CV114010S V.15.B and V.16]**

5.1.16. The permittee shall implement a program to investigate the cause of Hydrocarbon Flaring Incidents, take reasonable steps to correct the conditions that have caused or contributed to Hydrocarbon Flaring Incidents, and minimize Hydrocarbon Flaring Incidents. The permittee shall evaluate whether Hydrocarbon Flaring Incidents are due to Malfunctions by conducting a detailed analysis that sets forth the Root Cause and all contributing causes of the Hydrocarbon Flaring Incident, to the extent determinable; and by conducting an analysis of the measures, if any, that are available to reduce the likelihood of a recurrence of an Hydrocarbon Flaring Incident resulting from the same Root Cause or contributing causes in the future. The analysis should evaluate the alternatives, if any, that are available, the probable effectiveness and the cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operation, and maintenance changes shall be evaluated.

- "Hydrocarbon Flaring Incident" means the continuous or intermittent Hydrocarbon Flaring, except for Acid Gas and/or Sour Water Stripper Gas, at a Hydrocarbon Flaring Device that results in the emission of sulfur dioxide equal to, or in excess of five-hundred (500) pounds in any twenty-four (24) hour period; provided, however, that if five-hundred (500) pounds or more of sulfur dioxide have been emitted in a twenty-four (24) hour period and Flaring continues into subsequent, contiguous, non overlapping twenty-four (24) hour period(s), each period of which results in emissions equal to, or in excess of five-hundred (500) pounds of sulfur dioxide, then only one Hydrocarbon Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the Hydrocarbon Flaring Incident.
- "Hydrocarbon Flaring" means the combustion of refiner-generated gases, except for Acid Gas and/or Sour Water Stripper Gas in a Hydrocarbon Flaring Device.
- "Hydrocarbon Flaring Device" means a flare device used to control (through combustion) any excess volume of a refinery generated gas other than Acid Gas and/or Sour Water Stripper Gas.

[Consent Decree Civil No. 3.03CV114010S IV and V.16]

5.2. Monitoring Requirements

- 5.2.1. The permittee shall monitor the PM emissions by conducting visible emissions checks in accordance with Section 4.2.1. of this permit.
- 5.2.2. To determine compliance with the monthly emission rate limits set forth in Section 5.1.1, the permittee shall maintain fuel gas usage/flow (scf/hr) and hours of operation for pilot and non-pilot conditions of the Main/Sour Gas Flare [F1], and the Ammonia Destruction Unit Thermal Oxidizer [NH3OX]. Compliance with the yearly limit shall be based on a 12-month rolling total.
- 5.2.3. To determine compliance with the annual emission rate limits set forth in Section 5.1.1, the permittee may estimate emissions using monthly loading records, along with the appropriate emission factors for loading losses from AP-42, Chapter 5.2 (7/08). Compliance with the yearly limit shall be based on a 12-month rolling total.
- 5.2.4. The permittee shall meet all applicable monitoring requirements of 40 CFR §60.13 for MLDOX, OXIDIZER, and NH3OX. [NSPS, Subpart A; §60.13].
- 5.2.5. *Reserved*

5.3. Testing Requirements

- 5.3.1. The permittee shall conduct an initial performance test of MLDOX to demonstrate compliance with the control efficiency provided in the Emissions Unit Table, Section 1.0 and shall establish operating parameters.
- 5.3.2. The permittee shall meet all applicable performance tests requirements of 40 CFR §60.8 for MLDOX, OXIDIZER, and NH3OX. [NSPS, Subpart A; §60.8]
- 5.3.3. *Reserved*
- 5.3.4. The permittee shall calculate an annual estimate of HAP emissions from gasoline and light crude oil from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source. [MACT, Subpart Y; 63.560(a)(3)]

5.4. Recordkeeping Requirements

- 5.4.1. To determine compliance with the loading emission limits set forth in Sections 5.1.1, the permittee shall keep a monthly record of the volume and type of each product/product type loaded at each truck loading station and marine barge loading station and whether or not the VOC emissions were controlled using the control device [OXIDIZER, or MLDOX]. AP-42 emission factors for flares and transportation and marketing of petroleum liquids (Chapter 5.2, 1/95) may be used to estimate emissions.
- 5.4.2. To determine compliance with the annual benzene emission limit set forth in Section 5.1.1., the permittee shall estimate the emissions using a material balances calculation utilizing the vapor weight of benzene present in petroleum liquids processed and transported at the facility. The following equation shall be to determine monthly and yearly emissions.

Benzene Emissions (tpm or tpy) = (Total VOCs (tpm or tpy)) x (Actual Benzene Vapor Weight %)

Compliance with the yearly limit shall be based on a 12-month rolling total.

- 5.4.3. To demonstrate compliance with the operational limit for the main/sour gas flare [F1] established in section 5.1.2, the permittee shall maintain records of the hours that non-pilot emissions were sent to the flare. The annual limit shall be recorded on a 12-month rolling total basis.
- 5.4.4. The permittee shall meet all applicable notification and record keeping requirements of §60.7 for OXIDIZER, MLDOX, and NH3OX. [NSPS, Subpart A; §60.7]
- 5.4.5. *Reserved*
- 5.4.6. The permittee shall retain records of the emissions estimates determined in §63.565(l) and requirement 5.1.x of this permit and their actual throughputs by commodity for gasoline and light crude oil, for 5 years. [MACT, Subpart Y; 63.560(a)(3)]

5.5. Reporting Requirements

- 5.5.1. The permittee shall comply with the reporting requirements of 40 CFR Part 60, Subpart J. [40C.F.R. §60.107 and Consent Decree Civil No. 3.03CV114010S V.14]
- 5.5.2. *Reserved*
- 5.5.3. The permittee shall meet all applicable reporting requirements of 40 CFR §60.19 for OXIDIZER, MLDOX, and NH3OX. [NSPS, Subpart A; §60.19]

6.0. Source-Specific Requirements [Process Units: CDU, MEK-TOL, DHT-FUG, ISOM, UNIFINER, ADU, PL-FUG, and YNGL-FUG]

6.1. Limitations and Standards

- 6.1.1. Crude oil charge rate into the crude oil distillation unit shall not exceed 839,500 barrels per month and 8,395,000 barrels per year.
- 6.1.2. Fugitive emissions of VOC's (MEK and Toluene) from the Solvent Dewaxing Unit (Emission Point ID No. MEK-TOL) shall not exceed 9.29 TPY. Fugitive emissions of HAPs (Toluene) from the Solvent Dewaxing Unit (Emission Point ID No. MEK-TOL) shall not exceed 4.65 TPY.
- 6.1.3. The facility shall utilize the following internal leak definitions for valves and pumps in light liquid and/or gas/vapor service, unless other permit(s), regulations, or laws require the use of lower leak definitions:
 - a. Leak Definition for Valves. The facility shall utilize an internal leak definition of 500 ppm VOCs for the Refinery valves, excluding pressure relief devices. This leak definition for valves will be effective 120 days after issuance of the permit.
 - b. Leak Definition for Pumps. The facility shall utilize an internal leak definition of 2000 ppm VOCs for the Refinery pumps by the following dates:

1. By no later than June 30, 2004, the facility shall utilize this definition for 50% of the total number of pumps that each of them has at the Covered Refinery;
2. By no later than December 31, 2004, The facility shall utilize this definition for 85% of the total number of pumps that each of them has at the Covered Refinery;
3. By no later than April 30, 2006, The facility shall utilize this definition for all of the pumps that each of them has at the Covered Refinery.

6.1.4. Fugitive emissions from the Diesel Hydrotreater [DHT-FUG], the Ammonia Destruction Unit [ADUFUG], the Platformer Expansion Unit [PL-FUG], and the Y-Grade NNL Unit [YNGL-FUG] shall not exceed the following:

Pollutant	DHT-FUG Fugitives	ADUFUG Fugitives	PL-FUG Fugitives	YNGL-FUG Fugitives
	ton/yr	ton/yr	ton/yr	ton/yr
VOC	13.20	0.34	0.60	0.94
Toluene	0.003	n/a	n/a	n/a
Ethyl Benzene	0.001	n/a	n/a	n/a
Xylene	0.04	n/a	n/a	n/a
Pentane	n/a	0.05	n/a	n/a
Hexane	n/a	0.02	0.04	0.03

6.1.5. Fugitive emissions from the ISOM Unit shall not exceed 3.72 tpy VOC's and 0.85 tpy total HAP's.

6.1.6. The permittee shall comply with the VOC equipment leak requirements of NSPS, Subpart VVa (as required by the applicability of Subpart GGGa) of affected facilities for which construction, reconstruction, or modification commenced after November 7, 2006 and section 8.0 of this permit.

6.2. Recordkeeping Requirements

6.2.1. To determine compliance with the crude oil charge rate limits set forth in Section 6.1.1., the permittee shall keep daily records along with monthly and yearly totals of the amount of crude oil charged to the crude oil distillation unit. Compliance with the yearly limit shall be based on a 12-month rolling total.

6.2.2. To determine compliance with VOC fugitive emission rate limits set forth in Section 6.1.2., 6.1.4., 6.1.5., and the internal leak definitions set forth in Section., 6.1.3, the permittee shall comply with the requirements of 40CFR60 Subpart VV and apply the following Leak Detection and Repair (LDAR) program enhancements:

- a. Emission Estimates. The permittee may use an enhanced LDAR program for controlling and estimating emissions on a monthly and yearly basis for the Solvent Dewaxing Unit. The permittee may use EPA's Correlation Approach, published in EPA's Protocol for Equipment Leak Emission Estimates, with measured screening values and hours of operation to determine compliance with the emission limits.

7.0. Source-Specific Requirements [Tank Emissions and Throughput Rates]

7.1. Limitations and Standards

7.1.1. Storage tanks are limited to the raw material/ product type and throughput provided in the table below:

Tank ID No.	Raw Material/Product Type and Throughput (gallons per year)
4000, 4001, 4060, and 4061	crude oil-(802,264,890)
4062, 4063	light crude oil w/vapor pressure up to 11.0 psia (306,600,000)
4004, 4005, 4006, 4012, 4013, 4014, 4015, 4016, 4050, 4052, and 4053	gasoline or ethanol (282,320,300)
4002, 4003, 4009, 4011, 4054, 4055, 4056, and 4057	heavy products or kerosene 406,459,760
4007, 4008, 4010, 4017, 4018, 4019, 4020, 4021, 4022, 4023, 4024, 4025, 4026, 4027, 4028, 4029, 4030, 4031, 4032, 4033, 4034, 4035, 4036, 4037, 4038, 4039, 4040, 4041, 4042, 4043, 4044, 4045, 4046, 4047, 4048, 4051, 4103, and 4104	heavy products (550,817,989)

7.1.2. Combined emissions from the tanks listed in section 7.1.1 shall not exceed the following:

Pollutant	Emission Rate	
	TPM	TPY
Total VOC	5.39	53.87
Benzene	0.08	0.81
Total HAP	0.65	6.54

7.1.3. Fixed roof Tanks 4012 and 4013 shall be equipped with internal floating roofs to minimize emissions of VOC's.

7.1.4. The following requirements apply to Tanks 4004, 4005, 4006, 4014, 4015, and 4016:

- a. Each and every slotted guidepole that passes through the floating roof shall be equipped with one of the following: a pole float system; an alternate control technology that has an emission factor less than or equal to the emission factor for a pole float system; a pole sleeve system; an internal sleeve emission control system; a solid guidepole system; a flexible enclosure system; or
- b. In the alternative, the Permittee may elect to:

1. cover an external floating roof tank with a fixed roof mounted on the tank above the external floating roof, or
 2. remove the tank from the service storing liquids subject to NSPS Ka or Kb, modify the permit for that tank, and represent to the West Virginia Division of Air Quality that the tank will not be used to store certain petroleum liquids or volatile organic liquids.
- c. For systems that use a sliding cover, the sliding cover shall be in place over the slotted-guidepole opening in the floating roof at all times, except, when the sliding cover must be removed for access. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.
- d. The permittee shall visually inspect the deck fitting for the slotted guidepole at least once every ten (10) years and each time the vessel is emptied and degassed. If the slotted guidepole deck fitting or control device has defects, or if a gap that is more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.
- e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are taken out of service. Tanks taken out of service must have in place, prior to being put back into service, all controls necessary to remain below the emission limits set forth by the current version of the permit.

7.1.5. The following requirements apply to **Tanks 4000, 4002, and 4003**:

- a. Each and every slotted guidepole that passes through the floating roof shall be equipped with one of the following: a pole float system; an alternate control technology that has an emission factor less than or equal to the emission factor for a pole float system; a pole sleeve system; an internal sleeve emission control system; a solid guidepole system; a flexible enclosure system; or
- b. In the alternative, the Permittee may elect to:
 1. cover an external floating roof tank with a fixed roof mounted on the tank above the external floating roof, or
 2. remove the tank from the service storing liquids subject to NSPS Ka or Kb, modify the permit for that tank, and represent to the West Virginia Division of Air Quality that the tank will not be used to store certain petroleum liquids or volatile organic liquids.
- c. For systems that use a sliding cover, the sliding cover shall be in place over the slotted-guidepole opening in the floating roof at all times, except, when the sliding cover must be removed for access. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.
- d. The permittee shall visually inspect the deck fitting for the slotted guidepole at least once every ten (10) years and each time the vessel is emptied and degassed. If the slotted guidepole deck fitting or control device has defects, or if a gap that is more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

- e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are taken out of service. Tanks taken out of service must have in place, prior to being put back into service, all controls necessary to remain below the emission limits set forth by the current version of the permit.

7.1.6. The following requirements apply to Tanks 4035, 4036, 4037, 4038, 4039, and 4041:

The owner or operator of any storage vessel to which 40 C.F.R. Part 60 subpart K applies shall store petroleum liquids as follows: if the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mm Hg (1.5 psia) but not greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.

7.1.7. The following requirements apply to Tanks 4000, 4001, 4004, 4006, 4014, 4015, 4018, 4034, 4048, 4050, 4054, 4056, 4057, 4052, 4053, 4060, 4061, 4062, and 4063:

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible

gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

(i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 C.F.R. § 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 C.F.R. § 60.113b(b)(4).

(ii) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(iii) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an

instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 C.F.R. part 60, subpart VV, § 60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 C.F.R. § 60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) above as provided in 40 C.F.R. § 60.114b.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m³ which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in 40 C.F.R. § 60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in 40 C.F.R. § 60.114b of this subpart.

[NSPS, Subpart Kb; 40 C.F.R. § 60.112b(a) and (b) and 45CSR§16-2.1.]

7.2. Monitoring Requirements

7.2.1. Compliance with Sections 7.1.4 and 7.1.5 may be determined by visual inspection by the Director or a duly authorized representative of the Director.

7.2.2. The following requirements apply to Tanks 4000, 4001, 4004, 4006, 4014, 4015, 4018, 4034, 4048, 4050, 4052, 4053, 4054, 4056, 4057, 4060, 4061, 4062, and 4063:

The owner or operator of each storage vessel as specified in 40 C.F.R. § 60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of 40 C.F.R. § 60.112b.

(a) After installing the control equipment required to meet 40 C.F.R. § 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 C.F.R. § 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(3) For vessels equipped with a double-seal system as specified in § 60.112b(a)(1)(ii)(B) :

- (i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or
- (ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(b) After installing the control equipment required to meet 40 C.F.R. § 60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

- (i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.
- (ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
- (iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

- (i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
- (ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 C.F.R. § 60.113b(b)(4) (i) and (ii).

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in § 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from § 60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by § 60.7(a)(1) or, if the facility is exempt from § 60.7(a)(1), as an attachment to the notification required by § 60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under 40 C.F.R. Part 60 subpart K, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95

percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in § 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, § 60.18 (e) and (f).

[40 C.F.R. § 60.113b and 45CSR§16-2.1.]

7.3. Recordkeeping Requirements

7.3.1. To determine compliance with VOC emission limit set forth in 7.1.1., the permittee shall keep monthly records of throughput of each raw material/product for each tank. These records shall be kept individually, i.e. per tank. AP-42 emission factors for organic liquid storage tanks (Supp. D, Chapter 7.1), may be used to estimate yearly emissions.

7.3.2. To determine compliance with the short-term and annual HAP emission limits set forth in Section 7.1.1., the permittee shall estimate the emissions using a material balances calculation utilizing the vapor weight of benzene present in petroleum liquids processed and transported at the facility. The following equation shall be to determine monthly and yearly emissions.

$$\text{HAP Emissions (tpm or tpy)} = [(\text{Individual HAP \%}) \times (\text{Actual VOC emissions, obtained from section 7.3.1. (tpm or tpy)})] / 100$$

Compliance with the yearly limit shall be based on a 12-month rolling total.

7.3.3. The following requirements apply to **Tanks 4035, 4036, 4037, 4038, 4039 and 4041:**

Except as provided in 40 C.F.R. § 60.113(d), the owner or operator subject to 40 C.F.R. Part 60 subpart K shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

[NSPS, Subpart Ka; 40 C.F.R. § 60.112(a) and 45CSR§16-2.1.]

- 7.3.4. The following requirements apply to Tanks 4000, 4001, 4004, 4006, 4014, 4015, 4018, 4034, 4048, 4050, 4052, 4053, 4054, 4056, 4057, 4060, 4061, 4062, and 4063:

The owner or operator of each storage vessel as specified in 40 C.F.R. § 60.112b(a) shall keep records and furnish reports as required by 40 C.F.R. § 60.115b paragraphs (a), (b), or (c) depending upon the control equipment installed to meet the requirements of 40 C.F.R. § 60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by 40 C.F.R. § 60.115b(c)(1), for at least 2 years. The record required by 40 C.F.R. § 60.115b (c)(1) will be kept for the life of the control equipment.

a) After installing control equipment in accordance with § 60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

- (1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of § 60.112b(a)(1) and § 60.113b(a)(1). This report shall be an attachment to the notification required by § 60.7(a)(3).
- (2) Keep a record of each inspection performed as required by § 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- (3) If any of the conditions described in § 60.113b(a)(2) are detected during the annual visual inspection required by § 60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (4) After each inspection required by § 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in § 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of § 60.112b(a)(1) or § 60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with § 61.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

- (1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of § 60.112b(a)(2) and § 60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by § 60.7(a)(3).
- (2) Within 60 days of performing the seal gap measurements required by § 60.113b(b)(1), furnish the Administrator with a report that contains:
 - (i) The date of measurement.
 - (ii) The raw data obtained in the measurement.
 - (iii) The calculations described in § 60.113b (b)(2) and (b)(3).
- (3) Keep a record of each gap measurement performed as required by § 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
 - (i) The date of measurement.
 - (ii) The raw data obtained in the measurement.
 - (iii) The calculations described in § 60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by § 60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

(c) After installing control equipment in accordance with § 60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

(1) A copy of the operating plan.

(2) A record of the measured values of the parameters monitored in accordance with § 60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with § 60.112b, the owner or operator shall meet the following requirements.

(1) A report containing the measurements required by § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by § 60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.

(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(3) Semiannual reports of all periods recorded under § 60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

[NSPS, Subpart Kb; 40 C.F.R. § 60.115b and 45CSR§16-2.1]

7.3.5. The following requirements apply to Tanks 4000, 4001, 4004, 4006, 4014, 4015, 4018, 4034, 4048, 4050, 4052, 4053, 4054, 4056, 4057, 4060, 4061, 4062, and 4063:

(a) The owner or operator shall keep copies of all records required by 40 C.F.R. Part 60 Subpart Kb, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

(b) The owner or operator of each storage vessel as specified in 40 C.F.R. § 60.110b(a) shall keep readily accessible records showing the dimension and an analysis showing the capacity of the storage vessel.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure

is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference -- see § 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 C.F.R. §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM D2879-83, 96, or 97 (incorporated by reference -- see 40 C.F.R. § 60.17); or

(ii) ASTM D323-82 or 94 (incorporated by reference -- see 40 C.F.R. § 60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of 40 C.F.R. § 60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

[NSPS, Subpart Kb; 40 C.F.R. § 60.116b and 45CSR§16-2.1]

7.4. Reporting Requirements

[Reserved]

8.0. Source-Specific Requirements [Equipment Leaks]

8.1. Limitations and Standards

8.1.1. **Training.** The permittee shall implement the following training programs at the facility:

- i. For personnel newly-assigned to LDAR responsibilities, EWVI shall require LDAR training prior to each employee beginning such work;
- ii. For all personnel assigned LDAR responsibilities, EWVI shall provide and require completion of annual LDAR training; and
- iii. For all other Refinery operations and maintenance personnel (including contract personnel), EWVI shall provide and require completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties. Refresher training in LDAR shall be performed on a three year cycle.

[Civil Decree No. 3:03CV114010S Paragraph V.18.B.]

8.1.2. **LDAR Personnel.** The permittee shall establish a program that will hold LDAR personnel accountable for LDAR performance. The permittee shall maintain a position within the facility responsible for LDAR management, with the authority to implement improvements.

[Civil Decree No. 3:03CV114010S Paragraph V.18.K.]

8.1.3. **Internal Leak Definition for Valves and Pumps; Compressor Compliance.** The permittee shall utilize the following internal leak definitions for valves and pumps in light liquid and/or gas/vapor service, unless other permit(s), regulations, or laws require the use of lower leak definitions.

- i. **Leak Definition for Valves.** The permittee shall utilize an internal leak definition of 500 ppm VOCs for the valves at the facility, excluding pressure relief devices.
- ii. **Leak Definition for Pumps.** The permittee shall utilize an internal leak definition of 2000 ppm VOCs for the pumps at the facility.

[Civil Decree No. 3:03CV114010S Paragraph V.18.E.]

8.1.4. **First Attempt at Repairs on Valves.** The permittee shall make a "first attempt" at repair on any valve that has a reading greater than 200 ppm of VOCs, excluding control valves, pumps, and components that LDAR personnel are not authorized to repair. The permittee, or its designated contractor, however, shall re-monitor, within 5 business days, all valves that LDAR personnel attempted to repair. Unless the re-monitored leak rate is greater than the applicable leak definition, no further action will be necessary.

[Civil Decree No. 3:03CV114010S Paragraph V.18.G.]

8.1.5. **Delay of Repair.** For any equipment for which the permittee is allowed, under the applicable regulations, to place on the "delay of repair" list for repair:

- i. For all equipment, the permittee shall:
 - a. Require sign-off by the unit supervisor or shift supervisor that the piece of equipment is technically infeasible to repair without a process unit shutdown, before the component is eligible for inclusion on the "delay of repair" list; and

- b. Include equipment that is placed on the “delay of repair” list in the permittee’s regular LDAR monitoring.
- ii. For valves: For valves, other than control valves, leaking at a rate of 10,000 ppm or greater, the permittee shall continue to use its “drill and tap” method for fixing such leaking valves, rather than placing the valve on the “delay of repair” list, unless the permittee can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in this manner. After two unsuccessful attempts to repair a leaking valve through the drill and tap method, the permittee may place the leaking valve on its “delay of repair” list. If a new method develops for repairing such valves, the permittee will advise EPA prior to implementing such new method.
- iii. For pumps: For pumps leaking at a rate of 2000 ppm or greater, the permittee shall undertake its best efforts to isolate and repair such pumps with a first attempt at fifteen (15) days.
[Civil Decree No. 3:03CV114010S Paragraph V.18.N.]

- 8.1.6. Any affected facility under §60.480a (a) that commences construction, reconstruction, or modification after November 7, 2006, shall be subject to the requirements of §60.482-1a unless other permit requirements require more stringent requirements.
[NSPS, Subpart VVa; §60.480(a) and §60.482-1a]

8.2. Monitoring Requirements

- 8.2.1. **Reporting, Recording, Tracking, Repairing and Remonitoring Leaks of Valves and Pumps.** The permittee shall record, track, repair and re-monitor all leaks in excess of the internal leak definitions.
[Civil Decree No. 3:03CV114010S Paragraph V.18.F.]

8.2.2. LDAR Monitoring Frequency

- i. Pumps. The permittee shall monitor pumps on a monthly basis.
- ii. Valves. The permittee shall monitor valves -- other than difficult to monitor or unsafe to monitor valves -- on a quarterly basis.
[Civil Decree No. 3:03CV114010S Paragraph V.18.H.]

8.2.3. Calibration/Calibration Drift Assessment

- i. Calibration. The permittee shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas, in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21.
- ii. Calibration Drift Assessment. The permittee shall conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift, at a minimum. The permittee shall conduct the calibration drift assessment using, at a minimum, a 500 ppm calibration gas. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, the permittee shall re-monitor all valves that were monitored since the last calibration that had a reading greater than 100 ppm and shall re-monitor all pumps that were monitored since the last calibration that had a reading greater than 500 ppm.
[Civil Decree No. 3:03CV114010S Paragraph V.18.M.]

8.2.4. LDAR Audits. The permittee shall implement at the facility the Refinery audits set forth in the following paragraphs to ensure compliance with all applicable LDAR requirements. The LDAR audits shall include, but not be limited to, comparative monitoring, records review, tagging, data management, and observation of the LDAR technicians' calibration and monitoring techniques.

- i. **Third-Party Audits.** The permittee shall retain a contractor(s) to perform a third-party audit of the refinery's LDAR program at least once every four years.
- ii. **Internal Audits.** The permittee shall conduct internal audits of the LDAR program. An internal audit of the refinery shall be held every four years.
- iii. To ensure that an audit at the refinery occurs every two years, third-party and internal audits shall be separated by two years.
- iv. **Alternative.** As an alternative to the internal audit, the permittee may elect to retain third-parties to undertake the internal audit, provided that an audit of the facility occurs every two (2) years.

[Civil Decree No. 3:03CV114010S Paragraph V.18.C.]

If the results of any of the audits conducted at the facility identify any areas of non-compliance, the permittee shall implement, as soon as practicable, all steps necessary to correct the area(s) of noncompliance, and to prevent, to the extent practicable, a recurrence of the cause of the non-compliance. The permittee shall retain the audit reports generated during the audits and shall maintain a written record of the corrective actions taken at the facility in response to any deficiencies identified in any audits.

[Civil Decree No. 3:03CV114010S Paragraph V.18.D.]

8.3. Testing Requirements

- 8.3.1. For affected facilities subject to the standards in §§ 60.482-1a through 60.482-11a, 60.483a, and 60.484a, the permit shall determine compliance with the standards according to the test methods and procedures provided in §60.485a. **[NSPS, Subpart VVa; §60.485a]**

8.4. Recordkeeping Requirements

- 8.4.1. **Adding New Valves and Pumps.** The permittee shall establish a tracking program for maintenance records (e.g., a Management of Change program) to ensure that valves and pumps added to the facility during maintenance and construction are integrated into the LDAR program. **[Civil Decree No. 3:03CV114010S Paragraph V.18.L.]**

- 8.4.2. When a leak is detected, the following requirements apply:

- i. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- ii. The identification on a valve may be removed after it has been monitored for 2 successive months and no leak has been detected during those 2 months.
- iii. The identification on equipment, except on a valve, may be removed after it has been repaired. **[40 CFR § 60.486(b)]**

- 8.4.3. When a leak has been detected, the following information shall be recorded in a log and kept for 2 years in a readily accessible location:
- i. The instrument and operator identification numbers and the equipment identification number.
 - ii. The date the leak was detected and the dates of each attempt to repair the leak.
 - iii. Repair methods applied in each attempt to repair the leak.
 - iv. "Above 10,000" if the maximum instrument reading measured after each repair attempt is equal to or greater than 10,000 ppm.
 - v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - vi. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - vii. The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - viii. Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - ix. The date of successful repair of the leak.
[40 CFR § 60.486(c)]
- 8.4.4. The following information shall be recorded in a log that is kept in a readily accessible location:
- i. A list of identification numbers.
 - ii. A list of identification numbers for equipment that are designated for no detectable emissions. This list shall be signed by the owner or operator.
 - iii. A list of equipment identification numbers for pressure relief valves.
 - iv. The dates of each compliance test.
 - v. The background level measured during each compliance test.
 - vi. The maximum instrument reading measured at the equipment during each compliance test.
 - vii. A list of identification numbers for equipment in vacuum service.
 - viii. A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr, a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
[40 CFR § 60.486(e)]
 - ix. For all valves and pumps designated as unsafe-to-monitor or difficult-to-monitor:
 - a. A list of identification numbers for valves and pumps that are designated as unsafe-to-

monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

- b. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

[40 CFR § 60.486(f)]

- 8.4.5. Each owner or operator subject to the provision of NSPS, Subpart VVa shall comply with the recordkeeping requirements of this section. [NSPS, Subpart VVa; § 60.486a]

8.5. Reporting Requirements

8.5.1. Electronic Monitoring, Storing, and Reporting of LDAR Data

- i. Electronic Storing and Reporting of LDAR Data. The facility will maintain an electronic database (e.g., EXCEL spreadsheet) for storing and reporting LDAR data. The electronic database shall include data identifying the date and time of the monitored event, and the operator and instrument used in the monitored event.
- ii. Electronic Data Collection During LDAR Monitoring and Transfer Thereafter. The permittee shall use data loggers and/or electronic data collection devices during all LDAR monitoring. The permittee, or its designated contractor, shall use its/their best efforts to transfer, by the end of the next business day, electronic data from electronic data logging devices to the electronic database listed above. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp. The permittee may use paper logs where necessary or more feasible (e.g., small rounds, re-monitoring, or when data loggers are not available or broken), and shall record, at a minimum, the identification of the technician undertaking the monitoring, the date, and the identification of the monitoring equipment. The permittee shall use its best efforts to transfer any manually recorded monitoring data to the electronic database within seven days of monitoring.

[Civil Decree No. 3:03CV114010S Paragraph V.18.I.]

- 8.5.2. **QA/QC of LDAR Data** - The permittee shall ensure that monitoring data provided to the permittee by its contractors is reviewed for QA/QC before the contractor submits the data to the permittee. At least once per calendar quarter, the permittee shall perform QA/QC of the contractor's monitoring data which shall include, but not be limited to, number of components monitored per technician, time between monitoring events, and abnormal data patterns.

[Civil Decree No. 3:03CV114010S Paragraph V.18.J.]

- 8.5.3. The permittee shall submit semiannual reports to the Administrator beginning six months after the initial startup date. All semiannual reports shall include the following information:

- i. Process unit identification.
- ii. For each month during the semiannual reporting period,
 - a. Number of valves for which leaks were detected.
 - b. Number of valves for which leaks were not repaired.

- c. Number of pumps for which leaks were detected.
 - d. Number of pumps for which leaks were not repaired.
 - e. Number of compressors for which leaks were detected.
 - f. Number of compressors for which leaks were not repaired.
 - g. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- iii. Dates of process unit shutdowns which occurred within the semiannual reporting period.
 - iv. Revisions to items reported in initial report if changes have occurred since the initial report or subsequent revisions to the initial report.
[40 CFR § 60.487(c)]
- 8.5.4. Each owner or operator subject to the provision of NSPS, Subpart VVa shall comply with the reporting requirements of §60.487a. [NSPS, Subpart Vva; §60.487a]

9.0. Source-Specific Requirements [Wastewater Treatment Plant - 40 C.F.R. Part 60 Subpart QQQ]

9.1. Limitations and Standards

- 9.1.1. a. Each owner or operator subject to the provisions of this subpart shall comply with the requirements of 40 CFR §§ 60.692-1 to 60.692-5 and with §§ 60.693-1 and 60.693-2, except during periods of startup, shutdown, or malfunction.
- b. Compliance with 40 CFR §§ 60.692-1 to 60.692-5 and with §§ 60.693-1 and 60.693-2 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in § 60.696.
- c. 1. Stormwater sewer systems are not subject to the requirements of this subpart.
2. Ancillary equipment, which is physically separate from the wastewater system and does not come in contact with or store oily wastewater, is not subject to the requirements of this subpart.
3. Non-contact cooling water systems are not subject to the requirements of this subpart.
4. An owner or operator shall demonstrate compliance with the exclusions in paragraphs c.1., 2., and 3. of this section as provided in 40 CFR § 60.697 (h), (i), and (j).
[40 CFR § 60.692-1(a), (b), and (d) and 45CSR16]

9.1.2. Individual drain systems.

- a. 1. Each drain shall be equipped with water seal controls.
2. Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.
3. Each drain out of active service shall be checked by visual or physical inspection initially and weekly thereafter for indications of low water levels or other problems that could result in VOC emissions.
4. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except as provided in 40 CFR § 60.692-6.
- b. 1. Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.
2. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.
3. Junction boxes shall be visually inspected initially and semiannually thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

4. If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except as provided in 40 CFR § 60.692-6.
- c.
 1. Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.
 2. The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.
 3. Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in 40 CFR § 60.692-6.
 - d. Except as provided in paragraph e. of this section, each modified or reconstructed individual drain system that has a catch basin in the existing configuration prior to May 4, 1987 shall be exempt from the provisions of this section.
 - e. Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.
[40 CFR § 60.692-2 and 45CSR16]

9.1.3. Oil-water separators.

- a. Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of this subpart shall be equipped and operated with a fixed roof, which meets the following specifications, except as provided in paragraph c. of this section or in 40 CFR § 60.693-2.
 1. The fixed roof shall be installed to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall.
 2. The vapor space under a fixed roof shall not be purged unless the vapor is directed to a control device.
 3. If the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance.
 4. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly.
 5. When a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after it is identified, except as provided in 40 CFR § 60.692-6.
- b. Each oil-water separator tank or auxiliary equipment with a design capacity to treat more than

16 liters per second (250 gallons per minute (gpm)) of refinery wastewater shall, in addition to the requirements in paragraph a. of this section, be equipped and operated with a closed vent system and control device, which meet the requirements of 40 CFR § 60.692-5.

- c. Storage vessels, including slop oil tanks and other auxiliary tanks that are subject to the standards in 40 CFR §§ 60.112, 60.112a, and 60.112b and associated requirements, 40 CFR part 60, Subparts K, Ka, or Kb are not subject to the requirements of this section.
- d. Slop oil from an oil-water separator tank and oily wastewater from slop oil handling equipment shall be collected, stored, transported, recycled, reused, or disposed of in an enclosed system. Once slop oil is returned to the process unit or is disposed of, it is no longer within the scope of 40CFR Part 60, Subpart QQQ. Equipment used in handling slop oil shall be equipped with a fixed roof meeting the requirements of paragraph a. of this section.
- e. Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment that is required to comply with paragraph a. of this section, and not paragraph b. of this section, may be equipped with a pressure control valve as necessary for proper system operation. The pressure control valve shall be set at the maximum pressure necessary for proper system operation, but such that the value will not vent continuously.

[40 CFR § 60.692-3 (a), (b), (d), (e), and (f) and 45CSR16;]

9.1.4. Alternative standards for oil-water separators.

- a. An owner or operator may elect to construct and operate a floating roof on an oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of this subpart which meets the following specifications.
 - 1. Each floating roof shall be equipped with a closure device between the wall of the separator and the roof edge. The closure device is to consist of a primary seal and a secondary seal.
 - i. The primary seal shall be a liquid-mounted seal or a mechanical shoe seal.
 - A. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the separator and the floating roof. A mechanical shoe seal means a metal sheet held vertically against the wall of the separator by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
 - B. The gap width between the primary seal and the separator wall shall not exceed 3.8 cm (1.5 in.) at any point.
 - C. The total gap area between the primary seal and the separator wall shall not exceed 67 cm²/m (3.2 in.²/ft) of separator wall perimeter.
 - ii. The secondary seal shall be above the primary seal and cover the annular space between the floating roof and the wall of the separator.
 - A. The gap width between the secondary seal and the separator wall shall not exceed 1.3 cm (0.5 in.) at any point.

- B. The total gap area between the secondary seal and the separator wall shall not exceed 6.7 cm²/m (0.32 in.²/ft) of separator wall perimeter.
- iii. The maximum gap width and total gap area shall be determined by the methods and procedures specified in 40 CFR § 60.696(d).
 - A. Measurement of primary seal gaps shall be performed within 60 calendar days after initial installation of the floating roof and introduction of refinery wastewater and once every 5 years thereafter.
 - B. Measurement of secondary seal gaps shall be performed within 60 calendar days of initial introduction of refinery wastewater and once every year thereafter.
- iv. The owner or operator shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in paragraphs a.1.i. and ii. of this section.
- 2. Except as provided in paragraph a.4. of this section, each opening in the roof shall be equipped with a gasketed cover, seal, or lid, which shall be maintained in a closed position at all times, except during inspection and maintenance.
- 3. The roof shall be floating on the liquid (i.e., off the roof supports) at all times except during abnormal conditions (i.e., low flow rate).
- 4. The floating roof may be equipped with one or more emergency roof drains for removal of stormwater. Each emergency roof drain shall be fitted with a slotted membrane fabric cover that covers at least 90 percent of the drain opening area or a flexible fabric sleeve seal.
- 5.
 - i. Access doors and other openings shall be visually inspected initially and semiannually thereafter to ensure that there is a tight fit around the edges and to identify other problems that could result in VOC emissions.
 - ii. When a broken seal or gasket on an access door or other opening is identified, it shall be repaired as soon as practicable, but not later than 30 calendar days after it is identified, except as provided in 40 CFR § 60.692-6.
- b. An owner or operator must notify the Administrator in the report required by 40 CFR 60.7 that the owner or operator has elected to construct and operate a floating roof under paragraph a. of this section.
- c. For portions of the oil-water separator tank where it is infeasible to construct and operate a floating roof, such as the skimmer mechanism and weirs, a fixed roof meeting the requirements of 40 CFR § 60.692-3(a) shall be installed.
- d. Except as provided in paragraph c. of this section, if an owner or operator elects to comply with the provisions of this section, then the owner or operator does not need to comply with the provisions of 40 CFR §§ 60.692-3 or 60.694 applicable to the same facilities.
[40 CFR § 60.693-2 and 45CSR 16]

9.1.5. **Aggregate facility.**

A new, modified, or reconstructed aggregate facility shall comply with the requirements of 40 CFR §§ 60.692-2 and 60.692-3.

[40 CFR § 60.692-4 and 45CSR16]

9.1.6. Closed vent systems and control devices.

- a. Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.
- b. Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- c.
 1. Closed vent systems shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined during the initial and semiannual inspections by the methods specified in 40 CFR § 60.696.
 2. Closed vent systems shall be purged to direct vapor to the control device.
 3. A flow indicator shall be installed on a vent stream to a control device to ensure that the vapors are being routed to the device.
 4. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 5. When emissions from a closed system are detected, first efforts at repair to eliminate the emissions shall be made as soon as practicable, but not later than 30 calendar days from the date the emissions are detected, except as provided in 40 CFR § 60.692-6.

[40 CFR §§ 60.692-5(b), (d), and (e) and 45CSR16]

9.1.7. Delay of repair.

- a. Delay of repair of facilities that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial refinery or process unit shutdown.
- b. Repair of such equipment shall occur before the end of the next refinery or process unit shutdown.

[40 CFR § 60.692-6 and 45CSR16]

9.2. Monitoring Requirements

9.2.1. Each owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator.

- a. Where a carbon adsorber is used for VOC emissions reduction, a monitoring device that continuously indicates and records the VOC concentration level or reading of organics in the exhaust gases of the control device outlet gas stream or inlet and outlet gas stream shall be used.

For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device (e.g., a carbon canister), the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, an owner or operator may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

[40 CFR § 60.695(a)(3)(ii) and 45CSR16]

9.3. Testing Requirements

9.3.1. Before using any equipment installed in compliance with the requirements of 40 CFR § 60.692-2, § 60.692-3, § 60.692-4, § 60.692-5, or § 60.693, the owner or operator shall inspect such equipment for indications of potential emissions, defects, or other problems that may cause the requirements of this subpart not to be met. Points of inspection shall include, but are not limited to, seals, flanges, joints, gaskets, hatches, caps, and plugs.

[40 CFR § 60.696(a) and 45CSR16]

9.3.2. The owner or operator of each source that is equipped with a closed vent system and control device as required in 40 CFR § 60.692-5 (other than a flare) is exempt from § 60.8 of the General Provisions and shall use Method 21 to measure the emission concentrations, using 500 ppm as the no detectable emission limit. The instrument shall be calibrated each day before using. The calibration gases shall be:

- a. Zero air (less than 10 ppm of hydrocarbon in air), and
- b. A mixture of either methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

[40 CFR § 60.696(b) and 45CSR16]

9.4. Record keeping requirements

9.4.1. Each owner or operator of a facility subject to the provisions of this subpart shall comply with the record keeping requirements of this section. All records shall be retained for a period of 2 years after being recorded unless otherwise noted.

[40 CFR § 60.697(a) and 45CSR16]

9.4.2. a. For individual drain systems subject to 40 CFR § 60.692-2, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.

b. For junction boxes subject to 40 § 60.692-2, the location, date, and corrective action shall be recorded for inspections required by 40 CFR § 60.692-2(b) when a broken seal, gap, or other problem is identified that could result in VOC emissions.

- c. For sewer lines subject to 40 CFR §§ 60.692-2 and 60.693-1(e), the location, date, and corrective action shall be recorded for inspections required by 40 CFR §§ 60.692-2(c) and 60.693-1(e) when a problem is identified that could result in VOC emissions.
[40 CFR § 60.697(b) and 45CSR16]
- 9.4.3. For oil-water separators subject to 40 CFR § 60.692-3, the location, date, and corrective action shall be recorded for inspections required by 40 CFR § 60.692-3(a) when a problem is identified that could result in VOC emissions.
[40 CFR § 60.697(c) and 45CSR16]
- 9.4.4. For closed vent systems subject to 40 CFR § 60.692-5 and completely closed drain systems subject to 40 CFR § 60.693-1, the location, date, and corrective action shall be recorded for inspections required by 40 CFR § 60.692-5(e) during which detectable emissions are measured or a problem is identified that could result in VOC emissions.
[40 CFR § 60.697(d) and 45CSR16]
- 9.4.5. a. If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.
- b. The reason for the delay as specified in 40 CFR § 60.692-6 shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.
- c. The signature of the owner or operator (or designee) whose decision it was that repair could not be effected without refinery or process shutdown shall be recorded.
- d. The date of successful repair or corrective action shall be recorded.
[40 CFR § 60.697(e) and 45CSR16]
- 9.4.6. a. A copy of the design specifications for all equipment used to comply with the provisions of this subpart shall be kept for the life of the source in a readily accessible location.
- b. The following information pertaining to the design specifications shall be kept.
- i. Detailed schematics, and piping and instrumentation diagrams.
- ii. The dates and descriptions of any changes in the design specifications.
- c. The following information pertaining to the operation and maintenance of closed drain systems and closed vent systems shall be kept in a readily accessible location.
- i. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions shall be kept for the life of the facility. This documentation is to include a general description of the gas streams that enter the control device, including flow and volatile organic compound content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C (1,500 °F) is used to meet the 95-percent requirement, documentation that those conditions exist is sufficient to meet the requirements of this paragraph.
- ii. For a carbon adsorption system that does not regenerate the carbon bed directly onsite in

the control device such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

- iii. Dates of startup and shutdown of the closed vent system and control devices required in 40CFR § 60.692 shall be recorded and kept for 2 years after the information is recorded.
- iv. The dates of each measurement of detectable emissions required in 40 CFR §§ 60.692, 60.693, or 60.692-5 shall be recorded and kept for 2 years after the information is recorded.
- v. The background level measured during each detectable emissions measurement shall be recorded and kept for 2 years after the information is recorded.
- vi. The maximum instrument reading measured during each detectable emission measurement shall be recorded and kept for 2 years after the information is recorded.
- vi. Each owner or operator of an affected facility that uses a carbon adsorber shall maintain continuous records of the VOC concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for 2 years after the information is recorded.

If a carbon adsorber that is not regenerated directly onsite in the control device is used, then the owner or operator shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

[40 CFR § 60.697(f) and 45CSR16]

- 9.4.7. For stormwater sewer systems subject to the exclusion in 40 CFR § 60.692-1(d)(1), an owner or operator shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the stormwater sewer system.

[40 CFR § 60.697(h) and 45CSR16]

- 9.4.8. For ancillary equipment subject to the exclusion in 40 CFR § 60.692-1(d)(2), an owner or operator shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.

[40 CFR § 60.697(i) and 45CSR16]

- 9.4.9. For oil-water separators subject to 40 CFR § 60.693-2, the location, date, and corrective action shall be recorded for inspections required by 40 CFR §§ 60.693-2(a)(1)(iii)(A) and (B), and shall be maintained for the time periods specified in paragraphs a. and b. below.
 - a. For inspections required by 40 CFR § 60.693-2(a)(1)(iii)(A), ten years after the information is recorded.

- b. For inspections required by 40 CFR § 60.693-2(a)(1)(iii)(B), two years after the information is recorded.

[40 CFR § 60.697(k) and 45CSR16]

9.5. Reporting Requirements

- 9.5.1. Each owner or operator of a facility subject to this subpart shall submit to the Administrator within 60 days after initial startup a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests of process drains, sewer lines, junction boxes, oil-water separators, and closed vent systems and control devices have been carried out in accordance with these standards. Thereafter, the owner or operator shall submit to the Administrator semiannually a certification that all of the required inspections have been carried out in accordance with these standards.

[40 CFR § 60.698(b)(1) and 45CSR16]

- 9.5.2. A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted initially and semiannually thereafter to the Administrator.

[40 CFR § 60.698(c) and 45CSR16]

- 9.5.3. As applicable, a report shall be submitted semiannually to the Administrator that indicates:

Each 3-hour period of operation during which the average VOC concentration level or reading of organics in the exhaust gases from a carbon adsorber is more than 20 percent greater than the design exhaust gas concentration level or reading.

Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly onsite in the control device is not replaced at the predetermined interval specified in § 60.695(a)(3)(ii).

[40 CFR §§ 60.698(d)(3) and (d)(3)(ii) and 45CSR16]

- 9.5.4. If compliance with the provisions of this subpart is delayed pursuant to 40 CFR § 60.692-7, the notification required under 40 CFR 60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

[40 CFR § 60.698(e) and 45CSR16]

10.0. Source-Specific Requirements [Benzene Waste Operations - 40 C.F.R. Part 61 Subpart FF]

HAPs Emission Standards. The permitted facility shall comply with all applicable provisions of 45CSR34, which, by incorporation, subjects the facility to the provisions of 40 CFR 61 Subpart FF - National Emission Standard for Benzene Waste Operations, provided, however, that compliance with any more stringent limitation set forth under Conditions 5.1.6., 6.1.2. and 7.1.1. of this permit shall also be demonstrated.

[45CSR13 - Permit R13-2334 - 3.1.9.]

10.1. Limitations and Standards

10.1.1. An owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of 40 CFR § 61.342 (b) and (c). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:

- a. Wastes that are exempted from control under 40 C.F.R. §§ 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.
- b. The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.
- c. Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of 40 C.F.R. §§ 61.342(c) through (h). If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.
- d. The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 C.F.R. § 61.355(c)(1)(i) (A) through (C).

[40 CFR § 61.342(a) and 45CSR34]

10.2. Monitoring Requirements

10.2.1. Compliance with 40 CFR part 61 subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in Sections 10.3.1. through 10.3.3. of this permit.

[40 CFR § 61.342(g) and 45CSR34]

10.3. Testing Requirements

- 10.3.1. An owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:
- a. For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 C.F.R. § 61.342(a), the owner or operator shall:
 1. Determine the annual waste quantity for each waste stream using the procedures specified in Section 10.3.2. of this permit.
 2. Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in Section 10.3.3. of this permit.
 3. Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.
 - b. Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to Section 10.3.2.b. of this permit.
 - c. If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:
 1. Comply with the record keeping requirements of 40 C.F.R. § 61.356 and reporting requirements of 40 C.F.R. § 61.357; and
 2. Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.
 - d. The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in Section 10.3.2.b. of this permit, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with Sections 10.3.1. through 10.3.3. of this permit. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste. [40 CFR § 61.355(a) and 45CSR34]
- 10.3.2. For purposes of the calculation required by Section 10.3.1. of this permit, an owner or operator shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in Sections 10.3.2.a. and b. of this permit, by one of the methods given in Sections

10.3.2. c. through e. of this permit.

- a. The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.
- b. The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in Section 9.3.1.a.3. of this permit for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 C.F.R. § 61.357(a)(1), the owner or operator shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the owner or operator chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.
- c. Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility.
- d. Use the maximum design capacity of the waste management unit; or
- e. Use measurements that are representative of maximum waste generation rates.
[40 CFR § 61.355(b) and 45CSR34]

10.3.3. For the purposes of the calculation required by 40 C.F.R. §§ 61.355(a), an owner or operator shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in Section 10.3.3.a. of this permit using either of the methods given in Sections 10.3.3.b. and c. of this permit.

- a. The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:
 1. The determination shall be made at the point of waste generation except for the specific cases given in Sections 10.3.3.a.1.A and B. of this permit.
 - A. The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.
 - B. The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in Sections 10.3.3.b. or c. of this permit. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in Section 10.3.1.a.3. of this permit for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

2. Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.
 3. Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination -- to reduce the benzene concentration.
 4. The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in Sections 10.3.3.a.1.A. and B. of this permit.
 5. For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.
- b. *Knowledge of the waste.* The owner or operator shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the owner or operator shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When an owner or operator and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under Section 10.3.3.c. of this permit shall be used to resolve the disagreement.
- c. Measurements of the benzene concentration in the waste stream in accordance with the procedures listed in 40 CFR § 61.355(c)(3).
[40 CFR § 61.355(c) and 45CSR34]

10.4. Record keeping requirements

- 10.4.1. Each owner or operator of a facility subject to the provisions of 40 CFR Part 61, subpart FF shall comply with the following record keeping requirements. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.
[40 CFR § 61.356(a) and 45CSR34]
- 10.4.2. Each owner or operator shall maintain records that identify each waste stream at the facility subject to 40 CFR Part 61, subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the owner or operator shall maintain the following records:
 - a. For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
 - b. For each waste stream exempt from 40 C.F.R. § 61.342(c)(1) in accordance with 40 C.F.R. § 61.342(c)(3), the records shall include:

1. All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 40 C.F.R. § 61.342(c)(3)(i), or
 2. All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 40 C.F.R. § 61.342(c)(3)(ii).
- c. For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with 40 C.F.R. § 61.355(b)(5), the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with 40 C.F.R. § 61.355(b)(5), the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with 40 C.F.R. § 61.355(a)(1)(iii) of this section.
- [40 CFR § 61.356(b) and 45CSR34]**

10.5. Reporting Requirements

- 10.5.1. Each owner or operator of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Administrator within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to 40 C.F.R. § 61.342 and is determined by the procedures specified in 40 C.F.R. § 61.355(c) to contain benzene. Each owner or operator subject to this subpart who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other owners or operators subject to this subpart, the report shall include the following information:
- a. Total annual benzene quantity from facility waste determined in accordance with 40 C.F.R. § 61.355(a) of this subpart.
 - b. A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.
 - c. For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:
 1. Whether or not the water content of the waste stream is greater than 10 percent;
 2. Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
 3. Annual waste quantity for the waste stream;
 4. Range of benzene concentrations for the waste stream;

5. Annual average flow-weighted benzene concentration for the waste stream; and
 6. Annual benzene quantity for the waste stream.
- d. The information required in Sections 10.5.1.a., b., and c. of this Permit should represent the waste stream characteristics based on current configuration and operating conditions. An owner or operator only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 C.F.R. § 61.10(a).
[40 CFR § 61.357(a) and 45CSR34]
- 10.5.2. If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in Section 10.5.1.a. through c. of this permit. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by Section 10.5.1.a. through c. is not changed in the following year, the owner or operator may submit a statement to that effect.
[40 CFR § 61.357(c) and 45CSR34]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature¹ _____ Date _____
(please use blue ink) Responsible Official or Authorized Representative

Name and Title _____ Title _____
(please print or type) Name

Telephone No. _____ Fax No. _____

¹ This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
 - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.



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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2334Y
Plant ID No.:	029-00008
Applicant:	Ergon - West Virginia, Inc. (Ergon)
Facility Name:	Newell Refinery
Location:	Newell, Hancock County
SIC/NAICS Codes:	2911/324110
Application Type:	Modification
Received Date:	September 14, 2015
Engineer Assigned:	Joe Kessler
Fee Amount:	\$2,000
Date Received:	\$1,000 (9/16/15), \$1,000 (10/30/15)
Complete Date:	December 3, 2015
Due Date:	March 2, 2016
Applicant's Ad Date:	October 19, 2015
Newspaper:	<i>The Weirton Daily Times</i>
UTM's:	531.0 km Easting • 4,495.1 km Northing • Zone 17
Latitude/Longitude:	40.609173/-80.629196
Description:	Modification for the installation of new equipment and an increase of throughputs in the catalytic reforming (platformer) unit.

Entire Document
NON-CONFIDENTIAL

The Newell Refinery was originally constructed in 1972 by Quaker State and the facility was purchased by Ergon in 1995. On May 17, 2000, Permit Number R13-2334 was issued to Ergon that superceded and replaced all previous permits covering the facility. All portions of the facility are permitted under the current permit (R13-2334X) and no sections of the facility are grandfathered.

DESCRIPTION OF PROCESS/MODIFICATION

Existing Facility

The Newell Refinery processes crude oil into fuels and other industrial chemical feedstocks through the use of distillation and chemical reaction processes. The existing facility has a capacity of 803,000 barrels/month.

Proposed Modifications

Ergon has now submitted a permit application to make the following substantive modifications:

- Installation of a process gas-fired 8.745 mmBtu/hr process heater (H-505R) within the heater group H-500S to replace a similarly sized unit (H-505) that will be removed;
- Increase the catalytic reforming (platformer) unit capacity from 3,900 barrels per day (bpd) to 7,500 bpd;
- Add new equipment to recover liquid petroleum gas (LPG) from fuel gas used at the refinery; and
- Increase the crude oil throughput for the existing crude oil tank group from 705,180,000 gallons per year to 802,264,890 gallons per year.

Catalytic Reforming (Platformer Unit)

The platformer unit converts petroleum naphthas produced from distilling crude oil into high-octane liquid products called reformates, through a process known as catalytic reforming. These reformates can be used as premium blending stock for the production of gasoline or as a source of industrial feedstock for aromatic chemicals.

The process of catalytic reforming is shown in block diagram form in Attachment F of the permit application. Naphthas from the distillation of crude oil comes into the platformer unit and may be combined with hydrogen and other hydrocarbon streams. This is then heated and passed through catalyst beds to convert naphthas into branched or aromatic hydrocarbons of the desired range of molecular weights and chemical properties. This mixture of hydrocarbon products is then passed through a distillation tower to separate out the desired products.

At multiple points of this process, pumps and compressors are used to move liquid and gas streams from one unit of equipment to another, and process heaters and heat exchangers are used to bring liquids or gases to the desired temperature range for reactions or chemical separations to occur. Ergon is requesting to increase the platformer capacity from 3,900 bpd to 7,500 bpd to match the unfiner and allow the refinery to process an additional 1,000 bpd of untreated naphtha.

Crude Oil Tanks

Ergon is proposing to increase the crude oil throughput for the existing crude oil tank group from 705,180,000 gallons per year to 802,264,890 gallons per year. The crude oil tank group consists of tanks 4000, 4001, 4060, and 4061. Ergon plans to accommodate the crude oil throughput increase by increasing the throughput on tanks 4060 and 4061. Tanks 4060 and 4061 are currently permitted for 176,295,000 gallons per year per tank. Ergon plans to increase the crude oil throughput on tanks 4060 and 4061 to 224,837,445 gallons per year per tank.

Heater H-505R

The new 8.745 mmBtu/hr process heater (H-505R) will be a replacement for the existing H-505 heater. H-505 is part of a heater group (H-500S) that share a common exhaust stack (004-01). The heater shall be fired primarily with process gas and supplemented, when needed with natural gas.

LPG Recovery

The fuel gas used at the refinery is primarily methane and ethane, but can contain propane and butane. To relieve current fuel system limitations, equipment installed as part of this proposal will separate propane and butane from the fuel gas produced in the platformer unit. This propane and butane will then be stored in pressurized containment vessels and loaded onto trucks and sold as Y-Grade LPG.

SITE INSPECTION

Due to the nature of the modification, the writer did not conduct a site inspection for this permitting action. According to information in the DAQ database, the last full on-site inspection occurred on July 25, 2014 by Mr. Michael Wade of the Compliance/Enforcement Section.

AIR EMISSIONS AND CALCULATION METHODOLOGIES

Ergon included in Attachment N of the permit application an estimate of the potential increase in potential emissions for each of the proposed modifications. The methodology of each calculation is discussed below.

Heater Emissions

Potential emissions from the replacement heater H-505R were based on the maximum design heat input (MDHI) of the heater (8.745 mmBtu/hr) and emission factors provided by the manufacturer. Annual emissions were based on 8,760 hours of operation per year. A fuel gas heat content of 1,019 Btu/scf was used in the calculations.

Storage Tanks

Potential VOC emissions associated with the TK-4060 and TK-4061 crude oil tanks (working/breathing emissions) emission factors and calculation methodologies as provided under AP-42, Section 7 (AP-42 is a database of emission factors maintained by USEPA). The emissions from each tank were based on the new maximum throughput of 224,837,445 gallons per year.

Fugitive Emissions

Ergon based their fugitive process and piping components leak calculations on the "EPA Correlation Approach" taken from the document EPA-453/R-95-017 - "Protocol for Equipment Leak

Emission Estimates.” Leak Rate/Screening Value correlations were taken from Table 2-10 “Petroleum Industry Leak Rate/Screening Value Correlations.”

Emissions Summary

Based on the above estimation methodologies, the change in annual facility-wide PTE as a result of the modifications evaluated herein is given in the following table:

Table 1: Change In Facility-Wide Annual PTE

Pollutant	R13-2334X ⁽¹⁾	R13-2334Y	Change
	tons/year	tons/year	tons/year
CO	251.68	250.31	-1.37
NO _x	207.56	204.65	-2.91
PM _{2.5} /PM ₁₀ /PM	24.26	24.21	-0.05
SO ₂	79.04	79.19	0.15
VOCs	134.08	135.87	1.79
HAPs	21.94	22.07	0.13

(1) Emissions taken from R13-2334X Fact Sheet.

REGULATORY APPLICABILITY

The following will discuss only the regulatory applicability of general rules and specific rules to the emission units that have been proposed to be modified as part of this permitting action.

45CSR2: To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers

The replacement heater has, based on determinations in previous permitting actions at the Newell Refinery, been determined to meet the definition of a “fuel burning unit” under 45CSR2 and is, therefore, subject to the applicable requirements therein. However, pursuant to the exemption given under §45-2-11, as the MDHI of the unit is less than 10 mmBtu/hr, it is not subject to sections 4, 5, 6, 8 and 9 of 45CSR2. The only remaining substantive requirement is under Section 3.1 - Visible Emissions Standards.

Pursuant to 45CSR2, Section 3.1, the heater is subject to an opacity limit of 10% (from the combined exhaust stack of 004-01. Proper maintenance and operation of the unit (and the use of process gas as fuel) should keep the opacity of the unit (and the other heaters that make up the heater group H-500S) well below 10% during normal operations.

45CSR10: To Prevent and Control Air Pollution from the Emission of Sulfur Oxides (NON-APPLICABILITY)

45CSR10 has requirements limiting SO₂ emissions from “fuel burning units,” limiting in-stack SO₂ concentrations of “manufacturing processes,” and limiting H₂S concentrations in process gas streams. The only potential applicability of 45CSR10 to the proposed modifications is the limitations on fuel burning units. Pursuant to the exemption given under §45-10-10.1, as the MDHI of the new replacement heater - which has been determined to meet the definition of a “fuel burning unit” under 45CSR10 - is less than 10 mmBtu/hr, the unit is not subject to the limitations on fuel burning units under 45CSR10.

45CSR13: Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification of the Newell Refinery has the potential to increase a regulated pollutant (see Table 1 above). However, no regulated pollutant is increased is in excess of six (6) lbs/hour, and ten (10) TPY or 144 lbs/day and, therefore, the proposed changes would normally be eligible to be reviewed as a Class II Administrative Update. However, Ergon voluntarily submitted the application as a modification and it was reviewed as such. Pursuant to §45-13-5.1, “[n]o person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without . . . obtaining a permit to construct.” Therefore, Ergon is required to obtain a permit under 45CSR13 for the modification of the Newell Refinery.

As required under §45-13-8.3 (“Notice Level A”), Ergon placed a Class I legal advertisement in a “newspaper of *general circulation* in the area where the source is . . . located.” The ad ran on October 19, 2015 in *The Weirton Daily Times* and the affidavit of publication for this legal advertisement was submitted on November 16, 2015.

45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration - (NON APPLICABILITY)

The Newell Refinery is located in Hancock County, WV. Hancock County is classified as “in attainment” with all National Ambient Air Quality Standards. However, as the facility is a “listed source” under §45-14-2.43 (“Petroleum Refineries”), the individual major source applicability threshold for all pollutants is 100 TPY. As shown in Table 1, the existing facility-wide PTE of the Newell Refinery is greater than 100 TPY for CO, NO_x, and VOCs. Therefore, the existing facility is defined as a “major stationary source” under 45CSR14 and the modifications evaluated herein are subject to a Prevention of Significant Deterioration (PSD) Applicability Analysis.

Under the review for Permit Number R13-2334T, Ergon modified the Unifiner to increase the capacity and replace the H-501 heater. Additionally, the increase in Unifiner capacity led to an increase in throughput for Tanks 4004, 4006, 4014, 4015, 4050, and also led to an increase in throughput to the truck loading operations [TLOAD and OXIDIZER]. As a result of the changes, a PSD Applicability Analysis was submitted under R13-2334T (as discussed in detail in the fact

sheet for that permitting action). This analysis showed that the difference in actual-to-potential emissions of the emission units involved in the modification and those affected upstream/downstream of the changes were less than the “significant” thresholds given under §45-14-2.74. Pursuant to §45-14-19.7 (shown below), once a synthetic minor has been issued for a modification, relaxing the limits upon which that synthetic minor was issued (that results in a “major modification”) could result in the requirement for a retroactive PSD review.

Any person who owns or operates any particular source or modification which becomes a major stationary source or major modification solely by virtue of a relaxation in any limitation, enforceable by the Administrator or the Secretary, on the capacity of the source or modification otherwise to emit a pollutant (such as a restriction on hours of operation), shall become subject to the requirements of this rule as though construction had not yet commenced on the source or modification.

Therefore, as a result of the changes requested under R13-2334Y, a new PSD Applicability Analysis was requested that showed, using the same baseline actual emissions used in the R13-2334T PSD Applicability Analysis (annualized emissions from 2009 and 2010), the new potential-to-emit (PTE) of the same equipment/processes (with some noted changes), was not, on a pollutant-by-pollutant basis, more that a “significant” difference that would define the modifications evaluated herein as major (based on the language under §45-14-19.7). The following table details the PSD Applicability Analysis for VOCs using the same equipment/processes (exceptions noted) presented in the R13-2334T PSD Applicability Analysis with the addition of new sources added as part of the modifications evaluated herein.

Table 2: PSD Applicability Analysis for VOCs

Emission Units	All Emissions in TPY		
	Baseline Actuals ⁽¹⁾	Future PTE	Difference
TK-4000	1.41	1.47	0.06
TK-4001	1.13	1.47	0.34
TK-4002	0.34	0.14	-0.20
TK-4004	1.58	1.58	0.00
TK-4006	1.69	1.71	0.02
TK-4014	1.21	1.20	-0.01
TK- 4015	1.12	1.12	0.00
TK-4050	0.71	0.72	0.01
TK-4060 (modified)	0.91	2.37	1.46
TK-4061 (modified)	0.91	2.40	1.49
TK-4062	7.14	12.27	5.13
TK-4063	0.00	12.27	12.27
Naptha Splitter	0.00	0.79	0.79

Emission Units	All Emissions in TPY		
	Baseline Actuals ⁽¹⁾	Future PTE	Difference
ISOM Unit	0.00	3.72	3.72
H-501	0.18	0.25	0.07
H-101 and H-102	2.39	1.84	-0.55
H-505R (new)	0.00	0.07	0.07
H-505 (will be replaced)	0.18	0.00	-0.18
PL-FUG (new) ⁽³⁾	0.00	0.60	0.60
YNGL-FUG (new) ⁽³⁾	0.00	0.94	0.94
Truck Loading [TLoad]	0.38	4.22	3.84
OXIDIZER	7.19	11.59	4.40
TOTAL →	28.47	62.74	34.27

- (1) The MLD/MLDOX source that was part of the R13-2334T analysis has been removed from this analysis. According to Ergon, this source was installed as part of Permit Number R13-2334S and was not modified under R13-2334T. The MLD/MLDOX installation was a separate project and is unrelated to the other activities at the refinery and to the equipment modified under R13-2334T and currently being modified.
- (2) Based on Annualized Emissions from 2009/2010 as presented in R13-2334T fact sheet.
- (3) Fugitive Emissions are included as the Newell Refinery is a "listed source" under 45CSR14.

Based on information submitted by Ergon and on information from the R13-2334T fact sheet, the modifications evaluated herein are determined not to be defined as a "major modification" and, therefore, PSD Review pursuant to 45CSR14 is not required.

45CSR30: Requirements for Operating Permits - (NON APPLICABILITY)

45CSR30 provides for the establishment of a comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act. The Newell Refinery, defined under Title V as a "major source," was last issued a Title V renewal permit on August 18, 2015 (R30-02900008-2015). Proposed changes evaluated herein must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

40 CFR 60, Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

Subpart Ja of 40 CFR 60 is the NSPS for petroleum refineries which construction commenced after May 14, 2007. Process heater H-505R is subject to the requirements of Subpart Ja because it meets the applicability requirements and definition of a "fuel gas combustion device" in §60.100a and §60.100b, respectively. The only substantive standard applicable to H-505R is given under §60.102a(g)(1):

- (1) Except as provided in (g)(1)(iii) of this section, for each fuel gas combustion device, the owner or operator shall comply with either the emission limit in paragraph (g)(1)(i) of this section or the fuel gas concentration limit in paragraph (g)(1)(ii) of this section.
 - (i) The owner or operator shall not discharge or cause the discharge of any gases into the atmosphere that contain SO₂ in excess of 20 ppm_v (dry basis, corrected to 0-percent excess air) determined hourly on a 3-hour rolling average basis and SO₂ in excess of 8 ppm_v (dry basis, corrected to 0-percent excess air), determined daily on a 365 successive calendar day rolling average basis; or
 - (ii) The owner or operator shall not burn in any fuel gas combustion device any fuel gas that contains H₂S in excess of 162 ppm, determined hourly on a 3-hour rolling average basis and H₂S in excess of 60 ppm, determined daily on a 365 successive calendar day rolling average basis.
 - (iii) The combustion in a portable generator of fuel gas released as a result of tank degassing and/or cleaning is exempt from the emissions limits in paragraphs (g)(1)(i) and (ii) of this section.

Ergon has indicated they will comply with the above requirement through the use of continuous H₂S fuel monitoring (pursuant to the requirements of §60.107a) on the process gas that fires the new replacement process heater.

40 CFR 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

Subpart Kb of 40 CFR 60 is the NSPS for storage tanks containing Volatile Organic Liquids (VOLs) which construction commenced after July 23, 1984. The Subpart applies to storage vessels used to store volatile organic liquids with a capacity greater than or equal to 75 m³ (19,813 gallons). However, storage tanks with a capacity greater than or equal to 151 m³ (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa are exempt from Subpart Kb. Subpart Kb was previously determined to apply to the modified storage tanks TK-4060 and TK-4061 and the modifications evaluated herein do not change that determination. The tanks will have to continue to meet the requirements given under §60.112b(a) and (b).

40 CFR 60, Subpart GGGa: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Subpart GGGa of 40 CFR 60 is the NSPS for equipment leaks of VOC in petroleum refineries for which construction commenced after November 7, 2006. The new Platformer Expansion (PL-FUG) and Y-Grade NGL (YNGL-FUG) Units are subject to the requirements under GGGa. Subpart GGGa incorporates by reference the fugitive requirements under 40 CFR 60, Subpart VVa. Ergon shall be required to meet these requirements within the permit.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

This section provides an analysis for those regulated pollutants that may be emitted from the modified Monroe Compressor Station and that are not classified as “criteria pollutants.” Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NO_x), Ozone, Particulate Matter (PM), Particulate Matter less than 10 microns (PM₁₀), Particulate Matter less than 2.5 microns (PM_{2.5}), and Sulfur Dioxide (SO₂). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect the public health and welfare. Other pollutants of concern, although designated as non-criteria and without national concentration standards, are regulated through various federal and programs designed to limit their emissions and public exposure. These programs include federal source-specific Hazardous Air Pollutants (HAPs) limits promulgated under 40 CFR 61 (NESHAPS) and 40 CFR 63 (MACT). Any potential applicability to these programs for the modified sources were discussed above under REGULATORY APPLICABILITY.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The modifications evaluated herein have the potential to increase the following HAPs: n-Hexane, Toluene, and Xylene. The following table lists each HAP’s carcinogenic risk (as based on analysis provided in the Integrated Risk Information System (IRIS)):

Table 4: Potential HAPs - Carcinogenic Risk

HAPs	Type	Known/Suspected Carcinogen	Classification
n-Hexane	VOC	No	Inadequate Data
Toluene	VOC	No	Inadequate Data
Xylene	VOC	No	Inadequate Data

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health effects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle. As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals.* For a complete discussion of the known health effects of each compound refer to the IRIS database located at www.epa.gov/iris.

AIR QUALITY IMPACT ANALYSIS

The estimated maximum increase in emissions are less than applicability thresholds that would define the proposed modification as “major” under 45CSR14 and, therefore, no air quality impacts modeling analysis was required. Additionally, based on the nature of the modification and the location of the source, an air quality impacts modeling analysis was not required under 45CSR13, Section 7.

MONITORING, COMPLIANCE DEMONSTRATIONS, REPORTING, AND RECORDING OF OPERATIONS

No substantive change to the monitoring, compliance demonstration, reporting, and record-keeping requirements (MRR) in the draft permit was made. The modified and new emission units shall be integrated into the existing MRR requirements.

PERFORMANCE TESTING OF OPERATIONS

There was no change in the existing performance testing requirements.

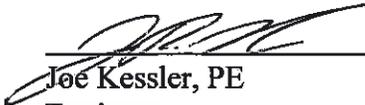
CHANGES TO PERMIT R13-2334X

The substantive changes made changes to R13-2334X were limited to:

- Emission Units Table 1.0 of the draft permit was updated with revised information based on the modifications and the new fugitive areas added;
- The Source-Specific Requirements Table under Section 4.0 was updated with corrected information for H-500S;
- Emission limits of H-500S under 4.1.22. of the draft permit were revised;
- Emission limits for the two new fugitive areas were added under 6.1.4. of the draft permit; and
- Storage tank emission limits were revised under 7.1.2. of the draft permit;

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that compliance with all applicable state and federal air quality regulations will be achieved. Therefore, I recommend to the Director the issuance of a Permit Number R13-2334Y to Ergon - West Virginia, Inc. for the proposed modification of the Newell Refinery located in Newell, Hancock County, WV.



Joe Kessler, PE
Engineer

12/03/15

Date

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Thursday, December 03, 2015 11:16 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions

Ok, thanks!

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

Entire Document
NON-CONFIDENTIAL

I.D. No. 029-0000B Reg. 2334Y
Company ERGON
Facility NEWELL Region _____
Initials JN

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From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Thursday, December 03, 2015 10:11 AM
To: Jake Neihaus
Subject: RE: Couple Questions

Jake, I'm going to formally deem the application complete. You will see the e-mail shortly. It will note the 90 statutory review period but obviously we are working to complete the review as soon as we can.

Joe

From: Jake Neihaus [mailto:Jake.Neihaus@ergon.com]
Sent: Thursday, December 03, 2015 9:46 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions

Is there anything that I can help with?

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Thursday, December 03, 2015 8:43 AM
To: Jake Neihaus
Subject: RE: Couple Questions

Jake, I can tell you that provided I'm not unexpectedly moved into something else, this permit is my priority. My goal is to get it to Bev before I leave today, but that is ambitious. Once I turn it into Bev, it is up to her to review the documents and give me permission to go to public notice. At that point the timing relies on the paper and how quick they can get it in.

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Thursday, December 03, 2015 9:30 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions

How is it going this morning? Are we close to getting the permit to notice? I know I will be asked about it today and would like to be able to provide an update and a timeline if possible.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 1:16 PM
To: Jake Neihaus
Subject: RE: Couple Questions

Working through the Ja requirements, looks like only standard applicable to H-505R is the SO2 limits, which you will meet by monitoring H2S in the gas?

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Wednesday, December 02, 2015 2:10 PM
To: Kessler, Joseph R
Subject: RE: Couple Questions

Yes, natural draft.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 1:08 PM
To: Jake Neihaus
Subject: RE: Couple Questions

Will H-505R be installed as a natural draft unit?

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Wednesday, December 02, 2015 2:06 PM
To: Kessler, Joseph R
Subject: RE: Couple Questions

Ok. let me know if you have any other questions. Already had project engineer ask today if I had heard when the permit would go to notice.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 1:01 PM
To: Jake Neihaus
Subject: RE: Couple Questions

Ok, existing language in the permit needs to be tweaked a little to be clear on that, no problem.

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Wednesday, December 02, 2015 2:00 PM
To: Kessler, Joseph R
Subject: RE: Couple Questions

Yes, that is correct.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 12:59 PM
To: Jake Neihaus
Subject: RE: Couple Questions

OK, so new components are subject to VVa through GGGa applicability. Is this the same for the existing units DHT-FUG and ADU-FUG?

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Wednesday, December 02, 2015 1:57 PM
To: Kessler, Joseph R
Subject: RE: Couple Questions

One caveat - fugitives are subject to GGGa, however, that rule mostly points to requirements in VVa.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 12:55 PM
To: Jake Neihaus
Subject: RE: Couple Questions

New process heater is subject to Subpart Ja, correct? And new fugitive emissions components (PL-FUG and YNGL-FUG) are subject to VVa and not GGa, correct?

Thanks

Joe

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Wednesday, December 02, 2015 1:48 PM
To: Kessler, Joseph R
Subject: RE: Couple Questions

How is everything coming along? Any other questions?

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 8:53 AM
To: Jake Neihaus
Subject: RE: Couple Questions

That's what I was looking for, thanks

Joe

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Wednesday, December 02, 2015 9:51 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions

See attached

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 8:46 AM
To: Jake Neihaus
Subject: RE: Couple Questions

Jake, can you e-mail me the new heater spec sheet that shows the emission factors used in the calculations?

Thanks

Joe

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Tuesday, December 01, 2015 11:49 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions

We purchased the facility from Pennzoil/Quaker State in 1995. The first permit issued to us, R13-2334A, was issued in 2001. All sources at the refinery are permitted and should be included in Version R13-2334Y.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Tuesday, December 01, 2015 10:40 AM
To: Jake Neihaus
Subject: Couple Questions

Jake, a couple of general questions: When was the Newell facility originally constructed? And is the entire facility currently permitted under 2334Y or are there parts that remain grandfathered?

Thanks,

Joe Kessler, PE
Engineer

West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Wednesday, December 02, 2015 9:51 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions
Attachments: H505R Burner Specs.pdf

See attached

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]
Sent: Wednesday, December 02, 2015 8:46 AM
To: Jake Neihaus
Subject: RE: Couple Questions

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Thanks

Joe

From: Jake Neihaus [<mailto:Jake.Neihaus@ergon.com>]
Sent: Tuesday, December 01, 2015 11:49 AM
To: Kessler, Joseph R
Subject: RE: Couple Questions

We purchased the facility from Pennzoil/Quaker State in 1995. The first permit issued to us, R13-2334A, was issued in 2001. All sources at the refinery are permitted and should be included in Version R13-2334Y.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [<mailto:Joseph.R.Kessler@wv.gov>]

Sent: Tuesday, December 01, 2015 10:40 AM

To: Jake Neihaus

Subject: Couple Questions

Jake, a couple of general questions: When was the Newell facility originally constructed? And is the entire facility currently permitted under 2334Y or are there parts that remain grandfathered?

Thanks,

Joe Kessler, PE

Engineer

West Virginia Division of Air Quality

601-57th St., SE

Charleston, WV 25304

Phone: (304) 926-0499 x1219

Fax: (304) 926-0478

Joseph.r.kessler@wv.gov

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Tuesday, December 01, 2015 11:50 AM
To: Kessler, Joseph R
Cc: McKeone, Beverly D
Subject: RE: EWVI R13 Permit
Attachments: PSD Applicability Determination for R13-2334Y.pdf

Joe,

Please find attached the requested PSD Applicability Analysis. For this analysis, EWVI used the same actual emissions data from 2009-2010 and included the sources that were in modification R13-2334T (as some of the same equipment is being modified at this time) as well as the sources for the current modification R13-2334Y. This analysis demonstrates that the post modification PTE is still below the 40 TPY for VOC (as well as all other pollutants below their respective thresholds).

One source, the MLD/MLDOX, has been removed from the analysis. This source was installed as part of permit R13-2334S and was not modified under R13-2334T. The MLD/MLDOX installation was a separate project and is unrelated to the other activities at the refinery and to the equipment currently being modified. The majority of the crude oil that is gathered and brought to the refinery is processed into petroleum derivatives (gasoline, lube oils, diesel, etc.). That portion that is not processed is stored on-site and then loaded onto barges for sale. The MLD/MLDOX are the emissions from loading this non-processed crude oil.

Should you have any questions, please let me know.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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-----Original Message-----

From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Tuesday, November 24, 2015 3:04 PM
To: Jake Neihaus
Cc: McKeone, Beverly D
Subject: RE: EWVI R13 Permit

Jake, while I have made the changes to the draft permit, the fact sheet still needs to be completed and it will need to include the PSD applicability analysis that I mentioned we needed to discuss over the phone. When it is completed,

along with a public notice, I will need to receive approval to go to public notice from my supervisor (after she reviews the documents). When I get that approval (resolving any comments she has), I can then have the secretary send the notice to the paper, which usually has a lead time of a few days to run the ad. So realistically my hope would be to have everything finished and to my supervisor for her review by the end of next week (if we can address the PSD issues by that time). After that, the timeline is dependent on my supervisor's turnaround and the paper's timeline.

FYI, 45CSR13 does permit extensive work to be done prior to receiving a permit as outlined under Section 5.1 including demolishing of existing structures, upgrading of utilities, receiving and storing on-site equipment and emission units (provided they are not erected in place) and digging and constructing foundations.

As for the PSD applicability analysis, when I researched the previous modifications of the facility, I noticed that under R13-2334T, a PSD applicability analysis was performed for the changes that involve the same equipment being modified at this time. I see that the actual-potential test at that time showed an increase in VOCs of 39.44 TPY. Based section 19.7 of 45CSR14:

"Any person who owns or operates any particular source or modification which becomes a major stationary source or major modification solely by virtue of a relaxation in any limitation, enforceable by the Administrator or the Secretary, on the capacity of the source or modification otherwise to emit a pollutant (such as a restriction on hours of operation), shall become subject to the requirements of this rule as though construction had not yet commenced on the source or modification."

I believe you will have to show that, in a new actual-to-potential analysis, and using the same actual emissions data used in that analysis (2009-2010) and the new post-modification PTE (including fugitives), the difference will still be below 40 TPY. Now I think since the increases for this modification are so small, you might be able to live with lower emission limits on the tanks.

I will also be out of the office for the remainder of the week but will checking my e-mail periodically.

Thanks

Joe Kessler

-----Original Message-----

From: Jake Neihaus [mailto:Jake.Neihaus@ergon.com]

Sent: Tuesday, November 24, 2015 3:13 PM

To: Kessler, Joseph R

Subject: EWVI R13 Permit

Joe,

I am out of the office all this week but will get you an answer to your question on Monday. Provided that resolves the issue, we really need the permit to go to public comment middle of next week so that our contractors can get started. Since the permit language has already been amended, do you see going to public comment around 12/2 as an issue?

Jake Neihaus

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Tuesday, November 24, 2015 4:17 PM
To: Kessler, Joseph R
Cc: McKeone, Beverly D
Subject: Re: EWWI R13 Permit

We hope to have the PSD issue resolved Monday. Is it possible your supervisor could begin reviewing what has been completed to date?

Any tasks that we can help with to get the permit to notice as quick as possible, we will be happy to complete.

Jake Neihaus

> On Nov 24, 2015, at 3:03 PM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov> wrote:

>

> Jake, while I have made the changes to the draft permit, the fact sheet still needs to be completed and it will need to include the PSD applicability analysis that I mentioned we needed to discuss over the phone. When it is completed, along with a public notice, I will need to receive approval to go to public notice from my supervisor (after she reviews the documents). When I get that approval (resolving any comments she has), I can then have the secretary send the notice to the paper, which usually has a lead time of a few days to run the ad. So realistically my hope would be to have everything finished and to my supervisor for her review by the end of next week (if we can address the PSD issues by that time). After that, the timeline is dependent on my supervisor's turnaround and the paper's timeline.

>

> FYI, 45CSR13 does permit extensive work to be done prior to receiving a permit as outlined under Section 5.1 including demolishing of existing structures, upgrading of utilities, receiving and storing on-site equipment and emission units (provided they are not erected in place) and digging and constructing foundations.

>

> As for the PSD applicability analysis, when I researched the previous modifications of the facility, I noticed that under R13-2334T, a PSD applicability analysis was performed for the changes that involve the same equipment being modified at this time. I see that the actual-potential test at that time showed an increase in VOCs of 39.44 TPY. Based section 19.7 of 45CSR14:

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>

> I believe you will have to show that, in a new actual-to-potential analysis, and using the same actual emissions data used in that analysis (2009-2010) and the new post-modification PTE (including fugitives), the difference will still be below 40 TPY. Now I think since the increases for this modification are so small, you might be able to live with lower emission limits on the tanks.

>

> I will also be out of the office for the remainder of the week but will checking my e-mail periodically.

>

> Thanks

>

> Joe Kessler

>

> -----Original Message-----

> From: Jake Neihaus [mailto:Jake.Neihaus@ergon.com]

> Sent: Tuesday, November 24, 2015 3:13 PM

> To: Kessler, Joseph R

> Subject: EWVI R13 Permit

>

> Joe,

>

> I am out of the office all this week but will get you an answer to your question on Monday. Provided that resolves the issue, we really need the permit to go to public comment middle of next week so that our contractors can get started. Since the permit language has already been amended, do you see going to public comment around 12/2 as an issue?

>

> Jake Neihaus

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Friday, November 20, 2015 3:34 PM
To: Kessler, Joseph R
Subject: EWVI Permit Changes
Attachments: R13-2334X_Draft Permit_11202015.pdf

Joe,

We did not have a Word version of the permit and were unable to do a redline strikeout. We did convert the PDF to OCR test recognition and add dialogue boxes for each addition or removal of a limit, emission rate, or special condition and the corresponding recommended change.

Please let me know if you have any questions.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Thursday, November 12, 2015 11:08 AM
To: Kessler, Joseph R
Subject: Fwd: R13-2334Y Status
Attachments: image001.png; ATT00001.htm; amended ADU legal add as sent to state..pdf; ATT00002.htm

See attached.

Jake Neihaus

Begin forwarded message:

From: Greir Merchant <Greir.Merchant@ergon.com<mailto:Greir.Merchant@ergon.com>>
Date: November 12, 2015 at 9:54:27 AM CST
To: Jake Neihaus <Jake.Neihaus@ergon.com<mailto:Jake.Neihaus@ergon.com>>
Subject: RE: R13-2334Y Status

Jake,

See attached. No sure how I did that, but the resubmit of the legal add DID have the coordinates. Let me know if I need to resubmit to the state with a cover letter. I will also call the paper to make sure I paid it.

Greir Merchant
Senior Environmental Coordinator

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Thursday, November 12, 2015 10:59 AM
To: Kessler, Joseph R
Subject: Re: R13-2334Y Status

We inadvertently attached the original ad to the second submittal to you. The refinery has the correct ad and is re-sending. I have it electronically and can sent it today if necessary.

I am out of the office today but can call you tomorrow. Do you have questions on the application?

Jake Neihaus

On Nov 12, 2015, at 8:02 AM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>> wrote:

Jake, I had on my desk this morning what I assumed was the new original affidavit of publication for the re-run of your ad with the latitude/longitude. But what I received was the same affidavit as submitted previously for the first ad without the latitude/longitude. I need the new affidavit to deem the application complete and start the statutory timeline. I have verified payment of the additional \$1,000. I will give you a call this morning to discuss the review.

Joe

From: Jake Neihaus [mailto:Jake.Neihaus@ergon.com]
Sent: Tuesday, November 10, 2015 12:16 PM
To: Kessler, Joseph R
Subject: R13-2334Y Status

Any progress on the permit modification? Any assistance I can provide? If you have any questions, please don't hesitate to call. They are anxious to get started.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Wednesday, October 14, 2015 1:42 PM
To: Kessler, Joseph R
Subject: Re: R13-2334Y Permit Application Review Status

I am out of the office and haven't had a chance to call you back. We will re-run the ad with the lat/long included and also send the check for the additional fee ASAP.

If there is anything I can do to help speed the process along, please let me know.

Jake Neihaus

On Oct 14, 2015, at 12:31 PM, Kessler, Joseph R <Joseph.R.Kessler@wv.gov<mailto:Joseph.R.Kessler@wv.gov>> wrote:

RE: Application Status: Incomplete
Ergon Corporation-West Virginia, Inc.
Newell Refinery
Permit Application: R13-2334Y
Plant ID No.: 029-00008

Dear Mr. Neihaus:

Your application for a modification to the Newell Refinery was received by the Division of Air Quality (DAQ) on September 14, 2015 and assigned to the writer for review. Upon an initial review of the application, it has been determined that the following items need to be addressed prior to the application being deemed complete:

1. The required Class I Legal Advertisement did not include the facility's latitude and longitude pursuant to the directions given at:
<http://www.dep.wv.gov/daq/permitting/Documents/June%202015/ExampleLegalAdvertisement%20Revised%20062015.pdf>; and
2. Pursuant to 45-22-3.4, an additional fee of \$1,000 is required for modifications involving equipment/processes subject to a New Source Performance Standard (NSPS).

Please address the above items as quickly as possible in order to facilitate review of the permit application. Should you have any questions, please contact me at (304) 926-0499 ext. 1219.

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov<mailto:Joseph.r.kessler@wv.gov>

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Tuesday, September 22, 2015 2:43 PM
To: Kessler, Joseph R; McKeone, Beverly D
Subject: RE: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

Ok, just let me know if I need to submit an additional payment. Just don't want this to hold up the process.

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Kessler, Joseph R [mailto:Joseph.R.Kessler@wv.gov]
Sent: Tuesday, September 22, 2015 12:28 PM
To: Jake Neihaus; McKeone, Beverly D
Subject: RE: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

When I do the 30-day completeness review, I will look at and let you know what I think. But basic rule of thumb is, if you are adding or modifying any equipment/processes subject to an NSPS or MACT, the additional fee of \$1,000 or \$2,500, respectively, is required.

Thanks

Joe Kessler

From: Jake Neihaus [mailto:Jake.Neihaus@ergon.com]
Sent: Tuesday, September 22, 2015 12:25 PM
To: McKeone, Beverly D
Cc: Kessler, Joseph R
Subject: FW: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

Bev,

For previous permit applications, our application fee was \$1,000. In the email below, it reads as though we need to submit an additional fee. Is this correct? What is the correct amount that should have been submitted?

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor

(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Adkins, Sandra K [<mailto:Sandra.K.Adkins@wv.gov>]
Sent: Wednesday, September 16, 2015 4:28 PM
To: Paul Young; Jake Neihaus
Cc: McKeone, Beverly D; Kessler, Joseph R
Subject: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

**RE: Application Status
Ergon Corporation-West Virginia, Inc.
Newell (Congo Plant)
Plant ID No. 029-00008
Application No. R13-2334Y**

Mr. Young,

Your application for a modification permit for the Newell facility was received by this Division on September 14, 2015, and was assigned to Joe Kessler. The following items were not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.
**Please note to use the new phone extension 1250 for future legal ads.*

Application fee AND/OR additional application fees not included:
**\$1,000 NSPS*

These items are necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

For future reference, please submit two electronic applications. These must include signatures.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.

Kessler, Joseph R

From: Jake Neihaus <Jake.Neihaus@ergon.com>
Sent: Friday, September 18, 2015 11:44 AM
To: Kessler, Joseph R
Subject: FW: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

I talked to Sandra and they did receive the \$1,000 check. She said Bev told her that she thought the \$1,000 application fee was insufficient. Can you verify for me what the application fee amount should be?

Thanks,

Jake Neihaus, CHMM, RPG
Environmental Supervisor
(601) 933 - 3123 office
(601) 209 - 6786 cell
(601) 933 - 3369 fax

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From: Adkins, Sandra K [mailto:Sandra.K.Adkins@wv.gov]
Sent: Wednesday, September 16, 2015 4:28 PM
To: Paul Young; Jake Neihaus
Cc: McKeone, Beverly D; Kessler, Joseph R
Subject: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

RE: Application Status
Ergon Corporation-West Virginia, Inc.
Newell (Congo Plant)
Plant ID No. 029-00008
Application No. R13-2334Y

Mr. Young,

Your application for a modification permit for the Newell facility was received by this Division on September 14, 2015, and was assigned to Joe Kessler. The following items were not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.
**Please note to use the new phone extension 1250 for future legal ads.*

Application fee AND/OR additional application fees not included:
***\$1,000 NSPS**

These items are necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

For future reference, please submit two electronic applications. These must include signatures.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.

Achieving Ultra Low Emissions in Field Operation

The Callidus Ultra Blue burner is the Best Available Control Technology burner on the market today for process heaters. *Without the use of any external flue gas recirculation or steam injection, we are able to achieve incredibly low NO_x levels in leakage-free furnaces.*

As we are able to reach lower and lower NO_x levels with our burners, we become increasingly aware that the condition and operation of process furnaces in the field will have a tremendous impact on the burners' ability to deliver test facility NO_x levels during installed operation. *The Ultra Blue burner's ability to deliver the best low NO_x levels is heavily dependent on steps our customers take in the refinery to improve the operating conditions at the burners.*

It is Callidus' goal to help our customers realize the lowest possible NO_x levels in field operation with the Ultra Blue burner. In addition to installing the Ultra Blue burner, there are other steps our customers should be taking in parallel to maximize NO_x reduction:

1. *Eliminate furnace tramp air leakage.* Tramp air can significantly increase burner NO_x emissions. Areas on which to focus include process tube penetrations, explosion doors, sight doors, skip-welded or bolted casing seams, and similar. The goal should be for floor O₂ and arch O₂ to be within 1% of each other.
2. *Do not overdesign the burners.* Specify a maximum heat release which is truly the maximum which will be needed. Running the burners on a day-in day-out basis at or near the Maximum heat release will produce the best possible NO_x levels and flame pattern.
3. *Filter fuel gas.* Plugged firing or ignition ports can affect burner NO_x and CO emissions, and alter flame profile. Achieving the lowest low NO_x levels with the Ultra Blue burner will sometimes require the use of firing ports smaller than 1/16". We make every effort to maximize gas tip port size, but in the end there is a trade-off between port size and NO_x level.
4. *Design for actual fuel gas.* We can achieve the lowest possible burner NO_x emissions if we optimize the burner gas tips for one fuel. Designing for full operation on both Natural Gas and Refinery Fuel Gas requires some conservatism in the burner design, and increases NO_x levels 2-3 ppm over what is achievable if either Natural Gas or Refinery Fuel Gas is chosen as a singular design fuel.

Optimal burner performance will be achievable if our End Users will take these steps in planning a big-picture approach to furnace NO_x reduction. Callidus offers full field assistance services to help customers plan the necessary steps to achieve these goals.

Customer Reference: ERGON / CQ-15-1366

Callidus Proposal No. B-1505-270101XJ

May 27, 2015

Page 3

Operating Conditions

Per your inquiry, the Ultra Blue burners for this project are designed for the following operating conditions:

End User:	Ergon
Job Site:	West Virginia

Heater Number	H-505
Burner Model	CUBLF-4W
Number of Burners	3
Maximum Heat Release (MMBtu/hr)	2.915
Normal Heat Release (MMBtu/hr)	2.332
Minimum Heat Release (MMBtu/hr)	0.972
Excess Air (%)	15%
Required Pressure Drop (" W.C.)	0.25
Air Temperature (°F)	60
Bridgewall Temperature (°F)	1428
Gas Pressure (psig)	20
Estimated Visual Flame Length (Ft.)	8
Elevation (Ft. ASL)	680
Noise Level (dBA @ 3')	80

Callidus Ultra-Blue (CUBL) Burners

The Callidus Ultra-Blue (CUBL) is rapidly becoming the preferred Ultra-low NO_x process burner.

An innovative design has been employed which increases the burner's stability and allows for optimal performance on typical refinery fuel gases and 100% natural gas. The new design also increases the tile exit velocity which enhances fuel/flu gas/air mixing, providing a shorter, "stiffer" flame as compared to other next generation Ultra-low NO_x burner designs.

Using our extensive engineering experience and ground breaking innovation, Callidus designed the CUBL to meet our customers' challenges.

With specific requests and developmental mandates from the industry's leading companies, the CUBL was created with these distinct advantages:

No special operating needs

- The CUBL does not require start-up lances or special procedures.
- Operations are no different than a conventional burner

Able to fit in virtually any application

- Natural draft or forced draft
- Flat flame or round flame
- 2 MM Btu/hr to 45 MM Btu/hr with higher levels possible
- Round flame tile has the smallest diameter of any comparable duty, ultra-low NO_x burner available, allowing for retrofits without floor modifications
- Fires — vertical (up or down) or horizontally
- Operates with a wide range of fuels
- Perfect for retrofit of older heaters originally designed for conventional raw gas and premix burners

Extremely Stable

- The CUBL is stable and can achieve 10 to 1 turndowns

Shorter Flame Lengths

- Typical flame length of (1.56 m/MM)

Reduced NO_x Emissions

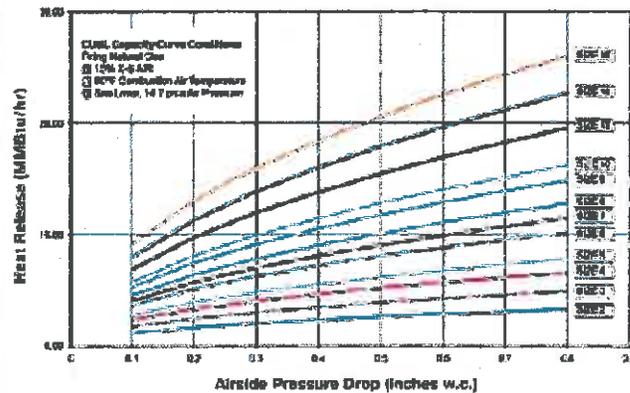
- 10-20 ppmw are typical without any additional technologies (steam, external flue gas, etc.)
- The CUBL is a highly staged, internal flue gas recirculation burner

Reduced Maintenance

- No metallic flame holders to burn up
- Primary tips are well away from the combustion and cooled by air stream
- Staged tips are shielded by refractory

CUBL Capacities

Heat Release vs. Airside Pressure Drop



CUBLF

Designed for cracking and coking furnace applications, the CUBLF is suitable for firing up a wall, across the floor or free standing in the furnace.

Mechanical safety and integrity

- Burner tiles use no metallic parts creating better thermal expansion while providing longer burner life

Control flame quality

- Reduced tile size results in thinner flames eliminating rollover
- All tip drillings are carefully engineered and tested to optimize heat flux profile

No special operating needs:

- CUBLF does not require start-up licenses or special procedures
- Emissions with less than 40 ppmv in the field

CUBL-DF

The CUBL-DF takes the proven CUBL technology one step further incorporating the use of separate manifolds to fire PSA or off-gases. The results are incredibly low NO_x levels. Additionally, the improved exit velocity from the CUBL-DF tile minimizes the flame leaning that can sometimes occur in a down fired reformer. Callidus has supplied thousands of down-fired CUBL-DF burners for reformers in hydrogen, ammonia and methanol service.

Key Features:

- Fuel source flexibility
- Low maintenance
- Outstanding combustion performance
- Ultra-low NO_x

CUBLX

Eased on the proven CUBL technology, the CUBLX burner uses a series of primary combustion air inductors designed to maximize the amount of air that is introduced into the primary combustion zone of the burner.

This added technology provides outstanding performance for furnaces with low-draft operations, short radiant box heights, tight burner-to-burner spacing or internal currents that prove to be a challenge for other "Next Generation" burner technology. This advanced technology gives the CUBLX its ability to produce 40% more heat capacity in comparison to other "Next Generation" burner that require larger heater floor cut-outs.

Key Features:

- More duty from a smaller burner
Shorter, stiffer flames (1.3 m/MW)
- Smaller burner circles or more burner to burner spacing
- Ultra-low NO_x

CUBL-HC

The CUBL-HC burner takes advantage of the CUBL technology and applies it in high capacity, forced draft situations. In these applications, large heat releases are required and there is additional need for shorter flames than traditional ultra-low NO_x burners. Utilizing the high airside pressure drop available on most high heat release, forced draft projects, the CUBL-HC yields ultra-low NO_x emissions and compact flames.

Key Features:

- Flame Lengths as short as 0.5 ft/ MMBtu (0.52 m/MW)
- Compact design retrofits into the most challenging furnaces
- Suitable for high airside pressure drop applications.
- Stable through a 10:1 turndown
Modular design is adjustable for retrofit projects using existing cut-outs and air delivery systems



Ultra-low NO_x CUBLX Burner



Ultra-low NO_x CUBL Burner

Performance

The Ultra Blue burners' expected NO_x emissions, based on each fuel's higher heating value, are as follows:

Burner	Fuel	NO_x Unit of Measure	Predicted NO_x	Guaranteed NO_x
CUBLF-4W	RFG	ppm	15	21
		lb/MMBtu HHV	0.018	0.025

Additional Guaranteed Emission Values

Carbon Monoxide (CO) 50 ppm(vd)
(Basis: 1500°F min. Radiant Fire Box Temperature, 2% to 4% volume (dry) Oxygen in Combustion Products, HHV.)

Unburned HydroCarbons (UHC) 0.0026 lb/MMBtu
(Basis: (C4's and lighter) 1500°F minimum Radiant Fire Box Temperature, 2% to 4% volume (dry) Oxygen in Combustion Products, Reported as Methane, HHV.)

Volatile Organic Compounds (VOC) 0.0017 lb/MMBtu
(Basis: 1500°F min. Radiant Fire Box Temperature, 2% to 4% volume (dry) Oxygen in Combustion Products, Reported as Methane, HHV.)

Particulates 0.0050 lb/MMBtu
(Basis: (C4's and lighter) measured only as products of incomplete combustion, excluding condensable products of complete combustion, and residual ash content, HHV.)

Emissions Notes

1. Our predicted and guaranteed NO_x values are made at maximum and normal heat liberations only due to the “limited ability” to control excess air in a process heater while firing at minimum turndown conditions. All guaranteed values are corrected to 3% dry O₂ with the bridgewall temperature, combustion air temperature, excess combustion air, and fuel gas compositions as specified.
2. Emissions levels are based on all of the combustion air entering through the throat of the burner. Due to its detrimental effect on emissions performance, “tramp” air entering the furnace must be minimized. We assume the heater has been, or will be, restored to a near “leak free” or “tight box” condition. Additionally, there may be operating situations where the end-user shuts down a burner, group of burners, or operating cell. During these transient situations, we assume the damper(s) of the secured burner(s) will be shut. Open dampers could cause a large amount of tramp air to be drafted into the furnace.
3. We assume Start-up and Shut-down situations are transient and we cannot provide NO_x guarantees during these periods, except in the case where an individual cell may be shut-down. During this time we assume the dampers will be shut, as noted above. If operating conditions during start-up and shut-down can be provided, we would be happy to estimate the expected NO_x.
4. CO guarantees are made for firebox temperatures greater than 700°C. During turndown situations at temperatures less than 700°C, we expect CO emissions to increase. At this time we cannot provide a guarantee for these lower temperature operations. We predict the CO levels to be between 300 and 400 ppm, uncorrected, with a firebox temperature of 565°C and 8-15% excess O₂. If further CO emissions guarantees are required, please specify the desired operating conditions and we will gladly evaluate CO production for those conditions.

Equipment Description

The proposed Low Emission Burners will be manufactured complete with the following:

Burner Plenum	Common or Integral	Integral
	Material	Carbon Steel
	Plate Thickness	10 Gage
Inlet Air Control	Damper or Register	Opposed Blade Damper
	Mode of Operation	Manual
Burner Tile	Composition	60% Al ₂ O ₃
	Max. Service Temperature	3000°F
Insulation	Noise or APH	Noise
	Type	Mineral Wool
	Thickness	1"
Noise Muffler	Yes/No	No
Pilot	Ignition Method	Manual Pilot
	Connection	½" 150# RFSW
	Fuel	Nat. Gas
	Fuel Pressure (psig)	7-10
	Capacity (MMBtu/hr)	0.10
Ignition Port	Size/Quantity	2"/1
Sight Port	Size/Quantity	2"/1
Flame Detection	Type	Flame Rod
	Number	One (1) - Pilot
Scanner Connection	Type	n/a
	Size/Quantity	n/a
Gas Manifold	Type	C.S. Pipe
	Connection	1-1/2" 150# RFWN
Gas Tips/Risers	Primary Tip Material	CK-20
	Secondary Tip Material	CK-20
	Primary Riser Material	304 SS
	Secondary Riser Material	304 SS
	Connection To Manifold	C.S. Pipe, C.S. Unions
Surface Requirements	Preparation	SSPC-SP-6
	Primer	1 Coat IZ Primer
	Finish Coat	None
Special Features		

Kessler, Joseph R

From: Kessler, Joseph R
Sent: Thursday, December 03, 2015 11:16 AM
To: Jake Neihaus (Jake.Neihaus@ergon.com)
Cc: Kessler, Joseph R
Subject: WV DAQ NSR Permit Application Complete for Ergon - West Virginia, Inc.: Newell Refinery

RE: Application Status: Complete
Ergon - West Virginia, Inc.
Newell Refinery
Permit Application: R13-2334Y
Plant ID No.: 029-00008

Mr. Neihaus,

Your application for a modification permit was received by the Division of Air Quality (DAQ) on September 14, 2015 and assigned to the writer. On October 14, 2015, an incomplete letter was sent to you requesting more information. Pursuant to §45-13-5.9, the application has, of the date of this e-mail, been deemed complete. Therefore, the 90-day statutory review period commenced on that date.

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact me at (304) 926-0499 ext. 1219 or reply to this email.

Thank You,

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Entire Document
NON-CONFIDENTIAL

Kessler, Joseph R

From: Ward, Beth A
Sent: Monday, November 02, 2015 4:06 PM
To: Kessler, Joseph R
Subject: ERGON CORP-WV INC PERMIT APPLICATION FEE

This is the receipt for payment received from:

ERGON CORP – WV INC, NEWELL (CONGO PLANT), CHECK NUMBER 810991, CHECK DATE 10/30/2015, \$1000.00
R13-2334Y ID# 029-00008

OASIS Deposit CR 1600049713

Thank You!

Beth Ward

**WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
BTO FISCAL
601 57TH STREET SE
CHARLESTON, WV 25304
(304) 926-0499 EXT 1846
beth.a.ward@wv.gov**

Kessler, Joseph R

From: Ward, Beth A
Sent: Wednesday, October 14, 2015 10:43 AM
To: Kessler, Joseph R
Subject: RE: R13-2334Y Permit Application Fee Confirmation

Payment was made by check # 803903 for \$1,000, OASIS ID 1600030935

Thank You!

From: Kessler, Joseph R
Sent: Wednesday, October 14, 2015 10:30 AM
To: Ward, Beth A
Subject: R13-2334Y Permit Application Fee Confirmation

\$1,000 on or about September 16, 2015 – probably a check.

R13-2334Y
Ergon

Thanks

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

UC Defaulted Accounts Search Results

Sorry, no records matching your criteria were found.

FEIN:

Business name:

ERGON-WEST VIRGINIA INC

Doing business

as/Trading as:

Please use your browsers back button to try again.

<u>WorkforceWV</u>	<u>Unemployment Compensation</u>	<u>Offices of the Insurance Commissioner</u>
------------------------------------	--	--

UC Defaulted Accounts Search Results

Sorry, no records matching your criteria were found.

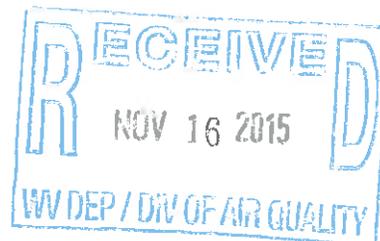
FEIN: 721375114
Business name:
Doing business as/Trading as:

Please use your browsers back button to try again.

<u>WorkforceWV</u>	<u>Unemployment Compensation</u>	<u>Offices of the Insurance Commissioner</u>
------------------------------------	--	--

 **Ergon - West Virginia, Inc.**

9995 Ohio River Blvd, Post Office Box 356
Newell, West Virginia 26050-0356



November 12, 2015,

Joe Kessler, Permit Engineer
West Virginia Department of Environmental Protection
Department of Air Quality
601 57th Street, SE
Charleston, WV 25304

Re: Ergon – West Virginia, Inc, Newell, WV
Class I Legal Advertisement

Entire Document
NON-CONFIDENTIAL

Dear Mr. Kessler,

Ergon – West Virginia, Inc. (EWVI) recently submitted an application to modify the current R13-2334X permit. Enclosed are the Legal Advertisement and Affidavit of Publication, as well as the paid receipt.

If you any questions or require additional information, please call Jake Neihaus at our Jackson, Mississippi office at (601) 933-3123.

Sincerely,


Greir Merchant
Ergon-West Virginia, Inc.
Senior Environmental Coordinator
Office: 304-387-7012
Email: Greir.merchant@ergon.com

ID. No. 029-00008 Reg. 23344
Company ERGON
Facility Newell Region _____
Initials JMC

Cc: Jake Neihaus-Corporate EHS
Jack Azar-EWVI

**STATE OF WEST VIRGINIA
COUNTIES OF HANCOCK AND
BROOKE**

I, LISA VARGO, bookkeeper for the publisher of THE WEIRTON DAILY TIMES a newspaper in the City of Weirton, State of West Virginia, hereby certify that the annexed publication was inserted in said newspaper on the following date:

Date: 10-19, _____ 2015

Given under my hand this 19th day of

October, _____ 2015

Lisa Vargo

////////////////////////////////////

Sworn to and subscribed before me on this
19th day of October, 2015
of, in and for **HANCOCK COUNTY,**
WEST VIRGINIA

AMOUNT: _____ \$30.73
ACCT.# _____ L00259

NOTARY:



NANCY KAUFMANN
NOTARY PUBLIC
STATE OF OHIO
MY COMMISSION EXPIRES
JUNE 9, 2017

Nancy Kaufmann

AIR QUALITY PERMIT NOTICE
Notice of Application
Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction and Modification Permit for a petroleum refinery located at 9995 Ohio River Boulevard, Newell, in Hancock County, West Virginia. The latitude and longitude coordinates are: 40.609173 N and 80.629196 W. The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: 1.79 tons per year (TPY) of VOC and 0.15 TPY of SO₂. Startup of operation is planned to begin on or about the 1st day of April, 2016. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV WV 25304, for at least 30 calendar days from the date of publication of this notice. Any questions regarding this permit application should be directed to the DAQ at (304) 928-0499, extension 1227, during normal business hours. Dated this the 19th day of October 2015.
By: Ergon - West Virginia, Inc.
Paul W. Young, Jr.
Senior Vice President -
Regulatory and Risk
601.933.3000
P.O. Box 1639
Jackson, MS 39215-1639
10-19, 2015 Adv.

Classified/Legal Advertising Invoice
Herald Star/Weirton Daily Times Legal Ads

401 Herald Square

Steubenville, OH
 43952
 (740) 283-4711

ERGON WV
CINDY DECAPIO
P.O. BOX 356
NEWELL, WV

10/15/2015 3:58:57PM

26050

No: 175207

Phone: 304 926-0499

Ad No 175207	Customer No: L00259	Start Date 10-19-2015	Stop Date 10-19-2015		Category: Special Stuff	Classification: W.Va. Legals		
Order No	Rate: WL	Lines: 42	Words: 201	Inches: 4.18		Cost 30.73	Payments .00	Balance 30.73
Publications ... Runs WV Legals ... 1		Solicitor: 26	Origin: 73	Sales Rep: 0	Credit Card	Credit Card Number		Card Expire
		<table border="1"> <tr> <td align="center">Identifier</td> </tr> <tr> <td>AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air</td> </tr> </table>						
Identifier								
AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air								
<p>*=Extend Expiration Date</p>								

BUSINESS NAME: Herald Star Counter

Date: 11/02/2015

Street Address: 401 Herald Square

City, State: Zip: Steubenville, OH 43952

TRANSACTION TYPE:**Purchase****Transaction Details:**

Card Type: Visa Keyed In

Response Message: Transaction status: Accepted

Card Number: *****9986

Approval Code: 008459

Invoice Number: L00259

System Trace:

Authorization Time: 16:11:12

Surcharge:

Authorization Date: 11022015

Cash Back Amount:

Current Balance:

Transaction Amount: 30.73

Total Charge: 30.73**Signature:** _____

Ergon - West Virginia, Inc.

9995 Ohio River Blvd, Post Office Box 356
Newell, West Virginia 26050-0356



November 6, 2015,

Joe Kessler, Permit Engineer
West Virginia Department of Environmental Protection
Department of Air Quality
601 57th Street, SE
Charleston, WV 25304

Re: Ergon – West Virginia, Inc, Newell, WV
Class I Legal Advertisement

Dear Ms. Jennings,

Ergon – West Virginia, Inc. (EWVI) recently submitted an application to modify the current R13-2334X permit. Enclosed are the Legal Advertisement and Affidavit of Publication, as well as the paid receipt.

If you any questions or require additional information, please call Jake Neihaus at our Jackson, Mississippi office at (601) 933-3123.

Sincerely,

Greir Merchant
Ergon-West Virginia, Inc.
Senior Environmental Coordinator
Office: 304-387-7012
Email: Greir.merchant@ergon.com

Cc: Jake Neihaus-Corporate EHS
Jack Azar-EWVI

Entire Document
NON-CONFIDENTIAL

I.D. No. 029-00003 Reg. 2334Y
Company ERGON
Facility NEWELL Region _____
Initials JM

Classified/Legal Advertising Invoice
Herald Star/Weirton Daily Times Legal Ads

401 Herald Square

Steubenville, OH
 43952
 (740) 283-4711

ERGON WV
CINDY DECAPIO
P.O. BOX 356
NEWELL, WV

09/11/2015 1:43:25PM

26050

No: 174996

Phone: 304 926-0499

Ad No 174996	Customer No: L00259	Start Date 09-14-2015	Stop Date 09-14-2015	Category: Special Stuff		Classification: W.Va. Legals			
Order No	Rate: WL	Lines: 40	Words: 188	Inches: 3.99	Cost 29.36	Payments .00	Balance 29.36		
Publications ... Runs WV Legals ... 1		Solicitor: 25	Origin: 73	Sales Rep: 0	Credit Card	Credit Card Number	Card Expire		
		<table border="1"> <tr> <td align="center">Identifier</td> </tr> <tr> <td>AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air</td> </tr> </table>						Identifier	AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air
Identifier									
AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air									
		*Extend Expiration Date							

STATE OF WEST VIRGINIA
COUNTY OF HANCOCK

I, LISA L. VARGO, bookkeeper for the publisher of THE WEIRTON DAILY TIMES a newspaper in the City of Weirton, State of West Virginia, hereby certify that the annexed publication was inserted in said newspaper on the following date:

Date: September 14, 2015
Given under my hand this 14th day of September, 2015

Lisa L. Vargo

////////////////////////////////////

Sworn to and subscribed before me on this 14th day of September 2015
in and for **HANCOCK COUNTY,**
WEST VIRGINIA

AMOUNT: \$29.36
ACCT.# L00259



PATRICIA J. SCHEEL
NOTARY PUBLIC
STATE OF OHIO
MY COMMISSION EXPIRES
MARCH 6, 2018

Patricia J. Scheel

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction and Modification Permit for a refinery located at 9995 Ohio River Boulevard, Newell, in Hancock County, West Virginia.

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: 1.79 tons per year (TPY) of VOC and 0.15 TPY of SO2.

Startup of operation is planned to begin on or about the 1st day of April, 2016. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV, 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 928-0498, extension 1227, during normal business hours.

Dated this the 15th day of September 2015.

By: Ergon - West Virginia, Inc.

Paul W. Young, Jr.

Senior Vice President -

Regulatory and Risk

601.933.3000

P.O. Box 1639

Jackson, MS 39215-1639

9-14, 2015 Adv.

Street Address: 401 Herald Square

City, State: Zip: Steubenville, OH 43952

TRANSACTION TYPE:

Purchase

Transaction Details:

Card Type: Visa Keyed In

Response Message: Transaction status: Accepted

Card Number: *****9986

Approval Code: 020051

Invoice Number: L00259 ergon west

System Trace:

Authorization Time: 15:54:01

Surcharge:

Authorization Date: 09212015

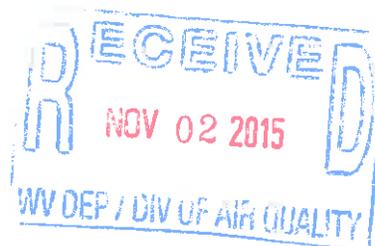
Cash Back Amount:

Current Balance:

Transaction Amount: 29.36

Total Charge: 29.36

Signature: _____



CERTIFIED MAIL – 7008 1830 0000 5402 3582

October 30, 2015

Bev McKeone, NSR Program Manager
West Virginia Department of Environmental Protection
Department of Air Quality
601 57th Street, SE
Charleston, WV 25304

Joe,
Added to AirTrax.
To Accts Rec'd 11/2
- Sandie

Re: Ergon – West Virginia, Inc., Newell, WV
Construction and Modification Permit Application Additional Fee

Dear Ms. McKeone,

Ergon – West Virginia, Inc. (EWWI) recently submitted a Construction and Modification Permit Application and included a \$1,000.00 application fee. It was later determined that an additional \$1000.00 fee was necessary. Enclosed is check number 810991 in the amount of \$1000.00 for the additional fee.

If you have any questions, please call me at our Jackson, Mississippi office at (601) 933-3123.

Sincerely,

Ergon – West Virginia, Inc.

Jake Neihaus, RPG, CHMM
Environmental Supervisor
Office: 601.933.3123
Fax: 601.933.3369
Mobile: 601.209.6786
jake.neihaus@ergon.com

Entire Document
NON-CONFIDENTIAL

I.D. No. 029-0000B Reg. 2534Y
Company ERGON
Facility NEWELL Region _____
Initials JAC

Enclosure – Check No. 810991

CC: Jack Azar – EWWI
Ray Callahan – EHS
File (48 – E – 01 – 03 –)

Kessler, Joseph R

From: Kessler, Joseph R
Sent: Wednesday, October 14, 2015 1:31 PM
To: Jake Neihaus (Jake.Neihaus@ergon.com)
Subject: R13-2334Y Permit Application Review Status

**RE: Application Status: Incomplete
Ergon Corporation-West Virginia, Inc.
Newell Refinery
Permit Application: R13-2334Y
Plant ID No.: 029-00008**

Dear Mr. Neihaus:

Your application for a modification to the Newell Refinery was received by the Division of Air Quality (DAQ) on September 14, 2015 and assigned to the writer for review. Upon an initial review of the application, it has been determined that the following items need to be addressed prior to the application being deemed complete:

1. The required Class I Legal Advertisement did not include the facility's latitude and longitude pursuant to the directions given at:
<http://www.dep.wv.gov/daq/permitting/Documents/June%202015/ExampleLegalAdvertisement%20Revised%20062015.pdf>; and
2. Pursuant to 45-22-3.4, an additional fee of \$1,000 is required for modifications involving equipment/processes subject to a New Source Performance Standard (NSPS).

Please address the above items as quickly as possible in order to facilitate review of the permit application. Should you have any questions, please contact me at (304) 926-0499 ext. 1219.

Joe Kessler, PE
Engineer
West Virginia Division of Air Quality
601-57th St., SE
Charleston, WV 25304
Phone: (304) 926-0499 x1219
Fax: (304) 926-0478
Joseph.r.kessler@wv.gov

Entire Document
NON-CONFIDENTIAL

Ergon - West Virginia, Inc.

9995 Ohio River Blvd, Post Office Box 356
Newell, West Virginia 26050-0356



September 28, 2015

Laura Jennings, Permit Engineer
West Virginia Department of Environmental Protection
Department of Air Quality
601 57th Street, SE
Charleston, WV 25304

**Re: Ergon – West Virginia, Inc., Newell, WV
Class I Legal Advertisement**

Entire Document
NON-CONFIDENTIAL

Dear Ms. Jennings,

Ergon – West Virginia, Inc. (EWVI) recently submitted an application to modify their current R13-2334 permit. Enclosed are the Legal Advertisement and Affidavit of Publication.

If you have any questions, please call Greir Merchant at 304-387-7012.

Sincerely,


Greir Merchant
Environmental Coordinator
Ergon-West Virginia Inc.

I.D. No. 029-00008 Reg. 2334Y
Company ERGON
Facility Newell Region _____
Initials GM

Enclosure – Legal Advertisement

CC: Jack Azar - EWVI

Jake Neihaus - Ergon

Classified/Legal Advertising Invoice
Herald Star/Weirton Daily Times Legal Ads

401 Herald Square

Steubenville, OH
 43952
 (740) 283-4711

ERGON WV
CINDY DECAPIO
P.O. BOX 356
NEWELL, WV

09/11/2015 1:43:25PM

26050

No: 174996

Phone: 304 926-0499

Ad No 174996	Customer No: L00259	Start Date 09-14-2015	Stop Date 09-14-2015	Category: Special Stuff		Classification: W.Va. Legals			
Order No	Rate: WL	Lines: 40	Words: 188	Inches: 3.99	Cost 29.36	Payments .00	Balance 29.36		
Publications ... Runs WV Legals ... 1		Solicitor: 25	Origin: 73	Sales Rep: 0	Credit Card	Credit Card Number	Card Expire		
		<table border="1"> <tr> <td align="center">Identifier</td> </tr> <tr> <td>AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon – West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air</td> </tr> </table>						Identifier	AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon – West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air
Identifier									
AIR QUALITY PERMIT NOTICE Notice of Application Notice is given that Ergon – West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air									
		*Extend Expiration Date							

STATE OF WEST VIRGINIA
COUNTY OF HANCOCK

I, LISA L. VARGO, bookkeeper for the publisher of THE WEIRTON DAILY TIMES a newspaper in the City of Weirton, State of West Virginia, hereby certify that the annexed publication was inserted in said newspaper on the following date:

Date: September 14, 2015
Given under my hand this 14th day of September, 2015

Lisa L. Vargo

////////////////////////////////////

Sworn to and subscribed before me on this 14th day of September 2015
in and for **HANCOCK COUNTY,**
WEST VIRGINIA

AMOUNT: \$29.36
ACCT.# L00259



PATRICIA J. SCHEEL
NOTARY PUBLIC
STATE OF OHIO
MY COMMISSION EXPIRES
MARCH 6, 2018

Patricia J. Scheel

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Ergon - West Virginia, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction and Modification Permit for a refinery located at 8995 Ohio River Boulevard, Newell, in Hancock County, West Virginia.

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: 1.79 tons per year (TPY) of VOC and 0.15 TPY of SO2.

Startup of operation is planned to begin on or about the 1st day of April, 2016. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 801 57th Street, SE, Charleston, WV, 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 15th day of September 2015.

By: Ergon - West Virginia, Inc.
Paul W. Young, Jr.
Senior Vice President -
Regulatory and Risk
801.933.3000
P.O. Box 1639

Jackson, MS 39215-1639
9-14, 2015 Adv.

Street Address: 401 Herald Square

City, State: Zip: Steubenville, OH 43952

TRANSACTION TYPE:

Purchase

Transaction Details:

Card Type: Visa Keyed In

Response Message: Transaction status: Accepted

Card Number: *****9986

Approval Code: 020051

Invoice Number: L00259 ergon west

System Trace:

Authorization Time: 15:54:01

Surcharge:

Authorization Date: 09212015

Cash Back Amount:

Current Balance:

Transaction Amount: 29.36

Total Charge: 29.36

Signature: _____

Adkins, Sandra K

From: Adkins, Sandra K
Sent: Wednesday, September 16, 2015 5:28 PM
To: 'paul.young@ergon.com'; 'jake.neihaus@ergon.com'
Cc: McKeone, Beverly D; Kessler, Joseph R
Subject: WV DAQ Permit Application Status for Ergon Corporation-West Virginia, Inc.; Newell

**RE: Application Status
Ergon Corporation-West Virginia, Inc.
Newell (Congo Plant)
Plant ID No. 029-00008
Application No. R13-2334Y**

Entire Document
NON-CONFIDENTIAL

Mr. Young,

Your application for a modification permit for the Newell facility was received by this Division on September 14, 2015, and was assigned to Joe Kessler. The following items were not included in the initial application submittal:

Original affidavit for Class I legal advertisement not submitted.

**Please note to use the new phone extension 1250 for future legal ads.*

Application fee AND/OR additional application fees not included:

***\$1,000 NSPS**

These items are necessary for the assigned permit writer to continue the 30-day completeness review.

Within 30 days, you should receive a letter from Joe stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

For future reference, please submit two electronic applications. These must include signatures.

Should you have any questions, please contact the assigned engineer, Joe Kessler, at 304-926-0499, extension 1219.