OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

DRAFT

MEMORANDUM **October 27, 2020**

TO: Phillip Fielder, P.E., Chief Engineer

THROUGH: Rick Groshong, Environmental Manager, Compliance and Enforcement

THROUGH: Phil Martin, P.E., Manager, Existing Source Permits Section

THROUGH: Ryan Buntyn, P.E., Existing Source Permits Section

FROM: David S. Schutz, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application **No. 2018-1565-TVR3**
Pan Pacific Products
Broken Bow Medium Density Fiberboard Plant (FAC ID 1871)
Section 14 – T 6S – R24E
Broken Bow, McCurtain County, Oklahoma
Directions: 1 Mile West of Broken Bow on SH-3
Latitude 34.03213^{o}N, Longitude 94.75921^{o}W

SECTION I. INTRODUCTION

Pan Pacific Products (Pan Pacific) has applied for a renewed Title V operating permit for its medium-density fiberboard (MDF) plant in Broken Bow (SIC 2493) in southeastern Oklahoma. The current active permit for the facility is Permit No. 2013-2138-TVR2 issued May 29, 2014; in addition, Permit No. 2013-2138-C (M-1) was issued on December 11, 2018. The facility includes units for processing wood chips into fibers, applying adhesive to the fibers, and setting the adhesive by steam into board.

The operating permit renewal will incorporate the following changes which were authorized by Permit No. 2013-2138-C (M-1):

- The boiler (Point ID 100) and dryer (Point ID 200 / 202) will burn only natural gas fuel; wood waste will no longer be burned. Using only gas fuel results in reductions in NOx, CO, VOC, PM, and SO_2 emissions from the boiler; and reduction of NOx emissions from the dryer.

- The facility boiler is currently rated at 45-MMBTUH based on 27-MMBTUH gas fuel and 18-MMBTUH wood-waste fuel. With elimination of wood-waste fuel, the boiler has been derated to 27-MMBTUH.

- Press VOC emissions were reduced, reflecting the results of testing of the unit's biofilter emissions control system. Fugitive VOC from the press were revised to be based on biofilter capture testing, as required by NESHAP Subpart DDDD.

- The Specific Condition regarding limits on post-press processing rates was removed (i.e., Specific Condition No. 3 of Permit No. 2013-2138-TV). That condition stemmed from 1994 BACT requirements, which were based on % control rather than gr/DSCF on the baghouses. Emissions limits (lb/hr) are a function of air flow and grain loading rather than process throughput (TPH).

- Two additional saws have been installed at the facility. The new saws operate independently of the board-making operations. They allow pre-sanded wood panels to be cut and packaged at this facility. The new saws (#511 and 512) are routed to Baghouse 67.

- The existing sander (#507) was re-routed from Baghouse 67 to Baghouse 66. Since PM emissions are based on ACFM and gr/DSCF, there was no change in PM emissions limits. VOC emissions from Baghouse 67 changed due to the increased board throughput.

With the reductions, the facility ceased to be a PSD major source; emissions of all criteria pollutants are now below 250 TPY.

The facility has the potential to emit more than 100 TPY of a criteria pollutant and more than 10 TPY of three Title III hazardous air pollutants (phenol, formaldehyde, and methanol), and is subject to Title V permitting requirements. Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) in Section III. Pipeline-grade natural gas is the primary fuel with the emission units operating continuously.

SECTION II. PROCESS DESCRIPTION

Green pine chips arrive at the plant by rail and truck. Chips are conveyed to a pile of approximately 4,000 tons. Chips are moved by screw auger onto conveyor systems that remove foreign objects and include a wash system. Chips from the washer are conveyed to a refiner where steam is used to digest and soften lignin in the pine chips. Steamed/softened chips are ground up ("refined") and mixed with wax and resins (primarily urea-formaldehyde and phenol-formaldehyde).

The facility processes up to 15 tons per hour, oven-dried basis (0% moisture), of wood into MDF. “Front half” processes (washing, refining, and drying) will be operated at rates of up to 15 TPH “oven-dried ton” (ODT) basis (17.8 to 18.8 TPH actual weight). However, since there is intermediate storage between several operations and some off-spec fiber is recycled to the process, the process rate at “back half” operations may be higher on an hourly basis; fiber handling, board pressing, and cooling will be up to 19 TPH (ODT).

The resin-coated fibers proceed to a gas-fired dryer (45 MMBTUH rating) where the moisture content of the wood is reduced to 5-10%. Discharges from the dryers will be processed by an RTO or equivalent emissions control device. Dried fibers are conveyed to the forming line that forms the fibers into a mat. Fiber mats proceed to a press where the fiber mats are pressed into board, with discharges from the board press vented to a biofilter. The fiberboards are sawed to size and edge-trimmed. Off-spec material is recycled into the production process, or sold.

The facility currently includes a 27 MMBTUH boiler that is fueled with natural gas. The boiler was manufactured in 1978. The boiler is subject to NESHAP Subpart DDDDD.

The facility is equipped with several organic materials storage vessels. The tanks hold diesel, wax, gasoline, hydraulic fluid, resin, catalyst, and resin scavenger.

Pan Pacific Products may mark its final product for its clients. The ink used for this process is an insignificant source of VOC emissions. VOC emissions from the ink are included in the emissions from the sawdust baghouses.

Anticipated process operations are 365 days per year, up to 8,000 hours per year for each operation.

Construction permit 2013-2138-C (M-1) provides for an alternative operating scenario that includes value-added sawing on pre-sanded pressed board at a rate up to an additional 80,000 MSF/year.

SECTION III. EQUIPMENT

Emissions Unit Group No. 1 is the facility as a whole. Due to changes at the facility, the EUGs are no longer sequential.

EUG 2: Fiber Dryer

EU	Point	Description	MMBTUH	Construction Date
200	202	fiber dryer exhaust #1	45 MMBTUH natural gas	<1988
200	202	fiber dryer exhaust #2		<1988
200	201	fiber dryer bypass stack		<1988
202	202	regenerative thermal oxidizer (RTO) or equivalent control device	15 MMBTUH (6 MMBTUH burner)	2005
12	12	refiner start-up cyclone	---	1995

EUG 3: Fiber Relay System

EU	Point	Equipment	Installed Date
15	15	fiber relay baghouse	1995
51	51	fiber return baghouse	1995
80	80	forming line pickups, scalper cyclone and baghouse	1995

EUG 4: Fiberboard Press and Cooler

EU	Point	Equipment	Installed Date
400	921	press/biofilter	1995 / 2010
401	97	wicket cooler fan, 40,000 ACFM	1995
401	98	wicket cooler fan, 40,000 ACFM	1995
401	99	wicket cooler fan, 40,000 ACFM	1995
400	74	press trim	1995

The “wicket cooler” refers to a unit that holds boards upright and in parallel for cooling air to be blown in between them.

EUG 5: Post-Board Press Processes

EU	Point	Equipment	Installed Date
505	66	Bison Sander	1995
505	66	Sander #2	1995
501	73	Globe saw	1995
502	73	Maureen Johnson rip saw	1995
503	73	Progressive rip saw	2002
504	73	chop saws (3) (504B, 504C, and 504D)	1999, 2000, 2002
506	73	Jenkins saw	2006
507	66	Steinemann Model 304488 sander (backup only)	2010
508	76	board breaker	1995
509	76	hammermill	1995
510	76	Blue Hog Panel Trip Chipper	2014
511	67	PSI Multi Rip Saw	2019
512	67	Pendu Multi Trim	2019

EUG 11: Boiler

EU	Point	Description	Serial Number	Capacity	Construction Date
1100	100	Tran Boiler	10841	27 MMBTUH natural gas	installed 1995 (manufactured 1978)

NOTE: The facility's previous permits included a provision for a temporary package boiler. The provision allowed Pan Pacific to source and install a temporary boiler in the event EU 100 was not operable. The emission unit associated with that temporary package boiler has been removed from this Title V renewal permit. However, as an alternate operating scenario, Pan Pacific Products may install a boiler to temporarily replace EU 100. In the event this alternate operating scenario occurs, the temporary unit's hourly emissions will be limited to the hourly emission limits specified for EU 100. The temporary boiler will be limited to the combustion of natural gas and will be operated only when Boiler EU 100 has been removed from service.

EUG 12: Tanks

EU	Point	Contents	Gallons	Installed Date
1201	1201	diesel	540	1995
1202	1202	resin scavenger	10,153	1995
1203	1203	resin scavenger or wax	10,153	1995
1204	1204	wax	10,153	1995
1205	1205	resin	10,153	1995
1206	1206	resin	10,153	1995
1207	1207	catalyst mixing	350	1995
1208	1208	catalyst	350	1995
1209	1209	gasoline	540	1995
1210	1210	methanol	325	2010
1211	1211	hydraulic fluid	400	2011

EUG 13: Fugitive Emissions

EU	Point	Equipment	Installed Date
1300	1301, 1302, 1303, 1304, 1305	wastewater treatment	1995
1300	1306	wood chip piles	1995
1307	1307	dust handling system	2002
1308	1308	air stripper, not currently in use	2012

EUG 14: Chip-to-Fiber Processing

EU	Point	Equipment	Installed Date
10	10	chip wash	1995
9	9	bow screen	1995

EUG 15: Pressurized Refiner

EU	Point	Equipment	Installed Date
15	202	pressurized refiner	1995

SECTION IV. EMISSIONS

Expected air emissions are primarily particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOC), but also include lesser amounts of nitrogen oxides (NOx) and sulfur dioxide (SO_2) from combustion units. Hazardous air pollutant (HAP) emissions estimates are based on stack testing results with a safety factor incorporated.

Point ID	Emission Unit	Pollutants	Emission Factors	Factor Reference
66	Sander Baghouse	PM_{10}	0.005 gr/dscf 40,210 acfm	vendor guarantee; air flow study 2013
		VOC	0.038 lb/MSF (3/4" basis) through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin +methanol + phenol + formaldehyde
		Formaldehyde	0.0032 lb/MSF (3/4" basis) through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin
		Methanol	0.0052 lb/MSF through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin
		Phenol	0.0083 lb/MSF (3/4" basis) through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin
67	Pendu and PSI Saw Baghouse	PM_{10}	0.005 gr/dscf 40,210 acfm	vendor guarantee; estimated air flow
		VOC	0.5118 lb/MSF (3/4" basis)	(AP-42 (8/02) Sections 10.5, SCC 30700792 and 10.6.3-7 + methanol + phenol + formaldehyde) + 45% safety factor
		Formaldehyde	0.0032 lb/MSF (3/4" basis) through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin
		Methanol	0.0052 lb/MSF (3/4" basis) through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin
		Phenol	0.0083 lb/MSF (3/4" basis) through sander	AP-42 (8/02) Section 10.6.3-7 + 20% safety margin

Point ID	Emission Unit	Pollutants	Emission Factors	Factor Reference
73	Sawdust Baghouse	PM_{10}	0.005 gr/dscf 42,874 acfm	vendor guarantee; air flow study 2013 + 10% safety factor on air flow
		VOC	1.78 lb/MSF (3/4" basis) through saws	AP-42 (8/02) Section 10.6.3-7 + 100% safety margin + methanol
		Methanol	0.76 lb/MSF(3/4" basis) through saws	AP-42 (8/02) Section 10.6.3-7 + 100% safety margin
74	Sawdust #2 Baghouse	PM_{10}	0.005 gr/dscf 42,874 acfm	vendor guarantee and estimated air flow rate
		VOC	1.78 lb/MSF(3/4" basis) through saws	AP-42 (8/02) Section 10.6.3-7 + 100% safety margin + methanol
		Methanol	0.76 lb/MSF (3/4" basis) through saws	AP-42 (8/02) Section 10.6.3-7 + 100% safety margin
76	Waste Classifier	PM_{10}	0.003 gr/dscf 22,520 acfm	vendor guarantee; air flow study 2013
		VOC	1.78 lb/MSF (3/4" basis) through saws	AP-42 (8/02) Section 10.6.3-7 + 100% safety margin + methanol
		Methanol	0.76 lb/MSF (3/4" basis) through saws	AP-42 (8/02) Section 10.6.3-7 +100% safety margin
1301-1305	Wastewater Treatment Ponds	VOC	WATER9	WATER9 + 20% safety margin
		Formaldehyde	WATER9	WATER9+ 20% safety margin
		Methanol	WATER9	WATER9+ 20% safety margin
		Phenol	WATER9	WATER9+ 20% safety margin
1306	Chip Piles	PM_{10}	0.001 lb/ton	AP-42 (11/06) Sec. 13.2.4 + safety margin
15	Fiber Relay Cyclone/Baghouse	PM_{10}	0.004 gr/dscf 24,080 acfm	vendor guarantee; air flow study 2013 + 20% safety factor on flow
51	Bin Transfer Cyclone/Baghouse	PM_{10}	0.004 gr/dscf 30,367 acfm	vendor guarantee; air flow study 2013
80	Scalper Cyclone/Baghouse	PM_{10}	0.001 gr/dscf 29,328 acfm	vendor guarantee; air flow study 2013+ 25% safety factor on flow
		Methanol	0.76 lb/msf (3/4" basis)	AP-42 (3/02) Section 10.6+100% safety factor
		VOC	1.085 lb/msf (3/4" basis)	AP-42 (3/02) Section 10.6+150% safety factor + methanol
1201-1211	VOL Storage Tanks	VOC	TANKS4.0	TANKS4.0
10	Chip Wash	VOC	0.05 lb/ton wood, 15 TPH	no reference listed
9	Bow Screen	VOC	0.05 lb/ton wood, 15 TPH	no reference listed
97 – 99	Board Coolers	VOC	0.2 lb/ODT	1996 stack test + 20% safety margin
		Formaldehyde	0.11 lb/ODT	1996 stack test + 20% safety margin
		Methanol	0.36 lb/ODT	1996 stack test + 20% safety margin
		Phenol	0.075 lb/ODT	1996 stack test + 20% safety margin
		PM_{10}	0.00475 lb/msf (3/4" basis)	AP-42 (3/02) Section 10.6 + 25% safety margin

Point ID	Emission Unit	Pollutants	Emission Factors	Factor Reference
202	Controlled Emissions from RTO/Fiber Dryers	NOx	0.95 lb/ODT while burning gas as fuel	Stack test (0.38 lb/ODT) + 150% safety factor
		CO	5.51 lb/ODT while burning gas as fuel	Stack test (2.90 lb/ODT) + 90% safety factor
		VOC	13.38 lb/ODT uncontrolled, 0.67 lb/ODT controlled	Uncontrolled VOC emissions from 2002 stack tests (8.21 lb/ton) + 63% safety factor, control from MACT
		PM_{10}	3.73 lb/ton, 88% control	RTO Inlet 2007 Stack test (2.72 lb/ton) + 37% safety factor
		SO_2	0.050 lb/MMBTU	AP-42 (9/03) Section 1.6 + 100% safety margin
		Formaldehyde	3.18 lb/ODT / 90% control	Average of stack test results for uncontrolled emissions 2.16 lb/ton, 47% safety factor, RTO vendor guarantee for control efficiency
		Methanol	1.5 lb/ODT / 90% control	Stack test for uncontrolled emissions (0.75 lb/ton), 100% safety factor, RTO vendor guarantee for control efficiency
		Phenol	1.56 lb/ODT / 90% control	Stack test for uncontrolled emissions (0.78 lb/ton), 100% safety factor, RTO vendor guarantee for control efficiency
		Acrolein	0.042 lb/ODT / 90% control	Stack test for uncontrolled emissions (0.021 lb/ton), 100% safety factor, vendor guarantee for control efficiency
		Acetaldehyde	0.042 lb/ODT / 90% control	Stack test for uncontrolled emissions (0.021 lb/ton), 100% safety factor, vendor guarantee for control efficiency
921	Board press	VOC	1.46 lb/ODT	2017 stack test + 90% safety margin
		Formaldehyde	0.81 lb/ODT	2007 stack test + 7% safety margin
		Methanol	0.21 lb/ODT	2006 stack test + 113% safety margin
		Phenol	0.49 lb/ODT	1996 stack test (raw material not currently used)
		Acrolein	0.01 lb/ODT	stack test + 25% safety margin
		Acetaldehyde	0.01 lb/ODT	stack test + 25% safety margin
		PM_{10}	0.16 lb/ODT	AP-42 10.6.3-4 (8/02)+ 25% safety margin

VOC emissions from wood processing are independent of resin usage and VOC content, but rather result primarily from residual wood sap and pyrolysis of wood in the drying and refining operations. Because of the contribution of wood sap, wood cut in summer months is anticipated to result in the highest emission rates.

Point ID	Emission Unit	Pollutants	Emission Factors	Factor Reference
100	Boiler	NOx	0.121 lb/MMBTU	July 2015 Stack Testing + 30% safety margin
		CO	0.0966 lb/MMBTU	AP-42 (7/98) Section 1.4+ 15% safety margin
		VOC	0.010 lb/MMBTU	AP-42 (7/98) Section 1.4 + 100% safety margin
		PM_{10}	0.0145 lb/MMBTU	AP-42 (7/98) Section 1.4 + 100% safety margin
		SO_2	0.0012 lb/MMBTU	AP-42 (7/98) Section 1.4+100% safety margin

Air emissions from the facility are controlled by a number of methods. PM and VOC emissions from the drying operation are currently controlled by a regenerative thermal oxidizer (RTO). PM emissions from forming, pressing, sawing, and sanding are controlled by baghouses. VOC and HAP emissions from the press are controlled by a biofilter. PM emissions from the fiber relay systems are controlled by both cyclones and baghouses.

EUG 2: Fiber Dryer

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
202	Dryer / RTO*	6.52	26.1	28.50	57.00	10.0	40.1	2.25	9.0	82.65	174.13
12	Start-up Cyclone **	--	--	--	--	--	--	--	--	--	--
201	Burner Exhaust *** (Fiber Dryer Bypass)	--	--	49.66	--	--	--	2.25	--	82.6	--
	TOTALS	6.52	26.1	49.66	57.00	10.0	40.1	2.25	9.0	82.65	174.13

*There is a safety factor incorporated into hourly NOx and CO emissions to account for seasonal variations in the raw materials being handled, which have higher VOC and moisture during summer months.

** The start-up cyclone operates only briefly during start-up, after that emissions are discharged from the RTO. The start-up cyclone does not have particulate matter emissions because the material is too wet to become airborne. The start up cyclone does not have VOC emissions because the VOCs are created during the drying process.

*** Exhaust from the burner during start-up operations vents through the gooseneck at the top of the burner. CO, NOx, and SO_2 emissions are not included in the total emissions listed and are not included in the emission limits specified in Specific Condition 1.

EUG 3: Fiber Relay System

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
15	Fiber Relay Cyclone/Baghouse	0.83	3.3	--	--	--	--	--	--	--	--
51	Bin Transfer Cyclone/Baghouse	1.04	4.16	--	--	--	--	--	--	--	--
80	Scalper Cyclone/ Baghouse	0.25	1.01	--	--	2.12	8.48	--	--	--	--
	TOTALS	**2.12**	**8.47**	**--**	**--**	**2.12**	**8.48**	**--**	**--**	**--**	**--**

EUG 4: Fiberboard Press and Cooler

Point ID	Emission Unit	PM_{10}		NOx		VOC*		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
921	Press/Biofilter	3.09	12.35	--	--	36.1	111.2	--	--	--	--
97, 98, 99	Cooling Fans	0.10	0.41	--	--	3.65	14.59	--	--	--	--
	TOTALS	**3.19**	**12.76**	**--**	**--**	**39.76**	**125.79**	**--**	**--**	**--**	**--**

*There is a safety factor incorporated into hourly VOC emissions to account for seasonal variations in the raw materials being handled, which have higher VOC and moisture during summer months.

EUG 5: Post-Board Press Processes

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
66	Sander Baghouse	1.72	6.89	--	--	1.59	1.85	--	--	--	--
67	Pendu and PSI Saw Baghouse	1.72	6.89	--	--	3.69	4.92	--	--	--	--
73	Sawdust Baghouse	1.84	7.35	--	--	10.58	11.51	--	--	--	--
74	Sawdust #2 Baghouse	1.84	7.35	--	--	10.58	11.51	--	--	--	--
76	Waste Classifier	0.58	2.32	--	--	10.58	11.51	--	--	--	--
	TOTALS	7.70	30.8	0	0	37.02	41.3	--	--	--	--

EUG 11: Boiler

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
100	Boiler	0.4	1.6	3.41	13.6	0.3	1.1	0.03	0.14	2.85	11.43

EUG 12: Tanks

Point ID	Emission Units	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1201-1211	VOL Storage Tanks	--	--	--	--	--	1.48	--	--	--	--

EUG 13: Fugitive Emissions

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1301-1305	Wastewater Treatment Ponds	--	--	--	--	3.23	12.91	--	--	--	--
1306	Chip Piles	0.03	0.11	--	--	--	--	--	--	--	--
	TOTALS	**0.03**	**0.11**	**--**	**--**	**3.23**	**12.91**	**--**	**--**	**--**	**--**

EUG 14: Chip-to-Fiber Processing

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
10	Chip Wash	--	--	--	--	1.13	4.95	--	--	--	--
9	Bow Screen	--	--	--	--	1.13	4.95	--	--	--	--
	TOTALS	--	--	--	--	2.26	9.90	--	--	--	--

EUG 15: Pressurized Refiner

Emissions from this operation are part of the fiber drying operation (EUG-2).

TOTAL FACILITY EMISSIONS

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
202	Dryer RTO	6.52	26.1	28.50	57.00	10.0	40.1	2.25	9.0	82.65	174.13
15	Fiber Relay	0.83	3.30	--	--	--	--	--	--	--	--
51	Bin Transfer	1.04	4.16	--	--	--	--	--	--	--	--
80	Scalper	0.25	1.01	--	--	2.12	8.48	--	--	--	--
100	Boiler	0.4	1.6	3.41	13.60	0.3	1.1	0.03	0.14	2.85	11.43
66	Sander Baghouse	1.72	6.89	--	--	1.59	1.85	--	--	--	--
67	Pendu and PSI Saw Baghouse	1.72	6.89	--	--	3.69	4.92	--	--	--	--
73	Sawdust Baghouse	1.84	7.35	--	--	10.58	11.51	--	--	--	--
74	Sawdust #2 Baghouse	1.84	7.35	--	--	10.58	11.51	--	--	--	--
76	Waste Classifier	0.58	2.32	--	--	10.58	11.51	--	--	--	--
921	Press/Biofilter	3.09	12.35	--	--	36.1	111.2	--	--	--	--
97-99	Cooling Fans	0.10	0.41	--	--	3.65	14.59	--	--	--	--
1301-1305	Wastewater Treatment Ponds	--	--	--	--	3.23	12.91	--	--	--	--
1306	Chip Piles	0.03	0.11	--	--	--	--	--	--	--	--
1308	Air Stripper	--	--	--	--	--	--	--	--	--	--
1201-1211	VOL Storage Tanks	--	--	--	--	--	1.48	--	--	--	--
10	Chip Wash	--	--	--	--	1.13	4.95	--	--	--	--
9	Bow Screen	--	--	--	--	1.13	4.95	--	--	--	--
TOTAL EMISSIONS		**19.96**	**79.84**	**31.91**	**70.60**	**94.68**	**241.06**	**2.28**	**9.14**	**85.50**	**185.56**

GREENHOUSE GAS EMISSIONS

Greenhouse gas emissions were calculated using the methods of 40 CFR Part 98, Subpart C.

Point	Maximum Process Rate	Emission Factors			CO_2e Emissions, TPY
		CO_2 (GWP = 1)	CH_4 (GWP = 25)	N_2O (GWP = 298)	
100	27 MMBTUH Boiler	53.02 kg/MMBTU	0.001 kg/MMBTU	0.0001 kg/MMBTU	13,802
202	45 MMBTUH Dryer + RTO	2.3% of 77,100 DSCFM	0.0042 kg/MMBTU	0.0001 kg/MMBTU	53,961
TOTAL					**67,763**

HAP EMISSIONS *

EU	Formaldehyde		Methanol		Phenol		Acrolein		Acetaldehyde	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
Dryer RTO	4.77	19.08	2.25	9.0	2.34	9.36	0.06	0.25	0.06	0.25
Scalper	0.04	0.16	1.48	5.94	0.1	0.4	--	--	--	--
Press/Biofilter	15.44	61.75	4.05	16.19	9.31	37.24	0.24	0.95	0.24	0.95
Cooling Fans	2.09	8.34	6.84	27.36	1.43	5.70	0.02	0.09	0.02	0.09
Sander	0.15	0.28	0.24	0.45	0.38	0.72	--	--	--	--
Pendu and PSI Saw Baghouse	0.15	0.28	0.24	0.45	0.38	0.72				
Sawdust	--	--	4.52	8.58	--	--	--	--	--	--
Sawdust #2			4.52	8.58						
Classifier	--	--	4.52	8.58	--	--	--	--	--	--
Boiler	0.87	3.50	0.74	2.96	2.28	9.12	--	--	--	--
Wastewater Treatment Ponds	0.17	0.67	1.54	6.14	0.5	2.02	--	--	--	--
Chip Wash & Bow Screen	--	--	--	--	--	--	--	--	--	--
TOTAL EMISSIONS	**23.68**	**94.06**	**30.94**	**94.23**	**16.72**	**65.28**	**0.32**	**1.29**	**0.32**	**1.29**

*Emissions in this table are pre-control. They are included only to show that the facility is a major source of HAPs.

STACK PARAMETERS

Discharge Point	Description	Height Feet	Diameter Inches	Flow ACFM	Temperature ºF
12	refiner start-up cyclone	50	54	120,000	170
202	RTO	50	86	120,000	165
15	cyclone/baghouse	39	60	24,080	100
51	cyclone/baghouse	39	60	30,367	amb
80	cyclone/baghouse	39	73	29,328	amb
66	sander baghouse	59	68	40,210	amb
67	Pendu and PSI saw baghouse	59	68	40,210	amb
73	sawdust baghouse	59	68	42,874	amb
74	sawdust #2 baghouse	59	68	42,874	amb
76	waste classifier	78	60	22,520	amb
97	cooling fan stack	49	54	25,000	80
98	cooling fan stack	49	54	25,000	80
99	cooling fan stack	49	54	25,000	80
100	boiler wet scrubber stack	53	26	10,000	150
921	biofilter	40	72	120,000	98

SECTION V. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the application are duplicated below. Records are available to confirm the insignificance of the activities. Appropriate record keeping of activities indicated below with "*" is specified in the Specific Conditions.

1. Space heaters, boilers, process heaters and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas). None identified, but may be used in the future.

2. * Emissions from fuel storage/dispensing equipment operated solely for facility owned vehicles if fuel throughput is not more than 2,175 gallons/day, averaged over a 30-day period. The facility has tanks for dispensing gasoline and diesel to vehicles.

3. * Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. The resin, wax, and diesel tanks are in this category.

4. * Emissions from storage tanks constructed with a capacity less than 39,894 gallons that store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature. The resin, wax, and diesel tanks are also in this category.

5. Welding/soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. However, welding is conducted as a part of routine maintenance and is considered a trivial activity and recordkeeping will not be required in the Specific Conditions.

6. Torch cutting and welding of under 200,000 tons of steel fabricated. These also are conducted as a part of routine maintenance and is considered a trivial activity and recordkeeping will not be required in the Specific Conditions.

7. Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included (i.e., lift stations).

8. Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas. The facility includes a storage area for resins and other chemicals.

9. Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas. Cleaning is conducted as a part of routine maintenance and is considered a trivial activity and recordkeeping will not be required in the Specific Conditions.

10. * Activities that have the potential to emit no more than 5 TPY (actual) of any criteria pollutant. The wastewater treatment ponds, bow screen, chip wash, chip refiner, and chip piles are in this category.

SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in "attainment" of these standards. In addition, modeled emissions from the facility as modified demonstrate that the facility would not have a significant impact on air quality.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]
Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories were submitted and fees paid for previous years as required.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit and that exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits.

- 5 TPY of any one criteria pollutant
- 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are taken from the permit application, or developed from the applicable requirement.

OAC 252:100-9 (Excess Emission Reporting Requirements) [Applicable]
Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-13 (Open Burning) [Applicable]
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter) [Applicable]
Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Appendix C specifies a PM emission limitation of 0.60 lb/MMBTU for all equipment at this facility with a heat input rating of 10 MMBTUH or less. Fuel-burning equipment is defined in OAC 252:100-1 as "combustion devices used to convert fuel or wastes to usable heat or power." Thus, the boiler and fiber dryer are subject to the requirements of this subchapter but the RTO is not. All fuel-burning equipment is in compliance with Subchapter 19.

Emission Unit	Heat Input MMBTUH		PM Emission Limitation of Subchapter 19, lb/MMBTU	Anticipated PM Emissions, lb/MMBTU
	Rated	Normal		
Boiler	27	25	0.39	0.0076

Subchapter 19 also specifies PM emission limitations based on process weight rate. The following table compares the emissions rates of PM with the allowable PM emissions under Subchapter 19, showing that the plant is in compliance. The fiber dryer, a direct-fired fuel-burning unit and industrial process, is subject to the limitations of Appendix G based on its process weight rate.

Discharge Point	Description	Process Rate TPH	Subchapter 19 Limitation, lb/hr	Emission Rate, lb/hr
202	fiber dryer	15	25.16	6.52
15	fiber relay	19	29.4	0.83
51	reject relay	19	29.4	1.04
80	mat trim	2.8	8.2	0.25
66	sander	40	42.5	1.72
67	Pendu and PSI Saw	40	42.5	1.72
73	sawdust collection	34	38.8	1.84
74	Sawdust #2	34	38.8	1.84
76	waste classifier	0.96	4.0	0.58

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences that consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. The permit will require weekly observation of the baghouses and RTO stacks. If visible emissions are detected, the permit will require opacity readings to be conducted using Method 9. The permit will also include reduced visible emission observation requirements if no visible emissions are detected or if visible emissions observations using Method 9 are below the 20% opacity limitation.

OAC 252:100-29 (Fugitive Dust) [Applicable]
No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on that the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Plant roads are paved, minimizing fugitive dust emissions. The only unconfined source of emissions is the wood chip piles. Under normal operating conditions, this facility will not cause a problem in this area, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 5 limits sulfur dioxide emissions from new equipment (constructed after July 1, 1972). For gaseous fuels, the limit is 0.2 lbs/MMBTU heat input. For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 BTU/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. The permit requires the use of pipeline-grade natural gas for Dryer 202 and the boilers to ensure compliance with Subchapter 31.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.20 lbs of NO_X per MMBTU, three-hour average. All fuel-burning units are smaller than 50 MMBTUH.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Parts 3, 5 and 7 are Applicable]
Part 3 affects storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and containing a VOC with a vapor pressure greater than 1.5 psia at maximum storage temperature. The gasoline storage tank is the only tank affected by this rule. The storage tanks containing wax, hydraulic fluid, and resin have vapor pressures below the 1.5 psia de minimis.
Part 3 requires loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. The facility does not have the physical equipment (loading arm and pump) to conduct this type of loading. Therefore, this requirement is not applicable.
Part 5 limits the VOC content of coatings for any coating line or coating operation. The coating operation has been removed from the facility; therefore, Part 5 is no longer applicable.
Part 5 requires all emissions of VOC from the cleanup of any article, machine, or equipment used in applying coatings to be included when determining compliance with the above stated solvent limitations and emission limits. All coatings comply with the VOC limitations above taking into account all emissions of VOCs from the cleanup of any article, machine, or equipment. That limitation will be incorporated into this permit.
Part 7 also requires fuel-burning equipment to be operated and maintained so as to minimize emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The equipment at this location is subject to this requirement.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]
This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter

shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:

OAC 252:100-11	Alternative Reduction	not eligible
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-39	Nonattainment Areas	not in a subject area
OAC 252:100-47	Landfills	not type of source category

SECTION VII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Not Applicable]
Pursuant to a previous Justice Department consent order, the facility has undergone PSD review. The facility has ceased to be a PSD-major source; emissions of all criteria pollutants are below 250 TPY.

NSPS, 40 CFR Part 60 [Not Applicable]
Subparts D and Da (Steam Generating Units) affect boilers with heat input capacities of 250 MMBTUH or more. The 27 MMBTUH boiler is smaller than the de minimis level for those subparts.
Subpart Db (Steam Generating Units) affects boilers with heat input capacities of 100 MMBTUH or more. The 27 MMBTUH boiler is smaller than the de minimis level for this subpart.
Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units. This subpart affects steam generating units constructed after June 9, 1989, and with capacity between 10 and 100 MMBTUH and additional PM standards for affected facilities constructed after February 28, 2005. The existing boiler was constructed prior to the effective date of this subpart.
Subparts K, Ka, Kb (VOL Storage Vessels) affects storage vessels with capacities above 19,813-gallons. None of the tanks are subject to any of the subparts because they were either installed prior to an applicable date or are too small.

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene, only affects process streams that contain more than 10% benzene by weight. All process streams at this facility are below this threshold.

NESHAP, 40 CFR 63 [Subparts DDDD and DDDDD Applicable]
Subpart DDDD, (Plywood and Composite Wood Products (PCWP)) This subpart was promulgated on September 13, 2004. This rule applies to MDF manufacturing and associated operations. The affected source, as defined by the rule, is the collection of dryers, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products at a plant site. The affected source includes, but is not limited to, green end operations, drying operations, blending and forming operations, pressing and board cooling operations, miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing and other finishing operations not subject to other NESHAP), raw material storage, onsite wastewater treatment operations specifically associated with PCWP manufacturing, miscellaneous coating operations, and lumber kilns. Compliance options based on production, add-on control, and emission-averaging as described in the MACT standard have been incorporated into the specific conditions.
Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters at major sources of HAPs. The boiler is subject to a one-time energy assessment, initial compliance report, as well as annual tune-ups, and annual reports.

The boiler is considered an existing unit. The boiler, combusting pipeline quality natural gas only, is subject only to a one-time energy assessment, an annual tune up, an initial notice (completed May 22, 2013), an Initial Compliance Report (due within 60 days of compliance demonstration), and annual compliance reports (due annually beginning January 31, 2017).

The temporary boiler authorized under the Alternate Operating Scenario would be exempt from Subpart DDDDD provided that it meets the exclusion criteria of Section 63.7491(j). The Dryer is not subject to this regulation because it does not meet the definition of a "boiler" (no steam created) or "process heater" (since the combustion gases come into contact with the process materials).

CAM, 40 CFR Part 64 [Applicable]
Compliance Assurance Monitoring (CAM), as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant of 100 TPY

This facility includes nine units which are currently subject to CAM: the fiber relay baghouse (EU 15), the fiber return baghouse (EU 51), the fiber reclaim baghouse (EU 80), the sander baghouse (EU 66), Pendu and PSI Saw Baghouse (EU 67), the sawdust baghouse (EU 73), the sawdust baghouse #2 (EU 74), the waste classifier baghouse (EU 76), and the dryer RTO (EU 202). CAM requirements for these points are as were established in Permit No. 2006-053-TVR, issued May 28, 2009, and carried forward in all subsequent permits. CAM requirements have been incorporated into the permit.

CAM at the boiler ceased to be an applicable requirement since the unit will no longer be operated with a wet scrubber due to becoming limited only to gas fuel.

CAM is applicable to the dryer RTO (EU 202) for PM. Since the controls required by applicable MACT standards will additionally control VOC at the dryer, the CAM plan for the dryer specifies compliance with control requirements and compliance demonstrations as set forth in 40 CFR 63 Subpart DDDD (i.e., proper operating temperatures). MACT Subpart DDDD does not affect PM, *per se*, but the RTO provides combustion of both VOHAP (as required by Subpart DDDD) and PM. CAM was accepted for the RTO in Permit No. 2013-2138-TVR2 issued May 29, 2014.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
This facility does not store any regulated substance above the applicable threshold limits. More information on this federal program is available at the web site: http://www.epa.gov/rmp/.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subpart A and F Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).
Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.
Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment comply with the standards for recycling and emissions reduction.
The standard conditions of the permit address the requirements specified at §82.156 for persons opening appliances for maintenance, service, repair, or disposal; §82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; §82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; §82.166 for recordkeeping; § 82.158 for leak repair requirements; and §82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

SECTION VIII. COMPLIANCE

Inspection

A full compliance inspection was conducted on April 25, 2018. Helen King of Air Quality conducted the inspection. The facility was physically as described in the permit application and supplemental materials. No violations were noted from the FCE.

Tier Classification and Public Review

This application has been determined to be Tier II based on the being the request for a renewed Title V operating permit.

The applicant published the "Notice of Filing a Tier II Application" in *The Broken Bow News*, a weekly newspaper in McCurtain County, on December 12, 2018. The notice stated that the application was available for public review in the Broken Bow City Hall or the DEQ office in Oklahoma City. The applicant will also publish a "Notice of Tier II Draft Permit." The facility is located within 50 miles of the border of Oklahoma and the states of Arkansas and Texas; those states will be notified of the draft permit. The proposed permit will be sent to EPA Region VI for their 45-day review period.

Information on all permit actions is available for review by the public on the Air Quality section of the DEQ web page at: *http:/www.deq.state.ok.us.*

The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operations upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the land. Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: www.deq.state.ok.us/.

Fee Paid

Part 70 renewal operating permit application fee of $7,500.

SECTION IX. SUMMARY

The facility was constructed as described in the permit application. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues. Issuance of the permit is recommended, contingent on public and EPA review.

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

Pan Pacific, Inc. **Permit Number 2018-1565-TVR3**
Broken Bow Medium – Density Fiberboard Plant

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on November 15, 2018. The Evaluation Memorandum, dated October 27, 2020, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Points of emissions and emissions limitations for each point. [OAC 252:100-8-6(a)]

EUG 2: Fiber Dryer

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
202	Fiber Dryer RTO	6.52	26.1	28.50	57.0	10.0	40.1	2.25	9.0	82.65	174.13
12	Start-up Cyclone	--	--	--	--	--	--	--	--	--	--
201	Burner Exhaust	--	--	--	--	--	--	--	--	--	--

a. Air exhausts from the fiber dryers shall be processed by a regenerative thermal oxidizer or other devices with equal or greater efficiency, except during periods of start up when discharges are vented through the start-up cyclone. [OAC 252:100-8-6(a)]

b. The RTO shall be operated with a minimum temperature in the flame zone as established during stack testing to demonstrate compliance with 40 CFR 63 Subpart DDDD requirements when the fiber dryer is operating and fiber is being processed. The operating temperature shall be continuously monitored and recorded during fiber processing operations.

c. If Pan Pacific Products elects to use a different control device/methodology to achieve the emission limits specified above and 40 CFR 63 Subpart DDDD requirements listed in Specific Condition 10(c), Pan Pacific Products shall demonstrate compliance as specified in 40 CFR 63 Subpart DDDD for the selected control device/methodology.

EUG 3: Fiber Relay System

Point ID	Emission Unit	PM_{10}		VOC	
		lb/hr	TPY	lb/hr	TPY
15	Fiber Relay Cyclone/Baghouse	0.83	3.3	--	--
51	Bin Transfer Cyclone/Baghouse	1.04	4.16	--	--
80	Scalper Cyclone/Baghouse	0.25	1.01	2.12	8.48

a. Air exhausts from the discharge points shall be processed by the following air pollution control devices or other devices with equal or greater efficiency: [OAC 252:100-8-6(a)]

Discharge Point	Control Device(s)	PM_{10} Concentration Limit, gr/DSCF
15	cyclone and baghouse	0.004
51	cyclone and baghouse	0.004
80	cyclone and baghouse	0.001

b. Compliance with these requirements shall be demonstrated by showing proper functioning of air pollution control devices as detailed in Specific Condition No. 4.
[OAC 252:100-8-6(a)]

EUG 4: Fiberboard Press and Cooler

Point ID	Emission Unit	VOC		PM_{10}	
		lb/hr	TPY	lb/hr	TPY
921	Press / Biofilter	36.1	111.2	3.09	12.35
97, 98, 99	Cooling Fans	3.65	14.59	0.10	0.41

EUG 5: Post-Board Press Processes

Point ID	Emission Unit	PM_{10}		VOC	
		lb/hr	TPY	lb/hr	TPY
66	Sander Baghouse	1.72	6.89	1.59	1.85
67	Pendu and PSI Saw Baghouse	1.72	6.89	3.69	4.92
73	Sawdust Baghouse	1.84	7.35	10.58	11.51
74	Sawdust #2 Baghouse	1.84	7.35	10.58	11.51
76	Waste Classifier	0.58	2.32	10.58	11.51

a. Air exhausts from the discharge points shall be processed by the following air pollution control devices or other devices with equal or greater efficiency: [OAC 252:100-8-6(a)]

Discharge Point	Control Device(s)	PM_{10} Concentration Limit, gr/DSCF
66	baghouse	0.005
67	Baghouse	0.005
73	baghouse	0.005
74	Baghouse	0.005
76	baghouse	0.003

b. Compliance with these requirements shall be demonstrated by showing proper functioning of air pollution control devices as detailed in Specific Condition No. 4.
[OAC 252:100-8-6(a)]

EUG 11: Boiler

Point ID	Emission Unit	PM_{10}		NOx		VOC		SO_2		CO	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
100	Boiler	0.39	1.56	3.41	13.60	0.28	1.13	0.03	0.14	2.85	11.43

a. The Boiler (Unit 100) is subject to 40 CFR 63 Subpart DDDDD. Applicable requirements are as follows:
   1) 63.7480 – Purpose
   2) 63.7485 – Applicability
   3) 63.7490 – Affected Source – the Boiler is an existing unit at a major source.
   4) 63.7499 – Subcategories of boilers and process heaters – the Boiler burns only gas 1 fuels (subcategory (l)).
   5) 63.7500(a)(1), (a)(3), and (f) – Emission limitations, work practice standards, and operating limits – the Boiler is subject only to the work practice standard of a one-time energy assessment (table 3) and annual tune-ups (table 3). The unit must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. Applicable standards apply at all times the unit is operating, except during periods of startup and shutdown during which compliance is required with Table 3.
   6) 63.7501 – Affirmative defense for violation of emission standards during malfunction – Pan Pacific Products reserves the right to this section.
   7) 63.7505 –General requirements for complying with this subpart - Standards apply at all times, except during periods of startup and shutdown as provided in 63.7500(f).

8) 63.7515 – Subsequent performance tests, fuel analyses, and tune-ups – Only 63.7515(d) applies and specifies annual tune-ups which occur not more than 13 months after the previous tune-up.
9) 63.7520 – What stack tests and procedures must I use? – No applicable requirements as long as the Boiler is combusting only natural gas.
10) 63.7521 – What fuel analyses, fuel specifications, and procedures must I use? - No applicable requirements as long as the Boiler is combusting only natural gas.
11) 63.7522 – Emission averaging - No applicable requirements at this time.
12) 63.7525 – Monitoring, Installation, Operation, and Maintenance Requirements - No applicable requirements as long as the Boiler is combusting only natural gas.
13) 63.7530 – Demonstrate initial compliance – Sections 63.7530(d) through (f) are applicable and require a Notice of Compliance Status Report.
14) 63.7533 – Efficiency credits – Pan Pacific Products reserves the right to use efficiency credits in the future.
15) 63.7535 – Monitoring data minimums - No applicable requirements as long as the Boiler is combusting only natural gas.
16) 63.7540 – Demonstrating continuous compliance with the emission limitations, fuel specification, and work practice standards – Section 63.7540(a)(10) applies and requires an annual tune-up of the Boiler. An annual report of the tune-up must be prepared and maintained on site. Section 63.7540(a)(13) allows for testing within 30 calendar days after startup when a unit is not operating on the required date for a tune-up. In the event that an annual tune-up or the one-time energy assessment was not completed, that would constitute a deviation and require reporting under 63.7540(b).
17) 63.7541 – Demonstrating compliance using emission averaging – Not applicable at this time.
18) 63.7555 – Records – Section 63.7555(a)(1) requires Pan Pacific Products to maintain copies of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semi-annual compliance report submitted. In the event Pan Pacific Products uses emission averaging or energy efficiency credits, records listed in 63.7555(e) and (f) will be maintained. Section 63.7555(h) requires records of the total hours per calendar year that alternative fuels were burned and the total hours per calendar year that the Boiler operated during periods of gas curtailment or gas supply emergencies. Section 63.7555(i) requires records for the date, time, occurrence, and duration for each startup and shutdown be maintained. Section 63.755(j) requires records of the type(s) and amount(s) of fuels used during each startup and shutdown be maintained.
19) 63.7560 – Record Retention – Pursuant to 63.10(b)(1), required records must be in a form suitable and readily available for expeditious review, be retained for a period of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, and such records must be kept on-site or be accessible from on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

20) 63.7565 – General Provisions – Table 10 of Subpart DDDDD identifies the General Provisions in Subpart A which apply. In addition to the requirements noted above, Pan Pacific Products will maintain records of maintenance conducted on the Boiler (63.10(b)(2)(iii)).
21) 63.7570 – Implementation and enforcement – No applicable requirements to Pan Pacific Products.
22) 63.7575 – Definitions

b. At least once per calendar quarter, the permittee shall conduct tests of NO_x and CO emissions in exhaust gases from the boiler when operating under representative conditions for that period. Testing is required if the boiler operates above standby for more than 220 hours during that calendar quarter. The boiler shall be tested no sooner than 20 calendar days after the last test. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality. When periodic compliance testing shows boiler emissions in excess of the lb/hr limits in Specific Condition No. 1, the permittee shall comply with the provisions of OAC 252:100-9 for excess emissions.

[OAC 252:100-43]

EUG 12: Tanks The following units are considered insignificant since emissions are less than 5 TPY.

EU	Point	Contents	Gallons	Installed Date
1201	1201	diesel	540	1995
1202	1202	resin scavenger or wax	10,153	1995
1203	1203	wax	10153	1995
1204	1204	wax	10153	1995
1205	1205	UF resin	10153	1995
1206	1206	UF resin	10153	1995
1207	1207	catalyst mixing	350	1995
1208	1208	catalyst	350	1995
1209	1209	gasoline	540	1995
1210	1210	methanol	325	2010
1211	1211	hydraulic fluid	400	2011

EUG 13: Fugitive Emissions The following units are considered insignificant since emissions are less than 5 TPY.

EU	Point	Equipment	Installed Date
1300	1301, 1302, 1303, 1304, 1305	wastewater treatment	1995
1300	1306	wood chip piles	1995
1307	1307	dust handling	2002

EUG 14: Chip-to-Fiber Processing The following units are considered insignificant since emissions are less than 5 TPY.

EU	Point	Equipment	Installed Date
10	10	chip wash	1995
9	9	bow screen	1995

EUG 15: Pressurized Refiner Discharges from this unit shall be processed by the emissions control device for EUG 2.

EU	Point	Equipment	Installed Date
15	202	pressurized refiner	1995

2. The fuel-burning equipment shall be fueled only with pipeline-grade natural gas. Compliance can be shown by the following methods: for pipeline grade natural gas, a current gas company bill; for other gaseous fuel, a current lab analysis, stain-tube analysis, gas contract, tariff sheet, or other approved methods. Compliance shall be demonstrated at least once per calendar year.

[OAC 252:100-31]

3. The permittee shall be permitted to operate the facility 8,000 hours per year. Pre-press operations may be operated up to 15 TPH, oven-dried basis (wood weight only, excludes weight of resin, wax, and moisture), and press operations may be operated at a production rate of up to 19 TPH of medium-density fiberboard product (oven-dried wood basis). The Alternate Operating Scenario allows sawing of pre-sanded pressed board at a rate up to an additional 80,000 MSF/year.

[OAC 252:100-8-6(a)]

4. The permittee shall conduct Method 22 visual observations of emissions from Points 202, 15, 51, 80, 66, 67, 73, 74, and 76 at least once per week except as authorized below. In no case shall the observation period be less than six minutes in duration. If visible emissions are observed for six minutes in duration for any observation period and such emissions are not the result of a malfunction, then the permittee shall conduct, for the identified points, within 24 hours, a visual observation of emissions, in accordance with 40 CFR Part 60, Appendix A, Method 9.

a. When four consecutive weekly visible emission observations or Method 9 observations show no visible emissions, or no emissions of a shade or density greater than twenty (20) percent equivalent opacity, respectively, the frequency may be reduced to monthly visual observations, as above. Upon any showing of non-compliance the observation frequency shall revert to weekly.

b. If a Method 9 observation exceeds 20% opacity, the permittee shall conduct at least two additional Method 9 observations within the next 24-hours.

c. If more than one six-minute Method 9 observation average exceeds 20% opacity in any consecutive 60 minutes; or more than three six-minute Method 9 observations in any consecutive 24 hours exceeds 20% opacity; or if any six-minute Method 9 observation exceeds 60% opacity; the owner or operator shall comply with the provisions for excess emissions during start-up, shut-down, and malfunction of air pollution control equipment. [OAC 252:100-43]

5. The following records shall be maintained on-site. All such records shall be made available to regulatory personnel. These records shall be maintained for a period of at least five years after the time they are made. [OAC 252:100-43]

a. production of MDF (monthly and 12-month rolling total).

b. hours of operation (monthly).

c. hours of operation of EU 2, the start-up cyclone.

d. visible emissions observations of points 202, 15, 51, 80, 66, 67, 73, 74 and 76 (weekly/monthly).

e. RTO or equivalent control device operating temperatures (continuous when Fiber Dryer – Point ID 201 is in operation).

f. records as required by 40 CFR Part 63, Subpart DDDD.

i. Biofilter bed temperature (24-hour block operating hour averages)
ii. Startup Shutdown Malfunction Plan
iii. Results of each inspection, validation, and calibration check for each monitoring device
iv. Copies of all notifications and submittals to DEQ and/or EPA related to Subpart DDDD
v. Documentation of any approved routine control device maintenance exemptions
vi. Copies of all performance testing conducted for MACT compliance purposes
vii. RTO exhaust temperature (3-hour block averages)

g. For the gas fuel, the appropriate document(s) as described in Specific Condition No. 2.

h. CAM records as specified in Specific Conditions No. 11 and 12.

i. Records as required by 40 CFR 63 Subpart DDDDD for the Boiler

i. Copies of all notifications and submittals to DEQ and/or EPA related to Subpart DDDDD
ii. Copy of one-time energy assessment

iii. Copies of annual boiler tune ups
iv. Records of occurrence and duration of each malfunction of the boiler or associated air pollution control or monitoring equipment
v. Records of actions taken during periods of malfunction to minimize emissions in accordance with general duty to minimize emissions
vi. Records of date, time, duration of each start up and shut down
vii. Records of alternative fuel use (hours per calendar year) and identifying periods of gas curtailment or gas supply emergencies
viii. Operating time records
ix. Records as identified in 40 CFR 63.7555

j. Total amount of pre-sanded board received for value-added sawing operations (MSF) (monthly, 12-month rolling total).

k. Specific Condition 5.k: Records of boiler testing (EUG-11), quarterly when operated.

6. The following records shall be maintained on-site to verify insignificant activities.

a. vapor pressures and capacities of all storage tanks with less than or equal to 39,984 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.5 psia at maximum storage temperature.

b. monthly record of diesel and gasoline purchases.

c. calculations of VOC emissions from wastewater treatment using EPA's "WATER9" or equivalent methods.

d. calculations of PM emissions from wood chip storage operations.

e. calculations of VOC emissions from the bow screen, chip wash, and air stripper.

7. No later than 30 days after each anniversary date of the issuance of the initial Title V operating permit (January 25, 2001), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6 (c)(5)(A) & (D)]

8. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility. [OAC 252:100-8-6(d)(2)]

a. OAC 252:100-11 Alternative Emissions Reduction

b. OAC 252:100-15 Mobile Sources

c. OAC 252:100-17 Incinerators

d. OAC 252:100-23 Cotton Gins

e. OAC 252:100-24 Grain Elevators

f. OAC 252:100-39 Nonattainment Areas

g. OAC 252:100-47 Landfills

h. 40 CFR Part 60 New Source Performance Standards

i. 40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants

j. 40 CFR Part 68 Risk Management Plans

k. 40 CFR Parts 72, 73, 74, 75, and 76 Acid Rain

9. At least once during the term of the renewal Title V permit, the permittee shall conduct performance testing as follows for the RTO/dryer (NOx, CO, VOC, and PM), board press/biofilter (VOC), and furnish a written report to Air Quality. Testing conducted to satisfy other federal regulations may be used to satisfy this permit condition. Testing shall be conducted while the process units are being operated at least 90% of permitted hourly capacity. A sampling protocol and notification of testing date(s) shall be submitted at least 30 days in advance of commencement of testing. The following USEPA methods shall be used for testing of emissions, unless otherwise approved by Air Quality: [OAC 252:100-43]

Method 1:	Sample and Velocity Traverses for Stationary Sources.
Method 2:	Determination of Stack Gas Velocity and Volumetric Flow Rate.
Method 3:	Gas Analysis for Carbon Dioxide, Excess Air, and Dry Molecular Weight.
Method 4:	Moisture in Stack Gases.
Method 5:	PM Emissions from Stationary Sources
Method 7E:	NOx Emissions from Stationary Sources
Method 10:	CO Emissions from Stationary Sources
Method 18:	Measurement of gaseous organic compound emissions by gas chromatography (for methane)
Method 25A:	Non-Methane Organic Emissions from Stationary Sources (VOC)
Method 202:	Condensable PM

10. This facility is subject to 40 CFR Part 63, Subpart DDDD (Plywood and Composite Wood Products), and shall comply with applicable requirements.

a. 63.2232: What parts of my plant does this subpart cover?
   i. Subpart DDDD covers the dryer and biofilter processes at this existing facility.

b. 63.2233: When do I have to comply with this subpart? (Exception: any compliance extension supersedes the dates of this section.)
    i. Consent Order 07-024 established a compliance date of October 1, 2010.

c. 63.2240: What are the compliance options and operating requirements and how must I meet them?
    i. Pan Pacific Products reserves the right to use emission averaging under this Subpart.
    ii. Compliance Options for the RTO and Biofilter:
        1. Reduce emissions of total HAP, measured as THC (as carbon), by 90 percent; or
        2. Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd; or
        3. Reduce methanol emissions by 90 percent; or
        4. Limit methanol emissions to less than or equal to 1 ppmvd if uncontrolled methanol emissions entering the control device are greater than or equal to 10 ppmvd; or
        5. Reduce formaldehyde emissions by 90 percent; or
        6. Limit formaldehyde emissions to less than or equal to 1 ppmvd if uncontrolled formaldehyde emissions entering the control device are greater than or equal to 10 ppmvd.
    iii. Operating Requirements for RTO:
        1. Maintain the 3-hour block average firebox temperature above the minimum temperature established during the performance test, OR
        2. Maintain the 3-hour block average THC concentration in the thermal oxidizer exhaust below the maximum concentration established during the performance test.
    iv. Operating Requirements for Biofilter:
        1. Maintain the 24-hour block biofilter bed temperature within the range established according to §63.2262(m), OR
        2. Maintain the 24-hour block average THC concentration in the biofilter exhaust below the maximum concentration established during the performance test.

d. 63.2241: What are the work practice requirements and how must I meet them?
    i. No work practice requirements apply to Pan Pacific Products.

e. 63.2250: What are the general requirements?
    i. You must be in compliance with the compliance options, operating requirements, and the work practice requirements in this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption specified in §63.2251
    ii. You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

iii. You must develop a written SSMP according to the provisions in §63.6(e)(3).

f. 63.2251: What are the requirements for the routine control device maintenance exemption?

i. Pan Pacific Products reserves the right to apply for routine control device maintenance exemptions in the future.

g. 63.2269: What are my monitoring installation, operation, and maintenance requirements?

i. *General continuous parameter monitoring requirements.* Install, operate, and maintain each continuous parameter monitoring system (CPMS) according to paragraphs (a)(1) through (3) of this section.

1. The CPMS must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and recording) for each successive 15-minute period.

2. At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

3. Record the results of each inspection, calibration, and validation check.

ii. *Temperature monitoring.* For each temperature monitoring device, meet the requirements in paragraphs (a) and (b)(1) through (6) of this section.

1. Locate the temperature sensor in a position that provides a representative temperature.

2. Use a temperature sensor with a minimum accuracy of 4 °F or 0.75 percent of the temperature value, whichever is larger.

3. If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20 °F.

4. Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owner’s manual. Following the electronic calibration, conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30 °F of the process temperature sensor's reading.

5. Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

6. At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

h. 63.2270: How do I monitor and collect data to demonstrate continuous compliance?

i. Except for, as appropriate, monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments).

Conduct all monitoring in continuous operation at all times that the process unit is operating. For purposes of calculating data averages, data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities shall not be used. Use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

ii. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used. Data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels may not be used, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. Use all the data collected during all other periods in assessing the operation of the control system.

iii. Except as provided in paragraph (e) of this section, determine the 3-hour block average of all recorded readings, calculated after every 3 hours of operation as the average of the evenly spaced recorded readings in the previous 3 operating hours (excluding periods described in paragraphs (b) and (c) of this section).

iv. For biofilter bed temperature monitoring, and biofilter outlet THC monitoring, determine the 24-hour block average of all recorded readings, calculated after every 24 hours of operation as the average of the evenly spaced recorded readings in the previous 24 operating hours (excluding periods described in paragraphs (b) and (c) of this section).

v. To calculate the data averages for each 3-hour or 24-hour averaging period, you must have at least 75 percent of the required recorded readings for that period using only recorded readings that are based on valid data (*i.e.* , not from periods described in paragraphs (b) and (c) of this section).

i. 63.2271: How do I demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements?

(i) Demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in §§63.2240 and 63.2241 that apply according to the methods specified in Tables 7 and 8 to this subpart.

For . . .	For the following compliance options and operating requirements . . .	You must demonstrate continuous compliance by . . .
(1) Each process unit listed in Table 1B to this subpart or used in calculation of an emissions average under §63.2240(c)	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in §63.2240(c) and the operating requirements in Table 2 to this subpart based on monitoring of operating parameters	Collecting and recording the operating parameter monitoring system data listed in Table 2 to this subpart for the process unit according to §63.2269(a) through (b) and §63.2270; AND reducing the operating parameter monitoring system data to the specified averages in units of the applicable requirement according to calculations in §63.2270; AND maintaining the average operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established according to §63.2262.
(2) Each process unit listed in Tables 1A and 1B to this subpart or used in calculation of an emissions average under §63.2240(c)	Compliance options in Tables 1A and 1B to this subpart or the emissions averaging compliance option in §63.2240(c) and the operating requirements in Table 2 of this subpart based on THC CEMS data	Collecting and recording the THC monitoring data listed in Table 2 to this subpart for the process unit according to §63.2269(d); AND reducing the CEMS data to 3-hour block averages according to calculations in §63.2269(d); AND maintaining the 3-hour block average THC concentration in the exhaust gases less than or equal to the THC concentration established according to §63.2262.
(3) Each process unit using a biofilter	Compliance options in Tables 1B to this subpart or the emissions averaging compliance option in §63.2240(c)	Conducting a repeat performance test using the applicable method(s) specified in Table 4 to this subpart within 2 years following the previous performance test and within 180 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.

For . . .	For the following compliance options and operating requirements . . .	You must demonstrate continuous compliance by . . .
(4) Each process unit using a catalytic oxidizer	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in §63.2240(c)	Checking the activity level of a representative sample of the catalyst at least every 12 months and taking any necessary corrective action to ensure that the catalyst is performing within its design range.
(5) Each process unit listed in Table 1A to this subpart, or each process unit without a control device used in calculation of an emissions averaging debit under §63.2240(c)	Compliance options in Table 1A to this subpart or the emissions averaging compliance option in §63.2240(c) and the operating requirements in Table 2 to this subpart based on monitoring of process unit controlling operating parameters	Collecting and recording on a daily basis process unit controlling operating parameter data; AND maintaining the operating parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established according to §63.2262.
(6) Each Process unit listed in Table 1B to this subpart using a wet control device as the sole means of reducing HAP emissions	Compliance options in Table 1B to this subpart or the emissions averaging compliance option in §63.2240(c)	Implementing your plan to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere.

(ii) You must report each instance in which you did not meet each compliance option, operating requirement, and work practice requirement in Tables 7 and 8 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction and periods of control device maintenance specified in paragraphs (b)(1) through (3) of this section. These instances are deviations from the compliance options, operating requirements, and work practice requirements in this subpart. These deviations must be reported according to the requirements in §63.2281.

(1) [Reserved]

(2) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(3) Deviations that occur during periods of control device maintenance covered by any approved routine control device maintenance exemption are not violations if you demonstrate to the EPA Administrator's satisfaction that

you were operating in accordance with the approved routine control device maintenance exemption.

j. 63.2280: What notifications must I submit and when?

k. 63.2281: What reports must I submit and when?

l. 63.2282: What records must I keep?

m. 63.2282: In what form and how long must I keep my records?

n. 63.2290: What parts of the General Provisions apply to me?

o. 63.2291: Who implements and enforces this subpart?

p. 63.2292: What definitions apply to this subpart?

11. A temporary boiler may be installed and operated under the permit flexibility criteria listed in OAC 252:100-8-6(f)(2). The temporary boiler may not operate simultaneously with EU 100 and is limited to natural gas as fuel. [OAC 252:100-8-6(f) (2)]

a. A permitted Part 70 source may make the following changes within the facility.
   1. Such a source may make changes that are not modifications under any provision of Title I of the Act.
   2. Such a source may make changes that do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded.
   3. Such a source may make changes that result in a net change in emissions of zero, provided that the facility notifies the DEQ and EPA in writing at least 7 days in advance of the proposed changes. The source, DEQ, and EPA shall attach each such notice to their copy of the relevant permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield described in OAC 252:100-8-6(d) does not apply to any change made pursuant to this subsection.

b. Installation of a temporary boiler is not a modification under NSPS or NESHAP. As such, installation of a temporary boiler is allowed under criteria a. 1. of this specific condition for the purpose of NSPS and NESHAP applicability.

12. The facility shall comply with the following Compliance Assurance Monitoring requirements for Point IDs 15, 51, 80, 66, 67, 73, 74, and 76: [40 CFR Part 64]

Baghouses	**Indicator No. 1**
Indicator	Baghouse pressure differential
Measurement Approach	Differential pressure transducer, gauge, or manometer
Indicator Range	An excursion is defined as a pressure differential below 0.2 inches water column or greater than 5.0 inches water column. Excursions trigger an inspection, corrective actions, and a reporting requirement.
Data Representativeness Performance Criteria	The differential pressure transducer, gauge, or manometer monitors the static pressures upstream and downstream of the baghouse.
QA/QC Practices and Criteria	Monthly comparison to U-tube manometer or calibrated pressure gauge. Acceptability criterion is 0.5 inches WC.
Monitoring Frequency	Pressure differential is monitored at least once every operating day
Data Collection Procedure	Data are recorded manually or by computer
Averaging Period	Daily when operated

13. The facility shall comply with the following Compliance Assurance Monitoring requirements for Point ID 202: [40 CFR Part 64]

Thermal Oxidizers	**Indicator No. 1**
Indicator	Operating temperature
Measurement Approach	Temperature shall be monitored using a Type K thermocouple or equivalent
Indicator Range	An excursion is defined as a 3-hour average temperature below 1,450^{o}F. Excursions trigger an inspection, corrective actions, and a reporting requirement.
Data Representativeness Performance Criteria	The thermocouple monitors the flame zone temperature of the RTO.
QA/QC Practices and Criteria	Accuracy $\pm$ 3%; annual calibration or replacement of thermocouples
Monitoring Frequency	Temperature is monitored at least once every 15 minutes
Data Collection Procedure	Data are recorded by computer and 3-hour averages are maintained
Averaging Period	3-hour

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

Pan Pacific Products
Attn.: Ms. Rhonda Hughett
Box 371, Route 4, Highway 3
Broken Bow, OK 74728

Re: Permit Application No. **2018-1565-TVR3**
Broken Bow MDF Plant (FAC ID 1871)
Broken Bow, McCurtain County, Oklahoma

Dear Ms. Hughett:

Enclosed is the permit authorizing operation of the referenced facility. Please note that this permit is issued subject to standard and specific conditions, that are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed through DEQ's electronic reporting system by April 1st of every year. Any questions concerning the submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation in this matter. If we may be of further service, please contact our office at (405)702-4100.

Sincerely,

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosure

PART 70 PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON STREET, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit No. 2013-2138-TVR3

Pan Pacific Products,

having complied with the requirements of the law, is hereby granted permission to operate a medium density fiberboard manufacturing plant in Sec. 14 – T6S – R24E near Broken Bow, McCurtain County, Oklahoma subject to standard conditions dated June 21, 2016, and specific conditions, both attached.

This permit shall expire five (5) years from the issuance date below, except as authorized under Section VIII of the Standard Conditions.

Division Director **Date**

Air Quality Division

MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(June 21, 2016)

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.
[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the 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 assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements.
[OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.
[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6 (a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:

(1) the date, place and time of sampling or measurement;
(2) the date or dates analyses were performed;
(3) the company or entity which performed the analyses;
(4) the analytical techniques or methods used;
(5) the results of such analyses; and
(6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report. [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions. [OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act. [OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality.

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM_{10}). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification. [OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit. [OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.
[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege. [OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit. [OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment. [OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition. [OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

(1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
(2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.

(3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
(4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.
[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

(1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
(2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
(3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
(4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.
[OAC 252:100-8-6(c)(2)]

SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.
[OAC 252:100-8-6 (a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance. [OAC 252:100-8-6(a)(3)(C)(iii)(II)]

C. An "emergency" means any situation arising from sudden and reasonably 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 this 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 preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that: [OAC 252:100-8-6 (e)(2)]

(1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
(2) the permitted facility was at the time being properly operated;
(3) 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 this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.
[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

(1) 5 tons per year of any one criteria pollutant.
(2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.

[OAC 252:100-8-2 and OAC 252:100, Appendix J]

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

(1) result in no net emissions increases,
(2) are not modifications under any provision of Title I of the federal Clean Air Act, and
(3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

(1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]

(2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]

(3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]

(a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
(b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
(c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
(d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.

(4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]

(5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]

(6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]

(7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR 82, Subpart A]

(1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
(2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
(3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR 82, Subpart F]

(1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
(2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
(3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
(5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

(1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.

(2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).

(3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).

(4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R.§ 70.8(a) and (c).

(5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.

(6) The DEQ complies with 40 C.F.R. § 70.8(d).

(7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).

(8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.

(9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).

(10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

SECTION XXII. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [OAC 252:100-43-6]

Department of Environmental Quality (DEQ)
Air Quality Division (AQD)
Acronym List
7-1-20

ACFM	Actual Cubic Feet per Minute
AD	Applicability Determination
AFRC	Air-to-Fuel Ratio Controller
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BHP	Brake Horsepower (bhp)
BTU	British thermal unit (Btu)
C&E	Compliance and Enforcement
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CAAA	Clean Air Act Amendments
CC	Catalytic Converter
CD	Consent Decree
CEM	Continuous Emission Monitor
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CI	Compression Ignition
CNG	Compressed Natural Gas
CO	Carbon Monoxide or Consent Order
COM	Continuous Opacity Monitor
D	Day
DEF	Diesel Exhaust Fluid
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)
EGU	Electric Generating Unit
EI	Emissions Inventory
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
EUG	Emissions Unit Group
EUSGU	Electric Utility Steam Generating Unit
FCE	Full Compliance Evaluation
FIP	Federal Implementation Plan
FR	Federal Register
GACT	Generally Achievable Control Technology
GAL	Gallon (gal)
GDF	Gasoline Dispensing Facility
GEP	Good Engineering Practice
GHG	Greenhouse Gases
GR	Grain(s) (gr)
HAP	Hazardous Air Pollutants
HC	Hydrocarbon
HCFC	Hydroclorofluorocarbon
HON	Hazardous Organic NESHAP
HP	Horsepower (hp)
HR	Hour (hr)
H_2S	Hydrogen Sulfide
I&M	Inspection and Maintenance
IBR	Incorporation by Reference
IC	Internal Combustion
LAER	Lowest Achievable Emission Rate
LB	Pound(s) [Mass] (lb, lbs, lbm)
LB/HR	Pound(s) per Hour (lb/hr)
LDAR	Leak Detection and Repair
LNG	Liquefied Natural Gas
LT	Long Ton(s) (metric)
M	Thousand (Roman Numeral)
MAAC	Maximum Acceptable Ambient Concentration
MACT	Maximum Achievable Control Technology
MM	Prefix used for Million (Thousand-Thousand)
MMBTU	Million British Thermal Units (MMBtu)
MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
MMSCF	Million Standard Cubic Feet (MMscf)
MMSCFD	Million Standard Cubic Feet per Day
MSDS	Material Safety Data Sheet
MWC	Municipal Waste Combustor
MWe	Megawatt Electrical
NA	Nonattainment
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH_3	Ammonia
NMHC	Non-methane Hydrocarbon
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxides
NOI	Notice of Intent
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standards
NSR	New Source Review
O_3	Ozone
O&G	Oil and Gas
O&M	Operation and Maintenance
O&NG	Oil and Natural Gas
OAC	Oklahoma Administrative Code
OC	Oxidation Catalyst

PAH	Polycyclic Aromatic Hydrocarbons
PAL	Plant-wide Applicability Limit
Pb	Lead
PBR	Permit by Rule
PCB	Polychlorinated Biphenyls
PCE	Partial Compliance Evaluation
PEA	Portable Emissions Analyzer
PFAS	Per-and Polyfluoroalkyl Substance
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers
PM_{10}	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers
POM	Particulate Organic Matter Or Polycyclic Organic Matter
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million Volume
ppmvd	Parts per Million Dry Volume
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
psia	Pounds per Square Inch Absolute
psig	Pounds per Square Inch Gage
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RICE	Reciprocating Internal Combustion Engine
RO	Responsible Official
ROAT	Regional Office at Tulsa
RVP	Reid Vapor Pressure
SCC	Source Classification Code
SCF	Standard Cubic Foot
SCFD	Standard Cubic Feet per Day
SCFM	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SER	Significant Emission Rate
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur Dioxide
SOx	Sulfur Oxides
SOP	Standard Operating Procedure
T	Tons
TAC	Toxic Air Contaminant
THC	Total Hydrocarbons
TPY	Tons Per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulates
TV	Title V of the Federal Clean Air Act
US EPA	U. S. Environmental Protection Agency
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VRU	Vapor Recovery Unit
YR	Year
$\mu g/m^3$	Micrograms Per Cubic Meter
2SLB	2-Stroke Lean Burn
4SLB	4-Stroke Lean Burn
4SRB	4-Stroke Rich Burn