PCC Structurals, Inc.

February 14, 2019

Mr. David Graiver
Oregon DEQ Air Quality
Northwest Region
700 NE Multnomah St., St #600
Portland Oregon 97232

RE: PCC Structurals Inc. Large Parts Campus Annual Air Report, ACDP 26-1867
For Calendar Year 2018

Dear Mr. Graiver,

Attached is the annual report for PCC Structurals, Inc. LPC facility. Our air permit is currently in the process of being renewed. The calculations in this report are based on the emissions factors specified in the facility's permit, currently in effect. This approach to completing the annual report is required by the terms of the permit. As you know, PCC is in the process of developing new emission factors for use in the renewed permit. These new emission factors reflect our improved process understanding and the additional controls which PCC installed in order to further reduce the emission rates for this facility. The emission rates included in the annual report accurately reflect the emission factors in the current permit. However, they do not accurately reflect past or current emission rates for the facility; we believe that they significantly overstate the actual emissions from certain processes. If you have any questions, please contact me at 503-777-7683

Condition 6.3.a. State the facility's compliance status with permit conditions.
Any violations or exceedances must be explained in detail including corrective action taken.
PCC believes that it was in compliance with all requirements of the permit except as noted below.

Condition 6.3.b.i-xxi. Report operating parameters.
A summary page is provided for usage of required parameters in specified units for the calendar year.

Condition 6.3.b.xxii. Report revisions of the pollutant capture efficiency function used for compliance emission calculations in 5.1.
The pollutant capture efficiency function used for compliance emission calculations are the same as the baseline for this permit with no revisions.

Condition 6.3.b.xxiii. Report emissions.
The attached summary page provides a table depicting emissions reported by month.

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Condition 6.3.c. Report records of all planned and unplanned excess emissions events.
The attached summary page provides details of planned and unplanned excess emissions events for the calendar year.

Condition 6.3.d. Report summary of complaints relating to air quality received by permittee during the year.
The attached summary page provides report of air quality complaints received during the calendar year.

Condition 6.3.e. List permanent changes made in plant process, production levels, and pollution control devices which affected air contaminant emissions.
See attached report

Condition 6.3.f. List major maintenance performed on pollution control equipment.
A downtime log for each VOC incinerator is attached for the calendar year.

Please contact me at (503) 777-7683 if you have any questions regarding this report.

Sincerely,
For PCC Structurals Inc. by

Sherry Uchytil
PCC Structurals, Inc.
Environmental Affairs

Attachments:
Operating and Emissions Summary Report
Oxidizer Downtime Log (LPC-T, LPC-S)
Alloy Report - HAPs Summary

LPC Annual Air Report 2018

ACDP 26-1867

6.3 Annual Report

a.	Compliance status with permit conditions, violations, exceedance explanation	In compliance - See cover letter
b.i-xxi	Usage for calendar year	See below
b. i	MM cf Natural Gas Used	437.6
b. ii	tons LPC-S vacuum cast *(parts plus ingots)*	6316.5
b. iii	tons LPC-S air cast *(parts plus ingots)*	384.9
b.iv	tons LPC-T vacuum cast	2058.1
b. v	tons metal cast in parts	3787.8
b. vi	tons individual HAP metal vacuum cast	3675.2
b. vii	tons individual HAP metal air cast	245.6
b. viii	tons combined HAP metal vacuum cast	4146.2
b. ix	tons combined HAP metal air cast	261.0
b. x	tons factory baghouse dust collected	374.6
b. xi	tons maintenance shop baghouse dust collected	2.2
b. xii	tons VOC used/emitted to LPC-S thermal oxidizer	169.9
b. xiii	tons VOC used/emitted to LPC-T thermal oxidizer	150.1
b. xiv	tons plastic used at LPC-S	6.3
b. xv	tons plastic used at LPC-T	0.0
b. xvi	tons misc VOC and VOC HAP used	5.4
b. xvii	tons latex flashfired	10.9
b. xviii	tons latex used and not flashfired	1.7
b. xix	tons HCL used	1.5
b. xx	number of hours of operation for the Alpha-case removal process	8760
b. xxi	tons non-emitted VOC waste collected and used as a subtract in emissions calculations	17.8
b. xxii	revisions of pollutant capture efficiency function used for compliance emission calculation in Condition 5.1	None
b. xxiii	calculated 12-month rolling emission rates for each month of the previous calendar year	See below

2018 Time Frame	PM tons	PM-10 tons	SO2 tons	CO tons	NOx tons	VOC tons	Total HAP tons	VOC HAP tons	Nickel Chrome PM HAP tons	Other HAP tons
January (02/17-01/18)	8.3	6.9	0.4	19.5	23.9	44.7	9.2	5.4	1.6	1.3
February (03/17-02/18)	8.3	6.9	0.4	19.5	24.0	43.9	9.0	5.2	1.6	1.3
March (04/17-03/18)	8.3	6.9	0.4	19.5	24.0	43.4	9.0	5.1	1.6	1.3
April (05/17-04/18)	8.3	6.8	0.4	19.3	23.8	38.8	8.7	5.0	1.6	1.3
May (06/17-05/18)	8.3	6.8	0.4	19.2	23.6	37.6	8.7	5.0	1.5	1.3
June (07/17-06/18)	8.3	6.9	0.4	19.1	23.5	36.9	8.4	4.8	1.5	1.3
July (08/17-07/18)	8.3	6.9	0.4	19.0	23.4	36.3	7.5	4.7	1.4	1.3
August (09/17-08/18)	8.3	6.9	0.4	18.9	23.2	35.8	7.4	4.7	1.3	1.3
September (10/17-09/18)	8.3	6.9	0.4	18.8	23.2	35.1	7.2	4.5	1.3	1.3
October (11/17-10/18)	8.5	7.0	0.4	18.7	23.0	34.2	7.2	4.6	1.3	1.3
November (12/17-11/18)	8.6	7.1	0.4	18.7	23.0	33.1	7.1	4.5	1.2	1.3
December (01/18-12/18)	8.7	7.2	0.4	18.4	22.6	33.5	7.0	4.4	1.3	1.3
Highest 12 Month Total	*8.7*	*7.2*	*0.4*	*19.5*	*24.0*	*44.7*	*9.2*	*5.4*	*1.6*	*1.3*
Limit	*83*	*54*	*39*	*99*	*58*	*99*	*24*	*9*	*9*	*9*
% Limit	*10.5%*	*13.3%*	*1.0%*	*19.7%*	*41.4%*	*45.1%*	*38.3%*	*59.8%*	*18.0%*	*14.6%*

c Records of planned and unplanned excess emissions events

See attached downtime logs LPC-S and LPC-T

d Summary of complaints relating to air quality received by permittee during the year

Neighborhood area odor complaints were reported to PCC by DEQ on 2/23, 4/7, 4/10, 4/27, 5/2, 7/4, 7/6, 7/27-29, 8/6, 9/6, 9/12, 9/13, 12/3, 12/13, 12/14, 12/17, 12/26, 12/27, and 12/29/2018. No SSM or upset conditions were identified at PCC Large Parts Campus during the complaint periods.

e List permanent changes made in plant processes, production levels, and pollution control equipment which affected air contaminant emissions

NOC 030235 Install LPCT BO #73 with afterburner. Install afterburner to BO#45.

NOC 029788 Install 2 emergency backup generators for the Stormwater system.

2019-02-13 DEQ approval to apply alternative emission factor for LPCT plastic which are processed in wax burnout ovens equipped with thermal oxidizers and are in compliance with permit Condition 2.3, to be effective in emissions calculated for usage starting 1/1/2018.

f List major maintenance performed on pollution control equipment

See attached downtime logs LPC-S and LPC-T

* Additional Information (production/calculations)

tons LPC-S vacuum cast in ingots	4,921.5
tons LPC-S air cast in ingots	50.0
tons LPC-S dust collector dust	159.9
tons LPC-T dust collector dust	214.7
Destruction efficiency LPC-S Thermal Oxidizer	90.7%
Destruction efficiency LPC-T Catalytic Oxidizer	98.1%
Alloy report	See attached
tons metal poured in LPCS parts - Misc. Metal	518.9
tons metal poured in LPCT parts - Misc. Metal	1440.7

Incinerator Downtime for LPC-S

2018	Downtime			Monthly Emissions			Reason for Incinerator Downtime
	Date	Hours	Min	VOC (lbs)	HAP (lbs)	VOC/HAP (lbs)	
January	1/26/2018	1	55	117.2	0.0	0.0	PGE Power Bump
	1/27/2018	2	45	168.1	0.1	0.0	PGE Power Failure
	1/28/2018	10	27	638.9	0.2	0.0	PGE Power Failure
Mo. Totals		**13**	**127**	**924.2**	**0.3**	**0.0**	
February	2/9/2018	0	19	14.2	0.00	0.0	Replace leaking hydraulic valve
Mo. Totals		**0**	**19**	**14.2**	**0.0**	**0.0**	
March	**No Downtime**						
April	4/14/2018	15	44	538.8	0.20	0.0	Prescheduled plant wide electrical shutdown
Mo. Totals		**15**	**44**	**538.8**	**0.2**	**0.0**	
May	5/3/2018	0	15	8.6	0.00	0.0	PGE Power bump
Mo. Totals		**0**	**15**	**8.6**	**0.0**	**0.0**	
June	6/21/2018	0	11	7.4	0.00	0.0	Flame out, relit
	6/29/2018	0	16	10.8	0.00	0.0	PGE Power bump
Mo. Totals		**0**	**27**	**18.2**	**0.0**	**0.0**	
July	7/27/2018	2	53	116.7	0.00	0.0	PGE power failure
Mo. Totals		**2**	**53**	**116.7**	**0.0**	**0.0**	
August	8/12/2018	0	11	5.3	0.00	0.0	PGE Power bump
	8/26/2018	0	25	12.2	0.00	0.0	Flameout
Mo. Totals		0	**36**	**17.5**	**0.0**	**0.0**	
September	**No Downtime**						
October	**No Downtime**						
November	11/2/20018	0	45	25.7	0.00	0.0	PGE Power bump
Mo. Totals		**0**	**45**	**25.7**	**0.0**	**0.0**	
December	12/5/2018	1	15	45.0	0.01	0.0	Sensor malfunction, reset
	12/7/2018	5	50	210.1	0.07	0.0	Valve track failure
	12/27/2018	0	20	12.0	0.00	0.0	Flame out. Relit
	12/28/2018	1	25	51.0	0.02	0.0	Valve track failure
	12/28/2018	33	30	1206.3	0.40	0.0	Replaced internal shaft bolts and electrrical wire.
Mo. Totals		**40**	**140**	**1524.4**	**0.5**	**0.0**	

Incinerator Downtime for LPC-T

2018	Downtime			Monthly Emissions			Reason for Incinerator Downtime
	Date	Hours	Min	VOC (lbs)	HAP (lbs)	VOC/HAP (lbs)	
January	1/26/2018	2	30	91.6	0.0	0.0	PGE Power Bump
	1/27/2018	2	40	97.7	0.0	0.0	PGE Power Failure
	1/28/2018	6	25	235.0	0.0	0.0	PGE Power Failure
Mo. Totals		**10**	**95**	**424.2**	**0.0**	**0.0**	
February	No Downtime						
March	No Downtime						
April	4/14/2018	15	48	475.0	0.09	0.0	Prescheduled plant wide electrical shutdown
	4/16/2018	2	25	72.7	0.01	0.0	Power off to perform maintenance on upstream baghouse
Mo. Totals		**17**	**73**	**547.7**	**0.1**	**0.0**	
May	No Downtime						
June	6/22/2018	2	0	49.8	0.00	0.0	Transformer repairs
Mo. Totals		**2**	**0**	**49.8**	**0.0**	**0.0**	
July	No Downtime						
August	No Downtime						
September	No Downtime						
October	No Downtime						
November	No Downtime						
December	12/6/2018	5	22	134.2	0.00	0.0	Replace fan bearings
Mo. Totals		**5**	**22**	**134.2**	**0.0**	**0.0**	

2018 LPC Average Alloy Summary

PCC Structurals Air Contaminant Discharge Permit number 26-1867

The following table summarizes the requirements of Conditions 6.5 and 7.3
for determining and reporting the amount of HAP metal poured and associated metal HAP emissions.

LPC-T Parts	
Total HAP Concentration (%)	0.077
PM HAP Concentration (%)	0.048
LPC-S Parts	
Total HAP Concentration (%)	68.25
PM HAP Concentration (%)	64.94
LPC-S Ingots	
Total HAP Concentration (%)	64.87
PM HAP Concentration (%)	56.25