STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0492-AOP-R12 AFIN: 66-00219

1. PERMITTING AUTHORITY:

Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Covia ISP, Inc. - Fort Smith Plant
5300 Gerber Road
Fort Smith, Arkansas 72904-1699

3. PERMIT WRITER:

Derrick Brown

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Ground or Treated Mineral and Earth Manufacturing
NAICS Code: 327992

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
10/15/2020	Minor Modification	Removing and renaming numerous sources. Re-permitting sources
02/08/21	Minor Modification	Addition of SN-C05, SN-C11, and three insignificant activities.

6. REVIEWER'S NOTES:

Covia ISP, Inc. (66-00219) owns and operates a facility located at 5300 Gerber Road in Fort Smith, Sebastian County, AR which manufacturer's proppants. With this modification the facility no longer uses bauxite, and removes sources: SN-09 & 09P, SN-13 & 13P, SN-26 & 26P, SN-27 & 27P, SN-56, SN-57, SN-58, SN-61, SN-67, SN-68, and SN-69. Facility reactivates SN-04 Plant #1, Kiln #1, 7.7 MMbtu/hr and SN-04P Plant #1, Kiln #1 DC and is renaming sources as follows: SN-C01: Kiln DC (Former SN-

10), SN-C02 Cooler DC (Former SN-12), SN-C03 Screen DC (Former SN-07), SN-C04 Loadout DC (Former SN-13), SN-C05 Storage Bin DC (Former SN-01), SN-C06 Mill Feed Silo (Former SN-01), SN-C07 Classifier DC (Former SN-11), and SN-C08 Product Bin DC (Former SN-32/33). Finally, the facility is permitting new source SN-C05, a Storage Bin DC, SN-C09 a pneumatic sand transfer filter, SN-10 a mobile transload conveyor filter, SN-C11 a second mobile transload conveyor filter as well as adding additional insignificant activities of a chopping mill, mixer, grinding mill with classifier and two (2) screening units at the pilot plant as A-13 activities. This modification decreases permitted emissions by 85.8 tpy of PM, 62.2 tpy of PM_{10}, 243.6 tpy of SO_2, 4.0 tpy of VOC, 157.9 tpy of CO, and 206.5 tpy of NO_x. Facility HAP emissions decreased as well.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

There are no pending enforcement actions for this facility.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N/A
If yes, were GHG emission increases significant?

b) Is the facility categorized as a major source for PSD? N
- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-18, SN-19, SN-20, SN-21, SN-22, SN-23, SN-25, SN-28, SN-31, SN-34, SN-38, SN-46, SN-47, SN-49, SN-50, SN-53, SN-54, and SN-55	PM	40 C.F.R. § 60, Subpart OOO
N-C05, SN-C08, SN-C09, SN-C10 and SN-C11	PM	40 C.F.R. § 60, Subpart OOO

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N
(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
N/A		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

c) H_2S Modeling: N/A

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
C01		0.01 gr/dscf			
SN-02, SN-18, SN-08/38, SN-50, SN-71/72	Ap-42	1.1 lbs/ton			
05, 49	AP-42	0.1 lbs/ton			
06, 14, 23, 32/33, 42, 43, 44	AP-42	0.72 lbs/ton			
21, 21B, 46, 47, 70	AP-42	0.05 lbs/ton			
31	AP-42	0.004 lbs/ton			
34	AP-42	0.002 lbs/ton			
62, 63	AP-42	0.00099 lbs/ton			
19, 20, 22, 25, 28, 40, 41, 53	Gain Loading 0.01 grain/DSCF				7000 lbs/grain
73A, 73B	AP-42 Table 3.3-1	0.31 lbs PM/PM_{10}/MmBtu; 0.29 lbs SO_2/MMBtu; 0.36 lbs VOC/MMBtu; 0.95 lbs CO/MMBtu; 4.41 lbs NO_x/MMBtu			73A = 305 Hp 73B = 700 Hp
73C		AP-42 Table 3.4-1	0.10 lbs PM/PM_{10}/MmBtu; 1.52E-3 lbs SO_2/MMBtu; 0.09 lbs VOC/MMBtu; 0.85 lbs CO/MMBtu; 3.20 lbs NO_x/MMBtu		2029 Hp
C01, C02, C03, C04C06, C07	ADEQ Default	0.01 gr/dscf			
C05, C08	NSPS OOO	0.022 gr/dscf			
C09, C10, 04P	NSPS OOO	0.014 gr/dscf			
C01, 04, 29	AP-42	PM/PM_{10} – 7.6 SO_2 - 0.6			Natural Gas Combustion

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		VOC – 5.5 CO – 84 NO_x - 100			

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
64, 65, C05, C08, C09, C10, C11	PM and Opacity	5 or 17 and 9	Initial	§ 60, Subpart OOO

17. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
No monitoring for this permit.				

18. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
04	Natural gas	67,452,000	Monthly	N
C01	Natural gas	175,200,000	Monthly	N
29	Natural gas	525,600,000	Monthly	N
08/38	Throughput	250,536 tons	Monthly	N
70/21	Ore	350,000 tons	Monthly	N
02	Ore	150,000 tons	Monthly	N
73A, 73B, 73C	Hours of operation	N/A	Continuously	N
74	Gallons used	2000	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
04, C01, 29	5% (Natural Gas)	Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311	Fuel burned
SN-02 through SN-06, SN-14, SN-18 through SN-23, SN-25, SN-28, SN-31, SN-34, SN-08/38, SN-40 through SN-44, SN-46, SN-47, SN-49 through SN-51, SN-53 through SN-55, SN-62, SN-63, SN-64, SN-65, SN-70, SN-71/72	5%	Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311	Weekly observations

20. DELETED CONDITIONS:

Former SC	Justification for removal
8, 22 through 32 (of R12)	Sources removed.

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Cat.	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
Gas fired pilot plant kiln	A-1	0.05	0.05	0.05	0.27	0.31	1.11E-3	5.21E-3
Two 0.6 MMBtu/hr Hot Water Heaters	A-1	0.05	0.05	0.05	0.27	0.31		0.00521
Four 0.38 MMBtu/hr water heaters for binder process	A-1	0.09	0.05	0.05	0.57	0.66		
One Diesel fuel Storage Tank	A-3			0.4				
Two 15,000 gallon Diesel Storage Tanks	A-13			0.00016				
Two Line #3 Milled Feed Vessel Filters	A-13			*				
Two Heat Exchangers	A-13			~				
Particulate emissions from a pilot plant kiln	A-13							
Chopping mill, mixer, grinding mill with classifier and screening units A&B at pilot plant	A-13							

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0492-AOP-R11

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Covia ISP, Inc.
Permit Number: 0492-AOP-R12
AFIN: 66-00219

$/ton factor	23.93	Annual Chargeable Emissions (tpy)	192.2
Permit Type	Modification	Permit Fee $	1000

Minor Modification Fee $	500
Minimum Modification Fee $	1000
Renewal with Minor Modification $	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	☐
If Hold Active Permit, Amt of Last Annual Air Permit Invoice $	0
Total Permit Fee Chargeable Emissions (tpy)	-539.9
Initial Title V Permit Fee Chargeable Emissions (tpy)	

HAPs not included in VOC or PM: *Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride*

Air Contaminants: *All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensible PM, H2S in TRS, etc.)*

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		230.8	145	-85.8	-85.8	145
PM_{10}		160.2	98	-62.2		
$PM_{2.5}$		0	0	0		
SO_2		244.3	0.7	-243.6	-243.6	0.7
VOC		8.1	4.1	-4	-4	4.1
CO		191.5	33.6	-157.9		
NO_X		248.9	42.4	-206.5	-206.5	42.4
HCl	☐	3.38	0	-3.38		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Cl	☐	2.47	0	-2.47		
HF	☐	11.28	0	-11.28		
Arsenic	☐	0.06	0	-0.06		
Beryllium	☐	0.05	0	-0.05		
Cadmium	☐	0.05	0	-0.05		
Chromium	☐	0.03	0	-0.03		
Formaldehyde	☐	0.46		-0.46		
Hexane	☐	1.82	0	-1.82		
Lead	☐	0.05	0	-0.05		
Mercury	☐	0.05	0	-0.05		
Phenanthrene	☐	0.08		-0.08		
Selenium	☐	0.05	0	-0.05		
F2	☐	1.75	0	-1.75		
Single HAP	☐	0	0.72	0.72		
Total HAP	☐	0	0.77	0.77		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
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