STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0492-AOP-R16 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:

Jae Jung

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
12/1/2025	Minor Mod	• Adding Scrubber #2 (SN-C18A2)

6. REVIEWER'S NOTES:

With this minor mod, Covia ISP, Inc. Fort Smith Plants requests the following: in the Emissions Summary and Specific Conditions (SCs) #1 through #5, and SCs #7 and #11 for Kiln Cyclone and Scrubber SN-C18A Plant No 2, change the descriptions to Kiln Cyclone and Scrubber #1 (SN-C18A1) or Scrubber #2 (SN-C18A2).

7. COMPLIANCE STATUS:

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

The facility was last inspected on July 22nd, 2025 with no violations identified. https://echo.epa.gov/detailed-facility-report?fid=110001710630

8. PSD/GHG APPLICABILITY:

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

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-73A	HAPs	NESHAP ZZZZ

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
None				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? Y
(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any 8 CAR pt. 40 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? Y
If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
SN-23, 25, 28, 34, 46, 50, 51, 53, and 54	40 C.F.R. § 60, Subpart OOO	The facility capacity is less than 25 tons per hour.

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
SN-C18A1 and SN-C18A2	--	Gas differential pressure will be continuously monitored. Values outside indicator range of 1 to 6 inches water column will require maintenance.
	--	Water flow rate will be continuously monitored. Values less than or equal to 60 gpm will require maintenance.
SN-C18B	--	Gas differential pressure will be continuously monitored. Values outside indicator range of 1 to 6 inches water column will require maintenance.
	--	Water flow rate will be continuously monitored. Values less than or equal to 60 gpm will require maintenance.

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:

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Benzene	0.063	0.007	1.49E-04	Yes
Formaldehyde	0.12	0.0132	7.35E-03	Yes
Hexane	176	19.36	1.76E-01	Yes
Arsenic	0.01	0.0011	1.96E-05	Yes
Beryllium	0.00005	0.0000055	1.18E-06	Yes
Cadmium	0.01	0.0011	3.37E-05	Yes
Chromium	0.5	0.055	1.37E-04	Yes
Cobalt	0.021	0.00231	8.23E-06	Yes
Lead	0.05	0.0055	4.90E-05	Yes
Manganese	0.02	0.0022	3.72E-05	Yes
Mercury	0.025	0.00275	2.55E-05	Yes
Nickel	1.5	0.165	2.06E-04	Yes
Selenium	0.2	0.022	2.35E-06	Yes
POM	0.2	0.022	1.04E-03	Yes

c) H_2S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H_2S Standards? Y
If exempt, explain: This facility does not emit H_2S.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
C01	Ap-42	0.988 gr/dscf – scrubber; 0.01 gr/dscf - baghouse	Scrubber with baghouse as backup	99%-scrubber; 99% baghouse	Control Equipment
02, C19, 50, 71/72	Ap-42	1.1 lbs/ton			
49	AP-42	0.1 lbs/ton			
06, 14, 23, 42, 43, 44	AP-42	0.72 lbs/ton			
21A, 21B, 46, C21, 70	AP-42	0.05 lbs/ton			
C22	AP-42	0.004 lbs/ton			
34	AP-42	0.002 lbs/ton			
62, 63	AP-42	0.00099 lbs/ton			
C20, C29, 25, 28, 40, 41, 53	Gain Loading	0.01 grain/DSCF			7000 lbs/grain
73A	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 = 362 Hp
73B, 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			73B = 791 Hp 73C = 1877 Hp
C02, C03, C04, C06, C07, C23, C24, C25, C30, C31	ADEQ Default	0.01 gr/dscf			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
C08	NSPS OOO	0.022 gr/dscf			
C09, C10, C11,	NSPS OOO	0.014 gr/dscf			
C01	AP-42	PM/PM_{10} – 7.6 SO_2 - 0.6 VOC – 5.5 CO – 84 NO_x - 100			Natural Gas Combustion emissions SN-C-01 (30 MMBtu/hr)
C13		0.01 gr/dscf			
C14		0.01 gr/dscf			
C15	AP-42 Table 11.19.2-2	PM – 0.00014 lb/ton PM_{10} - 4.6 E-5 lb/ton			
C16	AP-42 Chapter 11.19-2	0.0030lb PM/ton; 0.0011 lb PM_{10}/ton	Dust Collector	99%	
C17	AP-42 Chapter 11.19-2	0.025 lb PM/ton; 0.087 lb PM_{10}/ton	Dust Collector	99%	
C18		PM/PM_{10} – 7.6 SO_2 - 0.6 VOC – 5.5 CO – 84 NO_x - 100			68 MMBtu/hr
C18A1, C18A2, C18B	AP-42 Ch. 11.19-1	0.039 lb/ton			30 tph

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
C01	PM/PM_{10}	EPA Method 5	No later than 180 days after start-up	Rule.19.702 and/or Rule.18.1002 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311

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)
C21, C23, C24	PM_{10}	Continuous monitoring (opacity), varied	Continuous	N
C18A1, C18A2, &C18B	Differential pressure of gas across each scrubber shall be maintained between 1 and 6 inches of water (hourly average)	Continuous monitoring	Continuous	N
	A liquid flow rate of at least 60 gallons per minute shall be maintained at each scrubber (hourly average)	Continuous monitoring	Continuous	N

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)
C01	Natural gas	262,800,000	Monthly	Y
C18	Natural gas	595,680,000	Monthly	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
C19	Sand	180,000 tons per rolling 12-month period	Monthly	N
	Air Flow	720,000 ft^3/hr	Monthly	N
C20	Air Flow	570,000 ft^3/hr	Monthly	N
C21	Sand	111,000 tons per rolling 12-month period	Monthly	N
	Air Flow	1,980,000 ft^3/hr	Monthly	N
C22	Sand	140,000 tons per rolling 12-month period	Monthly	N
C23	Air Flow	168,000 ft^3/hr	Monthly	N
C24	Air Flow	168,000 ft^3/hr	Monthly	N
C25	Air Flow	60,000 ft^3/hr	Monthly	N
C29	Air Flow	90,000 ft^3/hr	Monthly	N
C30	Air Flow	120,000 ft^3/hr	Monthly	N
C31	Air Flow	120,000 ft^3/hr	Monthly	N
70	Ore	350,000 tons	Monthly	Y
02	Ore	150,000 tons	Monthly	Y
73A, 73B, 73C	Hours of operation	100 total operating hours per calendar year	Monthly	Y
74	Gallons solvent used	2000	Monthly	N
C15	Tons silica	876,000	Monthly	Y

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
C01*, C18A and C18B	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
	*20% with scrubber	Rule 19.503 and 40 C.F.R. § 52 Subpart E	
SN-02, SN-06, SN-14, SN-15, SN-17, SN-18, SN-19, SN-21A through SN-23,	5%	Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark.	Weekly observations

SN	Opacity	Justification for limit	Compliance Mechanism
SN-25, SN-28 through SN-31, SN-34, SN-40 through SN-44, SN-46, SN-47, SN-49 through SN-51, SN-53 through SN-55, SN-62, through SN-65, SN-70, SN-71/72, SN-C02 through SN-C11, SN-C13 through SN-C17, SN-C19		Code Ann. §§ 8-4-304 and 8-4-311	
SN-73A through C	20%	Rule 19.503 and 40 C.F.R. § 52 Subpart E	Inspector Observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
13	CAM conditions are already in for this source.

21. GROUP A INSIGNIFICANT ACTIVITIES:

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

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
Plant 2 R&D Pilot Plant (0.65 MMBtu/hr) Combustion Emissions	A-1	0.1	0.1	0.1	0.3	0.4	5.02E-03	5.27E-03
Plant 1 R&D Pilot Plant (1,5 MMBtu/hr) Combustion Emissions	A-1	0.1	0.1	0.1	0.6	0.7	1.16E-02	1.22E-02
One 115gal diesel storage tank	A-3			0.1				
One 30 gal diesel storage tank	A-3			0.1				
One 102 gal diesel storage tank	A-3			0.1				
One 1500 gal diesel tank for mobile	A-3			0.1				

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
equipment								
Three Heat exchangers Note 1	A-13							
Two 15,000 gallon diesel storage tanks	A-13			1.6E-04				
Two line #3 milled feed vessel filters Note 2	A-13							
Material Bin Vent (BV-1102) Note 3	A-13	0.38						
Bin Vent for BN-18 (BV-1218) Note 3	A-13	0.38						
Bin Vent for Hopper HO-1513 (BV-1514) Note 3	A-13	0.38						
Bin vent for bulk bagging hopper and loadout spout (BV-2702) Note 3	A-13	0.38						
Particulate emissions from a pilot plant kiln	A-13	0.01						
Chopping mill, mixer, grinding mill with classifier and screening units A&B at pilot plant	A-13	0.342						
Plant 1 R&D Pilot Plant & Baghouse	A-13	0.01						
Plant 1 R&D Pilot Plant Material Handling Baghouse	A-13	0.01						
Plant 2 R&D Grinding Mill #2	A-13	0.01						
Welding booth	A-13	0.01						

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-R15

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name: Covia ISP, Inc. - Fort Smith Plant
Permit Number: 0492-AOP-R16
AFIN: 66-00219

			Old Permit	New Permit
$/ton factor	28.14	Permit Predominant Air Contaminant	141.6	141.6
Minimum Fee $	400	Net Predominant Air Contaminant Increase	0	
Minimum Initial Fee $	500			
		Permit Fee $	400	
Check if Administrative Amendment	☐	Annual Chargeable Emissions (tpy)	141.6	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	141.6	141.6	0
PM_{10}	101	101	0
$PM_{2.5}$	0	0	0
SO_2	0.6	0.6	0
VOC	4.4	4.4	0
CO	37.3	37.3	0
NO_X	46.6	46.6	0
Total HAPs	0.85	0.85	0