

# Fact Sheet



## For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05300007-2015**  
Application Received: **September 5, 2014**  
Plant Identification Number: **05300007**  
Permittee: **ICL-IP America Inc.**  
Facility Name: **Gallipolis Ferry Plant**  
Mailing Address: **State Route 2, P.O. Box 1721**  
**Gallipolis Ferry, WV 25515**

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Physical Location: Gallipolis Ferry, Mason County, West Virginia  
UTM Coordinates: 396.5 km Easting • 4,292.30 km Northing • Zone 17  
Directions: From Point Pleasant, drive 6 miles south on Rt. 2. The facility is on the right.

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### Facility Description

Facility manufactures Aryl and Alkyl Phosphate Esters and other Specialty Chemicals.

SIC Codes: 2869; 2819; 2899

### Emissions Summary

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Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2013 Actual Emissions
Carbon Monoxide (CO)	87.12	21.03
Nitrogen Oxides (NO <sub>x</sub> )	173.86	14.91
Particulate Matter (PM <sub>2.5</sub> )	9.13	0.788
Particulate Matter (PM <sub>10</sub> )	9.13	0.788

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2013 Actual Emissions</b>
Total Particulate Matter (TSP)	9.13	0.788
Sulfur Dioxide (SO <sub>2</sub> )	1.61	0.255
Volatile Organic Compounds (VOC)	69.83	28.13

*PM<sub>10</sub> is a component of TSP.*

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2013 Actual Emissions</b>
Acetaldehyde	0.61	Not reported
Cresylic Acid (Cresol(-m) and Cresol(-p))	0.00	0.0052*
Diethanolamine	< 0.001	5.8E-06
Epichlorohydrin	3.17	0.5593
Ethylene Dichloride	3.65	0.00082
Ethylene Oxide	2.80	0.646
Formaldehyde	0.18	0.0173
Hydrochloric Acid	0.29	0.1466
Phenol	4.99	0.548
Phosphorus	0.00	0.00015*
Propylene Dichloride	5.94	2.957
Propylene Oxide	3.01	1.280
Total HAPs	24.64	6.161

*Some of the above HAPs may be counted as PM or VOCs.*

\* Actual emissions reported resulted from maintenance activity

### **Title V Program Applicability Basis**

This facility has the potential to emit 173.86 TPY of NO<sub>x</sub>. Due to this facility's potential to emit over 100 tons per year of NO<sub>x</sub>, ICL-IP America Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR7	Particulate Matter Emissions
	45CSR10	Emission of Sulfur Oxides
	45CSR11	Standby plans for emergency episodes.

	45CSR13	Preconstruction permits for sources
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40CFR60
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	MACT
	40 C.F.R. Part 60 Db	Steam Generating Units
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 CFR 63 Subpart H	Equipment Leaks
	40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR27	Toxic Air Pollutants

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

**Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2438P	9/30/2013	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

**Determinations and Justifications**

The following changes were included in the Title V renewal permit:

1. Emission Units Table 1.1 – deleted Air Compressor C-120 because it was removed from the facility.
2. 40 C.F.R. 63, Subpart ZZZZ “National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” is applicable to the following engines:

Engine	Design Capacity	Ignition	Type/Use	Year installed	Source of HAP emissions
C-209	78 HP	Compression (CI)	Non-Emergency	1996 (existing)	Area source
OM-183	375 hp	Compression (CI)	Emergency	1978 (existing)	Area source
OM-184	375 hp	Compression (CI)	Emergency	1978 (existing)	Area source
OM-231	368.8 hp	Compression (CI)	Emergency	1988 (existing)	Area source
OM-296	368.8 hp	Compression (CI)	Emergency	1988 (existing)	Area source
P-434	190 hp	Compression (CI)	Emergency	1976 (existing)	Area source

Section 5.0 was added to the permit to include applicable requirements of 40 CFR 63 Subpart ZZZZ. Per §63.6603(a) both emergency CI engines and non-emergency CI engines of ≤ 300 hp at area sources are subject only to work and management practices (periodic changing of oil and filter, inspection of air cleaner and all hoses and belts) detailed in Table 2d (requirement 5.1.1). Per § 63.6640(a) and Table 6, continuous compliance should be demonstrated by operating and maintaining engines in accordance with “the manufacturer’s emission-related operation and maintenance instructions” or developing and following company’s “own maintenance plan...”. Recordkeeping is per requirement 5.4.1, reporting is per requirements 5.5.1 and 5.5.2.

- Requirement 4.1.12.2 was revised in order to delete confidential information (chemical name of E06-16) per company’s CBI claim.

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- 45CSR2 - To prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers** for Boilers B-5A and B-6:

**45CSR§2-5 Control of Fugitive Particulate Matter** - Section 5 of 45CSR2 requires a fugitive particulate matter control system for any source of fugitive particulate matter associated with the fuel burning units. Using natural gas as fuel of the Boilers B-5A and B-6 will result in no potential for fugitive emissions from the boilers.

**45CSR§2-8.1.a Testing and 45CSR§2-8.2 Monitoring** - Boilers are not subject to these requirements per 45CSR§2-8.4.b because they burn only natural gas.

**45CSR§2A-5, 6 Testing and monitoring Requirements** - Pursuant to Section 3.1.a of the 45CSR2A Interpretive Rule, a fuel burning unit that “combusts only natural gas” is exempt from the Testing and Visible Emission Monitoring Plan Requirements (Sections 5 and 6) therein.

- 45CSR7: To Prevent and Control Particulate matter Air Pollution from Manufacturing Processes and Associated Operations**

This Rule is not applicable for Diesel Engines at the facility because they are not defined as related to manufacturing processes and associated operations, and rather serve secondary processes at the facility:

engine C-209 is an air compressor used for jackhammering, engines OM-183, OM-184, OM-231, and OM-296 are emergency generators to be used during power failures or safety back-up during critical maintenance procedures, engine P-434 is a back-up emergency fire water pump to be used during an emergency if an electrical fire pump is not available.

- 3) **45CSR§10-8 Testing, Monitoring, Record-keeping, & Reporting (TMR&R)** for Boilers B-5A and B-6: Section 8 of Rule 10 requires testing for compliance with the limits therein, monitoring for continued compliance, and recordkeeping. But pursuant to 45CSR§10-10.3, as the boilers “combust natural gas, wood or distillate oil, alone or in combination,” they are not subject to the Requirements under 45CSR§ 10-8.

- 4) **45CSR14: Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration**

Gallipolis Ferry Plant is an existing major source (emissions of NO<sub>x</sub> in excess of 100 TPY of a source listed in Table 2.43. a) in an area of attainment and, therefore, subject to the review procedures under 45CSR14 if a “major modification” is proposed. As this permitting action is only a Title V permit renewal and does not involve any increase in emissions, 45CSR14 is not applicable.

- 5) **40 CFR 60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units** for Boiler B-6:

40 CFR 60, Subpart Dc is applicable to “each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).” Although Boiler B-6 has a maximum design heat input of 93.7 MMBtu/hr, it was constructed in 1977 and, therefore, Subpart Dc is not applicable.

- 6) **40 CFR 63, Subpart PPP: National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production**

Permittee, in a letter the DAQ received on April 20, 2009, stated that it “...has terminated the production of all polyether polyols and does not anticipate to produce polyether polyols in the future, and as allowed by the Subpart PPP provisions in 40CFR §63.1420(e)(9), ... is not subject to the Polyether Polyols MACT requirements any longer because it does [not] operate a unit defined as a polyether polyol manufacturing process unit (PMPU).”

To enforce the non-applicability of Subpart PPP, Requirement 4.1.10 is placed in the permit that prohibits permittee from operating a PMPU at their Gallipolis Ferry facility.

- 7) **40 CFR 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines:**

This subpart is not applicable to engines at the facility because they were ordered before 07/11/2005.

- 8) **40 CFR 64 Compliance Assurance Monitoring (CAM)**

CAM applicability was evaluated during previous permit renewal, and there were no new PSEUs added to the facility since then.

- 9) **40 C.F.R. 63, Subpart JJJJJJ “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources “** is not applicable because of the following reasons stated in the table below:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity in mmBtu/hr	Subpart JJJJJ applicability
B-6	H-B-6	Boiler	1977	93.7 mmBtu/hr	Meets "gas-fired boiler" definition in § 63.11237, therefore per § 63.11195 (e) the Subpart is not applicable
B-5A	H-B-5A	Boiler	1998	122 mmBtu/hr	Meets "gas-fired boiler" definition in § 63.11237, therefore per § 63.11195 (e) the Subpart is not applicable
F-5	C-F-5	Heater (heats non-contact coolant)	1960	8.2 mmBtu/hr	Doesn't meet "boiler" definition in § 63.11237, therefore per § 63.11193 the Subpart is not applicable
F-6	C-F-6	Heater (heats non-contact coolant)	1969	6.4 mmBtu/hr	Doesn't meet "boiler" definition in § 63.11237, therefore per § 63.11193 the Subpart is not applicable
F-7	C-F-7	Heater (heats non-contact coolant)	1976	0.75 mmBtu/hr	Doesn't meet "boiler" definition in § 63.11237, therefore per § 63.11193 the Subpart is not applicable
F-8	C-F-8	Heater (heats non-contact coolant)	1976	0.75 mmBtu/hr	Doesn't meet "boiler" definition in § 63.11237, therefore per § 63.11193 the Subpart is not applicable

- 10) **Conditions 4.2.8. and 4.2.9** of the Permit R13-2438P were not included in the permit as written, but were cited along with the appropriate monitoring, recordkeeping and reporting requirements (if any) of the corresponding rules (45CSR2, 45CSR10, 40 C.F.R. 60, Subpart Db and 40 C.F.R. 63, Subpart H).
- 11) **Former condition 4.3.2** was not included in this permit renewal because Boilers B-5A and B-6 are exempt from testing requirements of 45CSR2 and 45CSR10 (see items (1) and (3) above), but condition 4.3.2 of the Permit R13-2438P was cited along with the appropriate testing requirements of 40 C.F.R. 60 Subpart Db and 40CFR63 Subpart H (requirements 4.3.2 and 4.3.3).

**Request for Variances or Alternatives**

None.

**Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

**Comment Period**

Beginning Date: March 26, 2015  
 Ending Date: April 27, 2015

**Point of Contact**

All written comments should be addressed to the following individual and office:

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 Division of Air Quality  
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### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Response to Comments (Statement of Basis)**

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.