ICL Industrial Products

Where needs take us

James Brent Turley (J.B.)
Environmental Engineer

May 17, 2017

Mr. William F. Durham, Director
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, West Virginia, 25304

RE: Reg. 13 Class II Administrative Update Application
Gallipolis Ferry Plant
ICL-IP America, Inc.

Dear Director Durham:

ICL-IP America, Inc. (ICL) is pleased to submit the enclosed application for a Reg. 13 Class II Administrative Update for the Gallipolis Ferry Plant near Gallipolis Ferry in Mason County, West Virginia. The original and two (2) electronic copies (CD-ROM) of the complete application package are enclosed.

A legal advertisement will be published in the next few days and proof of publication will be forwarded as soon as it is received.

If you have any questions about the information submitted or if you would like to discuss this project, feel free to contact me at (304) 674-6433. A payment for the $1,300.00 application fee is currently being processed by ICL Accounting. This payment will be submitted in a timely fashion as soon as it is processed and released by Accounting.

Sincerely,

James Brent Turley
Environmental Engineer
ICL-IP America, Inc.

cc: Grant Morgan, ERM – Grant.morgan@erm.com

Enclosures

ICL
11636 Huntington Road
Gallipolis Ferry, WV 25515
Tel: 304-675-1150 **Fax:** 304-675-6570
Cell: 304-674-6433
E-mail: james.turley@icl-group.com

ICL-IP America, Inc.

Permit Determination
Gallipolis Ferry Plant

Gallipolis Ferry, West Virginia

Title V Permit: R30-05300007-2015

Prepared By:

Environmental Resources Management, Inc.

Hurricane, West Virginia

May 2017

Table of Contents

INTRODUCTION

ICL-IP America, Inc. (ICL) submits this Reg. 13 Class II Administrative Update to the West Virginia Department of Environmental Protection (WVDEP): Division of Air Quality (DAQ) for the Gallipolis Ferry facility located in Mason County, West Virginia. This application addresses the operational changes at the facility associated with boilers B-5A and B-6.

FACILITY DESCRIPTION

The ICL Gallipolis Ferry facility operates in Mason County, WV. The facility will alter the operating conditions of Boilers B-5A and B-6 with this submittal.

With this application for a Class II Administrative Update, the applicant seeks the authority to modify the following equipment from in their existing permit:

- Boiler B-5A will operate at 50% load, it had previously operated at 100% load.
- Boiler B-6 will operate at 75% load, it had previously operated at 100% load.

ICL seeks operational changes associated with Boilers B-5A and B-6 as part of an effort to seek a synthetic minor permit limitation as a change from its major source status. Operation with Boilers B-5A and B-6 will occur as stated above, with the distinction of having operational flexibility to fire under 100% load during rare events when full capacity is required. ICL has represented this operational flexibility by representing the Potential to Emit (PTE) on a lb/hr basis under full operational load. Operations on an annual basis will comply with the synthetic minor permit limitation on natural gas usage in MMSCF/yr. A process flow diagram is included in this application as Attachment D.

REGULATORY DISCUSSION

This section outlines the West Virginia (WV) State air regulations that could be reasonably expected to apply to the Gallipolis Ferry facility and makes an applicability determination for each regulation based on activities conducted at the site and the emissions of regulated air pollutants. This review is presented to supplement and/or add clarification to the information provided in the Reg. 13 Class II Administrative Update application forms.

The WV state regulations address applicable state (i.e. State Implementation Plan) rules as well as federal regulations, including Title I Prevention of Significant Deterioration Nonattainment New Source Review preconstruction

permitting, Title V, New Source Performance Standards, and National Emission Standards for Hazardous Air Pollutants (HAPs). The regulatory requirements in reference to Gallipolis Ferry are described in detail in the below section.

WEST VIRGINIA STATE AIR REGULATIONS

45 CSR 02 – To Prevent and Control Particulate Air Pollution From Combustion of Fuel in Indirect Heat Exchangers

Boilers B-5A and B-6 are indirect heat exchangers fired on natural gas and have a design heat input capacity greater than 10 MMBtu/hr. Boilers B-5A and B-6 are subject to the opacity requirements of this rule, and comply with applicable requirements. Compliance with this rule includes meeting a ten percent opacity based on a six-minute block average.

45 CSR 04 – To Prevent and Control the Discharge of Air Pollutants into the Air Which Causes or Contributes to an Objectionable Odor

Operations conducted at the Gallipolis Ferry facility are subject to this requirement. Based on the nature of the processes at the facility, the presence of objectionable odors is unlikely.

45 CSR 06 – Control of Air Pollution from the Combustion of Refuse

There is no combustion of refuse at the Gallipolis Ferry facility. Therefore the facility is not subject to the conditions of this regulatory requirement.

45 CSR 10 – To Prevent and Control Air Pollution From the Emission of Sulfur Oxides

Boilers B-5A and B-6 are indirect heat exchangers fired on natural gas and have a design heat input capacity greater than 10 MMBtu/hr. The boilers are subject to the facility's 2,000 ppm_v sulfur dioxide concentration limitation but are exempt from most other requirements in the rule aside from discretionary testing requirements. Compliance with the allowable sulfur dioxide concentration limitations is based on a block (3) hour averaging time.

45 CSR 13 – Permits for Construction, Modification, Relocation, And Operation of Stationary Sources of Air Pollutants

This Reg. 13 Class II Administrative Update is being submitted for the operational activities associated with Boilers B-5A and B-6. ICL operates under the existing permit R13-2438S.

45 CSR 14 / 45 CSR 19 – Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration /

Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contributed to Non-attainment

The Gallipolis Ferry Plant is a major stationary source, and the current changes proposed in this permit application do not change this facility's status. Additionally, the plant is located in Mason County which is an EPA attainment area. Under both of these conditions, the ICL Gallipolis Ferry Plant is not subject to the conditions of 45 CSR 14 and 45 CSR 19. As a part of these revisions, ICL seeks to change major source status through the implementation of a synthetic minor permit limitation.

45 CSR 16 - Standards of Performance for New Stationary Sources (NSPS)

45CSR 16 applies to all registrants with affected facilities that are subject to any of the NSPS requirements, described in more detail in the Federal Regulations section. Boiler B-5A is subject to 40 CFR 60 Subpart Db.

45 CSR 30 – Requirements for Operating Permits

45 CSR 30 applies to the requirements of the federal Title V operating permit program (40 CFR 70). The major source thresholds with respect to the West Virginia Title V operating permit program regulations are 10 tons per year (tpy) of a single HAP, 25 tpy of any combination of HAPs, and 100 tpy of all other regulated pollutants.

The actions listed in this Reg. 13 Class II Administrative Update do not qualify as a major modification. With this submission, ICL seeks the authority to construct the new source and remove the facility from the Title V program and operate as a synthetic minor source.

45 CSR 34 – National Emission Standards for Hazardous Air Pollutants (NESHAP)

45 CSR 34 applies to all registrants that are subject to any of the NESHAP requirements, described in more detail in the Federal Regulations section.

FEDERAL REGULATIONS

40 CFR 63, Subpart Db (Standards Of Performance for Industrial-Commercial-Institutional Steam Generating Units)

Boiler B-5A is subject to the limitations and conditions of 40 CFR 63, Subpart Db, including standards for nitrogen oxide emissions, performance testing, monitoring, reporting, and recordkeeping requirements. The maximum design heat input of Boiler B-6 is 93.7 MMBtu/hr, and does not meet any of the applicability requirements for this rule.

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

APPLICATION FOR NSR PERMIT AND TITLE V PERMIT REVISION (OPTIONAL)

PLEASE CHECK ALL THAT APPLY TO **NSR (45CSR13)** (IF KNOWN):

☐ **CONSTRUCTION** ☐ **MODIFICATION** ☐ **RELOCATION**
☐ **CLASS I ADMINISTRATIVE UPDATE** ☐ **TEMPORARY**
☒ **CLASS II ADMINISTRATIVE UPDATE** ☐ **AFTER-THE-FACT**

PLEASE CHECK TYPE OF **45CSR30 (TITLE V)** REVISION (IF ANY):

☒ **ADMINISTRATIVE AMENDMENT** ☐ **MINOR MODIFICATION**
☐ **SIGNIFICANT MODIFICATION**

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS **ATTACHMENT S** TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant *(as registered with the WV Secretary of State's Office):*
Israel Chemicals Ltd

2. Federal Employer ID No. ***(FEIN):***
731708310

3. Name of facility *(if different from above):*
Gallipolis Ferry Plant

4. The applicant is the:
☐ **OWNER** ☐ **OPERATOR** ☒ **BOTH**

5A. Applicant's mailing address:
PO Box 1721
Gallipolis Ferry, WV 25537

5B. Facility's present physical address:
11636 Huntington Road
Gallipolis Ferry, WV 25537

6. **West Virginia Business Registration.** Is the applicant a resident of the State of West Virginia? ☒ **YES** ☐ **NO**

- If **YES,** provide a copy of the **Certificate of Incorporation/Organization/Limited Partnership** (one page) including any name change amendments or other Business Registration Certificate as **Attachment A.**
- If **NO,** provide a copy of the **Certificate of Authority/Authority of L.L.C./Registration** (one page) including any name change amendments or other Business Certificate as **Attachment A.**

7. If applicant is a subsidiary corporation, please provide the name of parent corporation: NA

8. Does the applicant own, lease, have an option to buy or otherwise have control of the *proposed site?* ☒ **YES** ☐ **NO**

- If **YES,** please explain: Applicant owns the site.
- If **NO,** you are not eligible for a permit for this source.

9. Type of plant or facility (stationary source) to be **constructed, modified, relocated, administratively updated** or **temporarily permitted** (e.g., coal preparation plant, primary crusher, etc.): Chemical Manufacturing

10. North American Industry Classification System **(NAICS)** code for the facility:
2869

11A. DAQ Plant ID No. (for existing facilities only):
053 – 00007

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):
R13-2438P and R30-0530007-2015

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits,** please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP** as **Attachment B**.

Adjacent to State Route 2 in Gallipolis Ferry WV.

12.B. New site address (if applicable):	12C. Nearest city or town:	12D. County:
NA	Gallipolis Ferry, WV	Mason
12.E. UTM Northing (KM): 4292.3	12F. UTM Easting (KM): 395.6	12G. UTM Zone: 17S

13. Briefly describe the proposed change(s) at the facility:
Operational changes with Boilers B-5A and B-6.

14A. Provide the date of anticipated installation or change: N/A / / – If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: / /	14B. Date of anticipated Start-Up if a permit is granted: / /

14C. Provide a **Schedule** of the planned **Installation** of/**Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:
Hours Per Day 24 Days Per Week 7 Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? ☐ **YES** ☒ **NO**

17**. Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18**. Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process *(if known).* A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance *(if known).* Provide this information as **Attachment D.**

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan,** e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to ***Plot Plan Guidance***) **.**

– Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F.**

23. Provide a **Process Description** as **Attachment G.**

– Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H.**

– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I.**

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J.**

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K.**

28. Check all applicable **Emissions Unit Data Sheets** listed below:

☐ Bulk Liquid Transfer Operations	☐ Haul Road Emissions	☐ Quarry
☐ Chemical Processes	☐ Hot Mix Asphalt Plant	☐ Solid Materials Sizing, Handling and Storage Facilities
☐ Concrete Batch Plant	☐ Incinerator	☐ Storage Tanks
☐ Grey Iron and Steel Foundry	☒ Indirect Heat Exchanger	
☐ General Emission Unit, specify:		

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L.**

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

☐ Absorption Systems	☐ Baghouse	☐ Flare
☐ Adsorption Systems	☐ Condenser	☐ Mechanical Collector
☐ Afterburner	☐ Electrostatic Precipitator	☐ Wet Collecting System

☐ Other Collectors, specify

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M.**

30. Provide all **Supporting Emissions Calculations** as **Attachment N,** or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O.**

➢ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and ***Example Legal Advertisement*** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33**. Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

☐ **YES** ☒ **NO**

➢ If **YES,** identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's ***"Precautionary Notice – Claims of Confidentiality"*** guidance found in the ***General Instructions*** as **Attachment Q.**

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

☐ Authority of Corporation or Other Business Entity	☐ Authority of Partnership
☐ Authority of Governmental Agency	☐ Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R.**

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned ☒ **Responsible Official** / ☐ **Authorized Representative,** hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE _____ DATE: 5-17-17

(Please use blue ink) *(Please use blue ink)*

35B. Printed name of signee: Roger D. Steele		35C. Title: Site Director
35D. E-mail: NA	36E. Phone: (304) 675-1150	36F. FAX: (304) 675-6570
36A. Printed name of contact person (if different from above): James B. Turley		36B. Title: Environmental Engineer
36C. E-mail: james.turley@icl-group.com	36D. Phone: (304) 674-6433	36E. FAX: (304) 675-6570

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

☒ **Attachment A: Business Certificate**
☒ **Attachment B: Map(s)**
☒ **Attachment C: Installation and Start Up Schedule**
☒ **Attachment D: Regulatory Discussion**
☒ **Attachment E: Plot Plan**
☒ **Attachment F: Detailed Process Flow Diagram(s)**
☒ **Attachment G: Process Description**
☒ **Attachment H: Material Safety Data Sheets (MSDS)**
☒ **Attachment I: Emission Units Table**
☒ **Attachment J: Emission Points Data Summary Sheet**
☒ **Attachment K: Fugitive Emissions Data Summary Sheet**
☒ **Attachment L: Emissions Unit Data Sheet(s)**
☒ **Attachment M: Air Pollution Control Device Sheet(s)**
☒ **Attachment N: Supporting Emissions Calculations**
☒ **Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans**
☒ **Attachment P: Public Notice**
☒ **Attachment Q: Business Confidential Claims**
☒ **Attachment R: Authority Forms**
☒ **Attachment S: Title V Permit Revision Information**
☒ **Application Fee**

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

☐ *Forward 1 copy of the application to the Title V Permitting Group and:*
☐ *For Title V Administrative Amendments:*
  ☐ *NSR permit writer should notify Title V permit writer of draft permit,*
☐ *For Title V Minor Modifications:*
  ☐ *Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,*
  ☐ *NSR permit writer should notify Title V permit writer of draft permit.*
☐ *For Title V Significant Modifications processed in parallel with NSR Permit revision:*
  ☐ *NSR permit writer should notify a Title V permit writer of draft permit,*
  ☐ *Public notice should reference both 45CSR13 and Title V permits,*
  ☐ *EPA has 45 day review period of a draft permit.*

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

Attachment A

Business Certificate

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
ICL-IP AMERICA INC
PO BOX 2
GALLIPOLIS FERRY, WV 25515-0002

BUSINESS REGISTRATION ACCOUNT NUMBER: **2193-9173**

This certificate is issued on: **08/21/2014**

This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.4
L1439406656

STATE OF WEST VIRGINIA
State Tax Department, Revenue Division
P. O. Box 2666
Charleston, WV 25330-2666

Earl Ray Tomblin, Governor

Mark W. Matkovich, Tax Commissioner

0001200201000

ICL-IP AMERICA INC
622 EMERSON RD STE 500
SAINT LOUIS MO 63141-6708

Letter Id: L1439406656
Issued: 08/21/2014
Account #: 2193-9173

RE: Business Registration Certificate

The West Virginia State Tax Department would like to thank you for registering your business. Enclosed is your Business Registration Certificate. This certificate shall be permanent until cessation of business or until suspended, revoked or cancelled. Changes in name, ownership or location are considered a cessation of business; a new Business Registration Certificate and applicable fees are required. Please review the certificate for accuracy.

This certificate must be prominently displayed at the location for which issued. Engaging in business without conspicuously posting a West Virginia Business Registration Certificate in the place of business is a crime and may subject you to fines per W.Va. Code § 11-9.

When contacting the State Tax Department, refer to the appropriate account number listed on the back of this page. The taxes listed may not be all the taxes for which you are responsible. Account numbers for taxes are printed on the tax returns mailed by the State Tax Department. Failure to timely file tax returns may result in penalties for late filing.

Should the nature of your business activity or business ownership change, your liability for these and other taxes will change accordingly.

To learn more about these taxes and the services offered by the West Virginia State Tax Department, visit our web site at www.wvtax.gov.

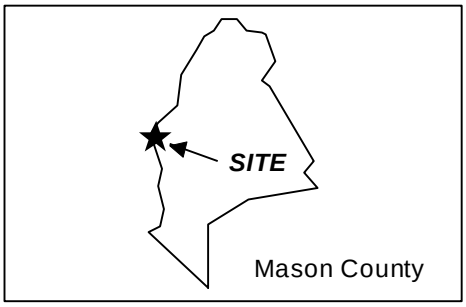
Enclosure

atL006 v.4

Attachment B

Map(s)

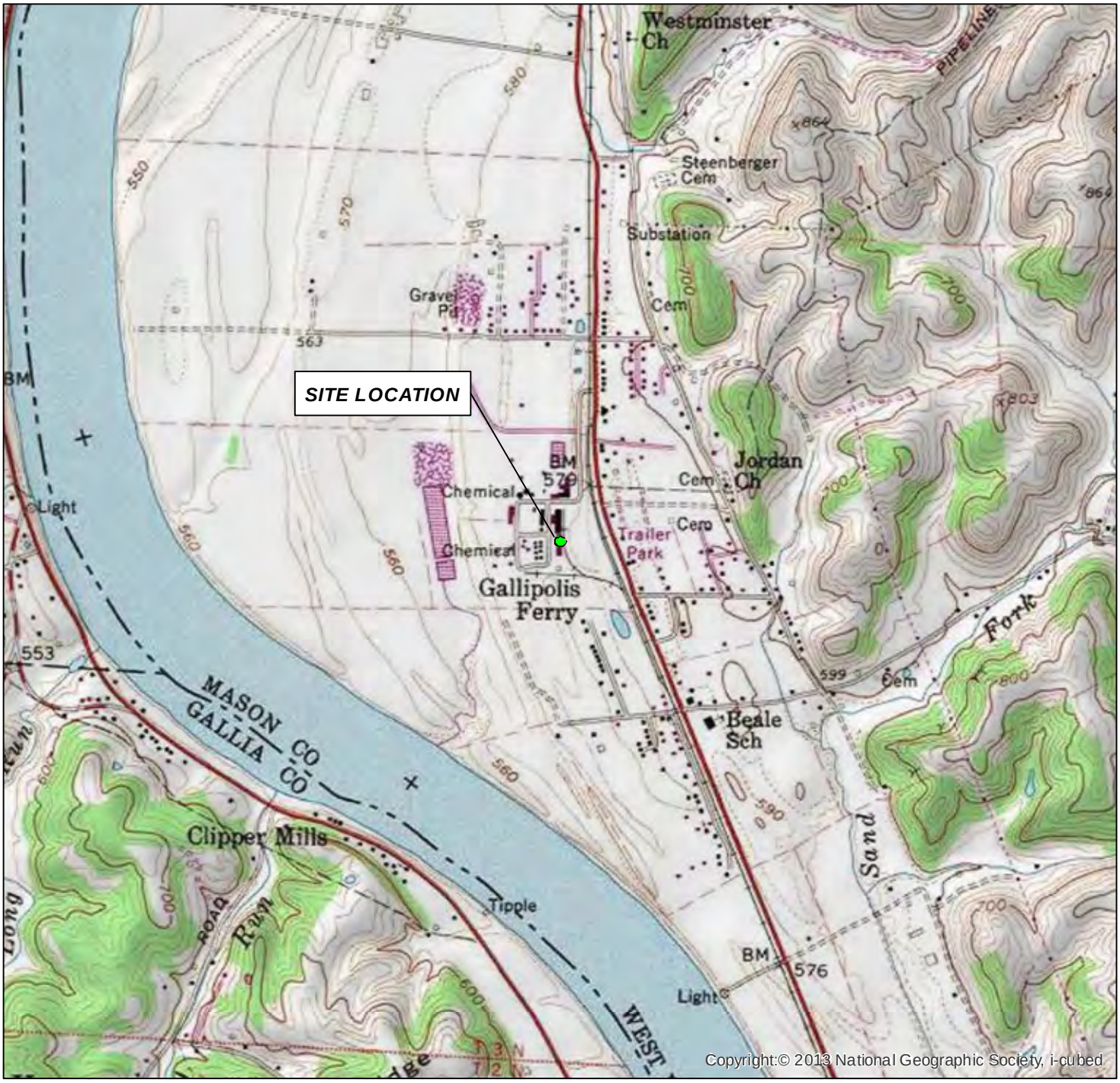
West Virginia



0 1,000 2,000 4,000 Feet

N

LAT. 38.772 LON. -82.201
MASON COUNTY
WEST VIRGINIA



USGS 1:24K 7.5' Quadrangle:
Gallipolis, WV

SITE LOCATION MAP

ERM	**Gallipolis Ferry Facility** ICL-IP America, Inc. Mason County, West Virginia	GIS Review: GM CHK'D: GM 0307688
Drawn By: SRV-8/25/15	**Environmental Resources Management**	ATTACHMENT B

J:\GIS\Projects\SiteLocationMaps\Clearon Corporation_MXD\Site_Location_Map_2.mxd - 8/25/2015\SRV

Attachment C

Installation and Start-Up Schedule

Attachment C
Schedule of Installation

Equipment included in this permit application is already installed and operational. Only operational changes will change upon issuance of this permit.

Attachment D

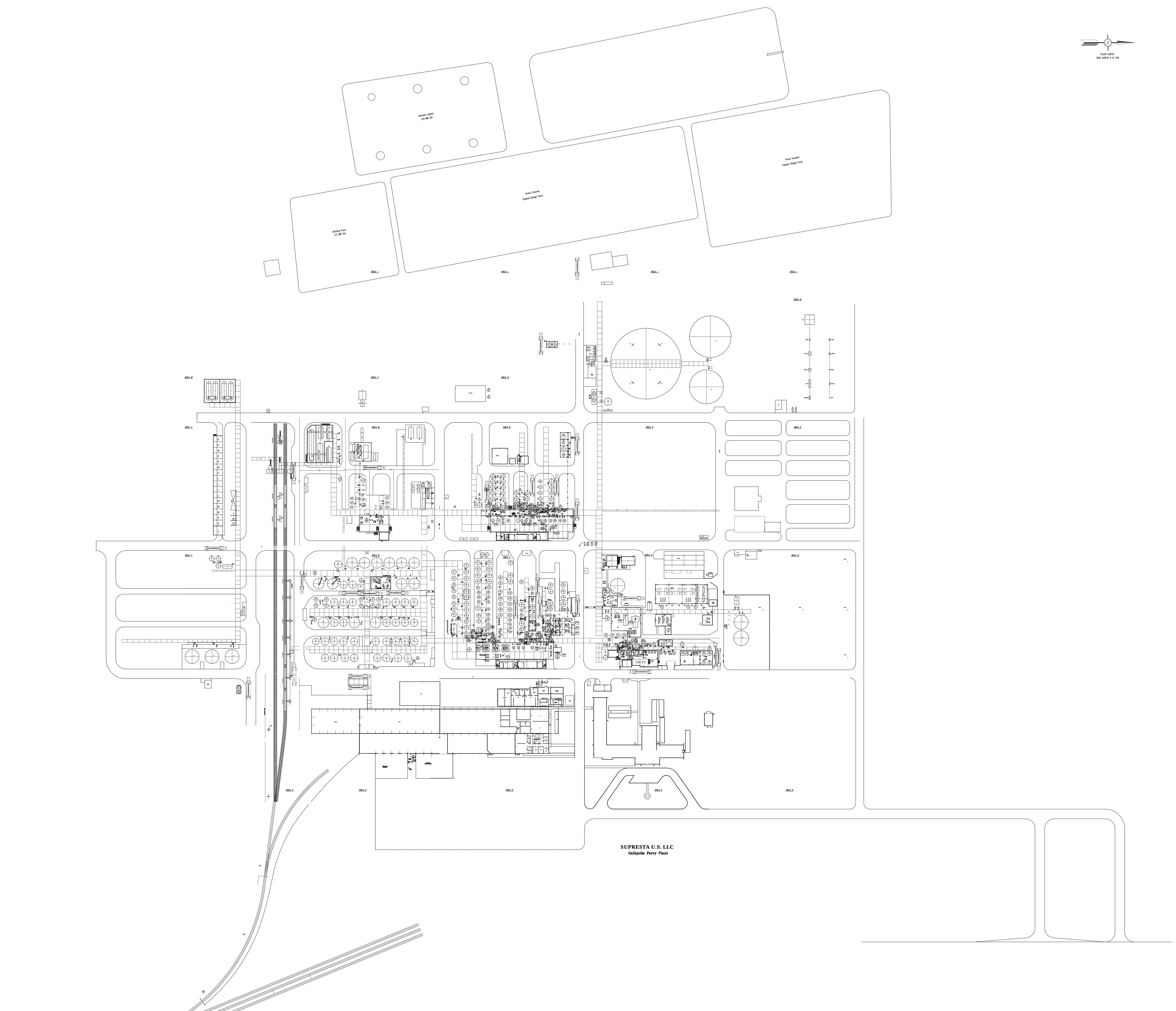
Regulatory Discussion

Attachment D
Regulatory Discussion

A state and federal regulatory discussion is included with the introduction to this permit application.

Attachment E

Plot Plan



No.	ACCT. No.	REVISIONS	BY	CK'D.	APR'D.	DATE
1		ADDED WAREHOUSE EXPANSION,LAB EXPANSION, BOILER5A CATCH BASIN IN AREA "L"	RRB			02-24-98

ACCOUNT No.
UNIT
DRAWN BY 12-05-96 L. Tupes
CHECKED BY
APPROVED BY
SCALE 1" = 80'-0"

ICL-IP America, Inc.
Gallipolis Ferry, West Virginia

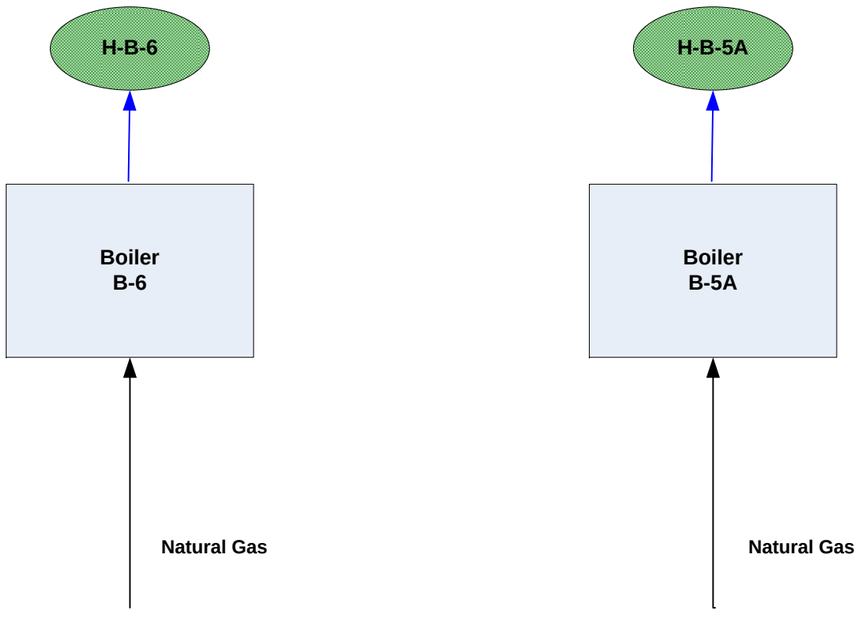
SITE PLOT PLAN

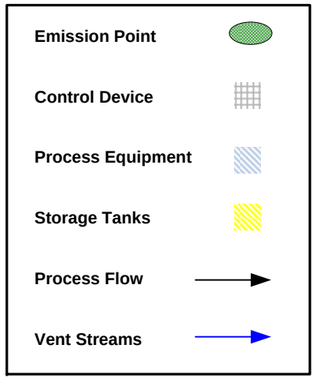
AREA: ALL
DRAWING No.: KDP-2B
REV.: 1

Attachment F

Detailed Process Flow Diagram(s)

Attachment F – Process Flow Diagram
Combustion Sources





Attachment G

Process Description

Attachment G – Process Description

ICL is requesting two natural gas fired boilers, B-5A and B-6, be re-permitted in order to account changes in operation load. Boiler B-5A operates at a maximum of 50% load, and is presently permitted for to operate at 100% load. Boiler B-6 operates at a maximum of 75% load, and is permitted to operate at 100% load.

Attachment H

Material Safety Data Sheets (MSDS)

Attachment H – Material Safety Data Sheets

This update to Boilers B-5A or B-6 does not introduce any chemicals to the site. For this reason, a MSDS is not included with this submission.

Attachment I

Emission Units Table

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices that will be part of this permit application review, regardless of permitting status)

Emission Unit ID[1]	Emission Point ID[2]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type[3] and Date of Change	Control Device[4]
B-6	H-B-6	Boiler	1977	93.7	Operation Change	None
B-5A	H-B-5A	Boiler	1988	122	Operation Change	None

[1] For Emission Units (or Sources) use the following numbering system:1S, 2S, 3S,... or other appropriate designation.
[2] For Emission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.
[3] New, modification, removal
[4] For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

Attachment J

Emission Points Data Summary Sheet

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 1: Emissions Data

Emission Point ID No. *(Must match Emission Units Table & Plot Plan)*	Emission Point Type[1]	Emission Unit Vented Through This Point *(Must match Emission Units Table & Plot Plan)*		Air Pollution Control Device *(Must match Emission Units Table & Plot Plan)*		Vent Time for Emission Unit *(chemical processes only)*		All Regulated Pollutants - Chemical Name/CAS[3] *(Speciate VOCs & HAPS)*	Maximum Potential Uncontrolled Emissions [4]		Maximum Potential Controlled Emissions [5]		Emission Form or Phase *(At exit conditions, Solid, Liquid or Gas/Vapor)*	Est. Method Used [6]	Emission Concentration [7] (ppmv or mg/m^4)
		ID No.	Source	ID No.	Device Type	Short Term[2]	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
H-B-5A	Upward Vertical Stack	B-5A	Natural Gas Boiler	NA	NA	C	500	Total VOCs NO_x CO PM_{10} $PM_{2.5}$ SO_x Total HAPs CO_2 CO_{2e}	0.36 6.50 5.46 0.49 0.49 0.04 0.12 7,750 7,758	1.56 28.45 23.90 2.16 2.16 0.17 0.54 33,944 33,979	0.36 6.50 5.46 0.49 0.49 0.04 0.12 7,750 7,758	1.56 28.45 23.90 2.16 2.16 0.17 0.54 33,944 33,979	Gas	AP-42, 40 CFR 98 Subpart C	N/A
H-B-6	Upward Vertical Stack	B-5A	Natural Gas Boiler	NA	NA	C	500	Total VOCs NO_x CO PM_{10} $PM_{2.5}$ SO_x Total HAPs CO_2 CO_{2e}	0.36 6.47 5.44 0.49 0.49 0.04 0.12 7,725 7,733	1.56 28.36 23.82 2.16 2.16 0.17 0.53 33,834 33,869	0.36 6.47 5.44 0.49 0.49 0.04 0.12 7,725 7,733	1.56 28.36 23.82 2.16 2.16 0.17 0.53 33,834 33,869	Gas	AP-42, 40 CFR 98 Subpart C	N/A

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

[1] Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

[2] Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).

[3] List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS_2, VOCs, H_2S, Inorganics, Lead, Organics, O_3, NO, NO_2, SO_2, SO_3, all applicable Greenhouse Gases (including CO_2 and methane), etc. **DO NOT LIST** H_2, H_2O, N_2, O_2, and Noble Gases.

[4] Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

[5] Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

[6] Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

[7] Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m^3) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO_2, use units of ppmv (See 45CSR10).

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 2: Release Parameter Data								
Emission Point ID No. *(Must match Emission Units Table)*	Inner Diameter (ft.)	Exit Gas			Emission Point Elevation (ft)		UTM Coordinates (km)	
		Temp. (^{o}F)	Volumetric Flow [1] (acfm) *at operating conditions*	Velocity (fps)	Ground Level *(Height above mean sea level)*	Stack Height [2] *(Release height of emissions above ground level)*	Northing	Easting
H-B-5A	0.25	335	37,251	12,654	585	70	4,292.3	396.5
H-B-6	0.25	326	28,310	9,617	585	40	4,292.3	396.5

[1] Give at operating conditions. Include inerts.
[2] Release height of emissions above ground level.

Attachment K

Fugitive Emissions Data Summary Sheet

Attachment K
Fugitive Emissions Data Summary

Fugitive Emissions will be unaffected in this Reg. 13 Class II Administration Update.

Attachment L

Emissions Unit Data Sheet(s)

Emission Unit Data Sheet
(INDIRECT HEAT EXCHANGER)

Control Device ID No. (must match List Form): **Boiler B-5A**

Equipment Information

1. Manufacturer: **Zurn**	2. Model No. **VEM-ULMB-125** Serial No. **NA**
3. Number of units: **1**	4. Use **1**
5. Rated Boiler Horsepower: **47,866** hp	6. Boiler Serial No.: **NA**
7. Date constructed: **1998**	8. Date of last modification and explain: **NA**
9. Maximum design heat input per unit: **121.9** $\times 10^6$ BTU/hr	10. Peak heat input per unit: **121.9** $\times 10^6$ BTU/hr
11. Steam produced at maximum design output: **100,000** LB/hr psig	12. Projected Operating Schedule: Hours/Day **24** Days/Week **7** Weeks/Year **52**
13. Type of firing equipment to be used: ☐ Pulverized coal ☐ Spreader stoker ☐ Oil burners ☒ Natural Gas Burner ☐ Others, specify	14. Proposed type of burners and orientation: ☐ Vertical ☒ Front Wall ☐ Opposed ☐ Tangential ☐ Others, specify
15. Type of draft: ☒ Forced ☐ Induced	16. Percent of ash retained in furnace: **NA** %
17. Will fly ash be reinjected? ☐ Yes ☒ No	18. Percent of carbon in flyash: **NA** %

Stack or Vent Data

19. Inside diameter or dimensions: **3.83** ft.	20. Gas exit temperature: **335** °F
21. Height: **70** ft.	22. Stack serves: ☒ This equipment only ☐ Other equipment also (submit type and rating of all other equipment exhausted through this stack or vent)
23. Gas flow rate: **18,626** ft^3/min	
24. Estimated percent of moisture: **NA** %	

Fuel Requirements

25.	Type	Fuel Oil No.	Natural Gas	Gas (other, specify)	Coal, Type:	Other:
	Quantity (at Design Output)	pph@60°F	**61,865** ft^3/hr	ft^3/hr		
	Annually	$\times 10^3$ gal	**284.49** $\times 10^6$ ft^3/yr	$\times 10^6$ ft^3/hr		
	Sulfur	Maximum: wt. % Average: wt. %	**0.01** % WT	gr/100 ft^3	Maximum: wt. %	
	Ash (%)		**NA**		Maximum	
	BTU Content	BTU/Gal. Lbs/Gal.@60°F	**1,020** BTU/ft^3	BTU/ft^3	BTU/lb	
	Source		**Columbia Transmission**			
	Supplier		**Columbia Transmission**			
	Halogens (Yes/No)		**No**			
	List and Identify Metals		**NA**			

26. Gas burner mode of control:
☐ Manual ☐ Automatic hi-low
☒ Automatic full modulation ☐ Automatic on-off

27. Gas burner manufacture: **Zurn**

28. Oil burner manufacture: **NA**

29. If fuel oil is used, how is it atomized? ☐ Oil Pressure ☐ Steam Pressure ☐ Compressed Air ☐ Rotary Cup ☐ Other, specify

30. Fuel oil preheated: ☐ Yes ☐ No

31. If yes, indicate temperature: °F

32. Specify the calculated theoretical air requirements for combustion of the fuel or mixture of fuels described above actual cubic feet (ACF) per unit of fuel:
1,220,048 cf/hr @ **60** °F, **14.7** PSIA, **NA** % moisture

33. Emission rate at rated capacity: **See below** lb/hr

34. Percent excess air actually required for combustion of the fuel described: **6** %

Coal Characteristics

35. Seams: **NA**

36. Proximate analysis (dry basis): % of Fixed Carbon: % of Sulfur: % of Moisture: % of Volatile Matter: % of Ash:

Emissions Stream

37. What quantities of pollutants will be emitted from the boiler before controls?

Pollutant	lb/hr	grain/ACF	@ °F	PSIA
CO	**11.02**	**NA**	**335**	**14.7**
Hydrocarbons	**NA**	**NA**		**14.7**
NO_x	**13.12**	**NA**	**335**	**14.7**
Pb	**NA**	**NA**		
PM_{10}	**1.00**	**0.053**	**335**	**14.7**
SO_2	**0.08**	**NA**	**335**	**14.7**
VOCs	**0.72**	**NA**	**335**	**14.7**
Other (specify)	**NA**	**NA**		

38. What quantities of pollutants will be emitted from the boiler after controls?

Pollutant	lb/hr	grain/ACF	@ °F	PSIA
CO	**Same as Item 37 above**			
Hydrocarbons				
NO_x				
Pb				
PM_{10}				
SO_2				
VOCs				
Other (specify)				

39. How will waste material from the process and control equipment be disposed of?
NA

40. Have you completed an *Air Pollution Control Device Sheet(s)* for the control(s) used on this Emission Unit?

41. Have you included the ***air pollution rates*** on the Emissions Points Data Summary Sheet?

42. **Proposed Monitoring, Recordkeeping, Reporting, and Testing**

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING PLAN: Please list (1) describe the process parameters and how they were chosen (2) the ranges and how they were established for monitoring to demonstrate compliance with the operation of this process equipment operation or air pollution control device.

See Attachment O for appropriate MRR requirements

TESTING PLAN: Please describe any proposed emissions testing for this process equipment or air pollution control device.

There are no proposed testing requirements for this boiler, as the heat rating does not exceed 100 MMBtu/hr, as required in 40 CFR 60 Subpart Db.

RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring.

ICL will monitor natural gas usage by complying with the synthetic minor limitation for boiler B-5A.

REPORTING: Please describe the proposed frequency of reporting of the recordkeeping.

There are no proposed reporting requirements for this boiler, as the heat rating does not exceed 100 MMBtu/hr, as required in 40 CFR 60 Subpart Db.

43. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty.

NA

Emission Unit Data Sheet
(INDIRECT HEAT EXCHANGER)

Control Device ID No. (must match List Form): **Boiler B-6**

Equipment Information

1. Manufacturer: **Zurn Industries**	2. Model No. **SAOH-14M** Serial No. **NA**
3. Number of units: **1**	4. Use **1**
5. Rated Boiler Horsepower: **36,793** hp	6. Boiler Serial No.: **NA**
7. Date constructed: **1977**	8. Date of last modification and explain: **NA**
9. Maximum design heat input per unit: **93.7** $\times 10^6$ BTU/hr	10. Peak heat input per unit: **93.7** $\times 10^6$ BTU/hr
11. Steam produced at maximum design output: **75,000** LB/hr psig	12. Projected Operating Schedule: Hours/Day **24** Days/Week **7** Weeks/Year **52**
13. Type of firing equipment to be used: ☐ Pulverized coal ☐ Spreader stoker ☐ Oil burners ☒ Natural Gas Burner ☐ Others, specify	14. Proposed type of burners and orientation: ☐ Vertical ☒ Front Wall ☐ Opposed ☐ Tangential ☐ Others, specify
15. Type of draft: ☒ Forced ☐ Induced	16. Percent of ash retained in furnace: **NA** %
17. Will fly ash be reinjected? ☐ Yes ☒ No	18. Percent of carbon in flyash: **NA** %

Stack or Vent Data

19. Inside diameter or dimensions: **3.67** ft.	20. Gas exit temperature: **330** °F
21. Height: **40** ft.	22. Stack serves: ☒ This equipment only ☐ Other equipment also (submit type and rating of all other equipment exhausted through this stack or vent)
23. Gas flow rate: **21,233** ft^3/min	
24. Estimated percent of moisture: **NA** %	

Fuel Requirements

25.	Type	Fuel Oil No.	Natural Gas	Gas (other, specify)	Coal, Type:	Other:
	Quantity (at Design Output)	pph@60°F	**71,330** ft^3/hr	ft^3/hr		
	Annually	$\times 10^3$ gal	**425.35** $\times 10^6$ ft^3/yr	$\times 10^6$ ft^3/hr		
	Sulfur	Maximum: wt. % Average: wt. %	**0.01** % WT	gr/100 ft^3	Maximum: wt. %	
	Ash (%)		**NA**		Maximum	
	BTU Content	BTU/Gal. Lbs/Gal.@60°F	**1,020** BTU/ft^3	BTU/ft^3	BTU/lb	
	Source		**Columbia Transmission**			
	Supplier		**Columbia Transmission**			
	Halogens (Yes/No)		**No**			
	List and Identify Metals		**NA**			

26. Gas burner mode of control:
☐ Manual ☐ Automatic hi-low
☒ Automatic full modulation ☐ Automatic on-off

27. Gas burner manufacture: **Zurn**

28. Oil burner manufacture: **NA**

29. If fuel oil is used, how is it atomized? ☐ Oil Pressure ☐ Steam Pressure ☐ Compressed Air ☐ Rotary Cup ☐ Other, specify

30. Fuel oil preheated: ☐ Yes ☐ No

31. If yes, indicate temperature: °F

32. Specify the calculated theoretical air requirements for combustion of the fuel or mixture of fuels described above actual cubic feet (ACF) per unit of fuel:
937,806 cf/hr @ **60** °F, **14.7** PSIA, **NA** % moisture

33. Emission rate at rated capacity: **See below** lb/hr

34. Percent excess air actually required for combustion of the fuel described: **6** %

Coal Characteristics

35. Seams: **NA**

36. Proximate analysis (dry basis): % of Fixed Carbon: % of Sulfur: % of Moisture: % of Volatile Matter: % of Ash:

Emissions Stream

37. What quantities of pollutants will be emitted from the boiler before controls?

Pollutant	lb/hr	grain/ACF	@ °F	PSIA
CO	**7.29**	**NA**	**330**	**14.7**
Hydrocarbons	**NA**	**NA**		**14.7**
NO_x	**8.68**	**NA**	**330**	**14.7**
Pb	**NA**	**NA**		
PM_{10}	**0.66**	**0.053**	**330**	**14.7**
SO_2	**0.05**	**NA**	**330**	**14.7**
VOCs	**0.48**	**NA**	**330**	**14.7**
Other (specify)	**NA**	**NA**		

38. What quantities of pollutants will be emitted from the boiler after controls?

Pollutant	lb/hr	grain/ACF	@ °F	PSIA
CO	**Same as Item 37 above**			
Hydrocarbons				
NO_x				
Pb				
PM_{10}				
SO_2				
VOCs				
Other (specify)				

39. How will waste material from the process and control equipment be disposed of?
NA

40. Have you completed an *Air Pollution Control Device Sheet(s)* for the control(s) used on this Emission Unit?

41. Have you included the ***air pollution rates*** on the Emissions Points Data Summary Sheet?

42. **Proposed Monitoring, Recordkeeping, Reporting, and Testing**

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING PLAN: Please list (1) describe the process parameters and how they were chosen (2) the ranges and how they were established for monitoring to demonstrate compliance with the operation of this process equipment operation or air pollution control device.

See Attachment O for appropriate MRR requirements

TESTING PLAN: Please describe any proposed emissions testing for this process equipment or air pollution

There are no proposed testing requirements for this boiler, as the heat rating does not exceed 100 MMBtu/hr, as required in 40 CFR 60 Subpart Db.

RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring.

ICL will monitor natural gas usage by complying with the synthetic minor limitation for boiler B-6.

REPORTING: Please describe the proposed frequency of reporting of the recordkeeping.

There are no proposed reporting requirements for this boiler, as the heat rating does not exceed 100 MMBtu/hr, as required in 40 CFR 60 Subpart Db.

43. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty.

NA

Attachment M

Air Pollution Control Device Sheet(s)

Attachment M
Air Pollution Control Device Sheets

No air pollution control devices are proposed for the Boilers B-5A or B-6 in this Reg. 13 Class II Administration Update.

Attachment N

Supporting Emissions Calculations

Boilers B-5A and B-6 Emission PTE Calculations

AP 42 Emission Factors ($lb/10^6$ scf)						Greenhouse Gas Emission Factors 40 CFR 98 Subpart C				Boiler Predicted Performance				
	NO_x	CO	PM_{Total}	SO_2	VOC	mmBtu/scf	kg CO_2/mmBtu	kg CH_4/mmBtu	kg N_2O/mmBtu	Units	100	75	50	10
Boiler 5A:	100	84	7.6	0.6	5.5	1.03E-03	53.06	0.001	0.0001	lbs/hr	5,459	4,068	2,702	566
Boiler 6:	100	84	7.6	0.6	5.5	1.03E-03	53.06	0.001	0.0001	scf/hr	86,809	64,741	43,603	21,844

Combustion Device ID:	Emission Control Techniques	Percent Load	Natural Gas Usage		Natural Gas Density (lbs/ft^3)	Natural Gas Usage (MMscf/hr)
Boiler B-5A:	Flue Gas Recirculation, Low NO_x Burners	50%	2,702	lbs/hr	0.0416	0.0650
		100%	5,459	lbs/hr	0.0416	0.1312
Boiler B-6:	Uncontrolled	75%	64,741	scf/hr	0.0416	0.0647
		100%	86,809	scf/hr	0.0416	0.0868

Operating Conditions		
Boiler 5A:	50% Load	max
Time Period (hrs):	8760	365
Boiler 6:	75% Load	max
Time Period (hrs):	8760	365
NG Heating Value	1020	mmBtu/mmscf

Combustion Device ID:	NO_x		CO		PM_{Total}		SO_2		VOCs		HAPs		CO_2		CH_4		N_2O		Total GHG	
	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)
Boiler B-5A:	13.12	28.45	11.02	23.90	1.00	2.16	0.08	0.17	0.72	1.56	0.25	0.54	15,657.45	33,944.33	0.30	0.64	0.03	0.06	15,673.62	33,979.39
Boiler B-6:	8.68	28.36	7.29	23.82	0.66	2.16	0.05	0.17	0.48	1.56	0.16	0.53	10,357.76	33,834.10	0.20	0.64	0.02	0.06	10,368.46	33,869.05
Total:	21.80	56.81	18.31	47.72	1.66	4.32	0.13	0.34	1.20	3.12	0.41	1.07	26,015.21	67,778.44	0.49	1.28	0.05	0.13	26,042.08	67,848.44

Total Estimated Emissions (tons/year)	
NOx	56.81
CO	47.72
PM_{Total}	4.32
SO_2	0.34
VOCs	3.12
HAPs	1.07
CO_2	67,778.44
CH_4	1.28
N_2O	0.13

	Gas Usage			Permitted Gas Usage
	MMBtu/hr	(MMscf/hr)	(MMscf/yr)	(MMscf/yr)
Boiler 5A:	66.25	0.0650	568.98	1,067.84
Boiler 6:	66.04	0.0647	567.13	820.81
Heater F-5	8.20	0.0080	70.42	71.83
Heater F-6	6.40	0.0063	54.96	56.06
Heater F-7	0.75	0.0007	6.44	6.57
Heater F-8	0.75	0.0007	6.44	6.57

Total Natural Gas Usage for Synthetic Minor: 1,274.38 MMscf/yr

Pollutant	Fuel Input	Boiler B-5A		Boiler B-6	
	($lb/10^6$ scf)	(lb/hr)	(tpy)	(lb/hr)	(tpy)
2-Methylnaphthalene	2.40E-05	3.15E-06	6.83E-06	2.08E-06	6.81E-06
3-Methylchloranthrene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
7,12-Dimethylbenz(a)anthracene	1.60E-05	2.10E-06	4.55E-06	1.39E-06	4.54E-06
Acenaphthene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Acenaphthylene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Anthracene	2.40E-06	3.15E-07	6.83E-07	2.08E-07	6.81E-07
Benz(a)anthracene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Benzene	2.10E-03	2.76E-04	5.97E-04	1.82E-04	5.95E-04
Benzo(a)pyrene	1.20E-06	1.57E-07	3.41E-07	1.04E-07	3.40E-07
Benzo(b)fluoranthene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Benzo(g,h,i)perylene	1.20E-06	1.57E-07	3.41E-07	1.04E-07	3.40E-07
Benzo(k)fluoranthene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Butane	2.10E+00	2.76E-01	5.97E-01	1.82E-01	5.95E-01
Chrysene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Dibenzo(a,h)anthracene	1.20E-06	1.57E-07	3.41E-07	1.04E-07	3.40E-07
Dichlorobenzene	1.20E-03	1.57E-04	3.41E-04	1.04E-04	3.40E-04
Ethane	3.10E+00	4.07E-01	8.82E-01	2.69E-01	8.79E-01
Fluoranthene	3.00E-06	3.94E-07	8.53E-07	2.60E-07	8.51E-07
Fluorene	2.80E-06	3.67E-07	7.97E-07	2.43E-07	7.94E-07
Formaldehyde	7.50E-02	9.84E-03	2.13E-02	6.51E-03	2.13E-02
Hexane	1.80E+00	2.36E-01	5.12E-01	1.56E-01	5.10E-01
Ideno(1,2,3-cd)pyrene	1.80E-06	2.36E-07	5.12E-07	1.56E-07	5.10E-07
Napthalene	6.10E-04	8.00E-05	1.74E-04	5.30E-05	1.73E-04
Pentane	2.60E+00	3.41E-01	7.40E-01	2.26E-01	7.37E-01
Phenanathrene	1.70E-05	2.23E-06	4.84E-06	1.48E-06	4.82E-06
Propane	1.60E+00	2.10E-01	4.55E-01	1.39E-01	4.54E-01
Pyrene	5.00E-06	6.56E-07	1.42E-06	4.34E-07	1.42E-06
Toluene	3.40E-03	4.46E-04	9.67E-04	2.95E-04	9.64E-04
Total POM		**1.16E-05**	**2.51E-05**	**7.66E-06**	**2.50E-05**
Total HAPs		**0.25**	**0.54**	**0.16**	**0.53**

Notes:
1. Short Term Potential Emission Rates (lb/hr) for both Boiler B-6 and B-5A are calculated using 100% load conditions.
2. Long Term Potential Emission Rates (tpy) for Boiler B-5A are based off 50% load conditions. Long Term Potential Emission Rates (tpy) for Boiler B-6 are based off 75% load conditions.

Emissions Summary

ICL Emission Rates - Initial Permit Levels																				
Emission Sources	**NO_x**		**CO**		**PM_{Total}**		**SO_2**		**VOCs**		**HAPs**		**CO_2**		**CH_4**		**N_2O**		**GHG**	
	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)
Boiler B-5A	24.40	106.80	10.00	43.80	0.91	4.00	0.07	0.32	0.61	2.67	0.22	0.96	--	--	--	--	--	--	--	--
Boiler B-6	9.18	40.20	7.68	33.70	0.70	3.08	0.06	0.25	0.47	2.05	0.17	0.74	--	--	--	--	--	--	--	--
Total Initial Permit Levels	**33.58**	**147.00**	**17.68**	**77.50**	**1.61**	**7.08**	**0.13**	**0.57**	**1.08**	**4.72**	**0.39**	**1.70**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Proposed ICL Modified Emission Rates																				
Emission Sources	**NO_x**		**CO**		**PM_{Total}**		**SO_2**		**VOCs**		**HAPs**		**CO_2**		**CH_4**		**N_2O**		**GHG**	
	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)
Boiler B-5A	13.12	28.45	11.02	23.90	1.00	2.16	0.08	0.17	0.72	1.56	0.25	0.54	15,657.45	33,944.33	0.30	0.64	0.03	0.06	15,673.62	33,979.39
Boiler B-6	8.68	28.36	7.29	23.82	0.66	2.16	0.05	0.17	0.48	1.56	0.16	0.53	10,357.76	33,834.10	0.20	0.64	0.02	0.06	10,368.46	33,869.05
Total	**21.80**	**56.81**	**18.31**	**47.72**	**1.66**	**4.32**	**0.13**	**0.34**	**1.20**	**3.12**	**0.41**	**1.07**	**26,015.21**	**67,778.44**	**0.49**	**1.28**	**0.05**	**0.13**	**26,042.08**	**67,848.44**

Total Change in Emission Rates																				
Emission Sources	**NO_x**		**CO**		**PM_{Total}**		**SO_2**		**VOCs**		**HAPs**		**CO_2**		**CH_4**		**N_2O**		**GHG**	
	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)	(lbs/hr)	(tons/year)
Boiler B-5A	-11.28	-78.35	1.02	-19.90	0.09	-1.84	0.01	-0.15	0.11	-1.11	0.03	-0.42	15,657.45	33,944.33	0.30	0.64	0.03	0.06	15,673.62	33,979.39
Boiler B-6	-0.50	-11.84	-0.39	-9.88	-0.04	-0.92	-0.01	-0.08	0.01	-0.49	-0.01	-0.21	10,357.76	33,834.10	0.20	0.64	0.02	0.06	10,368.46	33,869.05
Total	**-11.78**	**-90.19**	**0.63**	**-29.78**	**0.05**	**-2.76**	**0.00**	**-0.23**	**0.12**	**-1.60**	**0.02**	**-0.63**	**26,015.21**	**67,778.44**	**0.49**	**1.28**	**0.05**	**0.13**	**26,042.08**	**67,848.44**

Attachment O

Monitoring/Recordkeeping/Reporting/Testing Plans

Attachment O
Monitoring, Reporting, and Recordkeeping Plan

ICL will monitor and record natural gas usage by complying with the synthetic minor limitation for boilers B-5A and B-6. There are no proposed testing and reporting requirements associated with this permit update as neither of the boilers exceed the 100 MMBtu/hr threshold in 40 CFR 60 Subpart Db for promulgating such requirements.

Attachment P

Public Notice

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that ICL-IP America, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II Permit Administrative Update for a chemical manufacturing operation located on State Route 2, in Gallipolis Ferry in Mason County, West Virginia. The latitude and longitude coordinates are: 38.77303 and -82.20183.

The applicant estimates the maximum increase in potential in the following regulated air pollutants on a facility-wide basis will be:

Carbon Dioxide Equivalents (CO_2e) = 67,848.44 tpy

Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 15th day of May, 2017.

By: ICL-IP America, Inc.
John Kadlec
Director of Operations
11636 Huntington Road
Gallipolis Ferry, WV 25515

Attachment Q

Business Confidential Claims

Attachment Q
Business Confidential Claims

There is no confidential information associated with this permit application.

Attachment R

Authority Forms

Attachment R – Authority Form

This update does not include authority forms as the document is signed by the responsible official.

Attachment S

Title V Permit Revision Information

Attachment S

Title V Permit Revision Information

1. New Applicable Requirements Summary	
Mark all applicable requirements associated with the changes involved with this permit revision:	
☐ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR15)	☐ Nonattainment NSR (45CSR19)
☐ Section 111 NSPS (Subpart(s)_____)	☐ Section 112(d) MACT standards (Subpart(s)_____)
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☐ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ Compliance Assurance Monitoring (40CFR64) (1)
☐ NO_x Budget Trading Program Non-EGUs (45CSR1)	☐ NO_x Budget Trading Program EGUs (45CSR26)
(1) If this box is checked, please include **Compliance Assurance Monitoring (CAM) Form(s)** for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application).	

2. Non Applicability Determinations

List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination.

- SIP/FIP - Not specifically a list facility under either plan.
- NESHAP (45CSR15) – No NESHAP standards apply.
- Section 111 NSPS – No NSPS standards are applicable with the exception of 40 CFR 98 Subpart Db for Boiler B-5A.
- Section 112(g) - Case-by-case MACT – Facility is not a major source of HAP emissions.
- Section 112(j) - MACT Hammer – Facility is not a major source of HAP emissions.
- Section 129 – ICL-IP America, Inc. does not own a solid waste incinerator.
- Section 183(f) - Facility does not own or operate any tank vessels per section 183(f) and is located in an ozone attainment area.
- NAAQs - Facility is a permanent source and not a contemporary source.
- 45CSR19 - Facility is located in an attainment area.
- 45 CSR 2 – No added indirect heat exchangers.
- 45 CSR 4 - No imposed requirements per 45CSR4.
- 45 CSR 6 – There are no on-site incinerators, flares, or open burning associated with this update.
- 45 CSR 14 – Facility has no PSD permits and revision will not trigger thresholds.
- 45 CSR 25 – This update does not involve the storage, treatment, or disposal of hazardous waste.
- 45 CSR 27 – The emission of toxic air pollutants is unchanged by this administrative update.
- 45 CSR 28 – No emissions are banked or traded per this regulation.
- 45 CSR 1 - Boilers maximum heat imput are less than section 4's 250mm BTU/hr applicability.
- 45 CSR 19 - Facility has no PSD permits and revision will not trigger thresholds.
- Section 112(d) MACT standards – Facility is not a major source of HAP emissions.
- 112(r) RMP – Does not affect facility's RMP.
- Section 183 (e) - Facility does not produce a 183(e) listed consumer or commercial product.
- Stratospheric ozone (Title VI) – Revision does not involve any regulate pollutant.
- Emission Cap 45CSR section 30-2.6.1 - Facility has no emission cap agreement per section 2.6.1.
- 45CSR33 - Facility is not subject to the Acid Rain provisions listed in section 1.5.
- (40CFR64) – Monitoring requires have already been established.
- 45CSR26 - Boilers are not defined as EGU's.
- Section 112(i) - Early HAP reduction - Facility did not utilize the early reduction program.

☐ **Permit Shield Requested** *(not applicable to Minor Modifications)*

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

3. Suggested Title V Draft Permit Language

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision? ☐ Yes ☒ No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
R30-05300007-2015	08/11/2015	
R13-2438P	09/30/2013	
	/ /	

5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
NA	MM/DD/YYYY	
	/ /	
	/ /	

6. Change in Potential Emissions

Pollutant	Change in Potential Emissions (+ or -), TPY
NO_x	-90.19
CO	-29.78
SO_x	-0.23
PM_{10}	-2.76
$PM_{2.5}$	-2.76
VOC	-1.60
HAPs	-0.63
CO_{2e}	67,848.44

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

7. Certification For Use Of Minor Modification Procedures ***(Required Only for Minor Modification Requests)***

Note:	*This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows:*

i. Proposed changes do not violate any applicable requirement;

ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;

iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;

v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;

vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.

Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.

(Signed): _____ Date: 5 / 17 / 17

(Please use blue ink) *(Please use blue ink)*

Named (typed): **Roger D. Steele** Title: **Site Director**

Note: Please check if the following included (if applicable):

☐	Compliance Assurance Monitoring Form(s)
☐	Suggested Title V Draft Permit Language

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.