

## Ohio EPA Report - Environmental Citizens Advisory Committee

July 19, 2016

### Lima Refining Company/Husky Energy

#### Division of Air Pollution Control

1. A Title V air compliance inspection was conducted on June 22 and 23, 2016. An NOV was issued to Husky on July 6, 2016 for exceeding the ammonia injection feed rate to the electrostatic precipitation controlling the fluid catalytic cracking unit and for failure to submit a minor permit modification to incorporate various PTIs into the Title V permit.

#### Division of Materials and Waste Management

1. On March 1, 2016, Ohio EPA received a request for a class 1 permit modification requiring Director's prior approval to restore language to the renewal permit. The restored language defines responsibilities for the permitted facility. An approval was issued on May 5, 2016.
2. On April 6, 2016, Ohio EPA conducted a complaint investigation at Husky. The complaint alleged Husky was not properly managing oil and gas that was released on concrete. During the complaint investigation it was found that Lima Refinery cleans contaminated processing equipment on a concrete pad during plant shut downs. The contaminated liquid is collected and disposed of either as hazardous waste or through their waste water treatment system. No violations were noted and a notice of compliance letter was issued on April 26, 2016.
3. On June 9, 2016, Ohio EPA issued an Emergency Permit to Husky for the period of June 9, 2016 through September 2, 2016. The emergency permit allows the discharge and storage of D018 benzene contaminated waste waters into D-Pond in the event of a major rain event.

### PCS Nitrogen Ohio, L.P.

#### Division of Air Pollution Control

1. On April 21, 2016, an NOV was issued as a result of the March 30, 2016 Title V air compliance inspection. Violations included failure to submit LDAR reports in accordance with the federal rule and failure to maintain the appropriate emissions records for the ammonia production unit - reforming section. On April 7 and May 19, 2016, PCS submitted documentation showing that the violations were corrected. On May 24, 2016, a resolution of violations letter was issued.

2. On June 20, 2016, a PTI modification was issued draft to address changes made to the original ammonia expansion project. The project proposes to increase the maximum ammonia production rate, allow for downtime from two operations associated with the primary reformer and to increase the maximum heat input of the primary reformer. The 30-day public comment period ends July 25, 2016.

#### **Ineos Barex® USA LLC**

1. A hazardous waste compliance evaluation inspection was conducted on June 21 & 22, 2016. No violations were noted and a Notice of Compliance letter issued on July 12, 2016.

#### **ISP Lima LLC**

Nothing to report.

#### **Fort Amanda Specialties LLC (Akzo Nobel)**

Nothing to report.

#### **Acronyms**

AOGI - absorber offgas incinerator	BDO - butanediol
BP - British Petroleum	CEM - continuous emission monitor
CEMS - continuous emission monitors	CMS - corrective measures study
CO - Central Office	DAPC - Division of Air Pollution Control
DFFO's - director's final findings and order	ECAC - Environmental Citizens Advisory Committee
LDAR - leak detection and repair	LIU - Lima integrated unit division of hazardous waste management
NOD - notice of deficiency	NOV - Notice of Violation
NWDO - Northwest District Office	OAC - Ohio Administrative Code
PTI - permit to install	PTO - permit to operate
SOGI - scrubber off-gas incinerator	
NESHAPS - national emission standards for hazardous air pollutants	
NSPS new source performance standards	
MACT maximum achievable control technology	
NPDES - national pollutant discharge elimination system	
WTE - water treatment plant	
ERAC - Environmental Review Appeals Commission	



**Allen County Environmental Citizens Advisory Committee  
PCS Nitrogen Ohio, L.P.  
June 30, 2016 Report**

**General**

1. The plant completed an of the ammonia and urea units. Production capabilities have exceeded the design. A revision to the Title V permit is underway so that we can raise production to meet capabilities.

**Health and Safety**

1. Year to date, the site had 4 recordable injuries. 2 hand injuries and 2 foot injuries. One of the hand injuries became the first lost time injury since 2001.
2. The site had a third party safety audit

**PSM**

1. There has been no reportable quantity releases during 2016.
2. A fire on a process gas compressor resulted in a plant wide alarm. Shawnee Township Fire Dept. was already on the PCS site for joint training exercises and assisted the PCS Emergency Response Team in putting the fire out.
3. 1 other ammonia leak occurred when a transmitter started leaking while work was being performed on it. However, the leak was minor and blocked in within 5 minutes.

**Environmental**

**AIR**

1. Ohio EPA conducted a routine air inspection on March 30.
2. EPA Region 5 conducted an air inspection on June 13.
3. Submitted a permit application to raise the ton per day limit on the ammonia plant, the plant is running better than expected after the expansion. Also permitted down time for preventative maintenance with some new equipment as a result of the expansion.
4. A stack test was completed on the reformer, Ohio EPA accepted the test results as complete.
5. The first quarter Title V Deviation Report was submitted.
6. The Fee Emission Report and Emission Inventory Summary was submitted.
7. The Annual Compliance Certification was submitted.

**WATER**

1. The March – May DMRs were submitted.
2. Received the draft NPDES Permit from Ohio EPA. The date of public notice was May 27<sup>th</sup>. PCS and US EPA submitted comments on the draft NPDES permit. Ohio EPA is currently reviewing the comments received.

3. Received approval from Ohio EPA to neutralize and discharge the #3 Boiler cleaning chemicals through the 001 Outfall.

**RCRA**

1. Completed a hazardous waste shipment in May.

**SARA**

1. The Toxic Release Inventory was submitted.

**Acronyms**

CEMS	Continuous Emission Monitor System
DEF	Diesel Emission Fluid
DMR	Discharge Monitoring Report
GHG	Green House Gas
HAZOPS	Hazard and Operable Study
LDAR	Leak Detection and Repair
LEPC	Local Emergency Planning Committee
MON	Miscellaneous Organic NESHAP
NPDES	National Pollutant Discharge Elimination System
OEPA	Ohio Environmental Protection Agency
PMP	Pollutant Minimization Program
PSM	Process Safety Management
PTI	Permit to Install
RATA	Relative Accuracy Test Audit
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantity
SERC	State Emergency Response Commission
TRI	Toxic Release Inventory

Allen County Environmental Citizens Advisory Committee  
INEOS Lima Chemicals Status Report  
June 30, 2016

**Health, Safety and Environment Performance Summary**

<i>Ineos and PCS Nitrogen Facility*</i>	<u>2007</u>	<u>2008*</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
OSHA Recordables	3	4	1	2	0	5	5	1	6	0
DAFW Injuries	0	1	0	1	0	2	1	0	0	1
RQ Releases	5	4	4	0	1	2	1	2	2	0
UIC Permit % Compliance	100%	99.99%	100%	99.99%	99.99%	100%	100%	99.99%	99.99%	100%
AOGI Service Factor	99.8%	99.6%	99.7%	100%	100%	99.99%	99.99%	100%	99.9%	100%

*\* Beginning 2008, statistics are for the INEOS facility only. PotashCorp data is reported separately since INEOS is no longer their Agent.*

**Safety:**

- On May 2 Lima INEOS received an award from the Ohio Chemical Technology Council. Each year they recognize members who have demonstrated excellence in environmental, health, safety and security performance. The Lima team has made numerous upgrades to the site security program including access control improvements, surveillance systems and strengthened perimeter barriers. In 2015, a Department of Homeland Security assessment audit results suggested the current security measures were substantially more than expected based on the site's level of risk. Even then, additional measures were put in place such as replacing the entire perimeter security system and installing a new access control system.
- On May 2, the Bureau of Worker's Compensation (BWC) held the annual Safety Council Leaders Conference in Columbus. The West Central Ohio Safety Council (WCOSC) received the fourth place spot out of 83 safety councils statewide because of the council's exceptional efforts in educating members on effective workplace safety and health and wellness programming. Our Safety Engineer, Craig Hohenbrink, is president of the WCOSC.
- Craig Hohenbrink participated in the Allen County ER drill May 26 which was a table-top drill simulating a crude oil spill.
- The quarterly ER drill on tornados was rolled out to all site personnel.

**Environmental:**

- On June 21 we received the *draft* renewal permits for our four Class I Hazardous Underground Injection Control deep wells. The Public Hearing was held on July 12. The Ohio EPA presented information about the draft permits and answered questions. No testimony or comments were made by any of the attendees.
- On June 21-22 the annual hazardous waste inspection was conducted by the Ohio EPA. There were no findings.
- Hazardous Materials Identification System (HMIS) HAZCOM labeling has been updated to the new standard.

**PSM – Process Safety Management:**

- An internal audit (20 Principles) was conducted in Lima the week of June 13.

## Acronyms

AOGI	Absorber Off Gas Incinerator
BSI	British Standard Institute
BST	Behavioral Science Technology
CAPU	Continuous Acetonitrile Purification Unit
CEM	Continuous Emission Monitor
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGA	Cylinder Gas Audit
CWC	Chemical Weapons Convention
DAFW	Days Away From Work
DCS	Distributed Control System
DHS	Department of Homeland Security
EBA	Emergency Breathing Apparatus
EMA	Emergency Management Agency
FOV	Finding of Violation
FRC	Flame Resistant Clothing
HAZOP	Hazard and Operability Study
ISO	International Organization of Standardization
LASER	Lima Area Security and Emergency Response Team
LDAR	Leak Detection and Repair
LEPC	Local Emergency Planning Committee
LOPA	Layers of Protection Analysis
LOTO	Lock Out Tag Out
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
OAC	Ohio Administrative Code
OCTC	Ohio Chemistry Technology Council
ODH	Ohio Department of Health
OEL	Open Ended Line
OEPA	Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
MIT	Mechanical Integrity Test
MOC	Management of Change
NIMS	National Incident Management System
OEL	Open Ended Lines
PHA	Process Hazard Analysis
PPE	Personal Protective Equipment
PSM	Process Safety Management
PSV	Pressure Safety Valve
PTI	Permit to Install
RATA	Relative Accuracy Test Audit
RCRA	Resource Conservation and Recovery Act
RQ	Reportable Quantity
SARA	Superfund Amendments and Reauthorization Act
SCBA	Self Contained Breathing Apparatus
SERC	State Emergency Response Commission
SHE	Safety, Health & Environmental
SIL	Safety Integrity Level
SWMU	Solid Waste Management Unit
TAR	Turnaround
UIC	Underground Injection Control
VOC	Volatile Organic Compounds
WDW	Waste Disposal Well (Deepwell)

**Allen County Environmental Citizens' Advisory Committee  
Husky - Lima Refinery Status Report**

**1. EXCEEDANCES/RELEASES**

The table below summarizes the last four years of environmental performance.

	2013	2014	2015	2016
<b>Air Overall Excess Emissions Compliance</b>	99.2%	99.5%	99.3%	98.4%
<b>SARA Reportables</b>	4	7	7	1
<b>CERCLA Reportables</b>	2	6	2	1
<b>NPDES Reportables</b>	2	4	1	1
<b>Agency Reportable Spills (including RCRA)</b>	0	1	3	0

NA = Not Available

**Reportable Release Summary**

Date	Release Type	Description	Emissions/Release		
			SO <sub>2</sub> (tons)	NO <sub>x</sub> (tons)	BOD (Kg/day)
3/15/16	NPDES	The Biochemical Oxygen Demand loading limit 1,047 (Kg/day) was exceeded twice due to the organic loading at the AWWTP as process units were taken out of service and chemically cleaned for the turnaround.	NA	NA	1,074 1,225
5/2/16	CERCLA	The reportable quantity (RQ = 1,000 lbs.) for NO <sub>x</sub> was exceeded at the Reformer Furnace due to damper for the SCR not opening automatically.	NA	1.22	NA
5/12/16	SARA	A SARA SO <sub>2</sub> release was reported for exceeding the 500 lb. reportable quantity (RQ) for the Acid Gas Flare.	4.8	NA	NA

Reportable Quantities    SO<sub>2</sub> = 500 lbs    H<sub>2</sub>S = 100 lbs    H<sub>2</sub>SO<sub>4</sub> = 1,000 lbs    NO<sub>x</sub> = 1,000 lbs

**2. Permits/Projects**

No.	Description	Permit Application Type	Permit Issued Final
1	Wastewater Permit-to-Install for a new sewer at the Isocracker	Air	Yes
2	Wastewater Permit-to-Install for a new sewer for the Lube Oil Skid Project.	Air	Yes
3	Emergency Hazardous Waste Permit from the Ohio EPA for the overflow of storm water from G-Tank to D Pond.	RCRA	Yes

**Agency Inspections/Enforcement/Rulemaking**

- The Ohio EPA issued a follow-up report for the complaint investigation that was conducted on April 6th for alleged non-compliance for managing waste materials in the refinery. OEPA did not find evidence to support the complainant's allegations. As there were no violations noted OEPA considers the investigation closed.
- The Ohio EPA was on-site June 22<sup>nd</sup> and 23<sup>rd</sup> to conduct the annual air compliance inspection for the refinery. They conducted a field walk-thru and reviewed numerous records. There were no findings; however, they have requested additional information pertaining to 9 emissions units. A response was prepared to meet the July 7<sup>th</sup> due date.
- The U.S. EPA is investigating the refinery's compliance relative to three EPCRA/CERCLA releases that occurred between March 2013 and July 2015. Two of the incidents involved the release of hydrogen sulfide above the 100 lb. reportable quantity (RQ = 100 lbs.) and the other was for an exceedance of the sulfur dioxide RQ (500 lbs.). EPA issued a letter requesting additional information about these incidents and the response deadline is August 5<sup>th</sup>.

Acronyms			
AFE	Authorization for Expenditure	MBPD	Thousand barrels per day
AFU or DAF	Air Flotation Unit (Dissolved Air Flotation)	mg/L	Milligram per liter
AWWTP	Advanced Wastewater Treatment Plant	MSOR	Maximum Source Operating Rate
BDO	Butanediol	NESHAP	National Emission Standards for Hazardous Air Pollutants
BEHP	Bis(2-ethylhexyl) Phthalate	NOV	Notice of Violation
Btu	British Thermal Unit	NOx	Nitrogen Oxides
CEMS	Continuous Emission Monitor System	NPDES	National Pollution Discharge Elimination
CERCLA	Comprehensive Environmental, Response, Compensation and Liability Act	NSPS	New Source Performance Standard
CO	Carbon Monoxide	OEPA	Ohio Environmental Protection Agency
DHT	Diesel Hydrotreater	PSV	Pressure Safety Valve
DMRQA	Discharge Monitoring Report Quality Assurance	PTI	Permit to Install
EHS	Environmental, Health & Safety	RCFA	Root Cause Failure Analysis
EPA/USEPA	Environmental Protection Agency	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RCRA	Resource Conservation and Recovery Act
ERAC	Environmental Review Appeals Commission	SARA	Superfund Amendments and Reauthorization Act
ESP	Electrostatic Precipitator	SCR	Selective Catalytic Reduction
FCCU	Fluidized Catalytic Cracking Unit	SGP	Saturated Gas Plant
HDS	Hydro-Desulfurization	SO <sub>2</sub>	Sulfur Dioxide
H <sub>2</sub> S	Hydrogen Sulfide	SRU	Sulfur Recovery Unit
LIU	Lima Integrated Unit	TRI	Toxic Release Inventory
KHT	Kerosene Hydrotreater	TSCA	Toxic Substance Control Act
LDAR	Leak Detection and Repair	VOC	Volatile Organic Compound

**Allen County Environmental Citizen's Advisory Committee**  
**ISP Status Report (January 2015 – June 2015)**  
19 July 2016

1. SAFETY/SECURITY

	2014	2015	2016 YTD
OSHA recordable – ISP	0	0	0
OSHA recordable - Contractors	0	0	0

2. RELEASES

- No RQ incidents (YTD = 0)

3. AIR

- The following reports were submitted to Environmental Protection Agency (EPA):
  - Emergency planning and hazardous chemical inventory
  - Greenhouse Gas
  - Emissions inventory
  - Title V Compliance Certification
  - Toxic Release Inventory (TRI 313)

4. WATER

- Nothing to report

5. RESOURCE CONSERVATION AND RECOVERY ACT

- Nothing to report

6. OTHER

- Nothing to report

