

**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%	94.4%
<b>SARA Reportables</b>	4	7	7	7
<b>CERCLA Reportables</b>	2	6	2	4
<b>NPDES Reportables</b>	2	4	1	2
<b>Agency Reportable Spills (including RCRA)</b>	0	1	3	0

**Reportable Release Summary**

**Emissions/Release**

Date	Release Type	Description	Selenium (ppb)	SO <sub>2</sub> (tons)	H <sub>2</sub> S (tons)	H <sub>2</sub> SO <sub>4</sub> (tons)
12/21/16	SARA (SO <sub>2</sub> ) CERCLA (All 3)	Due to freezing of a propane line on the Northside, the north flare gas recovery system was shutdown, resulting in reportable releases due to flaring.	NA	45,782	494	1,704
12/29/16	SARA (SO <sub>2</sub> )	South Flare gas Recovery System was shutdown to address a split in the 2" line to the flare off the water boot of the DHT Product Stripper Reflux Drum, resulting in a reportable release due to flaring.	NA	1,210	NA	NA
12/31/16	NPDES Exceedance	The average monthly selenium concentration for December was 12.6 ppb, which exceeds the limit of 12.0 ppb in the NPDES Permit.	12.6	NA	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  
NA = Not Applicable

**2. Permits/Projects**

No.	Description	Permit Application Type	Permit Issued Final
1	Wastewater Permit-to-Install applications for the following projects: <ul style="list-style-type: none"> <li>• Pumphouse Sump Water Discharge</li> <li>• Cavern 305 Area Drainage</li> <li>• Sludge Thickener Improvements</li> <li>• Reverse Osmosis Building West Area Sewer</li> <li>• Sulfur Block Area Sewers</li> <li>• Reverse Osmosis Building</li> </ul>	Water	Yes Yes Yes Yes Yes No
2	Emergency Hazardous Waste Permit from the Ohio EPA for the overflow of storm water from G-Tank to D Pond.	RCRA	Yes
3	The permit-to-drill application for the deep-well injection project was updated in response to comments from OEPA and ODNR, and submitted for review/approval. A public hearing will be scheduled and conducted by the Ohio EPA.	UIC	No

**Agency Inspections/Enforcement/Rulemaking**

1. The Ohio EPA issued a Notice of Violation (NOV) on October 4<sup>th</sup> stating that Husky failed to certify the CEMS for the LIU, FCC and SRU Flares within 180 days of startup. As such they consider the periods of operation without certified CEMS as downtime. They have requested updated deviation reports. Responses were submitted November 3<sup>rd</sup> and December 16<sup>th</sup>.

2. The Ohio EPA was on-site August 18<sup>th</sup> and 19<sup>th</sup> to conduct the annual RCRA Hazardous Waste inspection for the refinery. The inspection consisted of a field walk-thru of various areas of the plant where wastes are managed, along with a detailed records review. There were a few deficiencies noted pertaining to labeling and training. A resolution of violation letter was issued December 7<sup>th</sup> by the Ohio EPA upon the deficiencies being corrected.
3. The Ohio EPA made an unannounced visit to the refinery on 12/22/16 in response to the calls to the Central Office of OEPA concerning potential health hazards from the FCC flaring. OEPA came away from the meeting assured that the flaring did not pose a health hazard to the community. Husky conducted community monitoring twice/day until the flaring ended.
4. The Ohio EPA issued a Notice of Violation (NOV) on November 29<sup>th</sup> for excess emissions and CEMS downtime from the heaters at the Isocracker and Reformer Units, and excess emissions from the LIU Flare. A response was submitted January 12, 2017.

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 Citizens Advisory Committee  
INEOS Lima Chemicals Status Report  
September 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	2
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%	99.99%

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

The Barex Production unit has produced the last volume of product and has been shut down and isolated from the rest of the plant. The demolition contractor began work on December 5<sup>th</sup>. The closure / demo work is expected to take about 6 months.

Work has begun to add three (3) additional lanes to the INEOS' entry boulevard to provide additional truck lanes for PCS during their spring busy season.

**Safety:**

- There were two recordable injuries that occurred during 4Q16:
  - ✓ 10/31/2016 – A maintenance technician injured their index finger while performing PM on blower belts.
  - ✓ 12/8/2016 – Operator sprayed with caustic mist.
- The Ohio Department of Health conducted a radiation audit October 18; they were very complimentary of our program.
- ERT Refresher Training (8-hour) was conducted in October. This training strengthens our ability to respond to on-site incidents.
- Radiation Technician training was conducted on site October 27.
- 24-hour Emergency Response Training was conducted on-site by the University of Findlay in September, October, and December.
- The annual Incident Command refresher training was conducted by Shawnee Township Fire Chief on November 30 for the Lima Leadership teams at INEOS and Ashland (BDO).
- The flu vaccine was made available to employees beginning mid-October.

**Environmental:**

- Agreement was received from the Department of Justice to terminate Lima's LDAR Consent Decree.
- Received permit violation from Ohio EPA 10/7/2016. Continuous flow was interrupted on deep well #4 when flow meter was removed and replaced 7/2/2016. The pump was shut down at the time but OEPA interpreted the rule to indicate there has to be a flow measurement even if the pump is shut down.
- On Nov. 10 the Ohio EPA conducted the annual Underground Injection Control inspection; there were no findings.
- The Risk Management Plan was updated due to Barex closure.

**PSM – Process Safety Management:**

- A BSI ISO Audit was conducted Nov. 2-3, 2016. We will be moving to the ISO 9001:2015 standard in 2017.
- ARM Consulting conducted an ISO 9001:2015 gap analysis in December.

## 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 Citizen's Advisory Committee ISP Status Report (July 2016 – December 2016)

17 January 2017

## 1. SAFETY/SECURITY

	2015	2016	2017 YTD
OSHA recordable – ISP	0	0	0
OSHA recordable - Contractors	0	0	0

## 2. RELEASES

- No RQ incidents (CY2016 = 0)

## 3. AIR

- In August, we successfully passed the Title V inspection without any notice-of-violations (NOVs). The inspector conducted a field inspection and reviewed two years of records.
- In August, our continuous emission monitoring system (CEMS) for nitrogen oxides (NOx) has successfully passed the Relative Accuracy Test Audit (RATA).
- As part of our routine maintenance of environmental control equipment, the Plant were down between October and September for 30+ days to service the scrubber off-gas boiler (SOGB), flare, and liquid-storage tank with floating roof.

## 4. WATER

- Nothing to report

## 5. RESOURCE CONSERVATION AND RECOVERY ACT

- Nothing to report

## 6. OTHER

- An external Responsible Care 14001 audit (by a third party auditor) is schedule for January to maintain certificate.

**Allen County Environmental Citizens Advisory Committee  
PCS Nitrogen Ohio, L.P.  
December 31, 2016 Report**

**General**

1. The plant continues to run well. We anticipate the start up of a new boiler by the end of November.

**Health and Safety**

1. The site had 1 recordable injury during the last quarter. An employee suffered some minor burns when he had some acid drip on him.

**PSM**

1. There have been no reportable quantity releases during 2016.
2. The site has had no NOV's for the year.

**Environmental**

**AIR**

1. The third quarter Title V Deviation report was submitted.
2. Received PTI for 2,600 tpd ammonia production, PCS was required to submit an Alternative Flare Monitoring Program because thermocouples need to be installed, OEPA has approved the AFMP.
3. Received approval for Title V Quarterly Deviation report for the new boiler.
4. Submitted a permit application for a new bagger for the prill warehouse.

**WATER**

1. The September, October, November DMRs were submitted.
2. The Proposed Final NPDES Permit was submitted by OEPA to USEPA in September. USEPA objected to total phosphorus requirements in the permit and OEPA withdrew the permit in December. PCS and OEPA will work together to resolve the total phosphorus permit requirements.
3. Received approval from OEPA to use water treatment chemical ChemTreat CL-206 and for Ineos to use water treatment chemical Nalco 3DT396.
4. Continued the pilot test of the process sewer reverse osmosis treatment system.

**RCRA**

1. Completed hazardous waste shipments in October and December.

**SARA**

1. The TRI report was submitted.

2. The annual continuous emission releases was completed.

TSCA

1. The Form U was completed and 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
NOV	Notice of Violation
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



## Ohio EPA Report - Environmental Citizens Advisory Committee

January 17, 2017

### **Lima Refining Company / Husky Energy**

#### Division of Environmental Response and Revitalization

1. A notice of violation (NOV) was issued on September 30, 2016 for violation noted during an inspection that was conducted at the facility on August 18, 2016. Violations included failure to evaluate spent aqueous parts washer solvent and spent solvent contaminated wipes, and failure to properly label boxes of universal waste lamps. A resolution of violation letter was issued to the facility on December 7, 2016.
2. On October 21, 2016, Ohio EPA issued an Emergency Permit to discharge storm water and process water from the facility's open sewers to D-Pond. The Emergency Permit expires on January 19, 2017.
3. On November 3, 2016, Lima Refinery submitted a class 2 permit modification to modify the sampling and emergency permit procedures for the management of excess water generated during storm events. This permit modification was withdrawn on December 15, 2016.

#### Division of Air Pollution Control

1. On November 29, 2016, a notice of violation was issued for excess emissions and downtime exceedances. Corrective actions were completed for each of the excess emissions and downtime violations.

### **PCS Nitrogen Ohio, L.P.**

No information to report.

### **ISP Lima LLC**

No information to report.

### **Ineos Barex® USA LLC**

#### Division of Air Pollution Control

1. On December 13, 2016, INEOS Barex® provided formal notification that the last day of production was September 30, 2016 and that the last remaining air pollution source was shut down on November 28, 2016. The facility is considered to be permanently shut down but will submit the remaining deviation reports, fee emission report and annual Title V compliance certification.

## Ineos Nitriles USA LLC

No information to report.

## Fort Amanda Specialties LLC (Akzo Nobel)

### Division of Environmental Response and Revitalization

1. A compliance evaluation inspection was conducted at Fort Amanda Specialties on November 2, 2016. One violation for failure to identify the location of emergency equipment in the facility contingency plan was noted in a notice of violation letter dated November 18, 2016. This violation has been corrected and a return to compliance letter will be issued to the facility.

#### 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 orders	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	