



## Remediation Management - Lima, Ohio

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### **Allen County**

### **Environmental Citizens Advisory Committee Report**

**January 21, 2014**

#### **Health and Safety**

- There were no incidents or reportable injuries in 2013 or January 2014.

#### **Buckeye Road Landfill (BRLF)**

Annual Inspection by ACHD December 6, 2013:

- The inspection identified one area for repair on the north slope of Cell 2.
- Repair activities are scheduled for the Spring of 2014.

Monitoring Activities:

- December Semi-Annual Landfill Gas Monitoring Event: No methane concentrations detected.

#### **E-Pond, L-5 Landfill, Land Treatment Unit (LTU) Properties**

- Vegetation Management: Control invasive species on prairies at L-5, E-Pond and LTU conducted through October 2013.
- Annual pump system maintenance for the L-5 Landfill dewatering system completed on October 24, 2013. No issues identified.

#### **RCRA Corrective Action**

- RCRA Permit Renewal Application (for on-site properties) submitted to Ohio EPA on December 19, 2012.

#### **RCRA Closure Activities Primary Pond**

- Second semi-annual groundwater monitoring event completed October 21, 2013. No Issues Identified.
- Quarterly RCRA Cap Inspection Performed on November 13, 2013. No Issues Identified.



## **Fort Amanda Specialties LLC**

*(A joint venture of AkzoNobel and BASF Corporation)*

Brett Anderson  
HSE&S Manager

January 21, 2014

To: Environmental Citizens Advisory Council

Cc: J. Claessen, B. Anderson

Re: **ECAC Meeting January 21, 2014**

### **General News**

- The plant is scheduled to run at full rates pending raw material availability.
- Complications from the “polar vortex” event shut the facility down the 2<sup>nd</sup> week of January. There was no water available at the facility (excepting firewater) and limited steam availability during the week of January. Plant currently running at ½ rates with assistance from Ineos, Husky and Lima City Water Department. Trucking in 8-10 trailers of water per day just to run at these low rates.
- AkzoNobel is designing a project for a new unique export product. Construction will begin in April and start-up in late fall.

### **Environmental Systems**

- No new issues to report.

### **Safety Performance**

- Contractors achieved a milestone of 5+ years since the last recordable injury (8/1/2008).
- A week long tri-annual HSE&S audit was completed by corporate global audit team in October with no major findings.
- One recordable injury in October 2013: An operator experienced an acute upper left back strain as he started climbing stairs outside. He was not carrying anything at the time and was doing nothing unusual.
- One recordable injury in January 2014: Operator slipped on ice and fell. Mild back strain resulted that required no medications, but resulted in some treatment by a chiropractor..

### **Security and Regulatory**

- Project initiated to upgrade the site security camera system.



## **Lima Refining Company**

A Husky Energy Inc. Subsidiary

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1150 South Metcalf Street  
Lima, OH 45804-1145

Bus: (419) 226-2300

January 14, 2014

Ms. Kathy Luhn  
Allen County Environmental Citizens Advisory Committee  
C/o Allen County Health Department  
P.O. Box 1503  
Lima, OH 45802

**SUBJECT: Husky - Lima Refinery Highlights**

Dear Ms. Luhn:

Attached is the Husky Lima Refinery status report for our meeting on January 14, 2014.

If you have any questions regarding this report, please give me a call at (419) 226-2645.

Sincerely,

Paul G. Logsdon  
Health, Safety & Environmental Director

### **Attachments**

xc: ECAC

Michael D. Edmiston, PhD  
Gary Sheely  
Eric Getz - OEPA  
Steve Kayatin  
William Kelly, RS  
Michael Wildermuth  
Connie J. Miller  
Russ Decker

### Other

Roy Warnock - Husky  
Pat Conrath - Husky  
David Stein - Husky  
Gary Vonderembse - Husky  
L.D. Pierce - Husky  
Beth Keehn - Husky

**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.

	2011	2012	2013	2014
Air Overall Excess Emission Compliance	99.5%	99.8%	99.2%	TBD
SARA Reportables	8	6	4	2
CERCLA Reportables	2	2	2	2
NPDES Reportables	2	5	2	0
RCRA Reportables	0	0	1	0
Agency Reportable Spills	0	0	0	0

**SARA/CERCLA Reportable Releases**

**10/12/2013 Reportable Air Incident (SARA SO<sub>2</sub> SRU Claus 1)**

The SRU amine acid gas flow was interrupted during the start-up of the Sour Water Stripper, causing the Claus 1 Unit to trip off due to low combined air flow. Subsequently, it was discovered that the diverter valve to the Incinerator failed to open during the unit trip. The SO<sub>2</sub> emissions from the Acid Gas Flare and the emissions limit exceedances from the Incinerator resulted in a reportable quantity (RQ) of SO<sub>2</sub> (1,798 lbs).

**12/4/2013 Reportable Air Incident (SARA SO<sub>2</sub> Release – FCC Wet Gas Compressor)**

The wet gas compressor at the FCC tripped off, resulting in flaring which exceeded the reportable quantity for SO<sub>2</sub> (4,567 lbs). The original emissions calculations demonstrated that the RQ's for H<sub>2</sub>S and sulfuric acid were exceeded; however, it was later determined not to be the case, and those notifications were recanted in writing.

**1/6/2014 Reportable Air Incident –SARA/CERCLA Release (SRU TGTU)**

The TGTU quench water pump discharge froze which lead to a failure to properly treat acid gas. As a result, SRU permit limits were exceeded and various agencies were notified of a SARA release for SO<sub>2</sub> and a SARA/CERCLA release for H<sub>2</sub>S.

**1/12/2014 Reportable Air Incident - SARA/CERCLA Release (Power Outage)**

A power outage caused by the failure of a substation transformer affected several operating units, and the associated flaring resulted in the following reportable releases.

- SARA SO<sub>2</sub> and SO<sub>2</sub>/H<sub>2</sub>S/H<sub>2</sub>SO<sub>4</sub>/emissions limits/odor complaint
- SARA/CERCLA H<sub>2</sub>S
- SARA/CERCLA H<sub>2</sub>SO<sub>4</sub> (sulfuric acid)

**NPDES Reportable Releases**

There were no NPDES permit exceedances or unauthorized discharges.

**RCRA Reportable Releases**

**10/6/2013 Agency Reportable Spill (Overflow of Tank 76 K-listed Hazardous Waste)**

During a heavy rain event, the flow of oil/water to Tank 76 was significant enough to cause the tank to overflow to grade. There were approximately 15 bbls of slop oil emulsion (K-listed hazardous waste) released to the ground, and was all contained on-site.

### **Community Complaints**

- On 12/16/2013, there were odor complaints received from Shawnee Township residents via STFD, Ineos, and Potash that were attributed to emissions vented from Tank 85 (Wastewater Slop Oil).
- On 1/6/2014, the Dominion Gas Company called to report that they had received several complaints for mercaptan odors east of the refinery. There were no LPG trucks loaded prior to the notification, and no other source was identified.
- On 1/7/2014, a city resident due north of the refinery (Weadock Avenue) called regarding sulfur odors. The source of the odors was determined to be from the SRU incident. The area north of the refinery was monitored, and there were no detectable readings for SO<sub>2</sub> or H<sub>2</sub>S.
- On 1/9/2014, complaints of mercaptan odors were received from Ineos and Potash facilities just west of the refinery. No refinery sources were identified.
- On 1/13/2014 odor complaints were called in to Dominion Gas Company from residents north of Robb Park area. The source was determined to be the aeration basins at the refinery wastewater treatment unit, as a result of the cold weather.

### **2. Air Permits/Projects**

- a. The Ohio EPA issued the final Permit-to-Install (PTI) for the Crude Oil Flexibility Project.
- b. Performed Relative Accuracy Test Audits (RATA) for the Continuous Emissions Monitors on (CEMS) on various heaters and flare system.
- c. The Ohio EPA authorized the request to conduct scheduled maintenance for work associated with the NESHAP Compressor. The work was completed and there were no emissions to the atmosphere during the equipment outage.

### **3. Wastewater Permits/Projects**

- a. Permits-to-Install (PTI) issued by the Ohio EPA
  - i. The sewers for the Amine Tank Project.
  - ii. The revamp of a section of the water return line from G-Tank and the impounding ponds.
- b. Permit-to-Install applications submitted to the Ohio EPA
  - i. SRU drainage project
  - ii. Modifications to the AWWTP for the permanent installation of the Siemens filtrate routed to the E-Tank Sump.
  - iii. The NESHAPs Blower Project.

### **4. RCRA Permits/Projects**

- a. The Ohio EPA issued the approval to conduct the Seismic Survey Plan that is required to be completed for prior to the agency approving the Permit-to-Drill for the deep wells that will be used for the Water Reuse Project.

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

**Allen County Environmental Citizen's Advisory Committee**  
**ISP Status Report (Oct-2013 – Dec-2013)**  
17 January 2014

1. SAFETY/SECURITY

	2011	2012	2013
OSHA recordable – ISP	0	0	0
OSHA recordable - Contractors	0	0	0

2. RELEASES

- No RQ incidents (2013 = 0)

3. AIR

- ISP received a Notice of Violation for exceeding the particulate matter (PM) limitation during April Stack Test at our boiler while injecting liquid organics. ISP has agreed with Ohio EPA to not inject liquid organics into the boiler until another stack test is conducted that demonstrates compliance with the PM emission limitation.

4. WATER

- Nothing to report

5. RESOURCE CONSERVATION AND RECOVERY ACT

- Nothing to report

6. OTHER

- Nothing to report



January 17, 2014

Ms. Kathy Luhn  
Allen County Environmental Citizens Advisory Committee  
c/o Allen County Health Department  
P. O. Box 1503  
Lima, Ohio 45802

Dear Ms. Luhn:

Attached is the INEOS Lima Chemicals status report update for the fourth quarter of 2013. Paper copies will be available at the January 21, 2014 meeting.

If you have any questions regarding the report, please contact me at (419) 226-1351.

Sincerely,



Joseph F. Bianco  
SHE Manager

cc: ECAC Members



Allen County Environmental Citizens Advisory Committee  
INEOS Lima Chemicals Status Report  
December 31, 2013

**Health, Safety and Environment Performance Summary**

<i>Ineos and PCS Nitrogen Facility*</i>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008*</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
OSHA Recordables	8	2	3	4	1	2	0	5	5
DAFW Injuries	0	0	0	1	0	1	0	2	1
RQ Releases	15	8	5	4	4	0	1	2	1
UIC Permit % Compliance	99.99%	100%	100%	99.99%	100%	99.99%	99.99%	100%	100%
AOGI Service Factor	99.81%	99.72%	99.8%	99.6%	99.7%	100%	100%	99.99%	99.99%

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

**Safety:**

- A first aid incident occurring 9/22/2013 was changed to a lost-time incident due to shoulder surgery performed on 1/9/2014.
- Lima incurred three OSHA recordable injuries during the 4<sup>th</sup> quarter:
  - ✓ On 11/12/2013 an operator twisted their ankle while exiting a forklift. They were placed on restricted duty.
  - ✓ On 12/13/2013 a contractor was struck by a piece of falling metal while cutting up an old tank. The job was stopped until a better Safe Plan of Action could be determined.
  - ✓ On 12/23/2013 an operator was hit in the hardhat by a falling piece of fireproofing.
- On 01/03/2014 an SO<sub>2</sub> cylinder plug failed and resulted in a vapor release. On 1/6/2014 a plug failed again, but there was no exposure. Both incidents resulted in RQs of sulfur dioxide (SO<sub>2</sub>).
- There were two first aid incidents in the fourth quarter:
  - ✓ On 12/10/2013 a lab technician picked up a tool that was hot enough to cause a burn on the skin.
  - ✓ On 12/17/2013 a contractor had a foreign body in their right eye which was flushed and removed.
- A Behavior Based Safety Program is being put into place across Nitriles. We are working with a consultant from Optimum Performance Solutions. This program will be led by the hourly workforce.
- Annual Emergency Response refresher training was conducted in September.
- All INEOS employees participated in the annual Safety Training Day in September and October and included hazard recognition training and CPR re-certification.

**Environmental:**

- A radiation source was removed from the plant in September.
- A Notice of Deficiency was received regarding the Hazardous Waste Part B Permit Renewal application. Additional information was provided to the Ohio EPA as requested. A return to compliance was received 11/14/2013.
- The annual comprehensive UIC inspection was conducted 11/12/2013. No violations were observed.
- The emission limitation for sulfur dioxide (SO<sub>2</sub>) was modified for the Acrylonitrile Plant Recovery and Purification Section. An updated Permit to Install was received 12/31/2013.

**PSM – Process Safety Management:**

- The bi-annual ISO audit was conducted by BSI on November 20-21. One minor non-conformance was found regarding lack of documentation around customer complaints.

## 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
LASER	Lima Area Security and Emergency Response Team
LDAR	Leak Detection and Repair
LEPC	Local Emergency Planning Committee
LOPA	Layers of Protection Analysis
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	Occupational Exposure Limits
OEPA	Ohio Environmental Protection Agency
OSHA	Occupational Safety and Health Administration
MIT	Mechanical Integrity Test
MOC	Management of Change
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
VPP	OSHA Voluntary Protection Program (a partnership between OSHA, the company and our USW Union Workforce)
WDW	Waste Disposal Well (Deepwell)

**Allen County Environmental Citizens Advisory Committee  
PCS Nitrogen Ohio, L.P.  
December 31, 2013 Report**

**General**

1. PCS hired a SHE Co-Op from the University of Findley to work with the department on assignments.
2. An offer has been made to fill the vacant safety specialist position.

**Health and Safety**

1. PCS conducted the annual Safety & Environmental Training Day for all employees and nested contractors in November and early December.
2. The site completed 12 years without a lost time injury to an employee or contractor.
3. Finished 2013 with 3 recordable injuries:
  - a. A contract loader sustained a lower leg injury walking through deep snow.
  - b. A PCS operator sustained a lower leg injury when she caught her toe on a deck plate.
  - c. A PCS operator got some foreign matter in his eye and received antibiotics.

**PSM**

1. No PSM incidents to report.

**Environmental**

**AIR**

1. Third Quarter Deviation Report submitted in October.
2. The Ohio Environmental Protection Agency (EPA) provided PCS a draft on the Permit to Install (PTI) for the expansion project. PCS provided comments back to the Ohio EPA for incorporation into the draft PTI. PCS requested a public meeting regarding the PTI, which took place on January 9, 2014. Received notice today (1/21/14) that the PTI has been issued.
3. The Title V Permit Renewal is due June 17, 2014, work is underway to complete the application for a timely submittal.

**WATER**

1. The Discharge Monitoring Reports (DMR) for October, November, and December have been submitted.
2. PCS Nitrogen, the City of Lima, and the Husky Lima Refinery have agreed to commission a study to analyze the impact of removing wastewater discharge from the Ottawa River.
3. The Fire Water Pond dredging project has been suspended for winter due to low water temperature.
4. The flow rate at Outfall 001 was reported as "AD, Flow meter not functioning properly" on 9/13/13 and 9/14/13. On October 18, 2013, Ohio EPA responded saying this was the



## **Lima**

correct way to report flow rate for those days. On December 3, 2013, Ohio EPA issued a Notice of Violation (NOV) for not reporting continuous flow data at Outfall 001. Reporting this in the past has not caused an NOV to be issued.

### **RCRA**

1. Hazardous and special waste pickups were completed in October, November and December.
2. An Ohio EPA asbestos inspector visited PCS in October to inspect the former administration building demolition project. The inspector had no negative comments during the inspection and no violations were received.

### **SARA**

No issues

### **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
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

## **Ohio EPA Report - Environmental Citizens Advisory Committee**

**January 21, 2014**

### **Lima Refining Company**

#### Division of Air Pollution Control

During the third quarter of 2013, Lima Refining Company's excess emission report for CEMS reported excess emissions exceeding the action level of five percent for two emissions units. On January 2, 2014, DAPC met with the facility to inform them that an NOV will be issued after review of the fourth quarter emission data.

#### Division of Materials and Waste Management

Ohio EPA received an October 21, 2013, spill report for a CERCLA/RCRA release. Lima Refining reported a spill of greater than 10 pounds of K048 listed hazardous waste slop oil emulsion cuff solids into the stone surrounding the Air Flotation Unit and Tank 76. Lima Refining recovered 110 barrels of oil from the API separator and excavated approximately 43 cubic yards of contaminated soil/stone from the spill areas. No material left the site.

### **Ineos USA LLC**

#### Division of Air Pollution Control

A return to compliance letter was sent to the company on January 16, 2014, which resolved the NOV issued on August 22, 2013, for violation of the sulfur dioxide per day emission limit on the Acrylonitrile Plant No. 2 emissions unit. The return to compliance was based on a PTI modification issued on December 26, 2013, which increased the emission limits for sulfur dioxide to 6.46 pounds per hour and 14.18 tons per year. These limits represent the correct potential to emit, which is from injection of sulfur dioxide into the emissions unit to prevent polymerization of hydrogen cyanide.

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

#### Division of Air Pollution Control

On November 22, 2013, a draft PTI was issued for an expansion project to increase production of ammonia and urea. On January 9, 2014, a public information session and public hearing was held in Lima, with five people testifying in favor of the project. In addition, a letter requesting information about why the emissions limits were established at the various levels was received. DAPC's response to comments document addresses the question regarding emission limits. The final PTI is expected to be issued by the end of January 2014.

Division of Surface Water

On December 3, 2013, an NOV was issued to PCS Nitrogen for flow rate data recording equipment failure at outfall 001.

**ISP Lima LLC**

Division of Air Pollution Control

A return to compliance letter was sent to the company on November 15, 2013 for the NOV issued September 24, 2013 for violation of the particulate emission (PE) limit of 6.4 pounds per hour during stack testing conducted April 23 through 25, 2013, on the scrubber offgas boiler (SOGB) at the butanediol production plant. The violation occurred during an operating scenario with liquid organic materials injection. The company has agreed in writing not to inject liquid organic material unless another stack test is conducted to demonstrate compliance with the PE limits.

**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 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	