

Ohio EPA Report - Environmental Citizens Advisory Committee April 19, 2016

Lima Refining Company / Husky Energy

Division of Air Pollution Control

On March 17, 2016 an NOV was issued for data capture less than 95 percent for the Crude II Furnace (91.76 percent data capture) and the Ultraformer Process Heater (94.97 percent data capture) during the fourth quarter 2015. Corrective actions were completed for the data capture violations. U.S. EPA has been designated as the lead agency for follow-up on these violations, since these types of CEMs violations are part of the federal consent decree addendum dated November 2007.

Division of Materials and Waste Management

- On April 6, 2016 Ohio EPA conducted a complaint investigation at Lima Refinery regarding the release of
 oil onto a concrete pad. Lima Refinery indicated that contaminated processing equipment is cleaned on a
 concrete pad during plant shut downs. The contaminated liquid is collected and properly disposed. A
 letter documenting this complaint investigation is being processed.
- On April 8, 2016 Ohio EPA issued a 45 day extension to an Emergency Permit to Lima Refinery for the period of April 10, 2016 through May 24, 2016. The original Emergency Permit was issued for the period of February 24, 2016 to April 9, 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

 A Title V air compliance inspection was conducted on March 30, 2016. Ohio EPA has requested additional information and will determine compliance status upon receipt.

Ineos Nitriles USA LLC

Nothing to report.

Ineos Barex® USA LLC

Nothing to report.

ISP Lima LLC

Nothing to report.

Fort Amanda Specialties LLC (Akzo Nobel)

Nothing to report.

Acronyms

AOGI - absorber offgas incinerator

BP - British Petroleum

CEMS - continuous emission monitors

CO - Central Office

DFFO's - director's final findings and orders LDAR - leak detection and repair

NOD - notice of deficiency

NWDO - Northwest District Office

PTI - permit to install

SOGI - scrubber off-gas incinerator

NESHAPS - national emission standards for hazardous air pollutants

NSPS new source performance standards MACT maximium achievable control technology

NPDES - national pollutant discharge elimination system

WTE - water treatment plant

ERAC - Environmental Review Appeals Commission

BDO - butanediol

CEM - continuous emission monitor CMS - corrective measures study

DAPC - Division of Air Pollution Control

ECAC - Environmental Citizens Advisory Committee

LIU - Lima integrated unit division of hazardous waste management

NOV - Notice of Violation

OAC - Ohio Administrative Code

PTO - permit to operate

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
Air Overall Excess Emissions Compliance	99.2%	99.5%	99.3%	NA
SARA Reportables	4	7	7	0
CERCLA Reportables	2	6	2	0
NPDES Reportables	2	4	1	0
Agency Reportable Spills (including RCRA)	0	1	3	0

NA = Not Available

Reportable Release Summary

Emissions

Date Release Type		Description	SO ₂ (tons)	H ₂ S (tons)	H ₂ SO ₄ (tons)	NO _x (tons)
NA	NA	No reportable releases during 1Qtr16	NA	NA	NA	NA
Reportable Quantities		SO2 = 500 lbs $H2S = 100 lbs$ H	12SO4 = 1,00	0 lbs	NOx = 1	000 lbs

2. Permits/Projects

No.	Description	Permit Application Type	Permit Issued Final
1	BP submitted a RCRA Class 1 Permit Modification for a revised annual inspection form for SWMU locations and areas where no excavations are permitted, along with an updated Post-Closure Monitoring Plan for the Primary Pond Landfill.	RCRA	Pending
2	Requested an 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

- A conference call was held January 19th with EPA and the Department of Justice (DOJ) to discuss the responses submitted November 4, 2015 to address questions they had with regard to the alleged violations in their Notice of Violation (NOV) from February 2015. The potential violations of the Consent Decree and various major air programs pertain primarily to flaring, Root Cause Failure Analysis reports, LDAR, CEMS, and emission limit exceedances.
- The Ohio EPA issued a Notice of Violation (NOV) for CEMS downtime that was less than the minimum acceptable 95% of source operating time for the Crude Furnace and Reformer Regenerator Heater CEMS.
- Ohio EPA Division of Surface Water representatives were on-site January 20th for an NPDES inspection of the wastewater facility. There were no issues cited during the inspection and a follow-up report was issued with no findings. OEPA did mention that facility's such as the Husky Lima Refinery that have a strong compliance record will now be inspected every two years instead of annually.

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
ВЕНР	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
СО	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 ₂	Sulfur Dioxide
H ₂ S	Hydrogen Sulfide	SRU	Sulfur Recovery Unit
LIU	Lima Integrated Unit	TRI	Toxic Release Inventory
КНТ	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 March 31, 2016

Health, Safety and Environment Performance Summary

Ineos and PCS Nitrogen Facility*	2007	2008*	2009	2010	2011	2012	2013	2014	2015	<u>2016</u>
OSHA Recordables	3	4	1	2	0	5	5	1	6	0
DAFW Injuries	0	1	0	1	0	2	1	1	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:

- INEOS Lima completed the first quarter of 2016 with no recordable injuries or loss of
 containments. However, on April 2 we suffered a lost-time injury when a contractor incurred a
 hand injury while water jetting piping.
- The chemical plant conducted a maintenance turnaround outage that began March 14 and lasted for five weeks. Full day Safety Training Day sessions were held during February for all plant personnel. Topics covered included: behavior based safety update, use of nitrogen, MTO requirements, fall protection and scaffolding, LOTO, new PPE requirements, personal accountability, 20 principles, safety absolutes, etc. All employees signed a banner as a commitment to "Zero Injuries".
 - Drug screening was required for all TAR contractors prior to working on site.
 - ✓ SHE developed a TAR Safety Plan.
 - ✓ TAR meetings were held with representatives from all businesses on the Lima Complex (PotashCorp, Husky, Ashland, INEOS) to share information. These meetings began 4Q15.
 - ✓ Safety Manager meetings were held prior to the start of the TAR to ensure that every Safety Professional was unified in the message regarding TAR safety.
 - ✓ Hazard Recognition Plus Training was conducted for Nested Contractors in Jan.
 - Radiation training was conducted prior to the start of the TAR.
 - ✓ Corporate sent extra field audit observers to Lima each week of the TAR. A total of 454 field audit / task observations were conducted during 1016.
 - <u>Daily</u> problem solving, safety, schedule status and schedule review meetings were held during the TAR.
- The Ohio Dept. of Health audited our X-Ray equipment March 17.
- The quarterly ER drill on suspicious packages was rolled out to all site personnel.
- On 3/17/2016 a contrator was observed not properly tied off—they did not have the chest strap or leg straps secured. The contractor was removed from the site.
- A high potential incident occurred at the site 3/26/2016 when contractors were lowering trays
 from the heads column to the ground. Wind caught the trays causing one section to fall. The area
 below the lift had been cordoned off using Yellow Caution tape prior to the lift, which prevented
 anyone from being injured.

- INEOS Lima received the Chamber of Commerce "Circle of Influence" Award in January. This
 award recognizes companies whose continual support has been instrumental in the growth of the
 Lima / Allen County Chamber of Commerce. Marcy Boone sits on the Lima Chamber Board of
 Directors.
- April 12 night INEOS Lima Chemicals received two safety certificates: one for working all of 2015 without a lost-time injury or illness, and a second for accumulating over 500,000 hours and six months without a lost-time injury. The awards banquet was sponsored by the West Central Ohio Safety Council and the Lima / Allen County Chamber of Commerce.

Environmental:

- We received word from the USEPA that the no-migration petition was approved for another 15
 years. This exemption allows Lima to continue disposing of wastewater in underground injection
 wells.
- The AOGI RATA took place February 25 and passed.
- The LDAR annual third party audit was conducted the week of February 29.

PSM - Process Safety Management:

- The Barex Plant's Paste Line HAZOP was conducted in January.
- Lima's Risk Management Plan (RMP) update was submitted in March. Updates are required every three years.

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 Emergancy Prothing Amendation

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)