1150 South Metcalf Street Lima, OH 45804-1145

Bus: (419) 226-2300

October 17, 2017

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

Vonderen ODE

Dear Ms. Luhn:

Attached is the Husky Lima Refinery status report for our meeting on October 17, 2017.

If you have any questions regarding this report, please give me a call at (419) 226-2562.

Sincerely,

Gary Vonderembse Environmental Manager

Attachments

xc: ECAC

Michael D. Edmiston, PhD Michael Caprella

Eric Getz - OEPA

Steve Kayatin William Kelly, RS

Michael Wildermuth Connie J. Miller

Tom Berger

Husky

Jerry Miller

Pat Conrath

David Stein Paul Logsdon

L.D. Pierce

Sher Follett

Claudio Ingaramo

Amy Rode

Will Ratliffe

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.

	2014	2015	2016	2017
Air Overall Excess Emissions Compliance	99.5%	99.3%	94.4%	99.3%
SARA Reportables	7	7	7	4
CERCLA Reportables	6	2	4	2
NPDES Reportables	4	1	2	3
Agency Reportable Spills (including RCRA)	1	3	0	1

Emissions/Release Reportable Release Summary

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Date	Release Type	Description	Oil Released	SO ₂
			(bbls)	(lbs)
7/29/17	RCRA	Various agencies were notified of a RCRA reportable release of toluene/benzene from storage tank 169 (T088) that resulted in hazardous waste (>0.5 ppm benzene) being released to the tank dike area due to a suspected leak in the floor. The oil in the tank dike was recovered and pumped to other tankage. Ambient air monitoring was conducted within the refinery and the community.	69	NA
9/14/17	NPDES	The refinery polishing ponds were bypassed to add Aquathol K to treat pond vegetation. The Area Operator discovered the isolation valve for the pond outlet was partially open, allowing some of the treated water to be discharged to the river.	NA	NA
9/24/17	SARA (SO ₂)	A power dip resulted in portions of the SRU going down which led to flaring of acid gas.	NA	908

Reportable Quantities NA = Not Applicable

 $SO_2 = 500 \text{ lbs}$ $H_2S = 100 \text{ lbs}$ $H_2SO4 = 1,000 \text{ lbs}$

NOx = 1,000 lbs

2. Permits/Projects

No.	Description	Permit Application Type	Permit Issued Final
1	Wastewater Permit-to-Install applications for the Water	Wastewater	
	Reuse Project.		
	Phase 1 Submitted		Yes
	Phase 2 Submitted		Yes
	Phase 3 Submittal Pending		No
2	Discretionary Exemption Request to proceed with a Crude	Air	Yes
	Unit feed rate test increase.		
			37
3	The Ohio EPA issued the air Permit-to-Install (PTI) to	Air	Yes
	incorporate NSPS Ja requirements into the permits for the		
	new crude heater and the new Acid Gas Flare.		

Agency Inspections/Enforcement/Rulemaking

- 1. The Ohio EPA issued a Notice of Violation (NOV) for Deepwell #1 due to a deviation in the casing setting depth of deep well #1, and for not submitting a written notice of a planned physical alteration of the well. LRC submitted the required minor permit-to-drill modifications for wells # 2 ad 3, and these were approved by the Ohio EPA.
- 2. An amended certification letter was submitted to the Department of Justice to confirm that LRC has completed its obligations under the existing Consent Decree. The amendment was necessary after becoming aware of noncompliance with respect to missed LDAR monitoring in the LPG area. LRC corrected all noncompliance issues, and has agreed to pay additional stipulated penalties.
- 3. Received Notice of Violation from OEPA dated September 26th for the following:
 - Failure to incorporate PTIs for B004 (crude furnace modification) and P050 (new Acid Gas flare) into our Title V permit.
 - b. Failure to conduct a proper NOx performance test pursuant to NSPS Ja for B002 (Isocracker), B006 (Reformer), and B004 (Crude Furnace). NSPS Ja requires 3 test runs that must be no less than 4 hours per run.

		1	
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 '	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	$s\bar{\Theta}_2$	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 Third Quarter 2017

Health, Safety and Environmental Performance Summary

Ineos Facility	2009	2010	2011	2012	2013	2014	2015	2016	2017
OSHA Recordables	1	2	0	5	5	1	6	2	1
DAFW Injuries	0	1	0	2	1	0	0	1	0
RQ Releases	4	0	1	2	1	2	2	0	0
UIC Permit % Compliance	100%	99.99%	99.99%	100%	100%	99.99%	99.99%	100%	99.9%
AOGI Service Factor	99.7%	100%	100%	99.99%	99.99%	100%	99.9%	99.99%	100%

Safety:

- The third quarter 2017 ended with strong safety results. An increase in near hit reporting is helping to identify areas that need to be improved.
- DHS approved the site's updated Security Plan. There is a possibility that there will be additional changes in the future related personal surety (i.e., background checks).
- The Fall Safety Training day sessions were completed in September. The focus was on Emergency Preparedness.
- Wylie Davidson is a Safety motivational speaker. He presented on October 4th at Apollo Career Center. The event was free and was well worth the time. Members from various industrial groups attended the presentation and should have been able to take a good safety message back to their facilities. The efforts by the West Central Ohio Safety Council to bring the speaker to Lima are very much appreciated.

Environmental:

- The Title V Permit deviation report for the 2nd Quarter was submitted in July and reported only 1 deviation, a monitoring problem at the loading rack. The report for the 3rd Quarter is due at the end of this month. The semi-annual MACT Periodic Report for the 1st half of the year was submitted in August. It is mainly a re-report of the information in the quarterly permit deviation reports.
- The comment period for the draft Title V permit renewal ended in September. No public hearing was requested, and the only comments on the draft were from INEOS. The permit should be submitted soon to US EPA Region 5 for their 45-day review, and the final should still be issued before the end of the year.
- US EPA re-issued a draft Federal RCRA permit in August for public review. It incorporates comments on a previous draft issued in 2014. The permit basically says that all RCRA air requirements are met by compliance with the overlapping CAA rules listed in the Title V permit. The draft is still in its comment period. The final permit may be issued this year and will be INEOS's first federal RCRA permit.
- A potential RQ release from the B Reactor was reported on August 9 and retracted soon after. A small crack in one of the manways was found leaking reactor contents, but not enough to exceed any RQ levels. The reactor was shut down safely, and the crack plus other repairs were performed during a 40-day outage.
- OEPA approved a request to operate Deepwell Pre-treatment Area equipment uncontrolled while performing maintenance. Normally the equipment is controlled by the AOGI, but the vent system blower is what requires maintenance. However, the maintenance had to be postponed because of the extent of the unplanned reactor work and will be completed in the 4th Quarter. Incidentally, the AOGI control is one of the RCRA requirements met by CAA/Title V compliance.
- Notifications were submitted for the MACT 10-year internal inspection of floating roofs in three tanks at the facility.
- The site completed three of the four annual deepwell integrity tests required. The three wells tested have good mechanical integrity as expected. The last well is scheduled to be tested in October.

Acronyms

Absorber Off Gas Incinerator AOGI **British Standard Institute** BSI Behavioral Science Technology **BST**

Clean Air Act CAA

Continuous Acetonitrile Purification Unit CAPU

Continuous Emission Monitor CEM

Comprehensive Environmental Response, Compensation and Liability Act CERCLA

Cylinder Gas Audit CGA

Chemical Weapons Convention CWC

DAFW Davs Away From Work DCS Distributed Control System Department of Homeland Security DHS **Emergency Breathing Apparatus EBA Emergency Management Agency EMA**

Finding of Violation **FOV** FRC Flame Resistant Clothing Hazard and Operability Study **HAZOP**

International Organization of Standardization ISO

Lima Area Security and Emergency Response Team LASER

Leak Detection and Repair LDAR

Local Emergency Planning Committee **LEPC**

Layers of Protection Analysis LOPA

Lock Out Tag Out LOTO Notice of Violation NOV

National Pollutant Discharge Elimination System **NPDES**

Ohio Administrative Code OAC

Ohio Chemistry Technology Council OCTC

Ohio Department of Health ODH

Open Ended Line OEL

Ohio Environmental Protection Agency **OEPA**

Occupational Safety and Health Administration **OSHA**

Mechanical Integrity Test MIT Management of Change MOC

National Incident Management System NIMS

Open Ended Lines OEL Process Hazard Analysis PHA Personal Protective Equipment PPE **Process Safety Management** PSM

Pressure Safety Valve **PSV** Permit to Install

PTI

Relative Accuracy Test Audit RATA

Resource Conservation and Recovery Act **RCRA**

Reportable Quantity RQ

Superfund Amendments and Reauthorization Act SARA

Self Contained Breathing Apparatus SCBA **SERC** State Emergency Response Commission

Safety, Health & Environmental SHE

Safety Integrity Level SIL

Solid Waste Management Unit **SWMU**

Turnaround TAR

Underground Injection Control UIC Volatile Organic Compounds VOC Waste Disposal Well (Deepwell) WDW



Fort Amanda Specialties LLC (A joint venture of AkzoNobel and BASF Corporation)

Brady Brown HSE and Security Manager

October 12, 2017

To:

Environmental Citizens Advisory Council

Cc: B. Ankone, J. Hutton

Re:

ECAC Meeting October 17, 2017

General News

- Site performance goals include leading indicators that are designed to prevent process safety and occupational safety incidents from occurring. Current year to day performance is exceeding the site HSE goals.
 - o 90% of incident investigations completed within 30 days
 - 90% of action items completed on time
 - o 90% of training completed on time.
- Site General Manager Tom Keating has taken new role with BASF and Bouke Ankone, AkzoNoble, the current Operations Manager is transitioning into the GM role. This is in line with 3 year leadership rotation in Joint Venture agreement between AkzoNoble and BASF. A new operations manager will be appointed by BASF in the near future.
- FAS has had a very good year in regards to HSE performance. See Summary Below.

	2014	2015	2016	2017
OSHA Recordable	1	0	0	0
Injuries				
Lost Time Injures	0	0	0	0
RQ Releases	0	0	0	0

Environmental Performance

- 0 Reportable Environmental Incidents or permit deviations
- HSE Department currently scoping projects to reduce Hazardous and Non-Hazardous Waste streams generated at the site.

Safety Performance

- 0 recordable injuries year to date and minimal first aid incidents.
- 0 Major Process Safety Incidents
- Occupational and Process Safety Near miss reporting rates are trending positively
- Site has made major improvements in the employee driven Behavior Based Safety Observation Program.

Security and Regulatory

Site is implementing enhanced information cyber security protocols

Allen County Environmental Citizen's Advisory Committee ISP Status Report (July 2017 – September 2017)

17 October 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 (CY2017 = 0)

3. AIR

- In August, our continuous emission monitoring system (CEMS) for nitrogen oxides (NOx) has successfully passed the Relative Accuracy Test Audit (RATA).
- Ohio EPA is currently reviewing our Title V renewal application.

4. WATER

• Nothing to report

5. RESOURCE CONSERVATION AND RECOVERY ACT

• Nothing to report

6. OTHER

• ISP plans to hire four new employees (i.e. Operations Specialists) in the coming weeks.