To: Environmental Citizens Advisory Council  
Cc: T. Keating, B. Anderson, J. Hutton

Re: ECAC Meeting January 20, 2015

General News

- The plant is running at reduced rates following the refinery incident. Our main raw material comes from Ineos who get raw material feed from Husky.
- Limited production is continuing using stockpiled intermediate materials that have been built up and warehoused in case of such an interruption.
- Advantage is being taken of the downtime in our main processes by accelerating our vessel inspection program.
- 2014 was the highest production rate for the site since the formation of Fort Amanda Specialties joint venture in 2004.

Environmental Systems

- No operational excursions or releases.
- No new issues.

Safety Performance

- No injuries at the site during the quarter.
- Plant recognized for exceptional performance in December for safety, production and shipments.

Security and Regulatory

- 10 additional video surveillance cameras added for security and process monitoring which can be accessed off-site if necessary.
- No new issues.
January 21, 2015

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 21, 2015.

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

Sincerely,

Gary Vonderembse  
Environmental Manager

Attachments

Cc: ECAC  
   Michael D. Edmiston, PhD  
   Gary Sheedy  
   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  
   Paul Logsdon - Husky  
   L.D. Pierce - Husky  
   Sher Follett - Husky  
   Claudio Ingaramo  
   Amy Rode - Husky
1. **EXCEEDANCES/RELEASES**
   The table below summarizes the last four years of environmental performance.

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
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<tbody>
<tr>
<td>Air Overall Excess Emission Compliance</td>
<td>99.5%</td>
<td>99.8%</td>
<td>99.2%</td>
<td>99.5%</td>
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<tr>
<td>SARA Reportables</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>7</td>
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<td>CERCLA Reportables</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
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<tr>
<td>NPDES Reportables</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Agency Reportable Spills (including RCRA)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**SARA/CERCLA Reportable Releases – Discussion Topic – Isocracker Fire**

**NPDES Reportable Releases**

A. **11/19/2014 NPDES Wastewater Incident (TSS Violation)**
   The treated effluent flow from the sand filter outlet was swung to the outfall through the bypass line while the composite sample was being collected, and the total suspended solids (TSS) concentration was high enough to result in an exceedance of the daily loading limit and an exceedance of the average monthly loading limit.

B. **11/23/2014 NPDES Wastewater Incident (Oil Sheen/Oil and Grease/Foam Violations)**
   The Wastewater Treatment Unit was found to be in an upset condition, which resulted in oil sheen being discharged to the Ottawa River on 11/24. The treated effluent flow was isolated from the river by impounding the water in C Pond, and the Oil Spill Contingency plan was implemented. All agency notifications were made as required and containment and absorbent booms were placed at downstream locations in the river. Subsequent measures to regain impounding capacity resulted in an exceedance of the oil and grease daily concentration limit, and a general effluent limit violation for foam to the river. By 11/28, treated effluent was being discharged to the river through the permitted outfall and sampled according to the permit.

C. **12/31/2014 NPDES Permit Limit Exceedance Average Monthly BEHP Concentration**
   Exceeded the NPDES Permit average monthly concentration limit of 8.5 ppb for bis(2-ethylhexyl) phthalate (BEHP). The average BEHP concentration for December was 9.25 ppb. Additional upstream samples and outfall samples were collected and analyzed to determine if BEHP was present. All results were non-detect.

<table>
<thead>
<tr>
<th>Permit Limit Exceedance or Unauthorized Discharge</th>
<th>Permit Limit</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Maximum Total Suspended Solids Loading Limit</td>
<td>730 kg/day</td>
<td>11/19/14</td>
</tr>
<tr>
<td>Monthly Average Total Suspended Solids Loading Limit</td>
<td>465 kg/day</td>
<td>11/30/14</td>
</tr>
<tr>
<td>Daily Maximum Oil and Grease Concentration Limit</td>
<td>10.0 mg/l</td>
<td>11/24/14</td>
</tr>
<tr>
<td>General Effluent Limitation – Oil Sheen to the River</td>
<td>No oil sheen</td>
<td>11/24/14</td>
</tr>
<tr>
<td>General Effluent Limitation – Foam to the River</td>
<td>No foam</td>
<td>11/24/14</td>
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<tr>
<td>Monthly Average BEHP Concentration Limit</td>
<td>8.5 ug/l</td>
<td>12/31/14</td>
</tr>
</tbody>
</table>

**RCRA Reportable Releases – Nothing to report**

**Agency Reportable Spills – Nothing to report**
2. **Air Permits/Projects**
   A. The Ohio EPA issued a modification of the Title V permit that incorporates the terms and conditions of the PTI for Tank 245 as it was converted from a Group 2 external floating roof tank to a Group 2 fixed roof tank. There were some outstanding discrepancies in the previously issued Title V permit modification that will be addressed.

   B. An inspector from USEPA Region V arrived at the refinery on the afternoon of 12/18 for an unannounced compliance inspection of the Coker. EPA has been gathering information pertaining to the operation of Coker Units and the material storage/handling practices at refineries and energy plants. The driver behind this enforcement initiative is the large coke piles in the Detroit and Chicago areas, whereby fugitive dust is blown around in the adjacent communities. The inspector was given an overview of the Lima Refinery process, followed by a walk-thru of the unit, including the area where the petroleum coke is stored. There were no compliance issues noted during the inspection, and EPA will prepare a report as such by the end of January 2015.

3. **Wastewater Permits/Projects**
   Wastewater Permit-to Install (PTI) Applications

<table>
<thead>
<tr>
<th>Description</th>
<th>PTI Application Submitted</th>
<th>PTI Issued Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of sewers for the Refinery Utility</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sewer Project</td>
<td></td>
<td></td>
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<tr>
<td>Installation of sewers for the FCC Wet Gas</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Scrubber Project</td>
<td></td>
<td></td>
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<tr>
<td>Installation of sewers for the FCC Flash Drum</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Project</td>
<td></td>
<td></td>
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<tr>
<td>Installation of sewers for the Central Sewer</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Project</td>
<td></td>
<td></td>
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<tr>
<td>Installation of sewers for the Tank 72 Project</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Installation of sewers for the Ditch Fill Project</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Installation of sewers for the Outside Battery</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Limits Project</td>
<td></td>
<td></td>
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<tr>
<td>Installation of sewers for the NESHAP Sewer</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Relocation Project</td>
<td></td>
<td></td>
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<tr>
<td>Installation of sewers for the RO Building as part of the Water Reuse Project</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Installation of rerouted sewers for the new Acid Gas Flare Project</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

   A. The Ohio EPA issued the modification of the NPDES Permit that incorporates the request for increased effluent limits (e.g., selenium) based on the construction of the Water Reuse Project. The permit modification also includes the discharge of once-through cooling water to Zurnehly Creek from LPG Cooler Project. There are separate effluent limits included for this new outfall.

4. **RCRA Permits/Projects**
   1. The Ohio EPA Division of Underground Injection Control (UIC) has not received the comments from the Ohio Department of Natural Resources pertaining to the Permit-to Drill (PTD) Application that was submitted for the three Class 2 injection wells for the Water reuse Project. A meeting is scheduled for 2/13/15 to discuss newly proposed rules that may affect the PTD. The U.S. EPA issued the approval of the Quality Assurance Project Plan (QAPP) for the Deepwell Injection Project, with repeat mention of the requirement for a No Migration Petition that will need to be submitted eventually for the conversion to hazardous waste service.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFE</td>
<td>Authorization for Expenditure</td>
<td>KHT</td>
<td>Kerosene Hydrotreater</td>
</tr>
<tr>
<td>AFU or DAF</td>
<td>Air Flotation Unit (Dissolved Air Flotation)</td>
<td>LDAR</td>
<td>Leak Detection and Repair</td>
</tr>
<tr>
<td>AWWTP</td>
<td>Advanced Wastewater Treatment Plant</td>
<td>MCC</td>
<td>Motor Control Center</td>
</tr>
<tr>
<td>BDO</td>
<td>Butanediol</td>
<td>mg/L</td>
<td>Milligram per liter</td>
</tr>
<tr>
<td>BEHP</td>
<td>Bis(2-ethylhexyl) Phthalate</td>
<td>MSOR</td>
<td>Maximum Source Operating Rate</td>
</tr>
<tr>
<td>Btu</td>
<td>British Thermal Unit</td>
<td>NESHAP</td>
<td>National Emission Standards for Hazardous Air Pollutants</td>
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<tr>
<td>CCF</td>
<td>Central Control Facility</td>
<td>NOV</td>
<td>Notice of Violation</td>
</tr>
<tr>
<td>CEMS</td>
<td>Continuous Emission Monitor System</td>
<td>NOx</td>
<td>Nitrogen Oxides</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental, Response, Compensation and Liability Act</td>
<td>NPDES</td>
<td>National Pollution Discharge Elimination</td>
</tr>
<tr>
<td>CO</td>
<td>Carbon Monoxide</td>
<td>OEPA</td>
<td>Ohio Environmental Protection Agency</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbon Dioxide</td>
<td>PSV</td>
<td>Pressure Safety Valve</td>
</tr>
<tr>
<td>DHT</td>
<td>Diesel Hydrotreater</td>
<td>PTI</td>
<td>Permit to Install</td>
</tr>
<tr>
<td>DMRQA</td>
<td>Discharge Monitoring Report Quality Assurance</td>
<td>RCFA</td>
<td>Root Cause Failure Analysis</td>
</tr>
<tr>
<td>EHS</td>
<td>Environmental, Health &amp; Safety</td>
<td>RQ</td>
<td>Reportable Quantity</td>
</tr>
<tr>
<td>EPA/USEPA</td>
<td>Environmental Protection Agency</td>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>EPCRA</td>
<td>Emergency Planning and Community Right-to-Know Act</td>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
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<tr>
<td>ERAC</td>
<td>Environmental Review Appeals Commission</td>
<td>SCR</td>
<td>Selective Catalytic Reduction</td>
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<td>ESP</td>
<td>Electrostatic Precipitator</td>
<td>SGP</td>
<td>Saturated Gas Plant</td>
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<tr>
<td>FCCU</td>
<td>Fluidized Catalytic Cracking Unit</td>
<td>SO₂</td>
<td>Sulfur Dioxide</td>
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<td>HDS</td>
<td>Hydro-Desulfurization</td>
<td>SRU</td>
<td>Sulfur Recovery Unit</td>
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<tr>
<td>H₂S</td>
<td>Hydrogen Sulfide</td>
<td>TRI</td>
<td>Toxic Release Inventory</td>
</tr>
<tr>
<td>JSMC</td>
<td>Joint Systems Manufacturing Complex</td>
<td>TSGA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>LIU</td>
<td>Lima Integrated Unit</td>
<td>VOC</td>
<td>Volatile Organic Compound</td>
</tr>
</tbody>
</table>
January 13, 2015

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 2014.

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

Sincerely,

[Signature]

Joseph F. Bianco  
SHE Manager

cc: ECAC Members
Health, Safety and Environment Performance Summary

<table>
<thead>
<tr>
<th></th>
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<td>4</td>
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<td>2</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>1</td>
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<tr>
<td>DAFW Injuries</td>
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<td>0</td>
<td>1</td>
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<td>1</td>
<td>0</td>
<td>2</td>
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<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>UIC Permit % Compliance</td>
<td>100%</td>
<td>100%</td>
<td>99.99%</td>
<td>100%</td>
<td>99.99%</td>
<td>99.99%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>AOGI Service Factor</td>
<td>99.72%</td>
<td>99.8%</td>
<td>99.6%</td>
<td>99.7%</td>
<td>100%</td>
<td>100%</td>
<td>99.99%</td>
<td>99.99%</td>
<td>100%</td>
</tr>
</tbody>
</table>

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

Safety:
- The 2014 annual Safety Training Day for all INEOS employees was completed as of Nov. 4. All employees received CPR / AED refresher training.
- Emergency Response Refresher Training was conducted on-site Sept. 30, Oct. 1 and Oct. 9. Craig Hohenbrink, INEOS Safety Engineer, Russ Decker, Homeland Security & Emergency Management, and Todd Truesdale, Shawnee Township Fire Chief, presented the training which included incident command, confined space rescue, Level A exercises, and a NIMS introduction.
- On Dec. 2-3-4 two employees attended the 24 hour ER training class at the Univ. of Findlay.
- The Chemtrec call out system was tested in November 2014.
- The Ohio Dept. of Health conducted the 3-year radiation audit 11/18/2014. There were no findings of non-compliance.

Environmental:
- On 9/29/2014 Lima received the draft renewal RCRA permit from both the federal and Ohio EPA for review. A public meeting was held Nov. 20, which was a non-event.
- On 10/22/2014 a valve was left open while filling a tank with crude acrylonitrile. This incident did not breach secondary containment or hit reportable quantities.
- The annual UIC inspection was conducted Monday 10/27/2014 with no issues.
- The quarterly LDAR audit for the Consent Decree was conducted in December; no issues.
- As of 12/16/14, the Acrylonitrile Compliance Plan for Industrial Hygiene was officially closed out. There will be additional personal monitoring in the future to ensure the engineered controls are still working, but the requirement for the additional PPE during these operations has been suspended.

PSM – Process Safety Management:
- Lima’s PSM Specialist attended 20 Principles training in Marina View in September.
- On November 10 and 11 the ISO three year re-certification audit was conducted. Lima received three minor non-conformances. The audit covered all operations as well as maintenance, procurement, training and document control.
- Five HAZOP’s scheduled for 2014 were completed on time—Acrylo Reactor, Acrylo AOGI, Acrylo Recovery, Catalyst Plant and Barex Waste Treatment.
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
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
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)
1. SAFETY/SECURITY

<table>
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<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015 YTD</th>
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</thead>
<tbody>
<tr>
<td>OSHA recordable – ISP</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>OSHA recordable - Contractors</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2. RELEASES
   - No RQ incidents (YTD = 0)

3. AIR
   - On August 15, 2014, our continuous emission monitoring system (CEMS) for nitrogen oxides (NOx) has successfully passed the Relative Accuracy Test Audit (RATA).
   - On November 18, 2014, the Scrubber Off-gas Boiler (N006, a control device) was operating above the pound per hour allowance of carbon monoxide (CO) for a period of 93 minutes. Excess emissions have been conservatively estimated to be 457 pounds.
   - On November 26, 2014, the Scrubber Off-gas Boiler (N006, a control device) was operating above the pound per hour allowance of carbon monoxide (CO) for a period of 88 minutes. Excess emissions have been conservatively estimated to be 687 pounds.
   - The facility successfully passed our Responsible Care 14001 audit (a program to achieve improvements in environmental, health, safety, security performance) without a non-conformities (NC’s) in December. This is our yearly audit by a third party auditor.
   - ISP received two temporary exemptions from Permit to Install and Operate (PTIO) requirements in order to conduct trials for the following activities: (1) loading maleic acid into tanker trailers in September and (2) unloading succinic acid from tanker trailers in December.

4. WATER
   - Nothing to report

5. RESOURCE CONSERVATION AND RECOVERY ACT
   - Nothing to report

6. OTHER
   - ISP has hired four new employees (i.e. Operating Specialists).