ENVIRONMENTAL PROTECTION AGENCY

REGION 6
MULTIMEDIA SECTION
1445 ROSS AVENUE
DALLAS, TEXAS 72505

FROM: **Minerva De Leon, Inspector**
Multimedia Enforcement Section (6EN-HM)

TO: **H. Troy Stuckey, Ph. D., Chief**
Multimedia Enforcement Section (6EN-HM)

A Risk Management Prevention Program (RMP) 40 CFR Part 68 Compliance Inspection was conducted on August 15-18, 2011 at the following location:

FACILITY NAME: Calumet Specialty Products Partners, L.P.

ADDRESS: 3333 Midway Ave.
CITY: Shreveport, Louisiana 71109

Lead Inspector: Ms. Minerva De Leon (6EN-HM)
Inspectors: Mr. Dave Hensley (6EN-HM)
Mr. Guadalupe Pesina (6EN-HM)

TYPE FACILITY: FEDERAL ( ) INDUSTRIAL(X)
112r(x) RMP (x)

REGION 6
MULTIMEDIA ENFORCMENT SECTION
RMP INSPECTION REPORT

Report Date:	10/20/2011
Inspection Date:	8/15/2011-8/18/2011
Type of Inspection:	RMP and 112(r)
Company Mane:	Calumet Specialty Products Partners, L.P.
Mailing Address:	3333 Midway Avenue P.O. Box 3099 Shreveport, LA 71109
Email:	lyndon.johnson@calumetspecialty.com
Type of Industry/NAIC/SIC/AFS:	32411 Petroleum Refineries
EPA Identification Number:	1000 0004 1153
Latitude:	32.470833
Longitude:	-93.790833
Lead Inspector:	Minerva De Leon Date: 10/20/2011
EPA Inspectors:	Minerva De Leon, Guadalupe Pesina, Dave Hensley (6EN-HM)
Reviewed by:	Guadalupe Pesina Date: 10/20/2011

CALUMET SHREVEPORT REFINERY
INSPECTION REPORT

Executive Summary:

This inspection report is comprised of three sections numbered I through III:

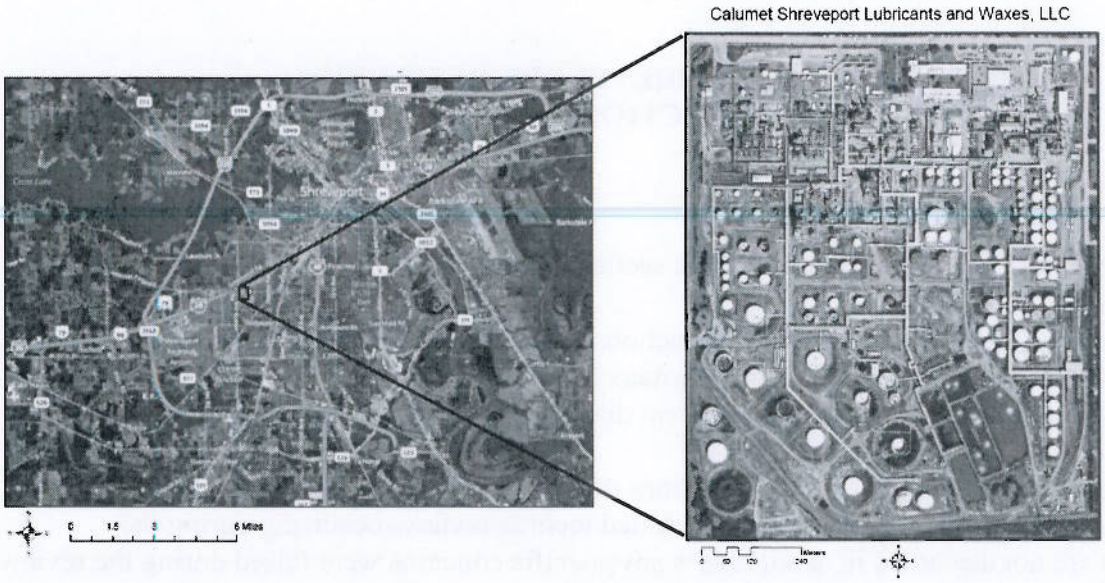
Section I discusses the purpose on the inspection, a general description of the portion of the facility inspected and names and phone numbers of individuals involved in the inspection. The process flow diagrams and process instrument diagrams are included in Attachment 1.

Section II includes a discussion on the findings of the inspection. In the discussion section, only highlights of the inspection are stressed. Detailed records reviews occurring during the inspection are not discussed in detail unless any specific concerns were raised during the reviews of the many records the facility is required to maintain.

Section III includes a summary of areas of concern discovered during the inspection and **closing conference. (Note that the findings stated in Section III) of the report may include non-**compliance, compliance or alleged areas of concern, and should not preclude any further enforcement document review, legal review or further enforcement action).

Section (I) Purpose:

On August 15th-18th, 2011, an unannounced full Risk Management Program (RMP) (40 CFR § 68, CAA § 112 (r)(7)) and General Duty (CAA § 112 (r)(1)) inspection was conducted by the United States Environmental Protection Agency Region 6 Multimedia Enforcement Section (EPA) at Calumet Specialty Products Partners LP (Calumet), 3333 Midway Avenue Shreveport, LA (EPA Facility ID 100000041153 / LAD0080052334). The Inspection was conducted under the authority granted by Section 114 of the Clean Air Act. The facility was selected for inspection to determine compliance with Section 112(r) of the Clean Air Act and Part 68 – Chemical Prevention Provisions and Subpart D Program 3 Prevention Program of the Risk Management Plan. The lead inspector advised Calumet that CAA 112(r) requires employee representatives be given an opportunity to participate in the physical inspection of the facility. Calumet has a union present the United Steel Workers Union. A union representative was invited to participate in the inspection. Mr. Kenny Zylicz, a union representative was interviewed in regard to the RMP inspection, and to discuss any health and safety issues he or the union may have. Mr. Zylicz and/or The Union President Mr. Bobby Hughs were also invited to participate in the onsite inspection.



Description of processes inspected

Calumet is located on the Southeastern side on Shreveport, LA. Calumet has 8 processes listed in their Risk Management Plan (RMP) submitted to EPA, listed below in table 1.

Table 1: RMP Processes

RMP Processes
Crude/Vac/Depropanizer
LPG Tanks
MEK
Naphtha Unifiner/Dehex
Penex
Platformers
Propane Deasphalting
Sour Crude Unit

The Crude/Vac/Depropanizer process is the intake of Crude to the refinery, the vacuum towers, and the Depropanizer. Crude oil is a mixture of different kinds of hydrocarbons with different boiling points. The differences in boiling points are used to separate crude oil into various products through the use of distillation towers. The crude unit includes storage, pumps, desalter, process water stripper, prefrac feed section, prefrac tower section, light straight run stabilizer tower fractionation column, and a main fractionators tower section (Calumet Doc. # 58-V-0008, #4 Crude Unit Process Overview, Attachment 3). The Vac or vacuum tower is connected to the crude unit as the main fractionation tower bottoms feed the vacuum tower. The Vacuum tower operates like a fractionation tower, to separate high boiling hydrocarbons from each other and avoid severe thermal cracking by using vacuum (Calumet Doc. # 32-V-0001, #4 Vac General Overview, Attachment 3).

LPG Tanks process is the storage of Liquefied Petroleum Gas (LPG). LPG is a flammable mixture of hydrocarbon gases stored as liquids under pressure.

The MEK Unit is a wax crystallization process which takes the feed stock form the LOHT unit and separates it into three products, dewaxed oil, soft wax, and hard wax. The unit consists of a

feed prep section, a filtering section, solvent recovery section for each of the 3 products, a refrigeration section and a dehydrator section. There are two solvents used in the MEK Unit methyl-ethyl ketone (MEK) and toluene (Calumet Doc. # 71-V-0001, MEK Process Overview, Attachment 3).

The Naphtha Unifiers main purpose is to desulfurize naphtha before charging it to the platformer. This prevents sulfur from reaching the platformer that would poison the catalyst. A byproduct of this process is hydrogen sulfide (H_2S) gas. Special cautions in the Naphtha Unifiers are H_2S gas monitoring, process chemical, and very hot flammable naphtha (Calumet Doc. # 55-V-0001, Process Overview Naphtha Unit, Attachment 3).

The Penex unit is a paraffin isomerization unit with a fixed bed catalyst of aluminum oxide, platinum, and aluminum chloride in a hydrogen atmosphere with a chloride promoter to aid the conversion. This catalytic reaction requires a dry, low sulfur feed, and dry hydrogen source.

The Platformers process purpose is to upgrade low octane number straight-run naphtha to higher octane motor fuel. This is done by blending components, and catalytically promoting specific groups of chemical reactions. Four major chemical reactions are occurring: 1) Dehydrogenation of naphthenes to aromatics, 2) Dehydrocyclization of paraffin to aromatics, 3) Isomerization, and 4) hydrocracking. Hazards encountered at the platformers are aromatic (benzene, toluene, and xylene), piping approaching 1000°F, Catalyst dust, hydrogen sulfide, caustic, contract chemicals, flammable liquids and gases, and hot steam and condensate (Calumet Doc. # 18-V-0001, Platformer Overview, Attachment 3).

The Propane Deasphalting (PDA) unit removes the asphaltenes from the atmospheric and vacuum still bottoms. This is done by using propane as a solvent in deasphalting. Ethane and butane may also be used with propane to obtain the proper solvent properties. Paraffins are very soluble in propane at temperature from 100° to 140°F but that solubility decreases as temperature increases. This solubility property is used to separate the asphaltenes generating asphalt (Calumet Doc. # 39-V-0001, PDA Process Overview, Attachment 3).

Sour crude unit is designed to handle sour crude containing the impurity sulfur. This process removes sulfur from the crude oil, allowing for processing in other units. Hazardous substances in this process are propane, isobutene, butane, isopentane, and pentane.

These 8 processes contain a total of 3,461,492 pounds of listed hazardous substances as listed in table 2.

Table 2: Listed Hazardous Substances

Chemical Name	Quantity (lbs)
Butane	1,253,375
Ethane	2,692
Isobutane [Propane, 2-methyl]	716,797
Isopentane [Butane, 2-methyl-]	46,676
Pentane	45,879
Propane	1,217,033
Hydrogen	840
Propylene [1-Propene]	178,000
Methane	200
Total	3,461,492

(RMP)

Table 3: List of Personnel Involved in Inspection

Name	Position	Phone	E-Mail
Tom Germany	Plant Manager	318-632-4077	tom.germany@calumetspecialty.com
Lyndon B. Johnson	Safety Manager	318-632-4269	lyndon.johnson@ calumetspecialty.com
Todd Dunn	Maintenance Manger	318-632-4030	todd.dunn@calumetspecialty.com
Michael Rhoades	Manager, Quality Systems & Training	724-756-9283	michael.rhoades@calumetspecialty.com
James Kelly	Technical Services Manager	318-210-3927	jamesk@calumetspecialty.com
Aubrey Marchand	Operations Manager	318-550-8447	aubrey.marchand@calumetspecialty.com
Rick Williams	Environmental Manager	318-632-4102	rick.williams@calumetspecialty.com
Kenny Zylicz	Instrumentation / Union	318-751-0196	kenny.zylicz@calumetspecialty.com
Minerva De Leon	EPA Inspector	281-983-2149	deleon.minerva@epa.gov
Guadalupe Pesina	EPA Inspector	214-665-8375	pesina.guadalupe@epa.gov
Dave Hensley	EPA Inspector	214-665-6739	hensley.dave@epa.gov

Section (II) Inspection Findings:

PART 68—CHEMICAL ACCIDENT PREVENTION PROVISIONS
Subpart A—General

68.3 Definitions.

Accidental release means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

Covered process means a process that has a regulated substance present in more than a threshold quantity as determined under § 68.115.

68.10 Applicability.

Calumet is a stationary source that has more than a threshold quantity of a regulated substance in a process so these regulations are applicable.

68.12 General requirements.

Calumet has submitted a single RMP that reflects all covered processes. As a program 3 facility Calumet must develop and implement a management system, conduct a hazard assessment, implement the prevention requirements of 68.65 through 68.87, develop and implement an emergency response program, and submit the data elements from 68.175 in their RMP.

68.15 Management.

Calumet has developed a management system that oversees the implementation of the risk management program elements, assigned a qualified person or position to oversee the RMP, and assigned positions responsible for portions of the RMP as evidenced by the "Process Safety Management and Risk Management Program Manual" supplied to the inspectors. (Attachment 1)

Subpart B—Hazard Assessment
68.20 Applicability.

Calumet is a program 3 stationary source subject to this part and thus required to prepare a worst case release scenario analysis and complete the five year accident history.

68.22 Offsite consequence analysis parameters.

In the analysis of its flammable worst case scenario Calumet used an endpoint of overpressure of 1 psi, a wind speed of 1.5 m/s, an atmospheric stability of F class, temperature of 25 °C, 50 % humidity, ground level release, a roughness or urban, and temperature of released substance at process temperature.

68.25 Worst-case release scenario analysis.

Calumet did not do any toxic (hydrogen sulfide) worst case scenarios. For its flammable worst case scenario, Calumet used the release of the entire volume of their largest vessel with no controls in calculation of their worst case scenario. Assumed the quantity in a vessel(s) of flammable gas held as a gas or liquid under pressure or refrigerated gas released to an un-diked area vaporizes resulting in a vapor cloud explosion, and used a yield factor of 10% of the available energy is released in the explosion for determining the distance to the explosion endpoint, if the model used is based on TNT-equivalent methods. Calumet used the parameters defined in 68.22 to determine distance to the endpoints using ALOHA. Calumet has also considered smaller quantities handled at higher process temperature or pressure and proximity to the boundary of the stationary source.

68.28 Alternative release scenario analysis.

Calumet has identified and analyzed at least one alternative release scenario for all regulated flammable substance held in a covered process that is more likely to occur than the worst case scenario that will reach an off-site receptor. The alternate scenario selected deals with transferring Butane to a truck with a leak in the transfer hose at the truck. Calumet used the parameters defined in 68.22 to determine distance to the endpoints using ALOHA. No mitigation systems were considered. The Five year accident history in 68.42 and failure scenarios identified in 68.50 were considered in selecting the alternate release scenario.

68.30 Defining offsite impacts—population.

The population included in the distance to the endpoint in the RMP was estimated using 2000 US Census information using a computer based mapping system, to two significant figures. The 2010 US Census data is scheduled for state-by-state release between June and August 2011, and should be used in the future.

68.33 Defining offsite impacts—environment.

Calumet indentified environmental receptors that would be included in the distance to the endpoint, which included the Louisiana State Fair Grounds, based on USGS map data from a computer mapping system.

68.36 Review and update.

Calumet indicated that the off-site consequences analysis is reviewed at least once every five years, and completed a revised analysis last year at the start up.

68.39 Documentation.

A description of the vessel or pipeline and substance selected, assumptions and parameters used, the rationale for selection, and anticipated effect of the administrative controls and passive mitigation on the release quantity and rate for the worst case scenario and alternative release scenario were documented by Calumet including documentation for estimated quantity release rate, and duration of release, methodology used to determine distances to endpoints, and data used to estimate population and environmental receptors potentially affected.

68.42 Five-year accident history.

Calumet has reported 6 incidents in its five year accident history on the current RMP.

Table 4: Five Year Accident History

				Onsite		Off Site	
ID	Date	Time	Source	Injuries	Property Damage	Injuries	Property Damage
8554	3/3/2004	4:02	Heater Tube	1	$450,000	0	0
8555	3/26/2007	5:08	Fired Process Heater	2	$800,000	0	0
8556	10/30/2008	7:45	Storage Vessel/Transfer Hose	2	$900,000	0	0
9280	6/29/2009	22:15	Fired Process Heater	0	$2,000,000	0	0
9481	12/10/2009	13:55	Asphalt Storage Tank	0	$1,160,000	0	0
9601	2/5/2010	17:30	Process Vessel	0	$3,200,000	0	$75,000

(RMP)

The EPA Inspectors obtained a list of all incidents at the facility in the last five years. A selection of the incidents was made and their reports were requested for review.

Subpart D—Program 3 Prevention Program
68.65 Process safety information.

Calumet provided documentation of process safety information including information pertaining to the hazards of substances in the processes, pertaining to the technology of the process, and pertaining to the equipment in the process. Calumet has begun a program to update and validate P&IDs. They provided P&IDs, block diagrams, and process descriptions of the RMP processes (Attachment 3).

68.67 Process hazard analysis.

Calumet has shown documentation of process hazard analysis (PHA) for all RMP processes within the last five years of the inspection (Attachment 4).

Table 5: PHA Revalidation Dates

RMP Processes	Unit	PHA Revalidation
Crude/Vac/Depropanizer	Number 4 Crude	October 2009
Crude/Vac/Depropanizer	Number 4 Vacuum	October 2009
Penex	Penex	October 2009
Penex	Penex Plus Revamp	September 2010
LPG Tanks	Tank Farm	February 2010
MEK	MEK	September 2009
Naphtha Unifiner/Dehex	Naphtha Unifiner and Dehexanizer	December 2009
Sour Crude Unit	Sour Crude Unit #93	December 2006
Propane Deasphalting	PDA	March 2008
Platformers	Platformers and Pressure Swing Adsober (PSA)	December 2009

The EPA inspectors selected the PHA Revalidation of the Platformer and Pressure Swing Absorber (PSA) Units from December 2009 for further review (Attachment 4).

68.69 Operating procedures.

Calumet provided the EPA inspectors a print out of their database records of the RMP process operating procedures with the recertification dates (Attachment 5). Calumet also provided a statement that they were partially compliant on certifications of procedures during 2006, 2007, and 2008 (Attachment 5).

68.71 Training.

Calumet has significantly revamped their training program since the 2008. They provided all the training records that they have in a new database training record management system (Attachment 6).

68.73 Mechanical integrity.

Calumet uses American Petroleum Institute (API) 510 Pressure Vessel Inspection Code: In Service Inspection, Rating, Repair, Alteration, and API 550 Piping External and Thickness Measurement Inspection, and Inspection, Repair, Alteration, and Rerating of In-service Piping Systems. Calumet provided written procedures to maintain the ongoing integrity of process equipment in the form of a Deficiency Management Program document, Work Procedures for Inspection of Lined Vessels, and Vibration Analysis Survey Procedures. The Calumet Unit Inspection Log, UltraPIPE Equipment Summary, Master Storage Tank Summary, Internal Storage Plan for 2011-2015, Inspectors Certifications, and a list of past due inspections were also given to EPA. Inspection reports for the Number 1 Platformer Exchanger, Number 2 Platformer Exchanger, and the Naphtha Exchanger were provided. Calumet uses an Inspection Data Management Systems (IDMS), Siemens' UltraPIPE® technology, that uses API standards, engineering information, data from past inspections, such as thickness and corrosion rate, to determine the due date for the next inspection. EPA inspectors accompanied Calumet's contract rotating inspector as he started his rounds on 8/17/2011. Since EPA was onsite in 2008, Calumet has developed a management system for the management of inspection records, and hired an outside contractor (Advantage Reliability Services, Incorporated) to conduct inspections of rotating equipment (Attachment 7).

68.75 Management of change.

Calumet provided a written standard operating procedure titled Management of Change. This procedure addresses the technical basis for the change, the impact on safety and health, modifications or operating procedures, necessary time period for the change, and authorization requirements for the proposed change. (Attachment 8)

68.77 Pre-startup review.

The Management of Change standard operating procedures addresses the need for pre-startup review in section 5.3 page 7, and section 9 states that the assigned Start-up individual shall indicate if a Pre-startup review has been done (Attachment 8) .

68.79 Compliance audits.

A copy of Calumet's Process Safety Management Compliance Audit Report from April 6, 2011 was provided to EPA. Mike Snakard of AcuTech Consulting Group was lead auditor and Lyndon Johnson was the facilities representative providing process knowledge (Attachment 9).

Table 6: Summary of 2010 Audit Findings (taken from Audit Report)

Element	Y	N	P	X	O	Totals	No. of Recommend
Applicability	2	0	0	1	0	**3**	1
Employee Participation	6	0	0	0	0	**6**	0
Process Safety Information	9	0	3	0	5	**17**	2
Process Hazard Analysis	8	8	7	0	4	**23**	8
Operating Procedure	12	6	1	1	2	**22**	4
Training	8	0	1	0	2	**12**	1
Contractors	9	1	2	0	6	**20**	3
Pre-Startup Safety Review	3	1	4	0	0	**8**	3
Mechanical Integrity	11	0	8	0	0	**19**	6
Hot Work Permits	44	0	2	8	0	**54**	2
Management of Change	4	0	5	0	0	**9**	4
Incident investigation	10	0	2	0	0	**12**	2
Emergency Planning & Response	39	0	1	8	48	**96**	1
Audits	6	0	0	0	0	**6**	0
Trade Secrets	0	0	0	0	0	**0**	0
RMP	47	0	0	9	18	**74**	0
Totals	**218**	**16**	**36**	**27**	**85**	**381**	**37**
Percentages	**57.22**	**4.20**	**9.45**	**7.09**	**22.31**	**100.0**	

Y = Positive/acceptable: full compliance with the criteria
N = Negative/exception: no compliance with criteria
P = Incomplete: Partial compliance with criteria
X = Not applicable: criteria are not applicable
O = Not observed or evaluated: question has been addressed in the response to another question; or written/verbal information was not complete enough to thoroughly evaluate and assign another category, or the item was not examined for some reason such as the activity did not take place during the audit.

The following is a summarized list of the audit findings that reference RMP regulations:

68.65 Inadequate MSDS
68.65 Safe Operating Limits were some time safe upper and lower some times normal/recommended operating limits.
68.67 Insufficient evidence to determine if initial PHAs were done.
68.67 PHA methodology was not justified.
68.67 Previous incidents not included in PHA
68.67 Siting checklist added but the PHA procedure has not changed.
68.67 Human factors checklist added but PHA procedures not updated.
68.67 New risk tolerance criteria developed but not in the PHA procedure.
68.67 Evidence shows that PHA recommendations have not been resolved in a timely manner.
68.67 Resolutions to PHA recommendations not documented.
68.67 Insufficient evidence to determine if PHAs are revalidated annually.

68.67 Insufficient evidence to determine if PHAs are retained for the life of the process.
68.69 SOP do not address safe upper and lower limits, information regarding safety systems, operating limits, consequences of deviations, and steps required to correct or avoid deviation.
68.69 Insufficient evidence to determine if procedures are annually certified.
68.87 No mechanism for confirming contractor audits.
68.87 Not all people on site had competency tests on file.
68.77 Pre Startup Safety Review (PSSR) standard for is used but not specialized for each MOC. Interview indicated that PSSR is not always required for MOCs. Two MOC were found that did not have PSSR recorded with them.
68.85 Hot work permit procedures require 30 minute gas checks not recorded however continuous gas monitoring was in use.
68.85 Hot work permits not consistently signed off on when work is complete.
68.75 A random check of MOC indicated inadequate documentation of the technical basis of the change.
68.75 Procedures need updated after MOC.
68.75 MOC related training not documented.
68.75 Updates to process safety information not done after MOC.
68.81 Some incident investigations not signed.
68.81 Some incident investigations do not include a root cause.

Thirty seven recommendations were generated from this audit. As shown above the largest number of recommendations (8) came from the area of process hazard analysis (PHA). Dealing with 1) PHA annual certifications, 2) use of appropriate PHA methodology, 3) inclusion of past incidents, 4) use of a facility siting check list, 5) use of a human factors checklist, 6) use of a qualitative risk assessment methodology, 7) resolution of PHA recommendations in a timely manner, and 8) documentation of resolutions. As shown in the area of concern of this report this is an area where Calumet needs improvement. Five recommendations came from the area of mechanical integrity. These were 1) use of personnel H_2S monitors instead of area H_2S monitors, 2) agreement of maintenance procedure and practices, 3) training documentation, 4) inspection deficiencies, and 5) new project and MOC data not provided to inspections prior to start up. Calumet has made improvements to its mechanical integrity program since the 2010 audit. Specifically, Calumet has developed a management system for the management of inspection records, and hired an outside contractor to conduct inspections of rotating equipment. However, there is room for improvement. Specific finding and recommendations can be found in Calumet's Process Safety Management Compliance Audit Report from April 6, 2010, in Attachment 9.

68.81 Incident investigation.

The EPA Inspectors obtained a list of all incidents at the facility in the last five years (1/1/2006 to 8/16/2011). Of these 594 a selection of 161 incidents was made, and their reports were requested for reviewed. The selected incident reports are in Attachment 3. The incident report form included the date of the incident, date of report, description of the incident, factors contributed to the incident, and recommendations from the investigations "findings". 12 of the selected 161 incident reports have "Date/Time of Occurrence" and

"Date/Time of Report" greater than 48 hours. All the fields were not filled out in all selected reports. In the 161 incident reports selected by EPA for review 133 had no or inadequate information, and the contributing factors contributed to the incident were left out of many reports (Attachment 2).

68.83 Employee participation.

Calumet has developed and provided a copy of a written plan of action to implement the employee participation required. In this document Calumet established the policy that each PHA team for an existing process will have at least one member that is an hourly employee with operating experience, and sets procedure for maintaining PHAs in a computer in a document control system accessible in the control room of that process. (Attachment 10) Calumet has a union. Mr. Kenny Zylicz a committee man for the United Steel Workers Union at Calumet was interviewed during the inspection. Mr. Zylicz was allowed to express any concerns and health and safety issues he was aware of.

68.85 Hot work permit.

While on a facility tour EPA inspectors witnessed hot work in progress on a water tank near process equipment. Copies of the Hot work permits for that day 8/16/2011 were requested and provided. (Attachment 11)

68.87 Contractors.

Calumet provided a Company Site Procedure Named Contractor Selection & Evaluation, document number 00-I-0119. That defines the requirements for the management of contractor selection and evaluation.

Subpart E—Emergency Response
68.90 Applicability.

Calumet is a stationary source with program 3 processes subject to this part and thus required to comply with the requirements of 68.95. Calumet employees will respond to accidental releases of regulated substances.

68.95 Emergency response program.

Calumet has developed an Emergency Operations Procedure that was provided to the EPA inspectors. This procedure includes procedures for informing the public and local emergency response agencies about accidental releases. First aid and emergency medical treatment is mentioned in the emergency procedure; however more hazard specific medical treatment information is needed. Calumet relies on the Shreveport Fire Department for rescue duties. Procedures of the use, maintenance, inspection, and testing of emergency equipment were provided to EPA. Training records for all employees in the fire brigade, and training content was reviewed. The Live Fire Training mentioned in the list of trainings in the Emergency Operating procedure does not appear in the training records (Attachment 13, Attachment 6).

Calumet has submitted a single RMP which includes the information required in 40 CFR 68.155.

Section (III) Areas of Concern:

68.67(c) (2) The PHA review did not identify all previous incidents which had a likely potential for catastrophic consequences.

In Section 2.4.1, on page 7, of the PHA one incident which had catastrophic consequences was addressed (Attachment 4). The EPA inspectors identified other incidents which had a likely potential for catastrophic consequences occurring prior to the PHA, in December 2009.

Table 7: Additional Incidents in Platformer Should have Been Used in PHA (Attachment 2)

ID	Date	Category	Type	Unit	Title
837	1/24/2007	Safety	Near Miss	#1 Platformer	#1 Platformer Regen. Blind Removal
849	6/25/2007	Safety	Fire	#1 Platformer	Flange Fire on the #1 Platformer #1 Heat
848	6/20/2007	Safety	Fire	#1 Platformer	Flange Fire top of #1 Plat #1 heater
845	5/17/2007	Safety	Fire	#2 Platformer	Fire #2 Stabilizer Reboiler
862	1/15/2008	Safety	Fire	#1 Platformer	#1 Plat #1 heater flange fire
1005	7/2/2009	Safety	Fire	#1 Platformer	Flange Fire on #1 Heater outlet #1 Plat
1095	12/7/2009	Safety	Fire	#1 Platformer	#1 Plat Shutdown Fire

68.67(c) (3) Calumet has removed the hydrogen sulfide (H_2S) and sulfur dioxide (SO_2) monitors, and this change has not been addressed in the PHA Revalidation of the Platformers and Pressure Swing Absorber (PSA) Units from December 2009.

Hydrogen sulfide (H_2S) monitors had been removed from the processes, before April 2010, according to internal audit, due to malfunction, and remain absent. Personnel are required to carry personal H_2S and SO_2 monitors when in the processes with potential for exposure. These warning devises provide a warning sound, light, and vibration. This requires personnel to be present to detect a H_2S or SO_2 release. This is not addressed in the PHA reviewed. There have been incidents due to exposures to H_2S and SO_2.

68.67(c) (5) The PHA did not fully address the siting of the stationary source.

In Section 3, on page 8 of the PHA it is stated. "The team did not have access to all of the information necessary to answer every question on the Facility Siting Checklist." The questions not answered are below. Sitting and vitalization control room needs to be addressed in all the PHAs that uses the control room (Attachment 4).

Table 8: Siting Questions Not Answered in the PHA Reviewed

Item	Question
4	Does the building have a location where personnel can go to withstand the release of toxic materials into the area?
9	Can the building ventilation system be isolated from outside air? Can this be done quickly?
20	What is the electrical classification of the building and the structure it is located in?
28	Are there any sewers connected to the building? Are they sealed?
30	Is there exterior and interior fire suppression equipment available to the building?
35	Is there a building or facility alarm system to warn building occupants?
41	Does the building have an emergency response plan for fire and toxic releases? Are the occupants trained in the plan?

68.67(e) The PHA does not document that the owner or operator has establish a system to promptly address the PHA team's findings and recommendations.

The PHA provided identifies a responsible department for each recommendation, but does not provide how the recommendations are to be resolved or give a time frame. The Siting recommendations from the June, 2009 Facility Siting Evaluation are mentioned as being addressed by Mr. Lyndon Johnson. At the time of the EPA inspection plans were reported to be in progress to resolve the siting issues, including the building of a new control room outside of the blast radius of the processes. No construction had occurred as of the inspection, 8/15/2011-8/18/2011.

68.69(c) Annual certification of operating procedures was not documented prior to 2008.

Calumet provided a statement that they were not in full compliance prior to 2008 (Attachment 5)

27 of the operating procedures annual certification reviewed were overdue at the time of the inspection.

Table 9: Units with Out of Date Operating Procedure Certification (Attachment 5)

	Procedure	Missing Certifications	Last Certified
	PDA Unit		
1	Emergency Shut Including a Fire/Vapor Release	2011	7/2/2010
2	Loss of Electrical Power	2011	7/7/2010
3	Loss of Instrument Air	2011	7/7/2010
4	Loss of Fuel Gas	2011	7/7/2010
5	Loss of Cooling Water	2011	7/7/2010
6	Loss of Steam	2011	2/25/2010
7	PDA Console Operator Demo Skills	2011	2/23/2010
8	PDA Outside Operator Demo Skills	2011	2/23/2010
9	Propane Deasphalting Unit Normal Operations	2011	7/7/2010
10	Flare Release Checklist	2011	7/7/2010
11	Flushing With Diesel	2010, 2011	9/16/2009
12	Hot Oil Flushing	2011	7/7/2010
13	PDA Quality Adjustments	2011	7/7/2010
14	PDA Outside Operators Duties	2011	7/7/2010
15	Deasphalting Tower Turnaround	2011	7/7/2010
16	PDA Shutdown for Turnaround Checklist	2011	7/7/2010
17	Loss of DAO Storage Pumps	2011	7/7/2010
18	Propane Circulation	2011	7/7/2010
19	Draining Flare Blowdown Drum	2011	7/7/2010
20	Loss of Asphalt Pressure	2011	7/7/2010
21	Bypass Old Low Temperature Evaporator	2011	7/7/2010
22	Hot Diesel Flush of Asphalt/Propane Container	2011	2/23/2010
23	Asphalt Recovery System	2011	7/7/2010
24	PDA Setup Checklist	2011	7/7/2010
25	Normal Startup Checklist	2011	7/7/2010
26	PDA Unit Manual	2011	7/7/2010
27	PDS Unit Overview	2011	2/3/2010

68.71(b) Refresher training were not taken or documented at least every three years

Attachment 6 contains training records that have been identified as not meeting the refresher training every three years, or more often if necessary.

Table 10: Training Records Identified with Area of Concern (Attachment 6)

Name	Department	Training	Problem Interval
Spearman, Matt	Shipping	Process Safety Management	11/30/2005-11/04/2009- (Date of inspection)
Stephens, Lee	Crude, Fire	HazWoper	6/12/2011-12/15/2005
Netter, Carlos	Fuels, Fire	HazWoper	1/8/2011-7/24/2009
Zylicz, Kenny W	LOHT, Fire	HazWoper	5/1/2011-7/17/2008
Lister, L.C.	Main., Fire	HazWoper	1/6/2011-11/25/2005
Mayfield, Louis	Crude, Fire	HazWoper	12/9/2010-4/26/2007
Hamiter, Casey	Crude, Fire	HazWoper	10/26/2010-4/28/2008

68.73(d) (3) Inspections not conducted with a frequency consistent with applicable manufacturer's recommendations and good engineering practices, or more frequently.

Thirty four (34) inspections were overdue at the time (8/18/2011) Calumet generated the list of corrosion monitored equipment (shown in Table 11). During the EPA inspection Bill Taylor of Calumet maintenance department indicated some inspections were overdue

because inspections ports in insulation did not exist, and inspections have to be done when equipment is shutdown and cool.

Table 11: Overdue Inspections

RMP Processes	Unit	Equipment ID	Last Inspection	Inspection Due
Crude/Vac/Depropanizer	4 CRU	105804	12/28/2005	12/28/2010
	4 CRU	161102	07/16/1998	07/16/2003
	4 CRU	165406	07/28/2005	07/28/2010
	4 VAC	123201	08/23/2005	08/23/2010
	4 VAC	123202	10/12/2004	10/12/2009
	4 VAC	163202	11/23/2004	11/23/2009
	DEPROP	168104	06/22/2006	06/22/2011
LPG Tanks				
MEK	MEK	127171	04/20/2004	08/27/2010
	MEK	127227	08/17/2006	08/17/2011
	MEK	127228	08/17/2006	08/17/2011
Naphtha Unifiner/Dehex	DHT	129201	07/14/2006	07/14/2011
	DHT	129202	07/14/2006	07/14/2011
	DHT	129203	07/14/2006	07/14/2011
	DHT	129204	07/14/2006	07/14/2011
	DHT	129205	07/14/2006	07/14/2011
	DHT	129206	07/14/2006	07/14/2011
	DHT	129211	07/14/2006	07/14/2011
	DHT	169201	07/14/2006	07/14/2011
	DHT	169202	07/14/2006	07/14/2011
	DHT	169203	07/14/2006	07/14/2011
	DHT	169204	07/14/2006	07/14/2011
	DHT	169205	07/14/2006	07/14/2011
	DHT	169206	07/14/2006	07/14/2011
	DHT	169207	07/14/2006	07/14/2011
	AMINE	107703	03/17/2008	06/28/2011
Penex	CDW	125206	01/30/2006	01/30/2011
	CDW	126415	03/17/2008	06/28/2011
	CDW	166417	09/28/2006	02/11/2011
Platformers	1 Plat	301804	07/07/2006	07/07/2011
	2 Plat	121916	09/07/2004	05/20/2011
	2 Plat	301904	07/05/2007	07/05/2011
Propane Deasphalting	PDA	123906	02/23/2004	08/03/2011
Sour Crude Unit	SOUR CRU	128116	08/16/2006	08/16/2011
	SOUR CRU	128125	08/16/2006	08/17/2011
	SOUR CRU	168121	08/16/2006	08/16/2011

(Attachment 7 "Corrosion Monitoring Wide EQ/Cric. ID Summary")

68.81(b) Incident investigations were not always initiated no later than forty eight hours following the incident.

12 of the selected 161 incident reports reviewed have "Date/Time of Occurrence" and "Date/Time of Report" greater than 48 hours. These are marked with orange flags in Attachment 2.

Table 12: Incident Reports Greater than 48 hours

	ID	Date/Time of Occurrence	Date/Time of Report	Elapsed (hr)	Unit
1	1490	7/17/2011 1:32	7/22/2011 15:34	134	No. 4 Vacuum
2	1439	5/21/2011 10:00	6/1/2011 8:39	263	CDW
3	1334	1/25/2011 23:00	1/31/2011 9:00	130	LOHT
4	1315	10/21/2010 11:00	12/9/2010 11:00	1176	Loading Docks
5	1249	8/1/2010 16:00	8/18/2010 16:00	408	Loading Docks
6	975	2/13/2009 1:30	3/9/2009 14:13	589	Diesel Hydrotreater
7	978	2/12/2009 11:50	3/9/2009 15:02	603	PDA
8	977	2/11/2009 3:30	3/9/2009 14:50	635	Diesel Dewaxing Desulfurization
9	983	2/4/2009 20:00	3/11/2009 11:19	831	No. 4 Crude
10	941	10/30/2008 7:45	11/4/2008 9:43	122	Storage Tanks
11	936	6/29/2008 0:00	7/31/2008 14:21	782	Flare System
12	908	2/24/2008 5:15	2/26/2008 10:57	54	No. 4 Vacuum

(Attachment 3: Incident Reports)

68.81(d) (4) Incident reports did not include factors that contributed to the incident.

In the 161 incident reports selected by EPA for review 133 had no or inadequate information under the factors contributed to the incident.

Table 13: Incidents w/o Contributing Factors Back One Year form Inspection (8/15/2011)

ID	Date	Unit	ID	Date	Unit
1339	1/22/2011	#2 Platformer	1411	4/18/2011	Tank Farm
1338	2/12/2011	#1 Platformer	1408	4/17/2011	Hydrogen Plant #2
1518	8/2/2011	Hydrogen Plant #2	1369	3/14/2011	No. 4 Crude
1516	8/9/2011	Maintenance	1368	3/10/2011	Maintenance
1515	8/9/2011	Loading Docks	1367	3/9/2011	DynaWave
1513	8/7/2011	Tank Farm	1362	2/19/2011	Loading Docks
1510	8/4/2011	Hydrogen Plant #2	1360	3/4/2011	LOHT
1504	8/1/2011	DynaWave	1354	3/1/2011	Contractor (PDA)
1503	8/2/2011	Hydrogen Plant #2	1353	2/25/2011	Contractor (PDA)
1491	7/21/2011	Contractor (Asphalt)	1344	2/28/2011	Fuel Gas
1490	7/17/2011	LOHT	1343	2/17/2011	Contractor (HF Drain Sump
1485	7/12/2011	Tank Farm	1337	2/9/2011	CDW
1473	6/29/2011	DynaWave	1334	1/25/2011	LOHT
1462	6/23/2011	LOHT	1327	1/10/2011	Penex
1455	6/14/2011	SRU #3	1325	1/9/2011	LOHT
1451	5/25/2011	LOHT	1314	12/8/2010	Penex
1450	6/3/2011	SRU	1307	11/16/2010	No. 4 Crude
1442	6/1/2011	MEK	1296	11/6/2010	Penex
1441	5/23/2011	Fuel Gas	1285	10/20/2010	Tank Farm
1440	5/22/2011	Hydrogen Unit	1282	10/19/2010	LOHT
1439	5/21/2011	CDW	1281	10/14/2010	Diesel Hydrotreater
1438	5/23/2011	Contractor (Drill Chill #2)	1274	10/12/2010	LOHT
1429	5/13/2011	Penex	1273	10/13/2010	Diesel Hydrotreater
1424	4/29/2011	Contractor (PDA)	1262	9/12/2010	SRU #1
1414	4/23/2011	Diesel Hydrotreater	1250	8/24/2010	Tank Farm

Attachment 2: Incident Reports

68.81 (e) Failed to adequately investigate and resolve Platformer incidences

Table 14: Incidents in Platformers

Unit	Date	Title	ID No.	Fire?	Missing
#2 Platformer	11/8/2010	Flange Fire in #2 Plantformer	1293	Yes	Facts, Findings, & Corrective Actions
#1 Platformer	8/1/2009	#1 Platformer #3 heater outlet Flange fire	1026	Yes	Fire, Facts, & Findings
#1 Platformer	7/2/2009	Flange Fire on #1 Heater Outlet #1 Platformer	1005	Yes	Fire, Facts, Findings, & Corrective Actions
#1 Platformer	1/15/2008	#1 Plat #1 heater flange fire	862	Yes	Fire, Facts, Findings, & Corrective Actions
PSA	1/3/2008	PSA Compressor Fire	861	Yes	Fire, Facts, Findings, Description & Corrective Actions
#1 Platformer	6/25/2007	Flange Fire on the #1 Platformer #1 Heater	849	Yes	Facts, Findings, & Corrective Actions
#1 Platformer	6/20/2007	Flange fire top of #1 Plat #1 heater	848	Yes	Fire, Facts, Findings, & Corrective Actions
#2 Platformer	5/17/2007	Fire #2 Stabilizer Reboiler	845	Yes	Facts, Findings, & Corrective Actions
#1 Platformer	3/27/2007	#1 Platformer Heater Explosion	841	Yes	Facts, Findings, & Corrective Actions

(Attachment 2: Incident Reports)

The above incident reports lacked critical information, such as factors contributing to the incident, finding from the investigation, and corrective actions taken as a result of the incident, needed to show adequate investigation and resolution.

68.95 (a) (1) (ii) Did not document specific proper medical treatment necessary to treat accidental exposures related to hazardous substance.

The facility stated that the Shreveport Fire Department provides rescue service at the facility. This is in the Emergency Response Teams Procedure. Calumet's Emergency Operating Procedure (Document No. 00-H-0025) does include a medical treatment section, 6.7 page 12. This states that medical treatment will be the responsibility of the Shreveport Fire Department EMS (Attachment 13). The facility is still required to document proper first-aid and emergency medical treatment necessary to treat accidental human exposures to the specific hazardous substances at the site.

68.180 (a) (2) Emergency response program did not include specific actions to be taken in response to an accidental releases of a regulated substance?

The facility stated that the Shreveport Fire Department provides rescue service at the facility. This is in the Emergency Response Teams Procedure. Calumet's Emergency Operating Procedure (Document No. 00-H-0025) does include actions to be taken in response to accidental releases, but does not cover specific actions related to specific regulated substances (Attachment 13).

Clean Air Act 112 (r) (1) "General Duty Clause"
Owners and operators of facilities producing, processing, handling, or storing extremely hazardous substances have a general duty to:

> Identify hazards associated with a potential accidental release, using appropriate hazard assessment techniques;
> Design and maintain a safe facility, taking steps to prevent releases; and
> Minimize the consequences of accidental releases that do occur.

The General Duty Clause is not limited to a finite list of chemicals or established thresholds. The facility failed to design and maintain a safe facility, and taking steps to minimize the consequences of accidental releases that do occur by not monitoring for the release of H_2S, an extremely hazardous substance produced as a byproduct of the crude oil refining. The facility had H_2S monitors installed at one time but they were removed due to malfunctions. Currently, refinery personnel are required to wear personal H_2S/SO_2 monitors. These warning devices provide a warning sound, light, and vibration. This requires personnel to be present to detect a H_2S or SO_2 release. There have been incidents (Table 8) due to exposures to H_2S and SO_2.

Table 15: Incidents Involving to H_2S and SO_2

ID	Date	Time	Unit
1217	7/25/2010	05:00	Pipe Rack South of Wax Slab
1222	7/29/2010	10:00	No. 4 Vacuum
1249	8/01/2010	16:00	49 Tank
1334	1/25/2011	11:00	#2 H2 Plant
1368	3/10/2011	14:30	'B' Flare Gas Compressor
1451	5/25/2011	00:00	LPS Booster Compressor

(Attachment 2 Incident Reports)

Incident 1451 involved a compressor H_2S leak. The incident description states H_2S levels as too high to conduct work in the area. Incident 1368 involved an employee exposed to H_2S. An attachment to the incident report documented failure to wear safe attire, not following the rules or instruction, safety devices inoperative or inadequate, defective safety devices, improper ventilation, defective tool or equipment and lack of training skill. Incident 1249 describe Manual Tyler and Gary Bragg cleaning a strainer when both started getting light headed and dizzy, so they decided to go and get a full gas monitor. As soon as they came over the dyke wall, the monitor picked up high readings above LEL of H_2S. Again, this practice means personnel have to be present for a release to be detected. The lack of an early warning system for H_2S is critical, especially in a rich environmental justice area and the proximity of the receptors to an accident. 2,107 people live within a half mile of the facility. Of these 40.2% are below the poverty level and 82.5% are minority. This compared to 19.6% below poverty level and 37.5% minority in the state of Louisiana. (http://oaspub.epa.gov/envjust/demog_report_2_ejv.doCountyStateComp)

The public has reported a rotten egg smell, which is associated with H_2S, coming from the facility (Example: LDEQ Incident Report 130194 and 131833). These two incidents received by the Louisiana Department of Environmental Quality, dated March 25, 2011 and June 16, 2011,

made references to an odor horrible and obnoxious and H_2S odors from Calumet. Even the state inspector assigned to incident Id 131094, noted a rotten egg odor at the corner of Midway and Hudson, on the same date of the reported incident. Over the last several years there have been numerous and continuing complaints from individual residents and community activist groups, such as Louisiana Environmental Justice Community Organizations Coalition (LEJCOC) concerning excessive odor and emissions. In efforts to further respond to concerns raised by people who live and work near this facility, the state conducted an air study of Calumet Refinery from May 17-19, 2010, using a Mobile Air Monitoring Lab. No odors were detected by lab staff during the operational period. The facility has reported releases of SO_2. On March 14th, 2011Calumet reported to the LDEQ that it released 9297 pounds of SO_2 through the #3 flare due to mechanical problems in the #3 SRU. An excessive emissions letter from Calumet to LDEQ indicates Draeger readings at 70,000 parts per million (ppm) H_2S, however the incident report 129867 indicates that the facility conducted air monitoring and nothing was noted. Draeger is a manufacturer of air monitoring equipment (http://www.draeger.com). A reading of 70,000 ppm would be note worthy, being above the lower explosive limit of H_2S (4%) at 7%. (Attachment 14)

Closing

A closing conference was held, on August 18, 2011, at approximately 7:00 PM. Mr. Tom Germany, Calumet plant manager, Ms. Minerva De Leon, Mr. Guadalupe Pesina, and Mr. Dave Hensley were present. The above mentioned areas of concern were communicated to Calumet representative. Mr. Germany said he hoped this was the worst EPA would see them and they are striving for improvement, and that the EPA inspection would be a good report card for how they are doing. He agreed to send the document stating Calumet was not in full compliance prior to 2008 (Attachment 5). Mr. Germany also stated that the siting issues at the facility should be resolved by next spring. He went on to say he knows what good looks like and recognizes that Calumet is not there yet. They are moving in the right direction by hiring additional staff, including experience personnel. Calumet has committed to improving the training program. Corporate management has shown a commitment to improving safety at Calumet Shreveport by committing budgeted and non-budgeted funds.

Attachments

1. Management System
2. Incident Records
3. Process Descriptions
4. Process Hazard Analysis
5. Operating Procedures
6. Training Records
7. Mechanical Integrity Procedure / Heat Exchanger Inspections
8. Management of Change
9. Audits
10. Employee Participation Plan
11. Safe Work Permits
12. Contractor Selection
13. Emergency Response
14. LDEQ reports

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP

Section A – Management [68.15]

Management system developed and implemented as provided in 40 CFR 68.15? ☒S
☐M ☐U ☐N/A

Comments:

Has the owner or operator:

1.	Developed a management system to oversee the implementation of the risk management program elements? [68.15(a)]	☒Y	☐N ☐N/A
2.	Assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements? [68.15(b)]	☒Y	☐N ☐N/A
3.	Documented other persons responsible for implementing individual requirements of the risk management program and defined the lines of authority through an organization chart or similar document? [68.15(c)]	☒Y	☐N ☐N/A

Section B: Hazard Assessment [68.20-68.42]

Hazard assessment conducted and documented as provided in 40 CFR 68.20-68.42? ☒ S
☐M ☐U ☐N/A

Comments:

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP
Hazard Assessment: Offsite consequence analysis parameters [68.22]	
1. Used the following endpoints for offsite consequence analysis for a worst-case scenario: [68.22(a)] ☐ For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)] NA ☒ For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]; or X ☐ For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m^2 for 40 seconds? [68.22(a)(2)(ii)] ☐ For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)] largest and closest to receptors	☒Y ☐N ☐N/A LPG tanks Butane
2. Used the following endpoints for offsite consequence analysis for an alternative release scenario: [68.22(a)] ☐ For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)] ☒ For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)] ☐ For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m^2 for 40 seconds? [68.22(a)(2)(ii)] ☐ For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)] closest to outside receptor.	☒Y ☐N ☐N/A Butane at loading Vapor cloud explosion
3. Used appropriate wind speeds and stability classes for the release analysis? [68.22(b)] based on ALOHA 3m/s & D	☒Y ☐N ☐N/A
4. Used appropriate ambient temperature and humidity values for the release analysis? [68.22(c)] ALOHA	☒Y ☐N ☐N/A
5. Used appropriate values for the height of the release for the release analysis? [68.22(d)] Yes ground level	☒Y ☐N ☐N/A
6. Used appropriate surface roughness values for the release analysis? [68.22(e)] Urban	☒Y ☐N ☐N/A
7. Do tables and models, used for dispersion analysis of toxic substances, appropriately account for dense or neutrally buoyant gases? [68.22(f)]	☒Y ☐N ☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
8. Were liquids, other than gases liquefied by refrigeration only, considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for a stationary source, or at process temperature, whichever is higher? [68.22(g)] abeyant LPG release	■Y	☐N	☐N/A
Hazard Assessment: Worst-case release scenario analysis [68.25]			
9. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated toxic substance from covered processes under worst-case conditions? [68.25(a)(2)(i)] NA They do not have H_2S onsite is it above threshold?	☐Y	☐N	■N/A
10. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated flammable substance from covered processes under worst-case conditions? [68.25(a)(2)(ii)] Yes	■Y	☐N	☐N/A
11. Analyzed and reported in the RMP additional worst-case release scenarios for a hazard class if the worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under 68.25(a)(2)(i) or 68.25(a)(2)(ii)? [68.25(a)(2)(iii)]	■Y	☐N	☐N/A
12. Has the owner or operator determined the worst-case release quantity to be the greater of the following: [68.25(b)] ■ If released from a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity? [68.25(b)(1)] **Yes total no controls** ☐ If released from a pipe, the greatest amount held in the pipe, taking into account administrative controls that limit the maximum quantity? [68.25(b)(2)]	■Y	☐N	☐N/A
13.a. Has the owner or operator for toxic substances that are normally gases at ambient temperature and handled as a gas or liquid under pressure:			
13.a.(1) Assumed the whole quantity in the vessel or pipe would be released as a gas over 10 minutes? [68.25(c)(1)]	☐Y	☐N	■N/A
13.a.(2) Assumed the release rate to be the total quantity divided by 10, if there are no passive mitigation systems in place? [68.25(c)(1)]	☐Y	☐N	■N/A
13.b. Has the owner or operator for toxic gases handled as refrigerated liquids at ambient pressure:			

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP
13.b.(1) Assumed the substance would be released as a gas in 10 minutes, if not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm or less? [68.25(c)(2)(i)] yes 1 cm or less	☐Y ☐N ■N/A
13.b.(2) If released substance would be contained by passive mitigation systems in a pool with a depth > 1 cm; ■ Assumed the quantity in the vessel or pipe (as determined per 68.25(b)) would be spilled instantaneously to form a liquid pool? [68.25(c)(2)(ii)] ☐ Calculated the volatility rate at the boiling point of the substance and at the conditions specified in 68.25(d)? [68.25(c)(2)(ii)]	☐Y ☐N ■N/A
13.c. Has the owner or operator for toxic substances that are normally liquids at ambient temperature:	
13.c.(1) Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool? [68.25(d)(1)]	☐Y ☐N ■N/A
13.c.(2) Determined the surface area of the pool by assuming that the liquid spreads to 1 cm deep, if there is no passive mitigation system in place that would serve to contain the spill and limit the surface area, or if passive mitigation is in place, was the surface area of the contained liquid used to calculate the volatilization rate? [68.25(d)(1)(i)]	☐Y ☐N ■N/A
13.c.(3) Taken into account the actual surface characteristics, if the release would occur onto a surface that is not paved or smooth? [68.25(d)(1)(ii)]	☐Y ☐N ■N/A
13.c.(4) Determined the volatilization rate by accounting for the highest daily maximum temperature in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution? [68.25(d)(2)]	☐Y ☐N ■N/A
13.c.(5) Determined the rate of release to air from the volatilization rate of the liquid pool? [68.25(d)(3)]	☐Y ☐N ■N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP
13.c.(6) Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(d)(3)] What modeling technique did the owner or operator use? [68.25(g)] _____	☐Y ☐N ■N/A
13.d. Has the owner or operator for flammables:	
13.d.(1) Assumed the quantity in a vessel(s) of flammable gas held as a gas or liquid under pressure or refrigerated gas released to an undiked area vaporizes resulting in a vapor cloud explosion? [68.25(e)]	■Y ☐N ☐N/A
13.d.(2) For refrigerated gas released to a contained area or liquids released below their atmospheric boiling point, assumed the quantity volatilized in 10 minutes results in a vapor cloud? [68.25(f)]	☐Y ☐N ■N/A
13.d.(3) Assumed a yield factor of 10% of the available energy is released in the explosion for determining the distance to the explosion endpoint, if the model used is based on TNT-equivalent methods? [68.25(e)]	■Y ☐N ☐N/A
14. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.25(g)]	■Y ☐N ☐N/A
15. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(g)] What modeling technique did the owner or operator use? [68.25(g)] ALOHA	■Y ☐N ☐N/A
16. Ensured that the passive mitigation system, if considered, is capable of withstanding the release event triggering the scenario and will still function as intended? [68.25(h)]	☐Y ☐N ■N/A

RMP Program Level 3 Process Checklist	**Facility Name: Calumet Specialty Products Partners LP**
17. Considered also the following factors in selecting the worst-case release scenarios: [68.25(i)] ■ Smaller quantities handled at higher process temperature or pressure? [68.25(i)(1)] ■ Proximity to the boundary of the stationary source? [68.25(i)(2)]	■Y ☐N ☐N/A
Hazard Assessment: Alternative release scenario analysis [68.28]	
18. Identified and analyzed at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes? [68.28(a)]	☐Y ☐N ■N/A
19. Selected a scenario: [68.28(b)] ■ That is more likely to occur than the worst-case release scenario under 68.25? [68.28(b)(1)(i)] ■ That will reach an endpoint off-site, unless no such scenario exists? [68.28(b)(1)(ii)]	■Y ☐N ☐N/A
20. Considered release scenarios which included, but are not limited to, the following: [68.28(b)(2)] ■ Transfer hose releases due to splits or sudden hose uncoupling? [68.28(b)(2)(i)] X ☐ Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds? [68.28(b)(2)(ii)] ☐ Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure? [68.28(b)(2)(iii)] ☐ Vessel overfilling and spill, or over pressurization and venting through relief valves or rupture disks? [68.28(b)(2)(iv)] ☐ Shipping container mishandling and breakage or puncturing leading to a spill? [68.28(b)(2)(v)]	■Y ☐N ☐N/A Transferring Butane to truck with leak at truck
21. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.28(c)] yes	■Y ☐N ☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP
22. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.28(c)] What modeling technique did the owner or operator use? [68.25(g)] ALOHA	■Y ☐N ☐N/A
23. Ensured that the passive and active mitigation systems, if considered, are capable of withstanding the release event triggering the scenario and will be functional? [68.28(d)]	■Y ☐N ☐N/A
24. Considered the following factors in selecting the alternative release scenarios: [68.28(e)] ■ The five-year accident history provided in 68.42? [68.28(e)(1)] ■ Failure scenarios identified under 68.50? [68.28(e)(2)] yes	■Y ☐N ☐N/A
Hazard Assessment: Defining off-site impacts–Population [68.30]	
25. Estimated population that would be included in the distance to the endpoint in the RMP based on a circle with the point of release at the center? [68.30(a)] Census information	■Y ☐N ☐N/A
26. Identified the presence of institutions, parks and recreational areas, major commercial, office, and industrial buildings in the RMP? [68.30(b)] mar plot, computer based system	■Y ☐N ☐N/A
27. Used most recent Census data, or other updated information to estimate the population? [68.30(c)] 2000	■Y ☐N ☐N/A
28. Estimated the population to two significant digits? [68.30(d)] yes	■Y ☐N ☐N/A
Hazard Assessment: Defining off-site impacts–Environment [68.33]	
29. Identified environmental receptors that would be included in the distance to the endpoint based on a circle with the point of release at the center? [68.33(a)] yes on worst Louisiana state fair grounds across interstate.	■Y ☐N ☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
30. Relied on information provided on local U.S.G.S. maps, or on any data source containing U.S.G.S. data to identify environmental receptors? [Source may have used Land View to obtain information] [68.33(b)] Mar Plot data	☒Y	☐N	☐N/A
Hazard Assessment: Review and update [68.36]			
31. Reviewed and updated the off-site consequence analyses at least once every five years? [68.36(a)] yes	☒Y	☐N	☐N/A
32. Completed a revised analysis and submit a revised RMP within six months of a change in processes, quantities stored or handled, or any other aspect that might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more? [68.36(b)] Yes last up date last year or start	☒Y	☐N	☐N/A
Hazard Assessment: Documentation [68.39]			
33. For worst-case scenarios: a description of the vessel or pipeline and substance selected, assumptions and parameters used, the rationale for selection, and anticipated effect of the administrative controls and passive mitigation on the release quantity and rate? [68.39(a)] yes	☒Y	☐N	☐N/A
34. For alternative release scenarios: a description of the scenarios identified, assumptions and parameters used, the rationale for the selection of specific scenarios, and anticipated effect of the administrative controls and mitigation on the release quantity and rate? [68.39(b)] yes	☒Y	☐N	☐N/A
35. Documentation of estimated quantity released, release rate, and duration of release? [68.39(c)]	☒Y	☐N	☐N/A
36. Methodology used to determine distance to endpoints? [68.39(d)] ALOHA	☒Y	☐N	☐N/A
37. Data used to estimate population and environmental receptors potentially affected? [68.39(e)] 2000 census data	☒Y	☐N	☐N/A
Hazard Assessment: Five-year accident history [68.42]			
38. Has the owner or operator included all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage? [68.42(a)]	☒Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP

39. Has the owner or operator reported the following information for each accidental release: [68.42(b)]	■Y ☐N ☐N/A
■ Date, time, and approximate duration of the release? [68.42(b)(1)]	
■ Chemical(s) released? [68.42(b)(2)]	
■ Estimated quantity released in pounds and percentage weight in a mixture (toxics)? [68.42(b)(3)]	
■ NAICS code for the process? [68.42(b)(4)]	
■ The type of release event and its source? [68.42(b)(5)]	
■ Weather conditions (if known)? [68.42(b)(6)]	
■ On-site impacts? [68.42(b)(7)]	
■ Known offsite impacts? [68.42(b)(8)]	
■ Initiating event and contributing factors (if known)? [68.42(b)(9)]	
■ Whether offsite responders were notified (if known)? [68.42(b)(10)]	
■ Operational or process changes that resulted from investigation of the release? [68.42(b)(11)]	

Section C: Prevention Program

Implemented the Program 3 prevention requirements as provided in 40 CFR 68.65 - 68.87? ☐S

☐M ■U ☐N/A

Comments:

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP

Prevention Program- Safety information [68.65]	
1. Has the owner or operator compiled written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by the rule? [68.65(a)] Does the process safety information contain the following for hazards of the substances: [68.65(b)] ■ Material Safety Data Sheets (MSDS) that meet the requirements of the OSHA Hazard Communication Standard [29 CFR 1910.1200(g)]? [68.48(a)(1)] ■ Toxicity information? [68.65(b)(1)] ■ Permissible exposure limits? [68.65(b)(2)] ■ Physical data? [68.65(b)(3)] ■ Reactivity data? [68.65(b)(4)] ■ Corrosivity data? [68.65(b)(5)] ■ Thermal and chemical stability data? [68.65(b)(6)] ■ Hazardous effects of inadvertent mixing of materials that could foreseeably occur? [68.65(b)(7)]	■Y ☐N ☐N/A
2. Has the owner documented information pertaining to technology of the process? ■ A block flow diagram or simplified process flow diagram? [68.65(c)(1)(i)] ■ Process chemistry? [68.65(c)(1)(ii)] ■ Maximum intended inventory? [68.65(c)(1)(iii)] ■ Safe upper and lower limits for such items as temperatures, pressures, flows, or compositions? [68.65(c)(1)(iv)] ■ An evaluation of the consequences of deviation? [68.65(c)(1)(iv)]	■Y ☐N ☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
3. Does the process safety information contain the following for the equipment in the process: [68.65(d)(1)] ■ Materials of construction? 68.65(d)(1)(i)] ■ Piping and instrumentation diagrams [68.65(d)(1)(ii)] ■ Electrical classification? [68.65(d)(1)(iii)] ■ Relief system design and design basis? [68.65(d)(1)(iv)] ■ Ventilation system design? [68.65(d)(1)(v)] ■ Design codes and standards employed? [68.65(d)(1)(vi)] ■ Material and energy balances for processes built after June 21, 1999? [68.65(d)(1)(vii)] ■ Safety systems? [68.65(d)(1)(viii)]	■Y	□N	□N/A
4. Has the owner or operator documented that equipment complies with recognized and generally accepted good engineering practices? [68.65(d)(2)]	■Y	□N	□N/A
5. Has the owner or operator determined and documented that existing equipment, designed and constructed in accordance with codes, standards, or practices that are no longer in general use, is designed, maintained, inspected, tested, and operating in a safe manner? [68.65(d)(3)]	■Y	□N	□N/A
Prevention Program- Process Hazard Analysis [68.67]			
6. Has the owner or operator performed an initial process hazard analysis (PHA), and has this analysis identified, evaluated, and controlled the hazards involved in the process? [68.67(a)]	□Y	■N	□N/A
7. Has the owner or operator determined and documented the priority order for conducting PHAs, and was it based on an appropriate rationale? [68.67(a)]	■Y	□N	□N/A
8. Has the owner used one or more of the following technologies to conduct process PHA: [68.67(b)] ■ What-if? [68.67(b)(1)] ■ Checklist? [68.67(b)(2)] □ What-if/Checklist? [68.67(b)(3)] □ Hazard and Operability Study (HAZOP) [68.67(b)(4)] □ Failure Mode and Effects Analysis (FMEA) [68.67(b)(5)] □ Fault Tree Analysis? [68.67(b)(6)] □ An appropriate equivalent methodology? [68.67(b)(7)]	■Y	□N	□N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
9. Did the PHA address: ■ The hazards of the process? [68.67(c)(1)] ☐ Identification of any incident that had a likely potential for catastrophic consequences? [68.67(c)(2)] ☐ Engineering and administrative controls applicable to hazards and interrelationships?[68.67(c)(3)] ■ Consequences of failure of engineering and administrative controls? [68.67(c)(4)] ☐ Stationary source siting? [68.67(c)(5)] ■ Human factors? [68.67(c)(6)] ■ An evaluation of a range of the possible safety and health effects of failure of controls? [68.67(c)(7)]	☐Y	■N	☐N/A
10. Was the PHA performed by a team with expertise in engineering and process operations and did the team include appropriate personnel? [68.67(d)]	■Y	☐N	☐N/A
11. Has the owner or operator established a system to promptly address the team's findings and recommendations; assured that the recommendations are resolved in a timely manner and documented; documented what actions are to be taken; completed actions as soon as possible; developed a written schedule of when these actions are to be completed; and communicated the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations? [68.67(e)]	☐Y	■N	☐N/A
12. Has the PHA been updated and revalidated by a team every five years after the completion of the initial PHA to assure that the PHA is consistent with the current process? [68.67(f)]	■Y	☐N	☐N/A
13. Has the owner or operator retained PHAs and updates or revalidations for each process covered, as well as the resolution of recommendations for the life of the process? [68.67(g)]	■Y	☐N	☐N/A
Prevention Program- Operating procedures [68.69]			
14. Has the owner or operator developed and implemented written operating procedures that provide instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
15 Do the procedures address the following: [68.69(a)] Steps for each operating phase: [68.69(a)(1)] ■ Initial Startup? [68.69(a)(1)(i)] ■ Normal operations? [68.69(a)(1)(ii)] ■ Temporary operations? [68.69((a)(1)(iii)] ■ Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)] ■ Emergency operations? [68.69(a)(1)(v)] ■ Normal shutdown? [68.68(a)(1)(vi)] ■ Startup following a turnaround, or after emergency shutdown? [68.69(a)(1)(vii)] Operating limits: [68.69(a)(2)] ■ Consequences of deviations [68.69(a)(2)(i)] ■ Steps required to correct or avoid deviation? [68.69(a)(2)(ii)] Safety and health considerations: [68.69(a)(3)] ■ Properties of, and physical hazards presented by, the chemicals used in the process [68.69(a)(3)(i)] ■ Precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment? [68.69(a)(3)(ii)] ■ Control measures to be taken if physical contact or airborne exposure occurs? [68.69(a)(3)(iii)] ■ Quality control for raw materials and control of hazardous chemical inventory levels? [68.69(a)(3)(iv)] ■ Any special or unique hazards? [68.69(a)(3)(v)] ■ Safety systems and their functions? [68.69(a)(4)]	■Y	☐N	☐N/A
16. Are operating procedures readily accessible to employees who are involved in a process? [68.69(b)]	■Y	☐N	☐N/A
17. Has the owner or operator certified annually that the operating procedures are current and accurate and that procedures have been reviewed as often as necessary? [68.69(c)]	☐Y	■N	☐N/A
18. Has the owner or operator developed and implemented safe work practices to provide for the control of hazards during specific operations, such as lockout/tagout? [68.69(d)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
Prevention Program - Training [68.71]			
19 Has each employee involved in operating a process, and each employee before being involved in operating a newly assigned process, been initially trained in an overview of the process and in the operating procedures? [68.71(a)(1)]	■Y	☐N	☐N/A
20. Did initial training include emphasis on safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks? [68.71(a)(1)]	■Y	☐N	☐N/A
21. In lieu of initial training for those employees already involved in operating a process on June 21, 1999, an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures [68.71(a)(2)]	■Y	☐N	☐N/A
22. Has refresher training been provided at least every three years, or more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process? [68.71(b)]	☐Y	■N	☐N/A
23, Has owner or operator ascertained and documented in record that each employee involved in operating a process has received and understood the training required? [68.71(c)]	■Y	☐N	☐N/A
24. Does the prepared record contain the identity of the employee, the date of the training, and the means used to verify that the employee understood the training? [68.71(c)]	■Y	☐N	☐N/A
Prevention Program - Mechanical Integrity [68.73]			
25. Has the owner or operator established and implemented written procedures to maintain the on-going integrity of the process equipment listed in 68.73(a)? [68.73(b)]	■Y	☐N	☐N/A
26. Has the owner or operator trained each employee involved in maintaining the on-going integrity of process equipment? [68.73(c)]	■Y	☐N	☐N/A
27. Performed inspections and tests on process equipment? [68.73(d)(1)]	■Y	☐N	☐N/A
28. Followed recognized and generally accepted good engineering practices for inspections and testing procedures? [68.73(d)(2)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
29. Ensured the frequency of inspections and tests of process equipment is consistent with applicable manufacturers' recommendations, good engineering practices, and prior operating experience? [68.73(d)(3)]	☐Y	■N	☐N/A
30. Documented each inspection and test that had been performed on process equipment, which identifies the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test? [68.73(d)(4)]	■Y	☐N	☐N/A
31. Corrected deficiencies in equipment that were outside acceptable limits defined by the process safety information before further use or in a safe and timely manner when necessary means were taken to assure safe operation? [68.73(e)]	■Y	☐N	☐N/A
32. Assured that equipment as it was fabricated is suitable for the process application for which it will be used in the construction of new plants and equipment? [68.73(f)(1)]	■Y	☐N	☐N/A
33. Performed appropriate checks and inspections to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions? [68.73(f)(2)]	■Y	☐N	☐N/A
34. Assured that maintenance materials, spare parts and equipment were suitable for the process application for which they would be used? [68.73(f)(3)]	■Y	☐N	☐N/A
Prevention Program - Management Of Change [68.75]			
35. Has the owner or operator established and implemented written procedures to manage changes to process chemicals, technology, equipment, and procedures, and changes to stationary sources that affect a covered process? [68.75(a)]	■Y	☐N	☐N/A
36. Do procedures assure that the following considerations are addressed prior to any change: [68.75(b)] ■ The technical basis for the proposed change? [68.75(b)(1)] ■ Impact of change on safety and health? [68.75(b)(2)] ■ Modifications to operating procedures? [68.75(b)(3)] ■ Necessary time period for the change? [68.75(b)(4)] ■ Authorization requirements for the proposed change? [68.75(b)(5)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP
37. Were employees, involved in operating a process and maintenance, and contract employees, whose job tasks would be affected by a change in the process, informed of, and trained in, the change prior to start-up of the process or affected parts of the process? [68.75(c)]	■Y ☐N ☐N/A
38. If a change resulted in a change in the process safety information, was such information updated accordingly? [68.75(d)]	■Y ☐N ☐N/A
39. If a change resulted in a change in the operating procedures or practices, had such procedures or practices been updated accordingly? [68.75(e)]	■Y ☐N ☐N/A
Prevention Program - Pre-startup Safety Review [68.77]	
40. If the facility installed a new stationary source, or significantly modified an existing source, (as discussed at 68.77(a)) did it perform a pre-startup safety review prior to the introduction of a regulated substance to a process to confirm: [68.77(b)] ■ Construction and equipment was in accordance with design specifications? [68.77(b)(1)] ■ Safety, operating, maintenance, and emergency procedures were in place and were adequate? [68.77(b)(2)] ■ For new stationary sources, a process hazard analysis had been performed and recommendations had been resolved or implemented before startup? [68.77(b)(3)] ■ Modified stationary sources meet the requirements contained in management of change? [68.77(b)(3)] ■ Training of each employee involved in operating a process had been completed? [68.77(b)(4)]	■Y ☐N ☐N/A
Prevention Program - Compliance audits [68.79]	
41. Has the owner or operator certified that the stationary source has evaluated compliance with the provisions of the prevention program at least every three years to verify that the developed procedures and practices are adequate and being followed? [68.79(a)]	■Y ☐N ☐N/A
42. Has the audit been conducted by at least one person knowledgeable in the process? [68.79(b)]	■Y ☐N ☐N/A
43. Are the audit findings documented in a report? [68.79(c)]	■Y ☐N ☐N/A
44. Has the owner or operator promptly determined and documented an appropriate response to each of the findings of the audit and documented that deficiencies had been corrected? [68.79(d)]	■Y ☐N ☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
45. Has the owner or operator retained the two most recent compliance reports? [68.79(e)]	■Y	☐N	☐N/A
Prevention Program - Incident investigation [68.81]			
46. Has the owner or operator investigated each incident that resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance? [68.81(a)]	■Y	☐N	☐N/A
47. Were all incident investigations initiated not later than 48 hours following the incident? [68.81(b)]	☐Y	■N	☐N/A
48. Was an accident investigation team established and did it consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of a contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident? [68.81(c)]	■Y	☐N	☐N/A
49. Was a report prepared at the conclusion of every investigation? [68.81(d)]	■Y	☐N	☐N/A
50. Does every report include: [68.81(d)] ■ Date of incident? [68.81(d)(1)] ■ Date investigation began? [68.81(d)(2)] ■ A description of the incident? [68.81(d)(3)] ☐ The factors that contributed to the incident? [68.81(d)(4)] ☐ Any recommendations resulting from the investigation? [68.81(d)(5)]	☐Y	■N	☐N/A
51. Has the owner or operator established a system to address and resolve the report findings and recommendations, and are the resolutions and corrective actions documented? [68.81(e)]	☐Y	■N	☐N/A
52. Was the report reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable? [68.81(f)]	■Y	☐N	☐N/A
53. Has the owner or operator retained incident investigation reports for at least five years? [68.81(g)]	■Y	☐N	☐N/A
Section D - Employee Participation [68.83]			
1. Has the owner or operator developed a written plan of action regarding the implementation of the employee participation required by this section? [68.83(a)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
2. Has the owner or operator consulted with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in chemical accident prevention provisions? [68.83(b)]	■Y	☐N	☐N/A
3. Has the owner or operator provided to employees and their representatives access to process hazards analyses and to all other information required to be developed under the chemical accident prevention rule? [68.83(c)]	■Y	☐N	☐N/A
Section E - Hot Work Permit [68.85]			
1. Has the owner or operator issued a hot work permit for each hot work operation conducted on or near a covered process? [68.85(a)]	■Y	☐N	☐N/A
2. Does the permit document that the fire prevention and protection requirements in 29CFR 1910.252(a) have been implemented prior to beginning the hot work operations? [68.85(b)]	■Y	☐N	☐N/A
3. Does the permit indicate the date(s) authorized for hot work and the object(s) upon which hot work is to be performed? [68.85(b]	■Y	☐N	☐N/A
4. Are the permits being kept on file until completion of the hot work operations? [68.85(b)]	■Y	☐N	☐N/A
Section F - Contractors [68.87]			
1. Has the owner or operator obtained and evaluated information regarding the contract owner or operator's safety performance and programs when selecting a contractor? [68.87(b)(1)]	■Y	☐N	☐N/A
2. Informed contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process? [68.87(b)(2)]	■Y	☐N	☐N/A
3. Explained to the contract owner or operator the applicable provisions of the emergency response or the emergency action program? [68.87(b)(3)]	■Y	☐N	☐N/A
4. Developed and implemented safe work practices consistent with §68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in the covered process areas? [68.87(b)(4)]	■Y	☐N	☐N/A
5. Periodically evaluated the performance of the contract owner or operator in fulfilling their obligations (as described at 68.87(c)(1) – (c)(5))? [68.87(b)(5)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP

Section G - Emergency Response [68.90 - 68.95]

Developed and implemented an emergency response program as provided in 40 CFR 68.90-68.95? ☐S ■M ☐U ☐N/A

Comments:

1.	Is the facility designated as a "first responder" in case of an accidental release of regulated substances"	■Y	☐N	☐N/A
1.a.	If the facility is not a first responder:			
1.a.(1)	For stationary sources with any regulated substances held in a process above threshold quantities, is the source included in the community emergency response plan developed under 42 U.S.C. 11003? [68.90(b)(1)]	■Y	☐N	☐N/A
1.a.(2)	For stationary sources with only regulated flammable substances held in a process above threshold quantities, has the owner or operator coordinated response actions with the local fire department? [68.90(b)(2)]	■Y	☐N	☐N/A
1.a.(3)	Are appropriate mechanisms in place to notify emergency responders when there is need for a response? [68.90(b)(3)]	■Y	☐N	☐N/A
2.	An emergency response plan is maintained at the stationary source and contains the following? [68.95(a)(1)] ■ Procedures for informing the public and local emergency response agencies about accidental releases? [68.95(a)(1)(i)] ☐ Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures? [68.95(a)(1)(ii)] ■ Procedures and measures for emergency response after an accidental release of a regulated substance? [68.95(a)(1)(iii)]	☐Y	■N	☐N/A
3.	The emergency response plan contains procedures for the use of emergency response equipment and for its inspection, testing, and maintenance? [68.95(a)(2)]	■Y	☐N	☐N/A
4.	The emergency response plan requires, and there is documentation of, training for all employees in relevant procedures? [68.95(a)(3)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
5. The owner or operator has developed and implemented procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes? [68.95(a)(4)]	■Y	☐N	☐N/A
6. Did the owner or operator use a written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance (''One Plan'')? If so, does the plan include the elements provided in paragraph (a) of 68.95, and also complies with paragraph (c) of 68.95? [68.95(b)]	■Y	☐N	☐N/A
7. Has the emergency response plan been coordinated with the community emergency response plan developed under EPCRA? [68.95(c)]	■Y	☐N	☐N/A
Section H – Risk Management Plan [40 CFR 68.190 – 68.195]			
1. Does the single registration form include, for each covered process, the name and CAS number of each regulated substance held above the threshold quantity in the process, the maximum quantity of each regulated substance or mixture in the process (in pounds) to two significant digits, the five- or six-digit NAICS code that most closely corresponds to the process and the Program level of the process? [68.160(b)(7)]	■Y	☐N	☐N/A
2. Did the facility assign the correct program level(s) to its covered process(es)? [68.160(b)(7)]	■Y	☐N	☐N/A
3. Has the owner or operator reviewed and updated the RMP and submitted it to EPA [68.190(a)]? Reason for update: ■ Five-year update. [68.190(b)(1)] ■ Within three years of a newly regulated substance listing. [68.190(b)(2)] ■ At the time a new regulated substance is first present in an already regulated process above threshold quantities. [68.190(b)(3)] ■ At the time a regulated substance is first present in an new process above threshold quantities. [68.190(b)(4)] ■ Within six months of a change requiring revised PHA or hazard review. [68.190(b)(5)] ■ Within six months of a change requiring a revised OCA as provided in 68.36. [68.190(b)(6)] ■ Within six months of a change that alters the Program level that applies to any covered process. [68.190(b)(7)]	■Y	☐N	☐N/A

RMP Program Level 3 Process Checklist	Facility Name: Calumet Specialty Products Partners LP		
4. If the owner or operator experienced an accidental release that met the five-year accident history reporting criteria (as described at 68.42) subsequent to April 9, 2004, did the owner or operator submit the information required at 68.168, 68.170(j) and 68.175(l) within six months of the release or by the time the RMP was updated as required at 68.190, whichever was earlier. [68.195(a)]	■Y	☐N	☐N/A
5. If the emergency contact information required at 68.160(b)(6) has changed since June 21, 2004, did the owner or operator submit corrected information within thirty days of the change? [68.195(b)]	☐Y	☐N	■N/A