

U.S. Department of Labor
Occupational Safety and Health Administration
1310 W. Clairemont Avenue
Eau Claire, WI 54701

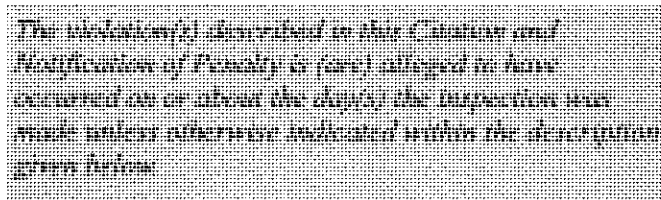


Citation and Notification of Penalty

To:
Superior Refining Company, LLC.
and its successors
2407 Stinson Ave.
Superior, WI 54880

Inspection Number: 1312169
Inspection Date(s): 04/27/2018 – 09/28/2018
Issuance Date: 10/02/2018

Inspection Site:
2407 Stinson Ave.
Superior, WI 54880



This Citation and Notification of Penalty (this Citation) describes violations of the Occupational Safety and Health Act of 1970. The penalty(ies) listed herein is (are) based on these violations. You must abate the violations referred to in this Citation by the dates listed and pay the penalties proposed, unless within 15 working days (excluding weekends and Federal holidays) from your receipt of this Citation and Notification of Penalty **you either call to schedule an informal conference (see paragraph below) or you mail a notice of contest** to the U.S. Department of Labor Area Office at the address shown above. Please refer to the enclosed booklet (OSHA 3000) which outlines your rights and responsibilities and which should be read in conjunction with this form. Issuance of this Citation does not constitute a finding that a violation of the Act has occurred unless there is a failure to contest as provided for in the Act or, if contested, unless this Citation is affirmed by the Review Commission or a court.

Posting - The law requires that a copy of this Citation and Notification of Penalty be posted immediately in a prominent place at or near the location of the violation(s) cited herein, or, if it is not practicable because of the nature of the employer's operations, where it will be readily observable by all affected employees. This Citation must remain posted until the violation(s) cited herein has (have) been abated, or for 3 working days (excluding weekends and Federal holidays), whichever is longer.

Informal Conference - An informal conference is not required. However, if you wish to have such a conference you may request one with the Area Director during the 15 working day contest period by calling 715-832-9019. During such an informal conference you may present any evidence or views which you believe would support an adjustment to the citation(s) and/or penalty(ies).

If you are considering a request for an informal conference to discuss any issues related to this Citation and Notification of Penalty, you must take care to schedule it early enough to allow time to contest after the informal conference, should you decide to do so. Please keep in mind that a written letter of intent to contest must be submitted to the Area Director within 15 working days of your receipt of this Citation. The running of this contest period is not interrupted by an informal conference.

If you decide to request an informal conference, please complete, remove and post the Notice to Employees next to this Citation and Notification of Penalty as soon as the time, date, and place of the informal conference have been determined. Be sure to bring to the conference any and all supporting documentation of existing conditions as well as any abatement steps taken thus far. If conditions warrant, we can enter into an informal settlement agreement which amicably resolves this matter without litigation or contest.

Right to Contest – You have the right to contest this Citation and Notification of Penalty. You may contest all citation items or only individual items. You may also contest proposed penalties and/or abatement dates without contesting the underlying violations. **Unless you inform the Area Director in writing that you intend to contest the citation(s) and/or proposed penalty(ies) within 15 working days after receipt, the citation(s) and the proposed penalty(ies) will become a final order of the Occupational Safety and Health Review Commission and may not be reviewed by any court or agency.**

Penalty Payment – Penalties are due within 15 working days of receipt of this notification unless contested. (See the enclosed booklet and the additional information provided related to the Debt Collection Act of 1982.) Make your check or money order payable to “DOL-OSHA”. Please indicate the Inspection Number on the remittance. You can also make your payment electronically on www.pay.gov. On the left side of the pay.gov homepage, you will see an option to Search Public Forms. Type "OSHA" and click Go. From the results, click on **OSHA Penalty Payment Form**. The direct link is:

<https://www.pay.gov/paygov/forms/formInstance.html?agencyFormId=53090334>.

You will be required to enter your inspection number when making the payment. Payments can be made by credit card or Automated Clearing House (ACH) using your banking information. Payments of \$25,000 or more require a Transaction ID, and also must be paid using ACH. If you require a Transaction ID, please contact the OSHA Debt Collection Team at (202) 693-2170.

OSHA does not agree to any restrictions or conditions or endorsements put on any check, money order, or electronic payment for less than the full amount due, and will process the payments as if these restrictions or conditions do not exist.

Notification of Corrective Action – For each violation which you do not contest, you must provide ***abatement certification*** to the Area Director of the OSHA office issuing the citation and identified above. This abatement certification is to be provided by letter within 10 calendar days after each abatement date. Abatement certification includes the date and method of abatement. If the citation indicates that the violation was corrected during the inspection, no abatement certification is required for that item. The abatement certification letter must be posted at the location where the violation appeared and the corrective action took place or employees must otherwise be effectively informed about abatement activities. A sample abatement certification letter is enclosed with this Citation. In addition, where the citation indicates that ***abatement documentation*** is necessary, evidence of the purchase or repair of equipment, photographs or video, receipts, training records, etc., verifying that abatement has occurred is required to be provided to the Area Director.

Employer Discrimination Unlawful – The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he/she has been discriminated against may file a complaint no later than 30 days after the discrimination occurred with the U.S. Department of Labor Area Office at the address shown above.

Employer Rights and Responsibilities – The enclosed booklet (OSHA 3000) outlines additional employer rights and responsibilities and should be read in conjunction with this notification.

Notice to Employees – The law gives an employee or his/her representative the opportunity to object to any abatement date set for a violation if he/she believes the date to be unreasonable. The contest must be mailed to the U.S. Department of Labor Area Office at the address shown above and postmarked within 15 working days (excluding weekends and Federal holidays) of the receipt by the employer of this Citation and Notification of Penalty.

Inspection Activity Data – You should be aware that OSHA publishes information on its inspection and citation activity on the Internet under the provisions of the Electronic Freedom of Information Act. The information related to these alleged violations will be posted when our system indicates that you have received this citation. You are encouraged to review the information concerning your establishment at www.osha.gov. If you have any dispute with the accuracy of the information displayed, please contact this office.



NOTICE TO EMPLOYEES OF INFORMAL CONFERENCE

An informal conference has been scheduled with OSHA to discuss the citation(s) issued on 10/02/2018. The conference will be held by telephone or at the OSHA office located at 1310 W. Clairemont Avenue, Eau Claire, WI 54701 on _____ at _____.

Employees and/or representatives of employees have a right to attend an informal conference.

CERTIFICATION OF CORRECTIVE ACTION WORKSHEET

Inspection Number: 1312169

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880
Issuance Date: 10/02/2018

List the specific method of correction for each item on this citation in this package that does not read "Corrected During Inspection" and return to: **U.S. Department of Labor – Occupational Safety and Health Administration, 1310 W. Clairemont Avenue, Eau Claire, WI 54701**

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

I certify that the information contained in this document is accurate and that the affected employees and their representatives have been informed of the abatement.

Signature

Date

Typed or Printed Name

Title

NOTE: 29 USC 666(g) whoever knowingly makes any false statements, representation or certification in any application, record, plan or other documents filed or required to be maintained pursuant to the Act shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment of not more than 6 months or both.

POSTING: A copy of completed Corrective Action Worksheet should be posted for employee review



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 1 Type of Violation: **Serious**

29 CFR 1910.119(d)(3)(i)(A): Process safety information pertaining to the equipment in the process did not include the materials of construction:

- (a) Superior Refining Company; On or about April 26, 2018, the employer failed to update and maintain process safety information for alterations made to the Primary Absorber (15G-V08), the absorber was noted per original installation to have three nozzles while current documentation showed ten nozzles. Documentation regarding design and installation information for the additional nozzles was not provided.
- (b) Superior Refining Company; On or about April 26, 2018, the employer failed to update and maintain process safety information for alterations made to the Sponge Absorber (15G-V09), the absorber was noted per original installation to have three nozzles while current documentation showed eight nozzles. Documentation regarding design and installation information for the additional nozzles was not provided.

Recommended Abatement: Ensure other equipment in the refinery has current and required process safety information.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	02/21/2019
Proposed Penalty:	\$6652.00



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 2 Type of Violation: **Serious**

29 CFR 1910.119(d)(3)(i)(D): The employers relief system design and design calculation for 15G-SV006, High Pressure Receiver Relief Valve and the flare were not adequately performed:

- a) Superior Refining Company; On or about April 26, 2018, the 15G-SV006 relief valve sizing document provided indicated the calculations were performed for pressure relief of the High Pressure Receiver (15G-V07), Primary Absorber (15G-V08), Sponge Absorber (15G-V09) and Water Knockout Drum (15G-V13). The calculations failed to include piping and vessels from the discharge of the gas compressors to the Stripper Column (including the High Pressure (HP) Receiver Condensers, HP Receiver, HP Receiver Water Knockout Drum, Primary Absorber, Sponge Absorber, and Stripper Column).
- b) Superior Refining Company; On or about April 26, 2018, the 15G-SV006 relief valve sizing document backpressure calculation included the discharge piping and elbows to the flare header (measuring less than 30 feet total length); however, the calculation failed to include the full length to the flare (flare header continues for over 100 feet to the flare), as well as, the possible flows and pressures from other relief devices in the common flare header.
- c) Superior Refining Company; On or about April 26, 2018, the design calculation for the flare was performed last in about 2003 and does not include changes in processes, equipment, and systems that have been implemented since the calculation was last performed.

See pages 1 through 4 of this Citation and Notification of Penalty for information on employer and employee rights and responsibilities.

U.S. Department of Labor
Occupational Safety and Health Administration

Inspection Number: 1312169
Inspection Date(s): 04/27/2018 -
Issuance Date: 10/02/2018



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Recommended Abatement: Update existing calculations to match current conditions and modify the relief devices and flare lines appropriately based on revised calculations. Please reference applicable recognized and generally accepted good engineering practices such as, but not limited to, API 520 Sizing, Selection, and Installation of Pressure-relieving Devices, 2014; API 521 Pressure-relieving and Depressuring Systems, 2014; and API 537 Flare Details for Petroleum, Petrochemical, And Natural Gas Industries, 2017 to perform calculations and make necessary changes to the system(s) in accordance with the results of the updated calculations.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

02/21/2019
\$11641.00

See pages 1 through 4 of this Citation and Notification of Penalty for information on employer and employee rights and responsibilities.



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

The alleged violations below have been grouped because they involve similar or related hazards that may increase the potential for injury or illness.

Citation 1 Item 3 a Type of Violation: **Serious**

29 CFR 1910.119(d)(3)(iii): For existing equipment designed and constructed in accordance with codes, standards, or practices no longer in general use, the employer did not determine and document that the equipment in the process was designed, maintained, inspected, tested, and operating in a safe manner (i.e. fit-for-service):

- a) Superior Refining Company; On or about April 26, 2018, the employer failed to determine and document that the following equipment including, but not limited to, the Primary Absorber (15G-V08), High Pressure Cooler (15G-E02A), High Pressure Receiver (15G-V07), Stripper Column (15G-V10), Stripper Reboiler (15G-E06), Debutanizer Column (15G-V11), Debutanizer Reboiler (15G-E08), Debutanizer Overhead Condenser (15G-E07), Debutanizer Receiver (15G-V12), Isostripper (16A-V08), and the Acid Settler (16A-V05) constructed of ASTM A-212 steel were fit-for-service based on Minimum Design Metal Temperature (MDMT), embrittlement, and brittle fracture hazards.

Recommended Abatement: The employer must ensure that the vessels utilized to replace the primary and sponge absorbers, destroyed in the incident on April 26, 2018, as well as other listed vessels above, meet recognized and generally accepted good engineering practices. These practices include, but are not limited to, ASME Boiler and Pressure Vessel Code Section VIII, API 510, API 579-1/ASME FFS-1, and should include inspection and testing for embrittlement before they are returned to service.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

02/21/2019
\$11641.00

See pages 1 through 4 of this Citation and Notification of Penalty for information on employer and employee rights and responsibilities.



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 3 b Type of Violation: **Serious**

29 CFR 1910.119(j)(4)(ii): The employers inspection and testing procedures did not follow recognized and generally accepted good engineering practices:

- a) Superior Refining Company; On or about April 26, 2018, the employer failed to perform inspection and testing to determine if the following equipment constructed of ASTM A-212 steel was fit-for-service to include, but not be limited to, the Primary Absorber (15G-V08), High Pressure Cooler (15G-E02A), High Pressure Receiver (15G-V07), Stripper Column (15G-V10), Stripper Reboiler (15G-E06), Debutanizer Column (15G-V11), Debutanizer Reboiler (15G-E08), Debutanizer Overhead Condenser (15G-E07), Debutanizer Receiver (15G-V12), Isostripper (16A-V08), and the Acid Settler (16A-V05) based on Minimum Design Metal Temperature (MDMT), embrittlement, and brittle fracture hazards.

Recommended Abatement: The employer must ensure that the vessels listed above are inspected and tested, prior to returning them to service, in accordance with recognized and generally accepted good engineering practices, including but not limited to, API 510 and API 579-1/ASME FFS-1. Only those vessels determined to be fit-for-service should be returned to service.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:

02/21/2019



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 4 Type of Violation: **Serious**

29 CFR 1910.119(e)(3)(i): The employer has not identified critical hazards of the process in the Process Hazard Analysis (PHA):

- a) Superior Refining Company; On or about April 26, 2018, the employer did not include the hazard of air introduction from the Fluid Catalytic Cracking Unit (FCCU) regenerator into the reactor due to loss of catalyst and or loss of seal on the spent catalyst slide valve.
- b) Superior Refining Company; On or about April 26, 2018, the employer did not adequately address the hazards associated with shutdowns, including but not limited to, the hazards associated with operation in manual mode, distractions from additional operators and workers in areas, introduction of air or other materials into the systems, deviations from procedures, inerting and purging of equipment, and other abnormal conditions and situations experienced during shutdowns.

Recommended Abatement: FCCU and Gas Concentration PHAs shall include the hazards of introduction of air into the system from the regenerator and from other sources; as well as, the hazards introduced during shutdowns. Revisit PHAs for this and other areas of the refinery to address introduction of air and shutdown hazards.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	02/21/2019
Proposed Penalty:	\$11641.00



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

The alleged violations below have been grouped because they involve similar or related hazards that may increase the potential for injury or illness.

Citation 1 Item 5 a Type of Violation: **Serious**

29 CFR 1910.119(f)(1)(i)(D): The employer did not develop and implement written operating procedures that provide clear instructions for 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:

- (a) Superior Refining Company; On or about April 26, 2018, operating procedure OPP1517 Fluid Catalytic Cracking Unit (FCCU) Stops (E-Stops) does not provide clear instructions to include the conditions and parameters under which emergency shutdown is required and the assignment of shutdown responsibility.

Recommended Abatement: Update emergency shutdown procedure OPP1517 to include clear instructions that address the conditions and parameters under which emergency shutdown is required, as well as, the assignment of shutdown responsibility. Review and revise other operating procedures at the refinery to include this information.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	02/21/2019
Proposed Penalty:	\$11641.00



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 5 b Type of Violation: **Serious**

29 CFR 1910.119(f)(1)(ii): The employer did not develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with addressing consequences of deviation and the steps required to correct or avoid deviations per 1910.119(f)(1)(ii)(A) & (B):

- (a) Superior Refining Company; On or about April 26, 2018, consequences of deviation and the steps required to correct and avoid deviations were not clear, inclusive, and consistent in that operating procedures such as, but not limited to, OPP1512-Fluid Catalytic Cracking Unit (FCCU) Control Room Pressurization, OPP0563 - FCCU, Gas Concentration, Merox, and C3C4 Splitter Shutdown, OPP0590 Loss of Catalyst Level from Regenerator, and OPP1537 Slide Valve Over-rides (COPS) referred operators to other documents for time critical events .

Recommended Abatement: Include consequences of deviation in the operating procedures at the refinery, as well as, the steps required to correct or avoid deviations.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:

02/21/2019



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 5 c Type of Violation: **Serious**

29 CFR 1910.119(f)(1)(iv): The employer failed to ensure operating procedures included safety systems and their functions:

- (a) Superior Refining Company; On or about April 26, 2018, information on safety systems and their functions were not addressed and implemented in operating procedures such as, but not limited to, OPP0563 - Fluid Catalytic Cracking Unit (FCCU), Gas Concentration, Merox, and C3C4 Splitter Shutdown and OPP0590 Loss of Catalyst Level from Regenerator.

Recommended Abatement: Include safety system information and the function of these safety systems in the operating procedures at the refinery.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:

02/21/2019



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 5 d Type of Violation: **Serious**

29 CFR 1910.119(f)(2): Operating procedures were not readily accessible to employees who work in or maintain a process area:

- (a) The Superior Refining Company; On or about April 26, 2018, operating procedures for the Fluid Catalytic Cracking Unit (FCCU), Gas Concentration Unit, and the Alkylation Unit were not provided with safe upper and lower limits, the consequences of deviation, and the steps required to correct or avoid deviations as the operating procedures referred the operators to other documents that were not always readily available in events such as, but not limited to, loss of power, loss and/or malfunction of operating system, or some other event.

Recommended Abatement: Keep current hard copies of the operating procedures at a known and accessible location in each control room.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:

02/21/2019



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 6 Type of Violation: **Serious**

29 CFR 1910.119(j)(5): The employer did not correct deficiencies in equipment that were outside acceptable limits before further use, or in a safe and timely manner, when necessary to ensure safe operation:

- (a) Superior Refining Company; On or about April 26, 2018, the employer did not implement interim risk mitigation measures to address deficiencies and potential hazards, including failure of the spent catalyst slide valve (s/n C98-3629-2) utilized at the time of the incident.

Recommended Abatement: Equipment deficiencies should be addressed per the facilities Mechanical Integrity Program and per industry recognized and generally accepted good engineering practices to determine if the equipment can be safely operated, or if a shutdown is necessary; if continued operation of deficient equipment requires some form of interim additional safeguards or monitoring, to ensure safe operation until the deficiency can be corrected, then the management of change process shall be followed.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

02/21/2019
\$11641.00



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 7 Type of Violation: **Serious**

29 CFR 1910.119(j)(6)(iii): The employer did not ensure that maintenance materials, spare parts, and equipment were suitable for the process application:

- (a) Superior Refining Company; On or about April 26, 2018, the employer could not demonstrate that there was an adequate process in place to ensure the right materials, parts and equipment were being specified, purchased, provided to, and used by the trades for repair and replacement of process equipment.

Recommended Abatement: Implement a process that ensures the right materials, spare parts, and equipment are being used by employees and contractors in the field. The management of change process must be followed before changes in materials, spare parts, and/or equipment are made.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	02/21/2019
Proposed Penalty:	\$6652.00



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

The alleged violations below have been grouped because they involve similar or related hazards that may increase the potential for injury or illness.

Citation 1 Item 8 a Type of Violation: **Serious**

29 CFR 1910.119(l)(3): Employees involved in operating a process, as well as, maintenance and contract employees whose job tasks would be affected by a change in the process were not informed of, and trained in the change, prior to the process commencing:

- a) Superior Refining Company; On or about April 26, 2018, employees were not adequately trained on operating procedure OPP0563 (dated 4/25/18) Fluid Catalytic Cracking Unit (FCCU), Gas Concentration, Merox, and C3C4 Splitter Shut-down utilized during the shutdown; changes were made to the procedure including, but not limited to, the addition of vapor phase cleaning, the order in which shutdown was performed, and when equipment was blinded.

Recommended Abatement: Ensure that the management of change process is followed when changes are made to procedures, and that affected employees and contractors receive adequate training to the procedures before they perform any functions in the new or revised procedures.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	02/21/2019
Proposed Penalty:	\$11641.00



Citation and Notification of Penalty

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880

Citation 1 Item 8 b Type of Violation: **Serious**

29 CFR 1910.119(l)(5): A change covered by this paragraph resulted in a change in the operating procedures or practices required by paragraph (f) of this section, and such procedures or practices were not updated accordingly:

- a) Superior Refining Company; On or about April 26, 2018, adequate management of change procedures were not performed prior to utilization of operating procedure OPP0563 (dated 4/25/18) Fluid Catalytic Cracking Unit (FCCU), Gas Concentration, Merox, and C3C4 Splitter Shut-down; changes were made to the procedure including, but not limited to, the addition of vapor phase cleaning, the order in which shutdown was performed, and when equipment was blinded.

Recommended Abatement: Provide additional instruction to supervisors and managers at the refinery so that changes to procedures (as well as other changes) follow the management of change process prior to implementation.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:

02/21/2019

A handwritten signature in black ink, appearing to read "Mark Hysell", written over a horizontal line.

Mark Hysell
Area Director

U.S. Department of Labor
Occupational Safety and Health Administration
1310 W. Clairemont Avenue
Eau Claire, WI 54701



INVOICE / DEBT COLLECTION NOTICE

Company Name: Superior Refining Company, LLC.
Inspection Site: 2407 Stinson Ave., Superior, WI 54880
Issuance Date: 10/02/2018

Summary of Penalties for Inspection Number	1312169
Citation 1, Serious	\$83150.00
TOTAL PROPOSED PENALTIES	\$83150.00

To avoid additional charges, please remit payment promptly to this Area Office for the total amount of the uncontested penalties summarized above. Make your check or money order payable to: "DOL-OSHA". Please indicate OSHA's Inspection Number (indicated above) on the remittance. You can also make your payment electronically on www.pay.gov. On the left side of the pay.gov homepage, you will see an option to Search Public Forms. Type "OSHA" and click Go. From the results, click on **OSHA Penalty Payment Form**. The direct link is <https://www.pay.gov/paygov/forms/formInstance.html?agencyFormId=53090334>. You will be required to enter your inspection number when making the payment. Payments can be made by credit card or Automated Clearing House (ACH) using your banking information. Payments of \$25,000 or more require a Transaction ID, and also must be paid using ACH. If you require a Transaction ID, please contact the OSHA Debt Collection Team at (202) 693-2170.

OSHA does not agree to any restrictions or conditions or endorsements put on any check, money order, or electronic payment for less than the full amount due, and will cash the check or money order as if these restrictions or conditions do not exist.

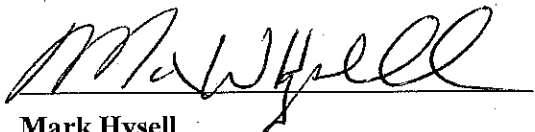
If a personal check is issued, it will be converted into an electronic fund transfer (EFT). This means that our bank will copy your check and use the account information on it to electronically debit your account for the amount of the check. The debit from your account will then usually occur within 24 hours and will be shown on your regular account statement. You will not receive your original check back. The bank will destroy your original check, but will keep a copy of it. If the EFT cannot be completed because of insufficient funds or closed account, the bank will attempt to make the transfer up to 2 times.

Pursuant to the Debt Collection Act of 1982 (Public Law 97-365) and regulations of the U.S. Department of Labor (29 CFR Part 20), the Occupational Safety and Health Administration is required to assess interest, delinquent charges, and administrative costs for the collection of delinquent penalty debts for violations of the Occupational Safety and Health Act.

Interest: Interest charges will be assessed at an annual rate determined by the Secretary of the Treasury on all penalty debt amounts not paid within one month (30 calendar days) of the date on which the debt amount becomes due and payable (penalty due date). The current interest rate is one percent (1%). Interest will accrue from the date on which the penalty amounts (as proposed or adjusted) become a final order of the Occupational Safety and Health Review Commission (that is, 15 working days from your receipt of the Citation and Notification of Penalty), unless you file a notice of contest. Interest charges will be waived if the full amount owed is paid within 30 calendar days of the final order.

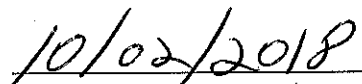
Delinquent Charges: A debt is considered delinquent if it has not been paid within one month (30 calendar days) of the penalty due date or if a satisfactory payment arrangement has not been made. If the debt remains delinquent for more than 90 calendar days, a delinquent charge of six percent (6%) per annum will be assessed accruing from the date that the debt became delinquent.

Administrative Costs: Agencies of the Department of Labor are required to assess additional charges for the recovery of delinquent debts. These additional charges are administrative costs incurred by the Agency in its attempt to collect an unpaid debt. Administrative costs will be assessed for demand letters sent in an attempt to collect the unpaid debt.



Mark Hysell

Area Director



Date



October 2, 2018

Superior Refining Company, LLC.
Attn: Chuck Palmer
2407 Stinson Ave
Superior, WI 54880

RE: Inspection #1312169

Dear Mr. Palmer:

An on-site inspection of the refinery was opened on April 27, 2018. Based on this inspection, the following recommendations are being provided to enhance employee safety and health. Additionally, for some of the listed recommendations no OSHA standard may apply and it was deemed inappropriate at this time, based on the information gathered per this inspection, to invoke Section 5(a)(1), the General Duty Clause of the Occupational Safety and Health Act.

- 1) Mechanical Integrity- It was identified per documentation received (SUPERIOR001650-SUPERIOR001729) that ASTM A-516-70 steel is utilized in the following equipment:

- 16A-V09-1 (Isostripper Receiver)
- 16A-V28 (Liquid Trap Relief Gas Scrubber)
- 15G-V17 (Settler)

This specific composition of steel was noted to have been utilized in the 1984 Romeoville Refinery incident in which inspection and testing found the metal to be brittle. The inspection team recommends that your facility add ASTM A-516 to an embrittlement testing list for inspection and testing per the facilities mechanical integrity program. As well as, review other metals (i.e. ASTM A-201) and incidents related to metal failure per API 579-1/ASME FFS-1 (2016) Fitness-For-Service.

- 2) Mechanical Integrity- For equipment involved in the fire that is being considered for continued service; the inspection team recommends following the requirements of API 579-1/ASME FFS-1 Fitness-For-Service (2016) as applicable, specifically Part 11 – Assessment of Fire Damage.
- 3) PHAs- The most recent PHAs do not inherently have a manager or a main representative from the maintenance and inspection department listed and included in the full PHA. It was noted that maintenance personnel would come in as needed for certain sections of the PHAs; however, none of their names were actually represented on the list of team

members. The 1995 PHA listed other personnel such as maintenance, electrical, operations, etc. that were additionally involved. None of the other PHAs provided listed a maintenance team member. The inspection team recommends having maintenance involved in every aspect of PSM especially the PHAs as they can be the most familiar with the equipment and how it can fail.

- 4) PHAs- Superior Refining Company currently utilizes a checklist addressing human factors as part of their PHA process. However, several other human factors could be addressed to include those associated with unfamiliar steps or deviations in routine and non-routine shutdown/start-up processes. The inspection team recommends that additional checklist questions be developed to address how operators and maintenance personnel would respond when faced with unfamiliar steps or deviations in the steps of operating or maintenance procedures.

For example, the Center for Chemical Process Safety has a publication, "Guidelines for Preventing Human Error in Process Safety", which discusses many human factors not listed in the PHAs, including but not limited to:

- Frequency of personnel involvement
- Complexity of process events
- Time constraints
- Lighting
- Work hours and overtime
- Production pressures and safe practices
- Performance changes associated with emergencies
- Training level of the workers
- Operating and maintenance procedure adequacy
- Deviations from procedures

- 5) Handling and resolution of incidents and near misses- Superior Refining Company has four recommendations, out of nine total, that have not been documented as completed and are beyond the due dates listed in the incident reports,

Furthermore, during the inspection it was indicated that near misses and incidents along with resolutions were not always covered with contractors. The inspection team recommends good communication and follow-through with all near misses and incidents to ensure they are addressed in a timely manner and both parties are apprised as to how they are being handled.

- 6) Hot work- Superior Refining Company utilizes two hot work programs, one for high energy hot work and another for low energy hot work. Low energy hot work requires no atmospheric monitoring or testing even though a fire or explosion can occur with low energy ignition sources in the presence of a fuel. The inspection team recommends that initial atmospheric monitoring be required as well prior to utilization of low energy devices. It may be easier to require atmospheric monitoring

for all hot work permits verses having employees differentiate between high and low energy.

- 7) Compliance Audits- Superior Refining Company currently has nine open action items remaining from the July 2016 compliance audit, with eight of the nine open beyond their due dates. The inspection team recommends additional emphasis on timely completion of action items.
- 8) Training- The inspection team identified through interviews and documentation that training of operator personnel was not adequate. It was noted that newer and less experienced operators were training new operators, and that training was not always consistent as the most experienced operator would not always train the new individual for the entire period of training.

This was previously addressed in the Non-PSM Incident Investigation Recommendations (SUPERIOR012647) and noted:

- consider a "train-the-trainer" program to certify trainers;
- strong operators should be trainers;
- there should be some type of performance evaluation;
- the head operators should be responsible for proper training, operator performance, and monitoring of the training process;
- consider developing a competency test in addition to the written test for operator training.

- 9) Process Safety Information- The inspection team recommends reviewing the FCCU stack height to ensure it is tall enough, so that vapors blowing away from the stack will not get sucked into the FCCU control room through the intake ventilation system.

In the interest of workplace safety and health, I recommend that you voluntarily take the necessary steps to eliminate or materially reduce your employees' exposure to the hazards described above.

OSHA welcomes any report of your efforts to reduce the above-mentioned exposures. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,



Mark W. Hyself
Area Director