

**U.S. Department of Labor**  
Occupational Safety and Health Administration  
919 N. Market Street  
Suite 900  
Wilmington, DE 19801-3319  
Phone: (302)573-6518 FAX: (302)573-6532



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## Citation and Notification of Penalty

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**To:**  
Kuehne Chemical Company, Inc.  
  
and its successors  
1645 River Road  
Delaware City, DE 19706

**Inspection Number:** 311812705  
**Inspection Date(s):** 08/23/2011 - 02/22/2012  
  
**Issuance Date:** 02/22/2012

**Inspection Site:**  
1645 River Road  
Delaware City, DE 19706

*The violation(s) described in this Citation and Notification of Penalty is (are) alleged to have occurred on or about the day(s) the inspection was made unless otherwise indicated within the description given below.*

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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 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.

**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 your inspection will be available 30 calendar days after the Citation Issuance Date. You are encouraged to review the information concerning your establishment at [WWW.OSHA.GOV](http://WWW.OSHA.GOV). If you have any dispute with the accuracy of the information displayed, please contact this office.**

**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. **The penalty dollar amounts need not be posted and may be marked out or covered up prior to posting.**

**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. 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 page 4 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.

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

**Notification of Corrective Action** - For violations which you do not contest, you should notify the U.S. Department of Labor Area Office promptly by letter that you have taken appropriate corrective action within the time frame set forth on this Citation. Please inform the Area Office in writing of the abatement steps you have taken and of their dates, together with adequate supporting documentation, e.g., drawings or photographs of corrected conditions, purchase/work orders related to abatement actions, air sampling results, etc.

**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.

**Notification of Corrective Action** - For **each** violation which you do not contest, you are required by 29 CFR 1903.19 to submit an Abatement Certification to the Area Director of the OSHA office issuing the citation and identified above. The certification **must** be sent by you within **10 calendar days** of the abatement date indicated on the citation. For **Willful** and **Repeat** violations, documents (example: photos, copies of receipts, training records, etc.) demonstrating that abatement is complete **must** accompany the certification. Where the citation is classified as **Serious** and the citations states that abatement documentation is required, documents such as those described above are required to be submitted along with the abatement certificate. If the citation indicates that the violation was corrected during the inspection, no abatement certification is required for that item.

**All abatement verification documents must contain the following information** -1) Your name and address; 2) the inspection number (found on the front page); 3) the citation and citation item number(s) to which the submission relates; 4) a statement that the information is accurate; 5) the signature of the employer or employer's authorized representative; 6) the date the hazard was corrected; 7) a brief statement of how the hazard was corrected; and 8) a statement that affected employees and their representatives have been informed of the abatement.

The law also requires a copy of all abatement documents, required by 29 CFR 1903.19 to be sent to OSHA, also be posted at the location where the violation appeared and the corrective action taken.



## NOTICE TO EMPLOYEES OF INFORMAL CONFERENCE

An informal conference has been scheduled with OSHA to discuss the citation(s) issued on 02/22/2012. The conference will be held at the OSHA office located at 919 N. Market Street, Suite 900, Wilmington, DE, 19801-3319 on \_\_\_\_\_ at \_\_\_\_\_. Employees and/or representatives of employees have a right to attend an informal conference.



919 Market Street  
Suite 900  
Wilmington, DE 19801-3319

### **Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to chemical burns as a result of the use of incompatible materials in pump flush seals:

- a) Main Bleach Slurry Recirculating Pump - Employees were exposed to severe chemical irritation and burns as the employer instructed employees to install two incompatible 316 stainless steel slurry pump flush seals which failed on two occasions. On or about November 18, 2011.

**ABATEMENT DOCUMENTATION REQUIRED:** Feasible methods of abatement among others include:  
1) Follow Chlorine Institute guidance to choose pumps and seals made of materials compatible with sodium hypochlorite solutions. Chlorine Institute References: Sections 6.1.2 (Storage and Equipment) and 6.3.4 (Pumps) of Pamphlet 96, Sodium Hypochlorite Manual, Edition 3 - Revision 1, November 2008; the Sodium Hypochlorite Incompatibility Chart, 3/24/2009; and, item 9 (Piping and Process Equipment) of the Sodium Hypochlorite Customers Generic Safety and Security Checklist, Edition 2, May 11, 2010. 2) Adhere to particular Responsible Care<sup>®</sup> management system requirements for managing chemical process changes commensurate with risk, as explained under section 3.0 (Implementation, Operation, and Accountability) of the Responsible Care Management System<sup>®</sup> Technical Specification, Document Number RC101.03, February 29, 2008.

Date By Which Violation Must be Abated:	Corrected During Inspection
Proposed Penalty:	\$ 6930.00

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



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### Citation and Notification of Penalty

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.22(c): Covers and/or guardrails were not provided to protect personnel from the hazards of open pits, tanks, vats, ditches, etc:

- a) Salt Warehouse, Brine Pit - A length of approximately 21 feet along the side of a brine pit, approximately 20 feet deep and containing brine heated up to 140 degrees Fahrenheit, was not guarded with guardrails to protect employees, who walk along the side of this unguarded length on a salt covered floor, from falling in and sustaining second and third degree burns or drowning. On or about 11/9/11.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 04/09/2012  
Proposed Penalty: \$ 6930.00

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

29 CFR 1910.119(d)(2)(i)(E): Information pertaining to the technology of the process did not include an evaluation of the consequences of deviations, including those affecting the safety and health of employees:

- a) Chlorine Processes (Plant Wide) - Employees are exposed to a potential explosion hazard from nitrogen trichloride as the employer did not document an evaluation of the consequences of deviation associated with accumulation of nitrogen trichloride. On or about 12/13/11.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 04/09/2012  
Proposed Penalty: \$ 6930.00

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**Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.119(e)(3)(i): The process hazard analysis did not identify the hazards of the process:

a) Kuehne Chemical Company, Inc., 1645 River Road, Delaware City, DE 19706 - The employer did not address the hazards of nitrogen trichloride during the process hazard analysis that was completed in September 2011. On or about December 13, 2011.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 04/09/2012  
Proposed Penalty: \$ 6930.00

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

29 CFR 1910.119(e)(3)(iii): The process hazard analysis did not address engineering and administrative controls applicable to the hazards:

a) Kuehne Chemical Company, Inc., 1645 River Road, Delaware City, DE 19706 - The process hazard analysis did not address and discuss engineering and administrative controls for the hazards of nitrogen trichloride during the process hazard analysis completed in September 2011. On or about December 13, 2011.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 04/09/2012

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



919 Market Street  
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### **Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.132(d)(1)(i): The employer did not select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment:

a) Chlor-Alkali Cell Membrane Electrolysis Process - The employer did not select and ensure the use of personal protective equipment such as, but not limited to, dielectric gloves and electrically resistant footwear for employees exposed to electrical hazards such as, but not limited to those posed to employees while taking chemical samples and reading gauges near charged cell units and while performing maintenance such as repairing a temperature probe or process piping in the cell line working zone. On or about October 6, 2011.

REPEAT VIOLATION: Kuehne Chemical Company, Inc. was previously cited for a violation of this same occupational safety and health standard [29 CFR 1910.132(d)(1)(i)], which was contained in OSHA inspection number 311808968, citation number 1, item number 2B, and was affirmed as an informal settlement agreement on January 26, 2011, with respect to the same workplace located at 1645 River Road, Delaware City, DE 19706.

#### **ABATEMENT DOCUMENTATION REQUIRED.**

Date By Which Violation Must be Abated: 03/19/2012  
Proposed Penalty: \$ 6930.00

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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  
Wilmington Area Office

**Inspection Number:** 311812705  
**Inspection Dates:** 08/23/2011 - 02/22/2012  
**Issuance Date:** 02/22/2012



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### **Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.136(a): The employer did not ensure that each affected employee uses protective footwear when working in areas where employee's feet are exposed to electrical hazards:

- a) Chlor-Alkali Cell Membrane Electrolysis Process - Employees working in areas such as, but not limited to, the cell line working zone, were not provided with dielectric safety boots in order to minimize the electric shock hazard. On or about October 6, 2011.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 03/19/2012

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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  
Wilmington Area Office

**Inspection Number:** 311812705  
**Inspection Dates:** 08/23/2011 - 02/22/2012  
**Issuance Date:** 02/22/2012



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### **Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.138(a): The employer did not select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes:

- a) Chlor-Alkali Cell Membrane Electrolysis Process - Employees working in areas such as, but not limited to, the cell line working zone, were not provided with rubber insulating gloves in order to minimize the electric shock hazard. On or about October 6, 2011.

#### **ABATEMENT DOCUMENTATION REQUIRED**

**Date By Which Violation Must be Abated:** 03/19/2012

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



919 Market Street  
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**Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.335(a)(1)(i): Employees working in areas where there were potential electrical hazards were not provided with, and/or did not use, electrical protective equipment that was appropriate for the specific parts of the body to be protected and for the work to be performed:

- a) Chlor-Alkali Cell Membrane Electrolysis Process - Employees working in areas such as, but not limited to, the cell line working zone were not provided with rubber insulating gloves and electrically resistant footwear in order to minimize the electric shock hazard. On or about October 6, 2011.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 03/19/2012

**U.S. Department of Labor**  
Occupational Safety and Health Administration  
Wilmington Area Office

**Inspection Number:** 311812705  
**Inspection Dates:** 08/23/2011 - 02/22/2012  
**Issuance Date:** 02/22/2012



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### **Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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

29 CFR 1910.306(h)(5)(ii)(C): Auxiliary electric equipment, such as motors, transducers, sensors, control devices, and alarms, mounted on an electrolytic cell line or other energized surface were not connected to the premises wiring system by wire or cable in suitable metal raceways or metal cable trays installed with insulating breaks such that they will not cause a potentially hazardous electrical condition:

- a) Cell Line Working Zone (Brine & Caustic RTDs) - Employees were exposed to electrical shock hazards as the employer did not ensure that the flexible metal conduit, covering the electrical wiring for numerous Thermo-Kinetics resistance temperature detectors (RTDs), was installed with insulating breaks. On or about 12/28/11.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated:	05/21/2012
Proposed Penalty:	\$ 6930.00

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



919 Market Street  
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### **Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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#### **Citation 2 Item 1 Type of Violation: Repeat**

29 CFR 1910.119(e)(3)(vii): The process hazard analysis did not address a qualitative evaluation of a range of the possible safety and health effects of failure of controls on employees in the workplace:

a) Chlorine and Sulfur Dioxide PSM Covered Processes - The employer's PHAs from 2006 for the sulfur dioxide process and 2011 for the chlorine processes did not address an evaluation of all possible safety and health effects due to failure of each control; and, as such, employees are potentially exposed to hazards related to a toxic chemical release such as, but not limited to, sulfur dioxide and inhalation hazards.

REPEAT VIOLATION: Kuehne Chemical Company, Inc. was previously cited for a violation of this same occupational safety and health standard [29 CFR 1910.119(e)(3)(vii)], which was contained in OSHA inspection number 312111396, citation number 1, item number 8, with respect to the workplace located at 86 Hackensack Ave., Kearny, NJ 07032. The final order date was March 23, 2009.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 04/09/2012  
Proposed Penalty: \$ 9900.00

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



919 Market Street  
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**Citation and Notification of Penalty**

**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706

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**Citation 2 Item 2** Type of Violation: **Repeat**

29 CFR 1910.1200(h)(3)(ii): Employee training did not include the physical and health hazards of the chemicals in the work area:

a) Chemical Processes - Employees working on equipment were exposed to inhalation, fire and explosion hazards. Employees were not trained on the physical hazards such as those related to the incompatibilities of chemicals such as caustic, chlorine, and bleach with other chemicals such as sodium chlorate, greases & oils, and acids, respectively, and with materials such as chlorinated PVC, silicon rubbers, and stainless steel, respectively. On or about December 13, 2011.

REPEAT VIOLATION: Kuehne Chemical Company, Inc. was previously cited for a violation of this same occupational safety and health standard [29 CFR 1910.1200(h)(2)(ii)], which was contained in OSHA inspection number 311808968, citation number 1, item number 4, and was affirmed as an informal settlement agreement on January 26, 2011, with respect to the same workplace located at 1645 River Road, Delaware City, DE 19706.

ABATEMENT DOCUMENTATION REQUIRED.

Date By Which Violation Must be Abated: 04/09/2012  
Proposed Penalty: \$ 13860.00

\_\_\_\_\_  
Domenick M. Salvatore  
Area Director

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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  
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Phone: (302) 573-6518 FAX: (302)573-6532



## INVOICE/ DEBT COLLECTION NOTICE

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**Company Name:** Kuehne Chemical Company, Inc.  
**Inspection Site:** 1645 River Road, Delaware City, DE 19706  
**Issuance Date:** 02/22/2012

**Summary of Penalties for Inspection Number 311812705**

<b>Citation 1, Serious</b>	= \$	<b>41580.00</b>
<b>Citation 2, Repeat</b>	= \$	<b>23760.00</b>
<b>TOTAL PROPOSED PENALTIES</b>	= \$	<b>65340.00</b>

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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.

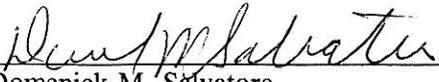
OSHA does not agree to any restrictions or conditions or endorsements put on any check or money order for less than full amount due, and will cash the check or money order as if these restrictions, conditions, or endorsements do not exist.

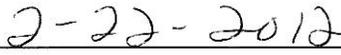
Pursuant to the Debt Collection Act of 1982 (Public Law 97-365) and regulations of the U.S. Department of Labor (29 CFR Part 20), the Occupational Safety and Health Administration is required to assess interest, delinquent charges, and administrative costs for the collection of delinquent penalty debts 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 3%. 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.

  
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Domenick M. Salvatore  
Area Director

  
\_\_\_\_\_  
Date