

U.S. Department of Labor

Occupational Safety and Health Administration
135 High Street, Suite 361
Hartford, CT 06103



08/26/2022

Phoenix Environmental Laboratories, Inc.
and its successors
P.O. Box 370
Manchester, CT 06040

Dear Employer:

Enclosed you will find citations for violations of the Occupational Safety and Health Act of 1970 (the Act) which may have accompanying proposed penalties. Also enclosed is a booklet entitled, "Employer Rights and Responsibilities Following an OSHA Inspection", (OSHA 3000-04R) revised 2018, which explains your rights and responsibilities under the Act. If you have any questions about the enclosed citations and penalties, I would welcome further discussions in person or by telephone. Please contact me at (860) 240-3152.

You will note on page 6 of the booklet that, for violations which you do not contest, you must (1) notify this office promptly by letter that you have taken appropriate corrective action within the time set forth on the citation; and (2) pay any penalties assessed. Please inform me 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. This information will allow us to close the case.

As indicated on page 3 of the booklet, you may request an informal conference with me during the 15-working-day notice of contest period. During such an informal conference you may present any evidence or views which you believe would support an adjustment to the citation or the penalty.

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 the citation. The running of this contest period is not interrupted by an informal conference.

If you decide to request an informal conference, please complete the attached notice at the bottom of this letter and post it next to the Citations as soon as the time, date and the place of the informal conference have been determined. Be sure to bring to the conference with you any and all supporting documentation of existing conditions as well as of 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.

You should be aware that OSHA publishes information on its inspection and citation activity on the Internet under the provisions of 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.

Sincerely,



Dale Varney
Area Director

Enclosures

U.S. Department of Labor
Occupational Safety and Health Administration
135 High Street, Suite 361
Hartford, CT 06103



Citation and Notification of Penalty

To:
Phoenix Environmental Laboratories, Inc.
and its successors
P.O. Box 370
Manchester, CT 06040

Inspection Number: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022

Inspection Site:
587 East Middle Turnpike
Manchester, CT 06040

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.

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 (860) 240-3152. 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 at www.pay.gov. At the top of the [pay.gov](http://www.pay.gov) homepage, type "OSHA" in the Search field and select Search. From **OSHA Penalty Payment Form** search result, select Continue. 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.

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



NOTICE TO EMPLOYEES OF INFORMAL CONFERENCE

An informal conference has been scheduled with OSHA to discuss the citation(s) issued on 08/26/2022. The conference will be held by telephone or at the OSHA office located at 135 High Street, Suite 361, Hartford, CT 06103 on _____ at _____. Employees and/or representatives of employees have a right to attend an informal conference.

CERTIFICATION OF CORRECTIVE ACTION WORKSHEET

Inspection Number: 1580830

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040
Issuance Date: 08/26/2022

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, 135 High Street, Suite 361, Hartford, CT 06103.**

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

OSH ACT of 1970 Section (5)(a)(1): The employer did not furnish employment and a place of employment which was free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to fire and explosion hazards when transferring Class 1A and Class 1B flammable liquids near electrical and/or potential static ignition sources in the following instances and areas:

a) New Prep - Hazardous Waste Storage rooms:

On or about February 28, 2022, the employer did not prevent the generation of static electricity discharge when inappropriate containers were used for Class IA flammable liquids including, but not limited to, ethyl ether, that were dispensed from 20-liter plastic satellite containers into 55-gallon metal drums in the inside liquid storage area; moreover, the system that the 55-gal drums were placed on was not grounded to an earth source. Metal drums that did not have grounding cables attached to an earth source were stored on a metal plate with a plastic structure preventing a continuation of metal to ground. Consequently, employees were exposed to fire and explosion hazards from the potential ignition of flammable vapors that are caused by static and electrical spark during the waste disposal process.

b) Old Prep Area:

On or about February 28, 2022, and at times thereafter, employees transferred Class IA and Class IB flammable liquids including, but not limited to, ethyl ether, hexane, and acetone, throughout the work shift, into 20-liter satellite containers that were located under the sink and in an "ether waste" cupboard, without adequate ventilation to remove vapors in close proximity to an ignition source.

c) New Prep Area:

On or about March 04, 2022, and at times thereafter, employees transferred Class IA and Class IB flammable liquids including, but not limited to, ethyl ether, hexane, and acetone, throughout the work shift, into 20-liter satellite containers that were located under the table, without the required mechanical ventilation, in close proximity to ignition sources.

d) Wet Lab:

On or about April 19, 2022, and thereafter, employees transferred Class IB flammable liquids including, but not limited to, acetone, near ignition sources without adequate ventilation to prevent the accumulation of flammable vapors. Flammable liquids were transferred into four-liter containers in chemical fume hood #8, which did not have adequate ventilation and was approximately two feet from hood #21V, which had wires that had short circuited causing it to spark. In addition, employees also dispensed acetone in the unventilated sink located approximately five feet from hood #21V.

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Feasible and acceptable means to correct these hazards involve following the practices set forth in the following NFPA Standards including but not limited to the following specific sections below:

a) New Prep - Hazardous Waste Storage rooms:

To reduce static electricity hazards while filling and emptying metal non-bulk containers, comply with the following NFPA requirements:

Comply with NFPA 45 Standard on Fire Protection in Laboratories Using Chemicals 2019, Chapter 9, Table 9.1.2, to eliminate the chance of static and explosion discharge, safe liquid dispensing shall be done under the following conditions:

- 1) Use only permitted size
- 2) For max size container, polyethylene 4L or 1 Gallon DOT Spec 34, or UN 1H1 type or DOT Special Permitted or another option is a Safety Can of 10L, or 2.6 Gallon may be used.

9.3.1 Dispensing of Class I liquids to or from containers less than or equal to 20 L (5 gal) in capacity shall be performed in one of the following locations:

- (1) In a chemical fume hood
- (2) In an area provided with ventilation adequate to prevent accumulations of flammable vapor/air mixtures from exceeding 25 percent of the lower flammable limit
- (3) Inside liquid storage areas specifically designed and protected for dispensing Class I flammable liquids that meet the requirements of NFPA 30

9.3.2 Except for pressurized liquid dispensing containers meeting the requirements of Section 9.4, dispensing of Class I liquids to or from containers greater than 20 L (5 gal) shall be performed in one of the following locations:

- (1) In a separate area outside the building
- (2) Inside liquid storage areas specifically designed and protected for dispensing Class I flammable liquids that meet the requirements of NFPA 30

9.3.3 Class I liquids shall not be transferred between conductive containers of greater than 4 L (1 gal) capacity unless the containers are electrically interconnected by direct bonding or by indirect bonding through a common grounding system.

9.3.4 When dispensing Class I liquids involves nonconductive containers larger than 4 L (1 gal), which can be difficult to bond or ground, special dispensing procedures commensurate with the electrical characteristics of the liquid shall be developed and implemented.

9.5.5 Electric motors shall be suitable for Class I, Division 2, locations when flammable and combustible liquids or

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

flammable gas concentrations can produce hazardous concentrations of flammable mixtures.

9.5.6 Electric motors that are located in chemical hoods or provided with special ventilation that will prevent flammable concentrations of gases or vapors from reaching the motor shall not be required to be listed or labeled for Class I, Division 2, hazardous locations.

Follow NFPA 77 Recommended Practice on Static Electricity 2019, Chapter 11, paragraphs 11.1.3.1 through 11.1.3.6:

11.1.3.1 Where being filled, metal containers and associated fill equipment should be bonded together and grounded.

11.1.3.2 Bonding should be done with a clamp that has hardened steel points that will penetrate paint, corrosion products, and accumulated material using either screw force or a strong spring. (See Annex G for recommendations.)

11.1.3.6 Where liquid is dispensed from a metal container, the container should be grounded. Metal containers that are not in use shall adhere to the following per NFPA 30 6.5.4.3. The bond and ground shall be physically applied or shall be inherently present by the nature of the installation.

11.1.6 Plastic Non-Bulk Containers. The use of plastic containers for Class I liquids is limited by Table 9.4.3 and Table 9.4.3.1 of NFPA 30, Flammable and Combustible Liquids Code. Where such containers are used for Class II and Class III liquids, the precautions for filling depend on the size of the container, the container design, and the conductivity of the liquid.

11.1.6.1 Because plastic containers cannot be grounded, they should not be used for Class I liquids or handled in flammable atmospheres without expert review of the hazards.

Instances b) Old Prep Area, c) New Prep Area, and instance d) Wet Lab:

Ensure that chemical fume hoods are inspected, tested, and maintained at least annually per NFPA Section 7.14.1:

- 1) Visual inspection of the physical condition of the hood interior, sash, and ductwork.
- 2) Measuring device for hood airflow.
- 3) Low airflow and loss-of-airflow alarms at each alarm location.
- 4) Face velocity
- 5) Verification of inward airflow over the entire hood face.
- 6) Changes in work area conditions that might affect hood performance.

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

7.14.2 Deficiencies in hood performance shall result in immediate suspension of all activities inside the hood until the deficiencies are corrected.

Ensure that transferring, and dispensing of flammable liquids is performed in accordance with NFPA 45 Standard on Fire Protection in Laboratories Using Chemicals, 2019, Chapter 9:

9.3.1 Dispensing of Class I liquids to or from approved containers less than or equal to 20 L (5 gal) in capacity shall be performed in one of the following locations:

- 1) In a chemical fume hood
- 2) In an area provided with ventilation adequate to prevent accumulations of flammable vapor/air mixtures from exceeding 25 percent of the lower flammable limit.
- 3) Inside liquid storage areas specifically designed and protected for dispensing Class I flammable liquids that meet NFPA 30.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$13,052.00



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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 2 a Type of Violation: **Serious**

29 CFR 1910.106(d)(2)(iii): Flammable liquid containers were not in accordance with table H-12:

Prep Lab:

On or about February 28, 2022, containers of Category 1 flammable liquids including, but not limited to, ethyl ether that have flashpoints below 73.4 °F (23 °C) and boiling points at or below 95 °F (35 °C), were regularly transferred into five-gallon nonconductive plastic satellite containers. Category 1 flammable liquids were not stored in accordance with the maximum allowable container type and size of one pint for glass or approved plastic containers per Table H-12 of the standard; thereby, the escape of flammable vapors exposed employees to an increased risk of injury from burns in the event of a fire.

Abatement Assistance Note: Please see table H-12 for guidance on the accepted container types and sizes for the Category 1 flammable liquids used, which included, but may not be limited to, ethyl ether. Note that Category 1 flammable liquid, according to OSHA, is any liquid having a flashpoint below 73.4 °F (23 °C) and having a boiling point at or below 95 °F (35 °C).

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	October 14, 2022
Proposed Penalty:	\$13,052.00

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: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.106(d)(4)(v): Containers over 30 gallons capacity were stacked one upon the other.

Prep Lab - Hazardous Waste Storage Room:

On or about 02/28/2022, multiple 55-gallon drums containing ethyl ether and acetone were stacked up two tiers high in the storage room.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$0.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.151(c): Where employees were exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body were not provided within the work area for immediate emergency use:

Prep Lab - Tumbler Room:

On or about March 22, 2022, when employees were exposed to injurious corrosive chemical vapors and splashed liquids, which included, but were not limited to nitric acid and hydrochloric acid, a suitable facility for quick drenching or flushing of the eyes and body was not available in the work area for immediate emergency use.

Abatement Assistance Note: Among other methods, an acceptable method of correction would be to install a suitable eyewash station that meets ANSI Z358.1-2014 requirements, such as:

- 1) Performance of eyewashes - ensure a controlled flow of flushing fluid is provided to both eyes simultaneously and provide 15 minutes of continuous flow.
- 2) Performance of control valve - valve shall remain open without the use of hands until intentionally closed.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$13,052.00



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.303(b)(1): Electrical equipment was not free from recognized hazards that were likely to cause death or serious physical harm to employees, in that the employer did not ensure the safety of the equipment pursuant to the considerations in sections (i) through (viii) of 29 CR 1910.303(b)(1):

a) Wet Lab:

On or about April 21, 2022, employees were observed performing analytical procedures that included, but were not limited to, an Ammonia/TKN Phenate Method on a distillation block that short circuited in chemical fume hood 21V. Defective cords connected to the rotating distillation block resulted in a short-circuit that caused sparks exposing employees, who were within close proximity, to risk of physical harm such as burns.

b) Prep Lab - New Prep Area:

On or about March 04, 2022, employees performed analytical procedures in fume hoods near a dishwasher where glassware that used various chemicals such as methylene chloride, ethyl ether, and acetone were cleaned. The dishwasher was placed directly next to a sink where MC was primarily used to manually clean the glassware, which frequently splashed the chemical by and on the machine. The dishwasher's electrical wiring short-circuited resulting in a fire that had to be extinguished, exposing employees to the risk of physical harm such as burns.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:	October 14, 2022
Proposed Penalty:	\$13,052.00

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: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.303(g)(1)(i): Workspace was less than 30 inches wide in front of electric equipment operating at 600 volts, nominal, or less:

Maintenance Room - First Floor:

On or about April 21, 2022, and at times thereafter, workspace was less than 30 inches wide when maintenance had to access the control panel and disconnect switch for the main exhaust, which were located on the second floor in the mechanical room. The equipment was obstructed by stacks of items that were adjacent to the panel and switch, which were approximately five inches in distance from the access points.

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$11,188.00

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: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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 6 a Type of Violation: **Serious**

29 CFR 1910.305(b)(1)(i): Conductors entering cutout boxes, cabinets, or fittings were not protected from abrasion, and openings through which conductors enter were not effectively closed.

Maintenance Room - First Floor:

On or about April 21, 2022, conductors entering control circuit panel cabinets mounted on the wall, and blocked by a workstation and cabinet, were not protected from damage while hanging out of the open face of the cabinet doors that were not effectively closed; moreover, non-metallic sheathed cables passed through holes in metal cabinets that were not provided with listed grommets or listed bushings to cover metal edges that would protect the passing cables from abrasion. The cabinets contained power, control, and communication wiring that controlled equipment throughout the facility.

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$7,458.00

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: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.305(b)(1)(ii): Unused openings in boxes, cabinets, or fittings were not effectively closed:

Maintenance Room - First Floor:

On or about April 21, 2022, an unused opening in the top of the panel was not plugged, exposing technicians to potential electrical shock hazards directly below the opening inside the panel.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$0.00

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: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.332(b)(2): Additional requirements for unqualified persons. Employees covered by paragraph (a) of this section, but who are not qualified persons, were not trained in and familiar with any electrically related safety practices that were not specifically addressed by 1910.331 through 1910.335 but were necessary for their safety:

Wet Chemistry Lab:

On or about April 21, 2022, an employee not qualified and not trained in and familiar with any electrically related safety practices, was exposed to potential shock or electrocution hazards when assigned to reenergize equipment with exposed electrical conductors that had detached and were arcing.

Date By Which Violation Must be Abated:
Proposed Penalty:

Corrected During Inspection
\$13,052.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

29 CFR 1910.1052(d)(5)(i): The employer did not notify each affected employee of monitoring results in writing within 15 working days after receipt of monitoring results performed under 29 CFR 1910.1052, either individually or by posting the results in an appropriate location that is accessible to affected employees:

Prep Lab:

On or about June 06, 2022, employees whose exposures were representative of those employees who were overexposed during OSHA's exposure monitoring assessment on April 14, 2022, did not receive written notification from the employer about the results of methylene chloride monitoring. The results were not provided individually nor posted within the required timeframe. The employer was informed by OSHA on May 12, 2022, of the results that revealed employees were overexposed to dichloromethane (DCM or methylene chloride) in excess of OSHA's 25 ppm permissible exposure limit (PEL) over an 8-hr TWA.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$13,052.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 1 Item 9 Type of Violation: **Serious**

29 CFR 1910.1450(e)(3)(ii): The Chemical Hygiene Plan did not include the criteria that the employer would use to determine and implement control measures to reduce employee exposure to hazardous chemicals including engineering controls, the use of personal protective equipment and hygiene practices:

Facility-wide:

On or about February 28, 2022, the employer's Chemical Hygiene Plan did not include standard operating procedures (SOPs) for chemicals used in the lab that described the conditions of their use in designated work areas with respect to specific control measures that were necessary to reduce employee exposure to the highly toxic chemicals used. Controls that were required included engineering controls, the appropriate personal protective equipment, and hygiene practices. Employees were regularly exposed to many of these highly toxic chemicals in the laboratory while handling methylene chloride, diethyl ether, acetone, chloroform, cyanide, ammonia, and hexane on a daily basis.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$13,052.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 1 Item 10 Type of Violation: **Serious**

29 CFR 1910.1450(f)(1): The employer did not provide laboratory employees with information and training to ensure that they were apprised of the hazards of chemicals present in their work area:

Company-wide:

On or about February 28, 2022, employees were not provided with the information and training on the hazards associated with the chemicals they used, which included, but were not limited to, methylene chloride and hexane. The chemicals were frequently used to analyze water and soil samples during non-production laboratory procedures including, but not limited to, herbicide extractions, separatory extractions, and accelerated solvent extractions (ASE). The employer did not ensure that employees who frequently used these highly toxic solvents were aware of the proper controls necessary, and that the acute and chronic toxic effects characterized by headaches, dizziness, and confusion--among other symptoms they often experienced while performing these job tasks--were associated with these chemical exposures. Locations in the lab where employees were not provided with training included:

- a) Prep Lab
- b) Wet Lab

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$13,052.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 2 Item 1 b Type of Violation: **Willful - Serious**

29 CFR 1910.1052(f)(1): The employer did not institute and maintain the effectiveness of engineering controls and work practices to reduce employee exposure to or below the permissible exposure limits:

Prep Lab:

a) On or about February 28, 2022, the employer did not maintain the effectiveness of multiple chemical fume hoods and failed to institute engineering controls where samples were processed in Buchi Concentrator machines resulting in dichloromethane (DCM) overexposures at 79.3 ppm and 39.4 ppm over an 8-hour time weighted average (TWA). Chemical fume hoods in the Tumbler Room, New Prep Area, and Old Prep Area were not maintained and environmental samples that were distilled with DCM in Buchi machines were not stored in fume hoods.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$0.00



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 2 Item 2 Type of Violation: **Willful - Serious**

29 CFR 1910.1052(d)(2): The employer did not perform initial monitoring to determine each employee's exposure to methylene chloride:

Prep Lab:

On or about February 28, 2022, the employer did not make an initial determination of employee exposure to dichloromethane (DCM or methylene chloride) that was released, stored, handled, and used in the areas of the Prep Lab where employees performed analytical procedures that exposed them to the chemical. Employees performed extractions in the New Prep Area, Old Prep Area, Tumbler Room, and Soxhlet Area, and at times, would perform a method in more than one of the four sections in the Prep Lab depending on available space. During OSHA's monitoring assessment on April 14, 2022, it was confirmed that employees in the Prep Lab were overexposed to DCM. At that time, it was discovered that employees were exposed to DCM at approximately thirty-nine and seventy-nine parts of DCM per million parts of air (39.4 ppm and 79.3 ppm) as an eight-hour time-weighted average (8-hr TWA), which was in excess of OSHA's 25 ppm permissible exposure limit (PEL) over an 8-hr TWA.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$130,524.00

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: 1580830
Inspection Date(s): 02/28/2022 - 04/25/2022
Issuance Date: 08/26/2022



Citation and Notification of Penalty

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 2 Item 3 Type of Violation: **Willful - Serious**

29 CFR 1910.1052(f)(3)(i):The employer did not implement procedures to detect leaks of methylene chloride in the workplace and did not make provisions to contain any spills and to safely dispose of any methylene chloride contaminated waste materials:

Prep Lab:

On or about February 28, 2022, and at times thereafter, the employer did not implement procedures to detect leaks of MC that were reoccurring from Buchi Concentrator machines located in various areas of the Prep Lab. Provisions to contain these spills and safely dispose of the waste from these leaks were not established by the employer.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$130,524.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 2 Item 4 Type of Violation: **Willful - Serious**

29 CFR 1910.1052(h)(1): Where needed to prevent methylene chloride induced skin or eye irritation, the employer did not provide clean protective clothing and equipment resistant to methylene chloride, at no cost to the employee, and/or did not ensure that each affected employee used it:

Prep Lab:

On or about February 28, 2022, and at times thereafter, employees handling dichloromethane (DCM or methylene chloride) solvents were exposed to skin and/or eye irritation and chemical burns while performing analytical laboratory extraction and rinsing procedures without adequate protective equipment that was resistant to DCM.

a. Employees were not provided with adequate skin protection for their hands, in that, Kimberly-Clark Purple Nitrile Exam Gloves, which deteriorated in a minute or less, were used while analyzing environmental water and soil samples and while rinsing or washing glassware with DCM, a Category 2 skin and eye irritant.

b. Employees were not provided and required to wear appropriate eye protection, goggles, and/or face shields during tasks where the chemical splashed in their face and eyes.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$130,524.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

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

Citation 2 Item 5 a Type of Violation: **Willful - Serious**

29 CFR 1910.1052(j)(1)(i): The employer did not make medical surveillance available for employees who were or potentially were exposed to methylene chloride at or above the action level on 30 or more days per year, or above the 8-hour time weighted average permissible exposure limit or the short term exposure limit on 10 or more days per year:

Prep Lab:

On or about February 28, 2022, employees who may have and were exposed to methylene chloride (MC) above the action level on 30 or more days per year, or above the 8-hour time weighted average (TWA) permissible exposure limit (PEL), did not have medical surveillance made available to them by the employer. These exposures occurred while laboratory technicians performed analytical procedures using MC to extract organic compounds when analyzing environmental samples--including wastewater, soil, and sludge samples--and also happened during instances when employees were required to rinse glassware with the solvent to clean the items after the oven broke. This was all performed in areas that were either not ventilated, such as the sink and Buchi machines, or in poorly ventilated chemical fume hoods.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$130,524.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 2 Item 5 b Type of Violation: **Willful - Serious**

29 CFR 1910.1450(g)(1)(i): Employees who had developed signs or symptoms associated with a hazardous chemical to which the employee could have been exposed in the laboratory, were not provided an opportunity to receive an appropriate medical examination:

On or about February 28, 2022, and at times thereafter, employees who exhibited symptoms associated with acute exposure to methylene chloride (MC) that included, but were not limited to, dizziness; light-headedness; headaches; and impaired gait, were not provided an opportunity to receive the appropriate medical examination when they were exposed to MC in the laboratory while performing extraction procedures with the solvent. Employees presented with symptoms during the following instances:

- a) February 23, 2022 - Dizziness and fatigue
- b) February 28, 2022 - Dizziness, fatigue, and tingling and numbness in their feet.
- c) February 28, 2022 - Nausea
- d) March 01, 2022- Impaired gait
- e) March 03, 2022 - Headaches, drowsiness, tingling and numbness in hands and fingers, fatigue
- f) March 04, 2022 - dizziness, headaches, nausea and fatigue, and respiratory irritation.
- g) March 04, 2022 - Impaired gait
- h) March 08, 2022 - Drowsiness and Fatigue
- i) March 10, 2022 - Impaired gait
- j) March 15, 2022 - Impaired gait
- k) April 06, 2022 - Light-headedness and respiratory distress
- l) May 06, 2022 - Lightheadedness and headache
- m) May 06, 2022 - Lightheadedness and dizziness

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$0.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 2 Item 6 Type of Violation: **Willful - Serious**

29 CFR 1910.1450(e)(1): Where hazardous chemicals were used in the workplace, the employer did not carry out the provisions of a written Chemical Hygiene Plan which was capable of protecting employees from health hazards associated with hazardous chemicals:

The employer did not carry out the provisions of the Chemical Hygiene Plan in that they did not ensure fume hoods were functioning properly and did not implement specific measures to ensure proper and adequate performance of such equipment in the following locations:

a) Prep Lab:

On or about March 22, 2022, and at times thereafter, the employer did not ensure that chemical fume hoods were functioning properly when hoods in the Tumbler Room failed to exhaust acidic vapors away from an employee's breathing zone resulting in a cloud of vapors becoming inhaled when the contents of water samples that were on a hot digestion block, which contained nitric acid, sulfuric acid, and hydrochloric acid, were opened.

b) Wet Lab:

On or about April 21, 2022, and at times thereafter, ducting connected to chemical fume hoods frequently leaked over employees and their workstations when solvents including, but not limited to, sulfuric acid, ammonia, and chloroform were used.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$130,524.00

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: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040

Citation 3 Item 1 Type of Violation: **Other-than-Serious**

29 CFR 1910.101(b): The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tank cars, or motor vehicle cargo tanks were not in accordance with Compressed Gas Association Pamphlet P-1-1965, which is incorporated by reference as specified in CFR 1910.6:

Wet Lab:

On or about February 28, 2022, a highly pressurized oxygen gas cylinder was chained to a table near samples that were prepared with corrosive chemicals before it was analyzed in fume hood 21V. Also, the pure oxygen cylinder, that had a rusty presentation at the valve and cylinder collar, was exposed to continuous dampness when it was stored under ventilation ducting, connected to fume hood 21V, that was leaking from the ceiling. Per 3.3.7 of the Compressed Gas Association Pamphlet, compressed gas cylinder valves that are exposed to corrosive chemicals present a danger if the valves become corroded. This damage may result in struck-by injuries from a highly pressurized compressed gas cylinder such as oxygen. Analytical procedures performed in Fume Hood 21V included an Ammonia/TKN Phenate Method that used a Category 1B corrosive ammonia solution and a Category 1A corrosive solution of sulfuric acid, which was diluted in the rotating distillation block that was also stored in the hood.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

October 14, 2022
\$1,047.00



Dale Varney
Area Director

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
135 High Street, Suite 361
Hartford, CT 06103



INVOICE /
DEBT COLLECTION NOTICE

Company Name: Phoenix Environmental Laboratories, Inc.
Inspection Site: 587 East Middle Turnpike, Manchester, CT 06040
Issuance Date: 08/26/2022

Summary of Penalties for Inspection Number: 1580830

Citation 1 Item 1, Serious	\$13,052.00
Citation 1 Item 2a, Serious	\$13,052.00
Citation 1 Item 2b, Serious	\$0.00
Citation 1 Item 3, Serious	\$13,052.00
Citation 1 Item 4, Serious	\$13,052.00
Citation 1 Item 5, Serious	\$11,188.00
Citation 1 Item 6a, Serious	\$7,458.00
Citation 1 Item 6b, Serious	\$0.00
Citation 1 Item 7, Serious	\$13,052.00
Citation 1 Item 8, Serious	\$13,052.00
Citation 1 Item 9, Serious	\$13,052.00
Citation 1 Item 10, Serious	\$13,052.00
Citation 2 Item 1a, Willful - Serious	\$130,524.00
Citation 2 Item 1b, Willful - Serious	\$0.00
Citation 2 Item 2, Willful - Serious	\$130,524.00
Citation 2 Item 3, Willful - Serious	\$130,524.00
Citation 2 Item 4, Willful - Serious	\$130,524.00
Citation 2 Item 5a, Willful - Serious	\$130,524.00
Citation 2 Item 5b, Willful - Serious	\$0.00
Citation 2 Item 6, Willful - Serious	\$130,524.00
Citation 3 Item 1, Other-than-Serious	\$1,047.00

TOTAL PROPOSED PENALTIES: \$907,253.00

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 at www.pay.gov. At the top of the pay.gov homepage, type "OSHA" in the Search field and select Search. From the **OSHA Penalty Payment Form** search result, select Continue. 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.

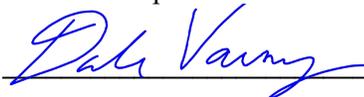
If a personal check is issued, it will be converted into an electronic fund transfer (EFT). This means that our bank will copy your check and use the account information on it to electronically debit your account for the amount of the check. The debit from your account will then usually occur within 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 two 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.



Dale Varney

Area Director

8/26/22

Date