Massachusetts Department of
ELEMENTARY & SECONDARY
EDUCATION

SAFETY SURVEY REPORT RESPONSE TEMPLATE
For the Safety Review Conducted at

Worcester Burncoat Senior High School

Date of Inspection: April 10, 2015

DIRECTIONS

This template contains the findings (Items) for the safety review conducted at the named school. The findings recorded on this template are protected and thus cannot be edited by the district. Below each finding, there are blocks that school district staff should use to record the corrective action date and the corrective action taken as of the date. Staff from the Department will complete the block titled "Department's Response" and will then return the template by email to the person in the district who submitted the template to the Department by email.

This actual template will be a "running template" i.e., a document that will be exchanged back and forth between the district and the Department until all findings have been remediated.

Districts shall submit the template to David Edmonds by email at dedmonds@doe.mass.edu.

District staff may call Mr. Edmonds at 781-338-3946, or their liaison in the Department's Office for Career/Vocational Technical Education for technical assistance. The list of liaisons by district is located at http://www.doe.mass.edu/cte/ under "CVTE Staff."

Thank you for making the shops in your school safe.

Massachusetts Department of Elementary and Secondary Education
Office for Career/Vocational Technical Education
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INTRODUCTION

This report provides the results of a safety survey completed at the indicated facility. The survey was conducted by the Massachusetts Department of Elementary and Secondary Education, Office for Career/Vocational Technical Education. The survey is intended to determine if schools are in compliance with standards established by the Occupational Safety and Health Administration (OSHA) to help ensure the safety of vocational technical students and staff.

SUMMARY of the VISIT

On April 10, 2015 an On-Site Inspection was conducted of the Technical Labs/Shops of the Burncoat Senior High School. The facility is operated under the guidance of Principal William Foley, with a staff of 120 +/- Administrative personnel, Teachers, and Support staff. The student population is approximately 925 +/- students. The building is a multistory masonry and glass steel frame construction with educational shops, classrooms, labs and administrative spaces.

The purpose of this On-Site Inspection was to conduct a safety survey of the labs indicated: Automotive Technology and Office Technology. A walkthrough survey of the labs was made to determine compliance with applicable State regulations and other relevant governmental and industry safety and health standards. Safety hazards noted during the walkthrough survey include the need for Emergency Stops and flammable storage changes. These conditions among others are noted in the enclosed report.

HAZARD DESCRIPTIONS AND CORRECTION RECOMMENDATIONS

The Report of Action Taken lists the hazards in order of item number. It provides a convenient form to briefly describe the methods and dates of hazard correction. Please use it to notify us when corrections are completed and to describe what action you took to eliminate or control the hazard. The Federal Occupational Safety and Health Administration **(OSHA)** Standards were used as the basis for determination.

IMMINENT DANGERS are hazards that can reasonably be expected to cause death or serious physical harm immediately or before this written report is received.

SERIOUS HAZARDS can cause an accident or health hazard exposure resulting in death or serious physical harm.

OTHER-THAN-SERIOUS-HAZARDS lack the potential for causing serious physical harm, but can have a direct impact on employee safety and health.

REPORT OF HAZARDS FOUND

Item No: 001

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Sufficient Emergency Stop buttons have not been installed in shop locations at strategic points on walls and posts.

Location: A. Automotive Technology: Need two units

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately determine the most suitable accessible locations for E-Stop buttons and install them as soon as possible. Repair all defective units.

Item No: 002

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. MSDS had not been updated to SDS.

Location: A. Facility

Standard: 29 CFR 1910.1200 (g)

Recommended Action: Change over to the SDS as quickly as possible. The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012, requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format. This brief provides guidance to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDSs.

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well). In addition, OSHA requires that SDS preparers provide specific minimum information as detailed in Appendix D of 29 CFR 1910.1200. The SDS preparers may also include additional information in various section(s).

Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., fire fighting). This information should be helpful to those that need to get the information quickly. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity

information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain Sections 12 through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

Item No: 003

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A storage cabinet for flammable or combustible liquid was not maintained to keep the design and construction specifications to continue to meet minimal fire resistance requirements.

Location: A. Automotive Technology: Hasp on Flammable Cabinet

Potential Effects: Burns, smoke-related injuries and traumatic injuries from fire and/or explosion.

Standard: 29 CFR 1910.106(d)(3)(ii)

Recommended Action: Remove hasp from unit. Place all flammable and combustible liquids in the flammable storage cabinets. Such cabinets are designed to limit the internal temperature to not more than 325 degrees Fahrenheit when subjected to a ten-minute fire test. They must be conspicuously labeled "Flammable - Keep Fire Away." Remove all storage on top of and around the units.

To meet the fire resistance rating metal cabinets should be constructed with top, bottom, sides and door of No. 18 gage sheet iron, double-walled with 1 1/2 inches of air space. Joints must be riveted, welded, or made tight by some equally effective means. The door must be provided with a three point lock, and the door sill must be raised at least two inches above the bottom of the cabinet, to contain spills.

Refer to NFPA 33, Flammable and Combustible Liquids Code, for more detailed information.

Item No: 004

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flammable or combustible liquid was stored in an unapproved or unacceptable container (unit) or portable tank or in an inappropriate way.

Location: A. Automotive Technology: Liquids & Gases together
B. Automotive Technology: Pallet under oil collector

Potential Effects: Burns and smoke-related injuries, from fire precipitated or aggravated by container failure.

Standard: 29 CFR 1910.106

Recommended Action: Containers or portable tanks must be approved for storage of particular flammable or combustible liquids by a nationally recognized testing laboratory as specified in 29 CFR 1910.7 or must meet Department of Transportation (DOT) regulations in Chapter I of 49 CFR. If it is impossible or impractical to use containers that have been shipped under DOT regulations, you should purchase containers marked as approved for the liquids to be stored.

For details, see this standard; the DOT regulations mentioned above; National Fire Protection Association (NFPA) 386, Standard for Portable Shipping Tanks; and American National Standards Institute

Item No: 005

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A machine designed for a fixed location was not securely anchored to prevent walking or moving..

Location: A. Automotive Technology: Black & Decker Grinder

Potential Effects: Bruising, contusions, lacerations.

Standard: 29 CFR 1910.212(b)

Recommended Action: Bolt the machinery to the floor or otherwise secure it in place. Installing the machine on a large base may eliminate movement and increase stability. If the machine is otherwise stable and secure against tipping or falling, rubber pads may be places under it to prevent undesired movement.

Item No: 006

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Where employees were exposed to injurious hazardous materials, suitable facilities for flushing of the eyes were not serviced and maintained within the work area for immediate emergency use.

Location: A. Automotive Technology: Unit defective

Potential Effects: Aggravated eye and skin injuries, from prolonged exposure of eyes to various hazardous chemicals.

Standard: 29 CFR 1910.151(c)

Recommended Action: Add signage to immediately identify the location of the eye wash. Facilities should have adequate liquid for at least 15 minutes of flushing. Plumbed units should be operated weekly to flush the lines and to verify proper operation; self-contained units should be inspected according to the manufacturer's instructions. While nozzles must be protected from airborne contaminants, such protection must not impede the operator.

Eyewash stations should always be near the hazardous work areas, so that travel to them takes no more

than ten seconds. The station should be clearly marked, brightly colored, well-lighted and free of obstructions.

Personal eyewash equipment supports plumbed and self-contained units but does not replace them. Such a unit may be kept in an area to supply immediate flushing. With this accomplished, the injured individual may then proceed to a permanent facility for the required 15-minute period.

Hand-held drench hoses are not to be considered as primary eyewash units because an injured worker would have difficulty in washing both eyes and keeping them open while using one hand to operate the hose.

Employees who might be exposed to chemical splashes should be instructed in the proper use of emergency eyewash units. It is necessary to hold the eyelids open and roll the eyeballs so water will flow on all surfaces and the surrounding inner folds, and to flush 15 full minutes.

The sign wording should be in plainly legible letters no less than six inches high with the principal strokes of the letters not less than 3/4 inches.

The sign should be distinctive in color and contrast with decorations, interior finish, or other signs.

OSHA does not specify the height of signs. They should be placed so that they are visible from across the shop.

Item No: 007

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A shield or guard was not affixed to its machine or secured elsewhere when attachment to the machine was not possible.

Location: A. Automotive Technology (Drill Press): Missing pulley cover

Potential Effects: Eye/face injury from contact with flying chips.

Standard: 29 CFR 1910.212(a)(2)

Recommended Action: Replace shields/guards to prevent dangerous machine components from being exposed.

The shield must be designed and fastened so that it does not present a hazard in itself. Sharp edges or projections are to be removed or covered. Pinch points between the guard and other components or obstructions should be eliminated or guarded.

Item No: 008

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Shelves and/or shelving systems, bookcases, coat racks, free standing cabinets and lockers were not stable and secure.

Location: A. Automotive Technology (Office): Bookcase

Potential Effects: Contusions, lacerations, fractures, punctures and internal injuries, from falling materials and/or shelf.

Standard: 29 CFR 1910.176

Recommended Action: Secure shelving racks/bookcases, etc. to the wall or to each other to insure stability from falling.

Item No: 009

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Electrical equipment was not free from a recognized hazard that was likely to cause death or serious physical harm to an employee.

Location: A. Automotive Technology: Improper Shop Lights

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(1)

Recommended Action: Secure power to the equipment, preferably using a lockout/tag out procedure. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

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If you have any questions or concerns, please feel free to contact me at 781-338-3946.

Sincerely,

David W. Edmonds
Educational Specialist

SAFETY AND HEALTH PROGRAM MANAGEMENT

The following are the basic elements of an effective safety and health program.

A. **MANAGEMENT LEADERSHIP AND EMPLOYEE INVOLVEMENT** assigns safety and health responsibility and authority to supervisors and employees and holds them accountable. It includes policy formulation, program review, and encouragement of employee involvement.

B. **WORKSITE ANALYSIS** identifies current and potential hazards. It includes a thorough baseline survey to review work process and individual potential hazards. It should also include job hazard analysis, written safe operating procedures (S.O.P.s) for major tasks and operations, a self-inspection program, a system for reporting hazards, accident and incident investigation, and analysis of injuries and illnesses.

C. **HAZARD PREVENTION AND CONTROL.** Prevention consists of maintenance and housekeeping, emergency planning and preparation, first aid, ready access to emergency care when required, and medical surveillance. Control includes engineering and administrative controls such as machine guards, enclosures, ventilation, personal protective equipment, safe work procedures (the result of job hazard analysis), and administrative placement of personnel so as to minimize hazards.

D. **TRAINING** of all personnel, from managers through supervisors to employees, about the hazards they may be exposed to, and their identification, prevention, and control. Managers and supervisors also need training in program management (e.g., enforcing rules, conducting drills). Training can demonstrate management leadership and facilitate employee involvement.

A safe and healthful workplace depends on effective management, to involve line workers, supervisors and managers in ensuring that hazards are identified and that effective physical and administrative controls are established and maintained.

TRAINING PROVIDED BY THE CONSULTANT

During the visit of April 10, 2015, Mr. Edmonds provided informal training during the opening conference, walkthrough survey, and closing conference. Areas discussed included among others:

- Electrical Safety
- Egress requirements
- Regulatory coverage
- Use of personal protective equipment
    - Fire protection
    - Stable storage and securing of storage devices
    - Fall protection issues
- Machine guarding requirements

REPORT OF ACTION TAKEN

David W. Edmonds
Educational Specialist
Office for Career/Vocational Technical Education
The Department of Elementary and Secondary Education
75 Pleasant Street
Malden, MA 02148
dedmonds@doe.mass.edu
781-338-3946

Site: Burncoat Senior High School

Date of Survey: April 10, 2015

Note: An extension of the time frame(s) set for the correction of the serious hazard(s) may be requested in writing if you have made a good faith effort to correct the hazard(s), show that the delay was beyond your control, and give assurance that interim safeguards are in use to protect employees from the hazard(s).

_____

(Employer name, printed/typed, title)

_____

(Signature)

Massachusetts Department of
ELEMENTARY & SECONDARY
EDUCATION

SAFETY SURVEY REPORT RESPONSE TEMPLATE
For the Safety Review Conducted at

Worcester Doherty Memorial High School

Date of Inspection: April 2, 2015

DIRECTIONS

This template contains the findings (Items) for the safety review conducted at the named school. The findings recorded on this template are protected and thus cannot be edited by the district. Below each finding, there are blocks that school district staff should use to record the corrective action date and the corrective action taken as of the date. Staff from the Department will complete the block titled "Department's Response" and will then return the template by email to the person in the district who submitted the template to the Department by email.

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Thank you for making the shops in your school safe.

Massachusetts Department of Elementary and Secondary Education
Office for Career/Vocational Technical Education
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INTRODUCTION

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SUMMARY of the VISIT

On April 2, 2015 an On-Site Inspection was conducted of the Technical Labs/Shops of the Doherty High School. The facility is operated under the guidance of Principal Sally Maloney, with a staff of 130 +/- Administrative personnel, Teachers, and Support staff. The student population is approximately 1400 +/- students. The building is a multistory masonry and glass steel frame construction with educational shops, classrooms, labs and administrative spaces.

The purpose of this On-Site Inspection was to conduct a safety survey of the labs indicated: Engineering Technology, Marketing/Finance, Office Technology, and Radio & Television Broadcasting. A walkthrough survey of the labs was made to determine compliance with applicable State regulations and other relevant governmental and industry safety and health standards. Safety hazards noted during the walkthrough survey include the need for Emergency Stop Signage and electrical repairs. These conditions among others are noted in the enclosed report.

HAZARD DESCRIPTIONS AND CORRECTION RECOMMENDATIONS

The Report of Action Taken lists the hazards in order of item number. It provides a convenient form to briefly describe the methods and dates of hazard correction. Please use it to notify us when corrections are completed and to describe what action you took to eliminate or control the hazard. The Federal Occupational Safety and Health Administration **(OSHA)** Standards were used as the basis for determination.

IMMINENT DANGERS are hazards that can reasonably be expected to cause death or serious physical harm immediately or before this written report is received.

SERIOUS HAZARDS can cause an accident or health hazard exposure resulting in death or serious physical harm.

OTHER-THAN-SERIOUS-HAZARDS lack the potential for causing serious physical harm, but can have a direct impact on employee safety and health.

REPORT OF HAZARDS FOUND

Item No: 001

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Existing E-Stop locations are not immediately and clearly visible within the shop areas.

Location: A. Engineering Technology: Review the location and signage for all E-Stop buttons.

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately mark the location of all existing E-Stop buttons with high visibility "Red/Black; Red/White or Red/Black/White signs. Locate the signs in locations that are easily visible from across the shop.

Item No: 002

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The place of employment was not kept in a clean and orderly condition.

Location: A. Engineering Technology (Storage Room)
B. Engineering Technology: Storage on cabinets

Potential Effects: Sprains, strains, contusions and fractures from falls; illness from bacteria or fungi.

Standard: 29 CFR 1910.22(a)(1)

Recommended Action: Minimize slips, trips and falls in by maintaining work areas in good condition. Provide for the orderly placement of equipment, tools and spare parts, etc. Enforce good house-keeping practices throughout the areas, as good housekeeping contributes to a safe and more efficient operation.

Inspect all areas for excess tools, fixtures, parts and equipment. Select one area of each department and designate it for storage of material and equipment not in use, to promote unobstructed work areas.

Item No: 003

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Exits out of the building and garage doors,

which were accessible from the roadway, did not have "No Parking" signage to ensure free egress from the building in the case of fire or other emergencies.

Location: A. Engineering Technology

Potential Effects: Burns, smoke-related injuries, and other injuries, from delayed egress during fire or other emergencies.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Post "No Parking" on all means of egress that have access to the roadway.

Item No: 004

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A storage cabinet for flammable or combustible liquid was not maintained to keep the design and construction specifications to continue to meet minimal fire resistance requirements.

Location: A. Engineering Technology: Storage on and around unit
B. Engineering Technology: Vents blocked

Potential Effects: Burns, smoke-related injuries and traumatic injuries, from fire and/or explosions.

Standard: 29 CFR 1910.106 (d) (3) (ii)

Recommended Action: Maintain good housekeeping in and around the cabinet.

Such cabinets are designed to limit the internal temperature to not more than 325 degrees Fahrenheit when subjected to a ten-minute fire test. They must be conspicuously labeled "Flammable – Keep Fire Away."

To meet the fire resistance rating metal cabinets should be constructed with top, bottom, sides and door of No. 18 gage sheet iron, double-walled with 1 ½ inches of air space. Joints must be riveted, welded, or made tight by some equally effective means. The door must be provided with a three point lock, and the door sill must be raised at least two inches above the bottom of the cabinet, to contain spills.

Refer to NFPA 33, Flammable and Combustible Liquids Code, for more detailed information.

Item No: 005

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flammable or combustible liquid was stored in an unapproved or unacceptable container (unit) or portable tank or in an inappropriate way.

Location: A. Engineering Technology: Liquids & Gases together

Potential Effects: Burns and smoke-related injuries, from fire precipitated or aggravated by container failure.

Standard: 29 CFR 1910.106

Recommended Action: Containers or portable tanks must be approved for storage of particular flammable or combustible liquids by a nationally recognized testing laboratory as specified in 29 CFR 1910.7 or must meet Department of Transportation (DOT) regulations in Chapter I of 49 CFR. If it is impossible or impractical to use containers that have been shipped under DOT regulations, you should purchase containers marked as approved for the liquids to be stored.

For details, see this standard; the DOT regulations mentioned above; National Fire Protection Association (NFPA) 386, Standard for Portable Shipping Tanks; and American National Standards Institute.

Item No: 006

Instance: A to B **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. An exit, way of approach thereto, or way of travel from the exit into the street or open space was not continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.

Location: A. Engineering technology: Blocked exit
B. Marketing/Finance: Blocked exit

Potential Effects: Burns, smoke-related injuries, and other injuries, from delayed egress during fire or other emergency.

Standard: 29 CFR 1910.37(a)(3)

Recommended Action: Remove materials from exit ways and continuously maintain exit ways free from all obstructions and impediments.

Perform routine inspections to ensure exits, ways of approach thereto, and ways of travel from exits into the street or open space are available for instant use in case of fire or other emergency.

Item No: 007

Instance: A **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Exhaust system seems inadequate.

Location: A. Engineering Technology

Potential Effects: Respiratory problems from inhalation of various types of contaminants.

Standard: 29 CFR 1910.94(b)(3)(ix)

Recommended Action: Repair outlet hoses and check motors. If necessary, have a certified industrial

hygienist from the Department of Labor and Industries, Division of Occupational Hygiene, OSHA Onsite Consultant Services provide for a complete evaluation of your exhaust system. In the interim, provide and require use of proper personal protective equipment or other protective measures to reduce employee exposure.

Item No: 008

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A machine designed for a fixed location was not securely anchored to prevent walking or moving..

Location: A. Engineering Technology: Bush Line Lathe
B. Engineering technology: Dayton Sander

Potential Effects: Bruising, contusions, lacerations.

Standard: 29 CFR 1910.212(b)

Recommended Action: Bolt the machinery to the floor or otherwise secure it in place. Installing the machine on a large base may eliminate movement and increase stability. If the machine is otherwise stable and secure against tipping or falling, rubber pads may be places under it to prevent undesired movement.

Item No: 009

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Where employees were exposed to injurious hazardous materials, suitable facilities for flushing of the eyes were not serviced and maintained within the work area for immediate emergency use.

Location: A. Engineering Technology: Portable Unit out of date

Potential Effects: Aggravated eye and skin injuries, from prolonged exposure of eyes to various hazardous chemicals.

Standard: 29 CFR 1910.151(c)

Recommended Action: Provide an eye wash station. Facilities should have adequate liquid for at least 15 minutes of flushing. Plumbed units should be operated weekly to flush the lines and to verify proper operation; self-contained units should be inspected according to the manufacturer's instructions. While nozzles must be protected from airborne contaminants, such protection must not impede the operator.

Eyewash stations should always be near the hazardous work areas, so that travel to them takes no more than ten seconds. The station should be clearly marked, brightly colored, well-lighted and free of obstructions.

Personal eyewash equipment supports plumbed and self-contained units but does not replace them. Such a unit may be kept in an area to supply immediate flushing. With this accomplished, the injured individual

may then proceed to a permanent facility for the required 15-minute period.

Hand-held drench hoses are not to be considered as primary eyewash units because an injured worker would have difficulty in washing both eyes and keeping them open while using one hand to operate the hose.

Employees who might be exposed to chemical splashes should be instructed in the proper use of emergency eyewash units. It is necessary to hold the eyelids open and roll the eyeballs so water will flow on all surfaces and the surrounding inner folds, and to flush 15 full minutes.

The sign wording should be in plainly legible letters no less than six inches high with the principal strokes of the letters not less than 3/4 inches.

The sign should be distinctive in color and contrast with decorations, interior finish, or other signs.

OSHA does not specify the height of signs. They should be placed so that they are visible from across the shop.

Item No: 010

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A shield or guard was not affixed to its machine or secured elsewhere when attachment to the machine was not possible.

Location: A. Engineering Technology (Lathe): Missing guard

Potential Effects: Eye/face injury from contact with flying chips.

Standard: 29 CFR 1910.212(a)(2)

Recommended Action: Replace shields/guards to prevent dangerous machine components from being exposed.

The shield must be designed and fastened so that it does not present a hazard in itself. Sharp edges or projections are to be removed or covered. Pinch points between the guard and other components or obstructions should be eliminated or guarded.

Item No: 011

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Shelves and/or shelving systems, bookcases, coat racks, free standing cabinets and lockers were not stable and secure.

Location: A. Engineering Technology: Shelving
B. Engineering Technology (Storage): Shelving

Potential Effects: Contusions, lacerations, fractures, punctures and internal injuries, from falling materials and/or shelf.

Standard: 29 CFR 1910.176

Recommended Action: Secure shelving racks/bookcases, etc. to the wall or to each other to insure stability from falling.

Item No: 012

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Electrical equipment was not free from a recognized hazard that was likely to cause death or serious physical harm to an employee.

Location:
A. Engineering Technology: Defective Electrical Panel
B. Engineering Technology: Electrical Panel missing face screws
C. Marketing/Finance (Old clock): Exposed wiring

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(1)

Recommended Action: Secure power to the equipment, preferably using a lockout/tag out procedure. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

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Item No: 013

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Listed or labeled electrical equipment was not used or installed in accordance with instructions included in the listing or labeling.

Location: A. Engineering Technology (Related): Power strips daisy chained

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(2)

Recommended Action: Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

Item No: 014

Instance: A to D **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flexible cords or cables were used for one of the following purposes:

(a) as a substitute for the fixed wiring of a structure;
(b) where run through holes in walls, ceilings or floors;
(c) where run through doorways, windows or similar openings;
(d) where attached to building surfaces; or
(e) where concealed behind building walls, ceilings or floors.

Location:
A. Engineering Technology (Related): Extension Cord across doorway
B. Engineering Technology (Related): Extension Cord in lieu of wiring
C. Marketing/Finance: Extension Cord in lieu of wiring
D. Radio & Television Broadcasting: Extension Cord incorrect length

Potential Effects: Burns and smoke-related injuries, from fire; electric shock, burns, and electrocution, from contact with live parts.

Standard: 29 CFR 1910.305 (g)(1)(iii)

Recommended Action: Replace the flexible electrical cord or cable with permanent wiring. Generally, metal raceways are used in industrial settings; however, other methods may be allowed or required, depending upon usage. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

Item No: 015

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Miscellaneous safety issues

Location: A. Engineering Technology: Broken chairs

Potential Effects: Death, severe injury, or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately make needed repairs.

If you have any questions or concerns, please feel free to contact me at 781-338-3946.

Sincerely,

David W. Edmonds
Educational Specialist

SAFETY AND HEALTH PROGRAM MANAGEMENT

The following are the basic elements of an effective safety and health program.

A. **MANAGEMENT LEADERSHIP AND EMPLOYEE INVOLVEMENT** assigns safety and health responsibility and authority to supervisors and employees and holds them accountable. It includes policy formulation, program review, and encouragement of employee involvement.

B. **WORKSITE ANALYSIS** identifies current and potential hazards. It includes a thorough baseline survey to review work process and individual potential hazards. It should also include job hazard analysis, written safe operating procedures (S.O.P.s) for major tasks and operations, a self-inspection program, a system for reporting hazards, accident and incident investigation, and analysis of injuries and illnesses.

C. **HAZARD PREVENTION AND CONTROL**. Prevention consists of maintenance and housekeeping, emergency planning and preparation, first aid, ready access to emergency care when required, and medical surveillance. Control includes engineering and administrative controls such as machine guards, enclosures, ventilation, personal protective equipment, safe work procedures (the result of job hazard analysis), and administrative placement of personnel so as to minimize hazards.

D. **TRAINING** of all personnel, from managers through supervisors to employees, about the hazards they may be exposed to, and their identification, prevention, and control. Managers and supervisors also need training in program management (e.g., enforcing rules, conducting drills). Training can demonstrate management leadership and facilitate employee involvement.

A safe and healthful workplace depends on effective management, to involve line workers, supervisors and managers in ensuring that hazards are identified and that effective physical and administrative controls are established and maintained.

TRAINING PROVIDED BY THE CONSULTANT

During the visit of April 2, 2015, Mr. Edmonds provided informal training during the opening conference, walkthrough survey, and closing conference. Areas discussed included among others:

- Electrical Safety
- Egress requirements
- Regulatory coverage
- Use of personal protective equipment
    - Fire protection
    - Stable storage and securing of storage devices
    - Fall protection issues
- Machine guarding requirements

REPORT OF ACTION TAKEN

David W. Edmonds
Educational Specialist
Office for Career/Vocational Technical Education
The Department of Elementary and Secondary Education
75 Pleasant Street
Malden, MA 02148
dedmonds@doe.mass.edu
781-338-3946

Site: Doherty Memorial High School

Date of Survey: April 2, 2015

Note: An extension of the time frame(s) set for the correction of the serious hazard(s) may be requested in writing if you have made a good faith effort to correct the hazard(s), show that the delay was beyond your control, and give assurance that interim safeguards are in use to protect employees from the hazard(s).

_____

(Employer name, printed/typed, title)

_____

(Signature)

Massachusetts Department of
ELEMENTARY & SECONDARY
EDUCATION

SAFETY SURVEY REPORT RESPONSE TEMPLATE
For the Safety Review Conducted at

Worcester North High School

Date of Inspection: April 1, 2015

DIRECTIONS

This template contains the findings (Items) for the safety review conducted at the named school. The findings recorded on this template are protected and thus cannot be edited by the district. Below each finding, there are blocks that school district staff should use to record the corrective action date and the corrective action taken as of the date. Staff from the Department will complete the block titled "Department's Response" and will then return the template by email to the person in the district who submitted the template to the Department by email.

This actual template will be a "running template" i.e., a document that will be exchanged back and forth between the district and the Department until all findings have been remediated.

Districts shall submit the template to David Edmonds by email at dedmonds@doe.mass.edu.

District staff may call Mr. Edmonds at 781-338-3946, or their liaison in the Department's Office for Career/Vocational Technical Education for technical assistance. The list of liaisons by district is located at http://www.doe.mass.edu/cte/ under "CVTE Staff."

Thank you for making the shops in your school safe.

Massachusetts Department of Elementary and Secondary Education
Office for Career/Vocational Technical Education
Address 75 Pleasant Street, Malden, MA 02149
Telephone 781-338-3910 internet www.doe.mass.edu/cte/
e-mail careervoctech@doe.mass.edu

TABLE OF CONTENTS

INTRODUCTION

This report provides the results of a safety survey completed at the indicated facility. The survey was conducted by the Massachusetts Department of Elementary and Secondary Education, Office for Career/Vocational Technical Education. The survey is intended to determine if schools are in compliance with standards established by the Occupational Safety and Health Administration (OSHA) to help ensure the safety of vocational technical students and staff.

SUMMARY of the VISIT

On April 1, 2015 an On-Site Inspection was conducted of the Technical Labs/Shops of Worcester North High School. The facility is operated under the guidance of Principal Lisa Dyer, with a staff of 250 +/- Administrative personnel, Teachers, and Support staff. The student population is approximately 1187 +/- students. The building is a multistory masonry and glass steel frame construction with educational shops, classrooms, labs and administrative spaces.

The purpose of this On-Site Inspection was to conduct a safety survey of the labs indicated: Biotechnology, Early Education & Care, Engineering Technology, Graphic Communications, Health Assisting, Marketing/Finance, Office Technology, Radio & Television Broadcasting, and Robotics & Automation Technology. A walkthrough survey of the labs was made to determine compliance with applicable State regulations and other relevant governmental and industry safety and health standards. Safety hazards noted during the walkthrough survey include the need for Shop Specific Safety & Health Plans. These conditions among others are noted in the enclosed report.

HAZARD DESCRIPTIONS AND CORRECTION RECOMMENDATIONS

The Report of Action Taken lists the hazards in order of item number. It provides a convenient form to briefly describe the methods and dates of hazard correction. Please use it to notify us when corrections are completed and to describe what action you took to eliminate or control the hazard. The Federal Occupational Safety and Health Administration **(OSHA)** Standards were used as the basis for determination.

IMMINENT DANGERS are hazards that can reasonably be expected to cause death or serious physical harm immediately or before this written report is received.

SERIOUS HAZARDS can cause an accident or health hazard exposure resulting in death or serious physical harm.

OTHER-THAN-SERIOUS-HAZARDS lack the potential for causing serious physical harm, but can have a direct impact on employee safety and health.

REPORT OF HAZARDS FOUND

Item No: 001

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. All shops do not have shop specific Safety & Health Plans.

Location: A. Facility

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately develop shop specific Safety & Health Plans

Item No: 002

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Vertical Clearance between sprinklers and material below was less than 18 inches.

Location: A. Health Assisting (Storage)

Potential Effects: Burns and smoke related injuries, from uncontrolled fire.

Standard: 29 CFR 1910.159(c)(10)

Recommended Action: Remove storage from top shelf of shelving racks. This will provide for an 18inch clearance from the sprinkler heads.

Item No: 003

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Shelves and/or shelving systems, bookcases, coat racks, free standing cabinets and lockers were not stable and secure.

Location: A. Early Education & Care: Bookcases
B. Health Assisting (Storage)

Potential Effects: Contusions, lacerations, fractures, punctures and internal injuries, from falling materials and/or shelf.

Standard: 29 CFR 1910.176

Recommended Action: Secure shelving racks/bookcases, etc. to the wall or to each other to insure stability from falling.

Item No: 004

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Miscellaneous safety issues

Location: A. Early Education & Care: Defective Coat Rack
B. Health Assisting: Missing SDS Book

Potential Effects: Death, severe injury, trauma, or disease.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately make needed repairs.

If you have any questions or concerns, please feel free to contact me at 781-338-3946.

Sincerely,

David W. Edmonds
Educational Specialist

SAFETY AND HEALTH PROGRAM MANAGEMENT

The following are the basic elements of an effective safety and health program.

A. **MANAGEMENT LEADERSHIP AND EMPLOYEE INVOLVEMENT** assigns safety and health responsibility and authority to supervisors and employees and holds them accountable. It includes policy formulation, program review, and encouragement of employee involvement.

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D. **TRAINING** of all personnel, from managers through supervisors to employees, about the hazards they may be exposed to, and their identification, prevention, and control. Managers and supervisors also need training in program management (e.g., enforcing rules, conducting drills). Training can demonstrate management leadership and facilitate employee involvement.

A safe and healthful workplace depends on effective management, to involve line workers, supervisors and managers in ensuring that hazards are identified and that effective physical and administrative controls are established and maintained.

TRAINING PROVIDED BY THE CONSULTANT

During the visit of April 1, 2015, Mr. Edmonds provided informal training during the opening conference, walkthrough survey, and closing conference. Areas discussed included among others:

- Electrical Safety
- Egress requirements
- Regulatory coverage
- Use of personal protective equipment
    - Fire protection
    - Stable storage and securing of storage devices
    - Fall protection issues
- Machine guarding requirements

REPORT OF ACTION TAKEN

David W. Edmonds
Educational Specialist
Office for Career/Vocational Technical Education
The Department of Elementary and Secondary Education
75 Pleasant Street
Malden, MA 02148
dedmonds@doe.mass.edu
781-338-3946

Site: Worcester North High School

Date of Survey: April 1, 2015

Note: An extension of the time frame(s) set for the correction of the serious hazard(s) may be requested in writing if you have made a good faith effort to correct the hazard(s), show that the delay was beyond your control, and give assurance that interim safeguards are in use to protect employees from the hazard(s).

_____

(Employer name, printed/typed, title)

_____

(Signature)

Massachusetts Department of
ELEMENTARY & SECONDARY
EDUCATION

SAFETY SURVEY REPORT RESPONSE TEMPLATE
For the Safety Review Conducted at

Worcester South High School Community

Date of Inspection: April 2, 2015

DIRECTIONS

This template contains the findings (Items) for the safety review conducted at the named school. The findings recorded on this template are protected and thus cannot be edited by the district. Below each finding, there are blocks that school district staff should use to record the corrective action date and the corrective action taken as of the date. Staff from the Department will complete the block titled "Department's Response" and will then return the template by email to the person in the district who submitted the template to the Department by email.

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Thank you for making the shops in your school safe.

Massachusetts Department of Elementary and Secondary Education
Office for Career/Vocational Technical Education
Address 75 Pleasant Street, Malden, MA 02149
Telephone 781-338-3910 internet www.doe.mass.edu/cte/
e-mail careervoctech@doe.mass.edu

TABLE OF CONTENTS

INTRODUCTION

This report provides the results of a safety survey completed at the indicated facility. The survey was conducted by the Massachusetts Department of Elementary and Secondary Education, Office for Career/Vocational Technical Education. The survey is intended to determine if schools are in compliance with standards established by the Occupational Safety and Health Administration (OSHA) to help ensure the safety of vocational technical students and staff.

SUMMARY of the VISIT

On April 2, 2015 an On-Site Inspection was conducted of the Technical Labs/Shops of the Worcester South High School. The facility is operated under the guidance of Principal Maureen Binienda with a staff of 170 +/- Administrative personnel, Teachers, and Support staff. The student population is approximately 1160 +/- students. The building is a multistory masonry and glass steel frame construction with educational shops, classrooms, labs and administrative spaces.

The purpose of this On-Site Inspection was to conduct a safety survey of the labs indicated: Automotive Technology, Culinary Arts, Early Education & Care, Family & Consumer Studies, Office Technology, and Radio & Television Broadcasting. A walkthrough survey of the labs was made to determine compliance with applicable State regulations and other relevant governmental and industry safety and health standards. Safety hazards noted during the walkthrough survey include the need for Emergency Stop Signage, Garage Door Auto Stops, and flammable storage changes. These conditions among others are noted in the enclosed report.

HAZARD DESCRIPTIONS AND CORRECTION RECOMMENDATIONS

The Report of Action Taken lists the hazards in order of item number. It provides a convenient form to briefly describe the methods and dates of hazard correction. Please use it to notify us when corrections are completed and to describe what action you took to eliminate or control the hazard. The Federal Occupational Safety and Health Administration **(OSHA)** Standards were used as the basis for determination.

IMMINENT DANGERS are hazards that can reasonably be expected to cause death or serious physical harm immediately or before this written report is received.

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OTHER-THAN-SERIOUS-HAZARDS lack the potential for causing serious physical harm, but can have a direct impact on employee safety and health.

REPORT OF HAZARDS FOUND

Item No: 001

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Emergency Stop buttons were not maintained clear of stored material at all times.

Location: A. Automotive Technology: Blocked unit

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately clear all areas around the location of all existing E-Stop buttons.

Item No: 002

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Existing E-Stop locations are not immediately and clearly visible within the shop areas.

Location: A. Automotive technology: Need signage

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately mark the location of all existing E-Stop buttons with high visibility "Red/Black; Red/White or Red/Black/White signs. Locate the signs in locations that are easily visible from across the shop.

Item No: 003

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Overhead doors are not equipped with safety reverse or stop device.

Location: A. Automotive Technology

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately install auto stop and/or auto reversing safety devices on overhead doors.

Item No: 004

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. All shops do not have shop specific Safety & Health Plans

Location: A. Facility

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately develop shop specific Safety & Health Plans

Item No: 005

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The place of employment was not kept in a clean and orderly condition.

Location: A. Automotive Technology

Potential Effects: Sprains, strains, contusions and fractures from falls; illness from bacteria or fungi.

Standard: 29 CFR 1910.22(a)(1)

Recommended Action: Minimize slips, trips and falls in by maintaining work areas in good condition. Provide for the orderly placement of equipment, tools and spare parts, etc. Enforce good house-keeping practices throughout the areas, as good housekeeping contributes to a safe and more efficient operation.

Inspect all areas for excess tools, fixtures, parts and equipment. Select one area of each department and designate it for storage of material and equipment not in use, to promote unobstructed work areas.

Item No: 006

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A storage cabinet for flammable or combustible liquid was not maintained to keep the design and construction specifications to continue to meet minimal fire resistance requirements.

Location: A. Automotive technology: Hasp on Flammable Cabinet

Potential Effects: Burns, smoke-related injuries and traumatic injuries from fire and/or explosion.

Standard: 29 CFR 1910.106(d)(3)(ii)

Recommended Action: Remove hasp from unit. Place all flammable and combustible liquids in the flammable storage cabinets. Such cabinets are designed to limit the internal temperature to not more than 325 degrees Fahrenheit when subjected to a ten-minute fire test. They must be conspicuously labeled "Flammable - Keep Fire Away." Remove all storage on top of and around the units.

To meet the fire resistance rating metal cabinets should be constructed with top, bottom, sides and door of No. 18 gage sheet iron, double-walled with 1 1/2 inches of air space. Joints must be riveted, welded, or made tight by some equally effective means. The door must be provided with a three point lock, and the door sill must be raised at least two inches above the bottom of the cabinet, to contain spills.

Refer to NFPA 33, Flammable and Combustible Liquids Code, for more detailed information.

Item No: 007

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flammable or combustible liquid was stored in an unapproved or unacceptable container (unit) or portable tank or in an inappropriate way.

Location:
A. Automotive Technology (Storage): Flammables outside of unit
B. Automotive Technology (Storage): Liquids and gases together
C. Automotive Technology (Oil Barrel): Needs pallet

Potential Effects: Burns and smoke-related injuries, from fire precipitated or aggravated by container failure.

Standard: 29 CFR 1910.106

Recommended Action: Containers or portable tanks must be approved for storage of particular flammable or combustible liquids by a nationally recognized testing laboratory as specified in 29 CFR 1910.7 or must meet Department of Transportation (DOT) regulations in Chapter I of 49 CFR. If it is impossible or impractical to use containers that have been shipped under DOT regulations, you should purchase containers marked as approved for the liquids to be stored.

For details, see this standard; the DOT regulations mentioned above; National Fire Protection Association (NFPA) 386, Standard for Portable Shipping Tanks; and American National Standards Institute.

Item No: 008

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The employer had not established a program to inspect automotive lifts and like equipment on a regular basis.

Location: A. Automotive Technology

Potential Effects: Contusions, abrasions, lacerations, punctures, fractures, amputations, internal injuries and crushing injuries, from being struck by falling objects during collapse.

Standard: Section 5 (a) (1) of the Occupational Safety and Health Act of 1970

Recommended Action: Automotive lifts and like equipment should be inspected at least annually, more frequently when so specified by the manufacturer or the authority having jurisdiction. The National Standard addressing automotive lift inspections is ANSI/ALI ALOIM (current edition) "Safety Requirements for the Operation, Inspection, and Maintenance of Automotive Lifts."

Item No: 009

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Exhaust system seems inadequate.

Location: A. Culinary: Kitchen Hood not inspected
B. Early Education & Care: Clothes dryer vented into room

Potential Effects: Respiratory problems from inhalation of various types of contaminants.

Standard: 29 CFR 1910.94(b)(3)(ix)

Recommended Action: Repair outlet hoses and check motors. If necessary, have a certified industrial hygienist from the Department of Labor and Industries, Division of Occupational Hygiene, OSHA Onsite Consultant Services provide for a complete evaluation of your exhaust system. In the interim, provide and require use of proper personal protective equipment or other protective measures to reduce employee exposure.

Item No: 010

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Abrasive blasting unit did not provide protection against the abrasive blasting medium. Seals were damaged.

Location: A. Automotive Technology (Snap On Sand Blaster): Defective seals

Potential Effects: Lacerations, punctures, embolisms of exposed body parts, from particulate matter driven by air pressure; overexposure to silica dust.

Standard: 29 CFR 1910.94(a)(5)(v)

Recommended Action: Provide a storage area whereby the personal protective equipment are kept in a sanitary, reliable condition and are accessible to employees for use.

Item No: 011

Instance: A **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A belt/pulley drive with a part seven feet or less from the floor or work platform was not guarded by a standard guard.

Location: A. Automotive technology (Atlas lathe): Exposed pulley

Potential Effects: Crushing or amputation of fingers, or hand from being caught between the belt and pulley.

Standard: 29 CFR 1910.219(d)(1)

Recommended Action: A standard guard is made of expanded metal, perforated or solid sheet metal, wire mesh on a frame of angle iron, or iron pipe. It is free of burrs and sharp edges and, for a horizontal overhead belt, completely encloses the belt runs and pulley faces, and where practical, either follows the line of the pulley to the ceiling or is carried to the nearest wall. The width of the guard should be a least one fourth wider than the width of the belt, except that the clearance on either side need not be greater than six inches.

Item No: 012

Instance: A **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The Crane system did not have a posted rating to determine maximum load.

Location: A. Automotive Technology

Potential Effects: Contusions, abrasions, lacerations, punctures, fractures, amputations, internal injuries and crushing injuries, from being struck by falling objects during collapse.

Standard: 29 CFR 1910.179(a)(50)

Recommended Action: Determine and post the rated load. "Rated load" means the maximum load for which a crane or individual hoist is designed and built by the manufacturer and shown on the equipment nameplate(s).

Item No: 013

Instance: A to B **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Where employees were exposed to injurious

hazardous materials, suitable facilities for flushing of the eyes were not serviced and maintained within the work area for immediate emergency use.

Location: A. Automotive Technology: Install unit
B. Culinary: Install unit

Potential Effects: Aggravated eye and skin injuries, from prolonged exposure of eyes to various hazardous chemicals.

Standard: 29 CFR 1910.151(c)

Recommended Action: Provide an eye wash station. Facilities should have adequate liquid for at least 15 minutes of flushing. Plumbed units should be operated weekly to flush the lines and to verify proper operation; self-contained units should be inspected according to the manufacturer's instructions. While nozzles must be protected from airborne contaminants, such protection must not impede the operator.

Eyewash stations should always be near the hazardous work areas, so that travel to them takes no more than ten seconds. The station should be clearly marked, brightly colored, well-lighted and free of obstructions.

Personal eyewash equipment supports plumbed and self-contained units but does not replace them. Such a unit may be kept in an area to supply immediate flushing. With this accomplished, the injured individual may then proceed to a permanent facility for the required 15-minute period.

Hand-held drench hoses are not to be considered as primary eyewash units because an injured worker would have difficulty in washing both eyes and keeping them open while using one hand to operate the hose.

Employees who might be exposed to chemical splashes should be instructed in the proper use of emergency eyewash units. It is necessary to hold the eyelids open and roll the eyeballs so water will flow on all surfaces and the surrounding inner folds, and to flush 15 full minutes.

The sign wording should be in plainly legible letters no less than six inches high with the principal strokes of the letters not less than 3/4 inches.

The sign should be distinctive in color and contrast with decorations, interior finish, or other signs.

OSHA does not specify the height of signs. They should be placed so that they are visible from across the shop.

Item No: 014

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A portable fire extinguisher was not located so that it was readily available to people without subjecting them to possible injury.

Location:
A. Automotive Technology: Unit unmounted

Potential Effects: Burns and smoke-related injuries, from uncontrolled fire.

Standard: 29 CFR 1910.157

Recommended Action: Provide appropriate fire extinguishers for the work environment in sufficient number and in appropriate locations. Do not allow materials or equipment to be stored around or in front of extinguishers in any way that would prevent

Item No: 015

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A shield or guard was not affixed to its machine or secured elsewhere when attachment to the machine was not possible.

Location:
A. Automotive Technology (Atlas Lathe): Need guard
B. Automotive Technology (Sunex grinder): Guard defective
C. Culinary (Hobart Mixer): Need guard

Potential Effects: Eye/face injury from contact with flying chips.

Standard: 29 CFR 1910.212(a)(2)

Recommended Action: Replace shields/guards to prevent dangerous machine components from being exposed.

The shield must be designed and fastened so that it does not present a hazard in itself. Sharp edges or projections are to be removed or covered. Pinch points between the guard and other components or obstructions should be eliminated or guarded.

Item No: 016

Instance: A to F **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Shelves and/or shelving systems, bookcases, coat racks, free standing cabinets and lockers were not stable and secure.

Location:
A. Automotive Technology: Bookcases
B. Automotive Technology (Office): Bookcase
C. Automotive Technology (Storage Room): Shelving
D. Culinary (Dry Storage): Shelving
E. Culinary: Bookcases
F. Early Education & Care: Cabinets

Potential Effects: Contusions, lacerations, fractures, punctures and internal injuries, from falling materials and/or shelf.

Standard: 29 CFR 1910.176

Recommended Action: Secure shelving racks/bookcases, etc. to the wall or to each other to insure stability from falling.

Item No: 017

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The opening between the work rest and abrasive wheel exceeded one-eighth inch.

Location: A. Automotive Technology (Sunex Grinder)

Potential Effects: Cuts to fingers and penetration injuries, from contact with or disintegration of the grinding wheel.

Standard: 29 CFR 1910.215(a)(4)

Recommended Action: Keep work rests in place whenever feasible for the work being performed; and keep them adjusted closely to the wheel with a maximum opening of one-eighth inch to prevent the work from being jammed between the wheel and the rest--which could cause wheel breakage. Adjust the work rests only when the wheel is stationary, and securely clamp the work rest after each adjustment.

Item No: 018

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Electrical equipment was not free from a recognized hazard that was likely to cause death or serious physical harm to an employee.

Location: A. Automotive Technology (Tool Room): Extension cord defective

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(1)

Recommended Action: Secure power to the equipment, preferably using a lockout/tag out procedure. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

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Item No: 019

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were

likely to cause death or serious physical harm to personnel. Listed or labeled electrical equipment was not used or installed in accordance with instructions included in the listing or labeling.

Location: A. Early Education & Care: Power Strips daisy chained
B. Culinary: Microwave on power strip

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(2)

Recommended Action: Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

Item No: 020

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flexible cords or cables were used for one of the following purposes:

(a) as a substitute for the fixed wiring of a structure;
(b) where run through holes in walls, ceilings or floors;
(c) where run through doorways, windows or similar openings;
(d) where attached to building surfaces; or
(e) where concealed behind building walls, ceilings or floors.

Location: A. Early Education & Care: Extension cord in lieu of wiring

Potential Effects: Burns and smoke-related injuries, from fire; electric shock, burns, and electrocution, from contact with live parts.

Standard: 29 CFR 1910.305 (g)(1)(iii)

Recommended Action: Replace the flexible electrical cord or cable with permanent wiring. Generally, metal raceways are used in industrial settings; however, other methods may be allowed or required, depending upon usage. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

Item No: 021

Instance: A to D **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were

likely to cause death or serious physical harm to personnel. Receptacles were not equipped with ground fault circuit interrupter (GFCI) protection.

Location: A. Early Education & Care: Washing Machine

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts.

Standard: 29 CFR 1910.305(j)(2)(iv)

Recommended Action: Have a qualified electrician install a ground fault circuit interrupter (GFCI) suitable for wet and damp locations.

Alternatively, discontinue use of this receptacle and blank it off so that it cannot be used.

Item No: 022

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Miscellaneous safety issues

Location: A. Automotive Technology (Red Wing Grinder): Unit defective
B. Automotive Technology (Willsaw Bandsaw): Unit defective

Potential Effects: Death, severe injury, trauma, or disease.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately make needed repairs.

If you have any questions or concerns, please feel free to contact me at 781-338-3946.

Sincerely,

David W. Edmonds
Educational Specialist

SAFETY AND HEALTH PROGRAM MANAGEMENT

The following are the basic elements of an effective safety and health program.

A. **MANAGEMENT LEADERSHIP AND EMPLOYEE INVOLVEMENT** assigns safety and health responsibility and authority to supervisors and employees and holds them accountable. It includes policy formulation, program review, and encouragement of employee involvement.

B. **WORKSITE ANALYSIS** identifies current and potential hazards. It includes a thorough baseline survey to review work process and individual potential hazards. It should also include job hazard analysis, written safe operating procedures (S.O.P.s) for major tasks and operations, a self-inspection program, a system for reporting hazards, accident and incident investigation, and analysis of injuries and illnesses.

C. **HAZARD PREVENTION AND CONTROL**. Prevention consists of maintenance and housekeeping, emergency planning and preparation, first aid, ready access to emergency care when required, and medical surveillance. Control includes engineering and administrative controls such as machine guards, enclosures, ventilation, personal protective equipment, safe work procedures (the result of job hazard analysis), and administrative placement of personnel so as to minimize hazards.

D. **TRAINING** of all personnel, from managers through supervisors to employees, about the hazards they may be exposed to, and their identification, prevention, and control. Managers and supervisors also need training in program management (e.g., enforcing rules, conducting drills). Training can demonstrate management leadership and facilitate employee involvement.

A safe and healthful workplace depends on effective management, to involve line workers, supervisors and managers in ensuring that hazards are identified and that effective physical and administrative controls are established and maintained.

TRAINING PROVIDED BY THE CONSULTANT

During the visit of April 2, 2015, Mr. Edmonds provided informal training during the opening conference, walkthrough survey, and closing conference. Areas discussed included among others:

- Electrical Safety
- Egress requirements
- Regulatory coverage
- Use of personal protective equipment
    - Fire protection
    - Stable storage and securing of storage devices
    - Fall protection issues
- Machine guarding requirements

REPORT OF ACTION TAKEN

David W. Edmonds
Educational Specialist
Office for Career/Vocational Technical Education
The Department of Elementary and Secondary Education
75 Pleasant Street
Malden, MA 02148
dedmonds@doe.mass.edu
781-338-3946

Site: Worcester South High School

Date of Survey: April 2, 2015

Note: An extension of the time frame(s) set for the correction of the serious hazard(s) may be requested in writing if you have made a good faith effort to correct the hazard(s), show that the delay was beyond your control, and give assurance that interim safeguards are in use to protect employees from the hazard(s).

_____

(Employer name, printed/typed, title)

_____

(Signature)

Massachusetts Department of
ELEMENTARY & SECONDARY
EDUCATION

SAFETY SURVEY REPORT RESPONSE TEMPLATE
For the Safety Review Conducted at

Worcester Technical High School

Date of Inspection: April 6-10, 2015

DIRECTIONS

This template contains the findings (Items) for the safety review conducted at the named school. The findings recorded on this template are protected and thus cannot be edited by the district. Below each finding, there are blocks that school district staff should use to record the corrective action date and the corrective action taken as of the date. Staff from the Department will complete the block titled "Department's Response" and will then return the template by email to the person in the district who submitted the template to the Department by email.

This actual template will be a "running template" i.e., a document that will be exchanged back and forth between the district and the Department until all findings have been remediated.

Districts shall submit the template to David Edmonds by email at dedmonds@doe.mass.edu.

District staff may call Mr. Edmonds at 781-338-3946, or their liaison in the Department's Office for Career/Vocational Technical Education for technical assistance. The list of liaisons by district is located at http://www.doe.mass.edu/cte/ under "CVTE Staff."

Thank you for making the shops in your school safe.

Massachusetts Department of Elementary and Secondary Education
Office for Career/Vocational Technical Education
Address 75 Pleasant Street, Malden, MA 02149
Telephone 781-338-3910 internet www.doe.mass.edu/cte/
e-mail careervoctech@doe.mass.edu

TABLE OF CONTENTS

INTRODUCTION

This report provides the results of a safety survey completed at the indicated facility. The survey was conducted by the Massachusetts Department of Elementary and Secondary Education, Office for Career/Vocational Technical Education. The survey is intended to determine if schools are in compliance with standards established by the Occupational Safety and Health Administration (OSHA) to help ensure the safety of vocational technical students and staff.

SUMMARY of the VISIT

On April 6-10, 2015 an On-Site Inspection was conducted of the Technical Labs/Shops of Worcester Technical High School. The facility is operated under the guidance of Principal Kyle Brenner, with a staff of 200 +/- Administrative personnel, Teachers, and Support staff. The student population is approximately 1400 +/- students. The building is a multistory masonry and glass steel frame construction with educational shops, classrooms, labs and administrative spaces.

The purpose of this On-Site Inspection was to conduct a safety survey of the labs indicated: Animal Science, Automotive Collision Repair & Refinishing, Automotive Technology, Biotechnology, Carpentry, Cosmetology, Culinary Arts, Drafting, Early Education & Care, Electricity, Environmental Science & Technology, Graphic Communications, Health Assisting, Heating-Ventilation-Air Conditioning-Refrigeration, Hospitality Management, Information Support Services & Networking, Machine Tool Technology, Marketing, Metal Fabrication & Joining Technologies, Office Technology, Painting & Design Technologies, Plumbing, Robotics & Automation Technology and Sheet Metalworking. A walkthrough survey of the labs was made to determine compliance with applicable State regulations and other relevant governmental and industry safety and health standards. Safety hazards noted during the walkthrough survey include the need for Emergency Stop signage, weight load reviews and flammable storage changes. These conditions among others are noted in the enclosed report.

HAZARD DESCRIPTIONS AND CORRECTION RECOMMENDATIONS

The Report of Action Taken lists the hazards in order of item number. It provides a convenient form to briefly describe the methods and dates of hazard correction. Please use it to notify us when corrections are completed and to describe what action you took to eliminate or control the hazard. The Federal Occupational Safety and Health Administration **(OSHA)** Standards were used as the basis for determination.

IMMINENT DANGERS are hazards that can reasonably be expected to cause death or serious physical harm immediately or before this written report is received.

SERIOUS HAZARDS can cause an accident or health hazard exposure resulting in death or serious physical harm.

OTHER-THAN-SERIOUS-HAZARDS lack the potential for causing serious physical harm, but can have a direct impact on employee safety and health.

REPORT OF HAZARDS FOUND

Item No: 001

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Sufficient Emergency Stop buttons have not been installed in shop locations at strategic points on walls and posts.

Location: A. Carpentry: Defective unit

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately determine the most suitable accessible locations for E-Stop buttons and install them as soon as possible. Repair all defective units.

Item No: 002

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Emergency Stop buttons were not maintained clear of stored material at all times.

Location: A. Electricity: Blocked unit
B. HVAC: Blocked Unit

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately clear all areas around the location of all existing E-Stop buttons.

Item No: 003

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Existing E-Stop locations are not immediately and clearly visible within the shop areas.

Location A. Facility: Review location of all signage to determine if visible across shop
B. Welding: Need signage

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately mark the location of all existing E-Stop buttons with high visibility "Red/Black; Red/White or Red/Black/White signs. Locate the signs in locations that are easily visible from across the shop.

Item No: 004

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. MSDS had not been updated to SDS.

Location: A. Facility

Standard: 29 CFR 1910.1200 (g)

Recommended Action: Review all shops. Change over to the SDS as quickly as possible. The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012, requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format. This brief provides guidance to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDSs.

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well). In addition, OSHA requires that SDS preparers provide specific minimum information as detailed in Appendix D of 29 CFR 1910.1200. The SDS preparers may also include additional information in various section(s).

Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., fire fighting). This information should be helpful to those that need to get the information quickly. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain Sections 12 through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

Item No: 005

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Unapproved loads were added to the roof system.

Location: A. Electricity (Related Storage): Storage in roof trusses

Potential Effects: Death, severe injury or trauma.

Standard: 29 CFR 1910.22 (d) (1-2)

Recommended Action: Immediately remove unlawful loads to the roof system and return to original approved load.

Item No: 006

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The maximum weight permitted to be stored on the floor or platform and storage rack systems was not posted in a conspicuous place.

Location: A. HVAC (Storage)

Potential Effects: Sprains, strains, contusions and fractures, from fall through collapsing floor; contusions, fractures and crushing injuries, from being struck by falling objects.

Standard: 29 CFR 1910.22(d)(1)

Recommended Action: Post a weight load limit sign. This sign must specify the amount of weight (in pounds per square foot) which can be stored safely on the floor, platform or rack, as determined by a qualified engineer, and must be conspicuous, easy to read, and durable.

If the sign is lost or stolen, you may obtain help from the person in a municipal or state building department responsible for issuing construction permits.

Item No: 007

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The place of employment was not kept in a clean and orderly condition.

Location: A. Animal Science (Related)
B. Early Education & Care (Gross Motor Skills Room)
C. Graphic Communications (Equipment Storage)

Potential Effects: Sprains, strains, contusions and fractures from falls; illness from bacteria or fungi.

Standard: 29 CFR 1910.22(a)(1)

Recommended Action: Minimize slips, trips and falls in by maintaining work areas in good condition. Provide for the orderly placement of equipment, tools and spare parts, etc. Enforce good house-keeping practices throughout the areas, as good housekeeping contributes to a safe and more efficient operation.

Inspect all areas for excess tools, fixtures, parts and equipment. Select one area of each department and designate it for storage of material and equipment not in use, to promote unobstructed work areas.

Item No: 008

Instance: A to E **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Overhead doors are not equipped with safety reverse or stop device.

Location:
A. Automotive Collision Repair & Refinishing
B. Electricity
C. Environmental Science & Technology
D. Painting & Design Technologies
E. Metal Fabrication & Joining Technologies

Potential Effects: Death, severe injury or trauma.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately install auto stop and/or auto reversing safety devices on overhead doors.

Item No: 009

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A floor, working area, or passageway was not kept free from holes or protrusions which cause slip, trip and fall hazards.

Location:
A. Biotechnology: Broken floor tiles
B. Early Education & Care (Kitchen): Broken floor tiles
C. Robotics & Automation Technology: Broken floor tiles

Potential Effects: Sprains, strains, contusions and fractures from falls; puncture wounds from protruding nails or splinters.

Standard: 29 CFR 1910.22(a)(3)

Recommended Action: Establish regular inspections of the work-place. Develop procedures for reporting and repairing damage to the physical plant.

Item No: 010

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were

likely to cause death or serious physical harm to personnel. Exits out of the building and garage doors, which were accessible from the roadway, did not have "No Parking" signage to ensure free egress from the building in the case of fire or other emergencies.

Location: A. Facility: Review all exits to ensure "No Parking" posting

Potential Effects: Burns, smoke-related injuries, and other injuries, from delayed egress during fire or other emergencies.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Post "No Parking" on all means of egress that have access to the roadway.

Item No: 011

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A storage cabinet for flammable or combustible liquid was not maintained to keep the design and construction specifications to continue to meet minimal fire resistance requirements.

Location: A. Automotive Collision Repair & Refinishing (Paint Room): Hasp on Flammable Cabinet

Potential Effects: Burns, smoke-related injuries and traumatic injuries from fire and/or explosion.

Standard: 29 CFR 1910.106(d)(3)(ii)

Recommended Action: Remove hasp from unit. Place all flammable and combustible liquids in the flammable storage cabinets. Such cabinets are designed to limit the internal temperature to not more than 325 degrees Fahrenheit when subjected to a ten-minute fire test. They must be conspicuously labeled "Flammable - Keep Fire Away." Remove all storage on top of and around the units.

To meet the fire resistance rating metal cabinets should be constructed with top, bottom, sides and door of No. 18 gage sheet iron, double-walled with 1 1/2 inches of air space. Joints must be riveted, welded, or made tight by some equally effective means. The door must be provided with a three point lock, and the door sill must be raised at least two inches above the bottom of the cabinet, to contain spills.

Refer to NFPA 33, Flammable and Combustible Liquids Code, for more detailed information.

Item No: 012

Instance: A to E **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A storage cabinet for flammable or combustible liquid was not maintained to keep the design and construction specifications to continue to meet minimal fire resistance requirements.

Location:
A. Automotive Collision Repair & Refinishing (Storage): Storage on and around unit
B. Carpentry: Venting blocked
C. Graphic Communications: Storage on and around unit
D. Metal Fabrication & Joining Technologies (Storage): Venting blocked
E. Painting & Design Technologies: Storage on and around unit

Potential Effects: Burns, smoke-related injuries and traumatic injuries, from fire and/or explosions.

Standard: 29 CFR 1910.106 (d) (3) (ii)

Recommended Action: Maintain good housekeeping in and around the cabinet.

Such cabinets are designed to limit the internal temperature to not more than 325 degrees Fahrenheit when subjected to a ten-minute fire test. They must be conspicuously labeled "Flammable – Keep Fire Away."

To meet the fire resistance rating metal cabinets should be constructed with top, bottom, sides and door of No. 18 gage sheet iron, double-walled with 1 ½ inches of air space. Joints must be riveted, welded, or made tight by some equally effective means. The door must be provided with a three point lock, and the door sill must be raised at least two inches above the bottom of the cabinet, to contain spills.

Refer to NFPA 33, Flammable and Combustible Liquids Code, for more detailed information.

Item No: 013

Instance: **A to G** **Hazard Type:** **Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flammable or combustible liquid was stored in an unapproved or unacceptable container (unit) or portable tank or in an inappropriate way.

Location:
A. Automotive Collision Repair and Refinishing: Flammables outside of unit
B. Cosmetology: Flammables outside of unit
C. Culinary (Barrel Room): Flammables outside of unit
D. Graphic Communications: Flammable Cabinet near exit
E. Machine Tool Technology: Liquids and gases together
F. Metal Fabrication & Joining Technologies (Storage): Liquids and gases together
G. Painting & Design Technologies: Liquids and gases together

Potential Effects: Burns and smoke-related injuries, from fire precipitated or aggravated by container failure.

Standard: 29 CFR 1910.106

Recommended Action: Containers or portable tanks must be approved for storage of particular flammable or combustible liquids by a nationally recognized testing laboratory as specified in 29 CFR 1910.7 or must meet Department of Transportation (DOT) regulations in Chapter I of 49 CFR. If it is impossible or impractical to use containers that have been shipped under DOT regulations, you should purchase containers marked as approved for the liquids to be stored.

For details, see this standard; the DOT regulations mentioned above; National Fire Protection Association (NFPA) 386, Standard for Portable Shipping Tanks; and American National Standards Institute

Item No: 014

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. An exit, way of approach thereto, or way of travel from the exit into the street or open space was not continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.

Location: A. Metal Fabrication & Joining Technologies: Exit door missing door knob
B. Carpentry: Blocked exit

Potential Effects: Burns, smoke-related injuries, and other injuries, from delayed egress during fire or other emergency.

Standard: 29 CFR 1910.37(a)(3)

Recommended Action: Immediately replace door knob with appropriate hardware. Remove materials from exit ways and continuously maintain exit ways free from all obstructions and impediments.

Perform routine inspections to ensure exits, ways of approach thereto, and ways of travel from exits into the street or open space are available for instant use in case of fire or other emergency.

Item No: 015

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The employer had not established a program to inspect automotive lifts and like equipment on a regular basis.

Location: A. Automotive Collision Repair & Refinishing (Frame Straightener)

Potential Effects: Contusions, abrasions, lacerations, punctures, fractures, amputations, internal injuries and crushing injuries, from being struck by falling objects during collapse.

Standard: Section 5 (a) (1) of the Occupational Safety and Health Act of 1970

Recommended Action: Automotive lifts and like equipment should be inspected at least annually, more frequently when so specified by the manufacturer or the authority having jurisdiction. The National Standard addressing automotive lift inspections is ANSI/ALI ALOIM (current edition) "Safety Requirements for the Operation, Inspection, and Maintenance of Automotive Lifts."

Item No: 016

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Exhaust system seems inadequate.

Location: A. Carpentry (Main Shop)

Potential Effects: Respiratory problems from inhalation of various types of contaminants.

Standard: 29 CFR 1910.94(b)(3)(ix)

Recommended Action: Repair outlet hoses and check motors. If necessary, have a certified industrial hygienist from the Department of Labor and Industries, Division of Occupational Hygiene, OSHA Onsite Consultant Services provide for a complete evaluation of your exhaust system. In the interim, provide and require use of proper personal protective equipment or other protective measures to reduce employee exposure.

Item No: 017

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A door which was not an exit or way of exit access, but was so located as likely to be mistaken for an exit, was neither identified by a sign reading _NOT AN EXIT_, nor identified by a sign indicating its character.

Location:
A. Animal Science
B. Health Assisting
C. Office Technology (B-219)

Potential Effects: Burns, smoke-related injuries, and other injuries, from delayed egress during fire or other emergency.

Standard: 29 CFR 1910.37(b)(5)

Recommended Action: Mark the door with a sign reading _NOT AN EXIT_ or as to the nature of the doors function. The sign should minimize the likelihood of employees mistaking a door to a dead-end space for a way out of the building.

Item No: 018

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A machine designed for a fixed location was not securely anchored to prevent walking or moving..

Location:
A. Automotive Technology: Drill Press
B. Machine Tool Technology: Baldor Polisher
C. Painting & Design Technologies: Rockwell Grinder

Potential Effects: Bruising, contusions, lacerations.

Standard: 29 CFR 1910.212(b)

Recommended Action: Bolt the machinery to the floor or otherwise secure it in place. Installing the machine on a large base may eliminate movement and increase stability. If the machine is otherwise stable and secure against tipping or falling, rubber pads may be places under it to prevent undesired movement.

Item No: 019

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Where employees were exposed to injurious hazardous materials, suitable facilities for flushing of the eyes were not serviced and maintained within the work area for immediate emergency use.

Location: A. Culinary: Need signage
B. Facility: Need to establish a schedule for weekly checking of units

Potential Effects: Aggravated eye and skin injuries, from prolonged exposure of eyes to various hazardous chemicals.

Standard: 29 CFR 1910.151(c)

Recommended Action: Add signage to immediately identify the location of the eye wash. Facilities should have adequate liquid for at least 15 minutes of flushing. Plumbed units should be operated weekly to flush the lines and to verify proper operation; self-contained units should be inspected according to the manufacturer's instructions. While nozzles must be protected from airborne contaminants, such protection must not impede the operator.

Eyewash stations should always be near the hazardous work areas, so that travel to them takes no more than ten seconds. The station should be clearly marked, brightly colored, well-lighted and free of obstructions.

Personal eyewash equipment supports plumbed and self-contained units but does not replace them. Such a unit may be kept in an area to supply immediate flushing. With this accomplished, the injured individual may then proceed to a permanent facility for the required 15-minute period.

Hand-held drench hoses are not to be considered as primary eyewash units because an injured worker would have difficulty in washing both eyes and keeping them open while using one hand to operate the hose.

Employees who might be exposed to chemical splashes should be instructed in the proper use of emergency eyewash units. It is necessary to hold the eyelids open and roll the eyeballs so water will flow on all surfaces and the surrounding inner folds, and to flush 15 full minutes.

The sign wording should be in plainly legible letters no less than six inches high with the principal strokes of the letters not less than 3/4 inches.

The sign should be distinctive in color and contrast with decorations, interior finish, or other signs.

OSHA does not specify the height of signs. They should be placed so that they are visible from across the shop.

Item No: 020

Instance: **A to H** **Hazard Type:** **Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Where employees were exposed to injurious hazardous materials, suitable facilities for flushing of the eyes were not serviced and maintained within the work area for immediate emergency use.

Location:
A. Automotive Technology: Unit defective
B. Automotive Technology: Temporary unit out of date
C. Biotechnology: Unit defective
D. Culinary (Dish Room): Unit defective
E. Electricity: Unit defective
F. Facility: Check all unit's water pressure
G. Metal Fabrication & Joining Technologies: Unit defective
H. Plumbing: Unit defective

Potential Effects: Aggravated eye and skin injuries, from prolonged exposure of eyes to various hazardous chemicals.

Standard: 29 CFR 1910.151(c)

Recommended Action: Provide an eye wash station. Facilities should have adequate liquid for at least 15 minutes of flushing. Plumbed units should be operated weekly to flush the lines and to verify proper operation; self-contained units should be inspected according to the manufacturer's instructions. While nozzles must be protected from airborne contaminants, such protection must not impede the operator.

Eyewash stations should always be near the hazardous work areas, so that travel to them takes no more than ten seconds. The station should be clearly marked, brightly colored, well-lighted and free of obstructions.

Personal eyewash equipment supports plumbed and self-contained units but does not replace them. Such a unit may be kept in an area to supply immediate flushing. With this accomplished, the injured individual may then proceed to a permanent facility for the required 15-minute period.

Hand-held drench hoses are not to be considered as primary eyewash units because an injured worker would have difficulty in washing both eyes and keeping them open while using one hand to operate the hose.

Employees who might be exposed to chemical splashes should be instructed in the proper use of emergency eyewash units. It is necessary to hold the eyelids open and roll the eyeballs so water will flow on all surfaces and the surrounding inner folds, and to flush 15 full minutes.

The sign wording should be in plainly legible letters no less than six inches high with the principal strokes of the letters not less than 3/4 inches.

The sign should be distinctive in color and contrast with decorations, interior finish, or other signs.

OSHA does not specify the height of signs. They should be placed so that they are visible from across the shop.

Item No: 021

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A portable fire extinguisher was not located so that it was readily available to people without subjecting them to possible injury.

Location:

A. Electricity: Unit unmounted
B. Electricity: Unit out of date

Potential Effects: Burns and smoke-related injuries, from uncontrolled fire.

Standard: 29 CFR 1910.157

Recommended Action: Provide appropriate fire extinguishers for the work environment in sufficient number and in appropriate locations. Do not allow materials or equipment to be stored around or in front of extinguishers in any way that would prevent

Item No: 022

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Vertical Clearance between sprinklers and material below was less than 18 inches.

Location: A. Culinary (Dry Storage)
B. Drafting

Potential Effects: Burns and smoke related injuries, from uncontrolled fire.

Standard: 29 CFR 1910.159(c)(10)

Recommended Action: Remove storage from top shelf of shelving racks. This will provide for an 18inch clearance from the sprinkler heads.

Item No: 023

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Caution signs were not posted to adequately warn against potential hazards.

Location: A. Automotive Technology: PPE Sign-Goggles (Student not wearing glasses)

Potential Effects: Contusions, abrasions and fractures.

Standard: 29 CFR 1910.145 (c)(2)(i)

Recommended Action: Post caution signs to warn against potential hazards and to list appropriate PPE.

Item No: 024

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A shield or guard was not affixed to its machine or secured elsewhere when attachment to the machine was not possible.

Location: A. Carpentry (Rockwell Delta Wood Lathe): Guard defective
B. Electricity (Skill Grinder): Guard defective
C. Metal Fabrication & Joining Technologies: Guard defective

Potential Effects: Eye/face injury from contact with flying chips.

Standard: 29 CFR 1910.212(a)(2)

Recommended Action: Replace shields/guards to prevent dangerous machine components from being exposed.

The shield must be designed and fastened so that it does not present a hazard in itself. Sharp edges or projections are to be removed or covered. Pinch points between the guard and other components or obstructions should be eliminated or guarded.

Item No: 025

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Compressed gas cylinders in use or storage were not properly supported or secured to prevent them from being knocked over.

Location: A. Culinary (Storage): Also missing caps

Potential Effects: Leg and foot injuries, shrapnel injuries, and burns from cylinder falling and becoming a projectile or exploding.

Standard: 29 CFR 1910.101(b); Section 3.3.8 Compressed Gas Association pamphlet P-1-1965.

Recommended Action: When transferring cylinders they should be properly secured to prevent them from being knocked over by material handling equipment or employees.

Item No: 026

Instance: A to H **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were

likely to cause death or serious physical harm to personnel. Shelves and/or shelving systems, bookcases, coat racks, free standing cabinets and lockers were not stable and secure.

Location:
A. Biotechnology: Shelving
B. Carpentry (Related): Bookcase
C. Culinary (Bakery Dry Storage): Shelving
D. Culinary (Dry Storage): Shelving
E. Culinary (Barrel Room): Shelving
F. Electricity (Office): Bookcases
G. Environmental Science & Technology (Related): Bookcases
H. Hospitality Management (Related Office): Shelving

Potential Effects: Contusions, lacerations, fractures, punctures and internal injuries, from falling materials and/or shelf.

Standard: 29 CFR 1910.176

Recommended Action: Secure shelving racks/bookcases, etc. to the wall or to each other to insure stability from falling.

Item No: 027

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Contact surface of abrasive wheels was not maintained in good condition.

Location: A. Electricity: Skill Grinder

Potential Effects: Cuts or penetration injuries from contact with or disintegration of the grinding wheel.

Standard: 29 CFR 1910.215 (d)(3)

Recommended Action: Replace wheel. Properly dress the wheel with appropriate wheel dressing tools.

Item No: 028

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The distance between abrasive wheel peripheries and the adjustable tongue or end of safety guard peripheral member at the top exceeded one-fourth inch.

Location:
A. Electricity: Skill Grinder
B. Metal Fabrication & Joining Technologies: Milwaukee Grinder

Potential Effects: Cuts or penetration injuries, from flying fragments of a broken grinding wheel.

Standard: 29 CFR 1910.215(b)(9)

Recommended Action: Adjust the tongue guard or safety guard peripheral member to within one-fourth inch of the wheel periphery, to contain and deflect fragments away from the operator if the wheel shatters. As the wheel is ground down, readjust the guard. This adjustment should be checked routinely before energizing the wheel, as a standard safe operating procedure. Units without a Manufacturer's Plate cannot be properly fitted for use.

Item No: 029

Instance: A to B **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. The opening between the work rest and abrasive wheel exceeded one-eighth inch.

Location: A. Electricity: Skill Grinder
B. Metal Fabrication & Joining Technologies: Milwaukee Grinder

Potential Effects: Cuts to fingers and penetration injuries, from contact with or disintegration of the grinding wheel.

Standard: 29 CFR 1910.215(a)(4)

Recommended Action: Keep work rests in place whenever feasible for the work being performed; and keep them adjusted closely to the wheel with a maximum opening of one-eighth inch to prevent the work from being jammed between the wheel and the rest--which could cause wheel breakage. Adjust the work rests only when the wheel is stationary, and securely clamp the work rest after each adjustment.

Item No: 030

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. A worker or other person adjacent to a welding area was not protected from the rays by a noncombustible or flameproof screen or shield.

Location: A. Metal Fabrication & Joining Technologies: Defective curtains

Potential Effects: Welding can generate ultraviolet light which can be absorbed by the cornea or lens of the eye. The duration of exposure and intensity of light determine the extent of potential injury to the eye. The typical effect of exposure is photokeratitis, also referred to as "welder's eye," and feels like sand in the eye. Ultraviolet light can also affect the skin and produces erythema (sunburn).

Standard: 29 CFR 1910.252(b)(2)(iii)

Recommended Action: Replace defective ARC Curtain. Place or construct a welding screen at the outside edge of the welding area so that others are shielded from ultraviolet light. The screen should be at least 8 feet tall to minimize the opportunity to directly view the weld point, and extend more than two feet off the ground to allow for circulation of air. The screen should be non-combustible and painted with a low reflectivity coating, such as zinc oxide and lamp black, to absorb ultraviolet rays.

Alternatively, place or construct a welding booth around the welder. Requirements for construction of a booth are similar to those for a screen.

Where screens or a booth are not feasible, employees within sight of an arc welding operation must be provided and wear goggles with a lens shade number of 8 or higher.

Item No: 031

Instance: A to F **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Electrical equipment was not free from a recognized hazard that was likely to cause death or serious physical harm to an employee.

Location:
A. Automotive Collision Repair & Refinishing (Spray Booth): Defective light
B. Carpentry (State Sander): Defective shut off
C. Culinary (Freezer): Missing light cover
D. Drafting: Open data box
E. Electricity (Electrical Panel): Defective lock
F. Robotics & Automation Technology (Floor Electrical Outlet): Defective cover

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(1)

Recommended Action: Secure power to the equipment, preferably using a lockout/tag out procedure. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

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Item No: 032

Instance: A to C **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Listed or labeled electrical equipment was not used or installed in accordance with instructions included in the listing or labeling.

Location:
A. Drafting: Power Strips daisy chained
B. Machine Tool Technology (Related): Power strips daisy chained
C. Marketing: Power Strips daisy chained

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts; burns and smoke-related injuries, from fire due to electrical overload.

Standard: 29 CFR 1910.303(b)(2)

Recommended Action: Have a qualified electrician repair, replace, or install the electrical equipment

according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

Item No: 033

Instance: A to C **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Flexible cords or cables were used for one of the following purposes:

(a) as a substitute for the fixed wiring of a structure;
(b) where run through holes in walls, ceilings or floors;
(c) where run through doorways, windows or similar openings;
(d) where attached to building surfaces; or
(e) where concealed behind building walls, ceilings or floors.

Location:
A. Environmental Science & Technology: Ceiling drop cord tied in knot
B. Marketing: Extension cord in lieu of wiring
C. Plumbing: Extension cord in lieu of wiring

Potential Effects: Burns and smoke-related injuries, from fire; electric shock, burns, and electrocution, from contact with live parts.

Standard: 29 CFR 1910.305 (g)(1)(iii)

Recommended Action: Replace the flexible electrical cord or cable with permanent wiring. Generally, metal raceways are used in industrial settings; however, other methods may be allowed or required, depending upon usage. Have a qualified electrician repair, replace, or install the electrical equipment according to the instructions provided and in accordance with NFPA 70, the National Electrical Code. Equipment listed by a recognized testing laboratory is tested and evaluated to ensure that it meets appropriate standards and is suitable for use in a specified manner. If it passes, it is labeled to indicate its listing and approval rating.

Item No: 034

Instance: A to C **Hazard Type:** Serious

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Sufficient access and working space was not provided and/or maintained about electric equipment operating at 600 volts nominal, or less, to permit ready and safe operation and maintenance.

Location:
A. Culinary (Bakery): Blocked panel
B. HVAC: Storage in electrical closet
C. ISSN: Blocked panel

Potential Effects: Electric shock, burns, and electrocution, from the inability to immediately deenergizing equipment.

Standard: 29 CFR 1910.303(g)(1)

Recommended Action: Provide and maintain sufficient access and working space to all electrical equipment operating at 600 volts nominal, or less, as follows: (source: 29 CFR 1910.303, Table S-2)

Nominal Voltage to Ground	Minimum Clear Distance (feet)
0 - 150	3
151 - 600	
Exposed live parts on one side and no live or grounded parts on the other side of working spaces.	3
Exposed live parts on one side and grounded parts on the other side of working spaces.	3.5
Exposed live parts on both sides of working space.	4

Employees who place objects in front of electrical equipment which obstructs access and/or working space should face disciplinary action.

Item No: 035

Instance: A **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Receptacles were not equipped with ground fault circuit interrupter (GFCI) protection.

Location: A. Cosmetology (Dispensary: Washing Machine

Potential Effects: Electric shock, burns, and electrocution, from contact with live parts.

Standard: 29 CFR 1910.305(j)(2)(iv)

Recommended Action: Have a qualified electrician install a ground fault circuit interrupter (GFCI) suitable for wet and damp locations.

Alternatively, discontinue use of this receptacle and blank it off so that it cannot be used.

Item No: 036

Instance: A to D **Hazard Type: Serious**

Condition: The facility did not furnish an environment which was free from recognized hazards that were likely to cause death or serious physical harm to personnel. Miscellaneous safety issues

Location: A. Cosmetology: Broken Formica counter tops

B. ISSN: Chain Ladders
C. Metal Fabrication & Joining Technologies: Broken paper towel dispenser
D. Robotics & Automation technology: Broken chairs

Potential Effects: Death, severe injury, trauma, or disease.

Standard: Section 5(a)(1) of the Occupational Safety and Health Act of 1970

Recommended Action: Immediately make needed repairs.

If you have any questions or concerns, please feel free to contact me at 781-338-3946.

Sincerely,

David W. Edmonds
Educational Specialist

SAFETY AND HEALTH PROGRAM MANAGEMENT

The following are the basic elements of an effective safety and health program.

A. **MANAGEMENT LEADERSHIP AND EMPLOYEE INVOLVEMENT** assigns safety and health responsibility and authority to supervisors and employees and holds them accountable. It includes policy formulation, program review, and encouragement of employee involvement.

B. **WORKSITE ANALYSIS** identifies current and potential hazards. It includes a thorough baseline survey to review work process and individual potential hazards. It should also include job hazard analysis, written safe operating procedures (S.O.P.s) for major tasks and operations, a self-inspection program, a system for reporting hazards, accident and incident investigation, and analysis of injuries and illnesses.

C. **HAZARD PREVENTION AND CONTROL**. Prevention consists of maintenance and housekeeping, emergency planning and preparation, first aid, ready access to emergency care when required, and medical surveillance. Control includes engineering and administrative controls such as machine guards, enclosures, ventilation, personal protective equipment, safe work procedures (the result of job hazard analysis), and administrative placement of personnel so as to minimize hazards.

D. **TRAINING** of all personnel, from managers through supervisors to employees, about the hazards they may be exposed to, and their identification, prevention, and control. Managers and supervisors also need training in program management (e.g., enforcing rules, conducting drills). Training can demonstrate management leadership and facilitate employee involvement.

A safe and healthful workplace depends on effective management, to involve line workers, supervisors and managers in ensuring that hazards are identified and that effective physical and administrative controls are established and maintained.

TRAINING PROVIDED BY THE CONSULTANT

During the visit of April 6-10, 2015, Mr. Edmonds provided informal training during the opening conference, walkthrough survey, and closing conference. Areas discussed included among others:

- Electrical Safety
- Egress requirements
- Regulatory coverage
- Use of personal protective equipment
    - Fire protection
    - Stable storage and securing of storage devices
    - Fall protection issues
- Machine guarding requirements

REPORT OF ACTION TAKEN

David W. Edmonds
Educational Specialist
Office for Career/Vocational Technical Education
The Department of Elementary and Secondary Education
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dedmonds@doe.mass.edu
781-338-3946

Site: Worcester Technical High School

Date of Survey: April 6-10, 2015

Note: An extension of the time frame(s) set for the correction of the serious hazard(s) may be requested in writing if you have made a good faith effort to correct the hazard(s), show that the delay was beyond your control, and give assurance that interim safeguards are in use to protect employees from the hazard(s).

_____

(Employer name, printed/typed, title)

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(Signature)