
MIOSHA

Michigan Occupational Safety and Health Administration (MIOSHA)
Department of Labor and Economic Opportunity (LEO)

AGENCY INSTRUCTION

DOCUMENT IDENTIFIER:

MIOSHA-COM-23-1

DATE:

August 28, 2023

SUBJECT: Cannabis – State Emphasis Program (SEP)

- I. Purpose. This instruction establishes a state emphasis program (SEP) to address safety and health hazards associated with the growing, harvesting, and processing of cannabis (marijuana).
- II. Scope. This instruction applies to the Consultation Education and Training (CET) Division and the General Industry Safety and Health Division (GISHD).
- III. References.
 - A. Agency Instruction, MIOSHA-COM-20-1, Companion and Expanded Inspections, as amended.
 - B. American National Standard Institute (ANSI)/CAN/Underwriters Laboratories (UL)/Underwriters Laboratories Canada (ULC), Standard for Safety 1389:2023, Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations.
 - C. Colorado Department of Public Health & Environment, Marijuana Occupational Health and Safety Work Group, January 2017, [Guide to Worker Safety and Health in the Marijuana Industry](#).
 - D. Couch J.R., et al., Annals of Work Exposures and Health, 2020, Vol. 64, No. 7, pages 693–704, [Review of NIOSH Cannabis-Related Health Hazard Evaluations and Research](#).
 - E. General Industry and Construction Standard [Part 451, Respiratory Protection](#) (Part 451, Respiratory Protection).
 - F. General Industry Standard [Part 2, Walking-Working Surfaces](#) (Part 2, Walking-Working Surfaces).
 - G. General Industry Standard [Part 6, Fire Exits](#) (Part 6, Fire Exits).
 - H. General Industry Standard [Part 33, Personal Protective Equipment](#) (Part 33, Personal Protective Equipment).
 - I. General Industry Standard [Part 39, Design Safety Standards for Electrical Systems](#) (Part 39, Design Safety Standards for Electrical).
 - J. General Industry Standard [Part 56, Storage and Handling of Liquefied Petroleum Gases](#) (Part 56, Storage and Handling of Liquefied petroleum).
 - K. General Industry Standard [Part 69, Compressed Gases: Acetylene, Hydrogen, Oxygen, and Nitrous Oxide](#) (Part 69, Compressed Gases: Acetylene, Hydrogen, Oxygen, and Nitrous Oxide).

- L. General Industry Standard [Part 75, Flammable Liquids](#) (Part 75, Flammable Liquids).
 - M. General Industry Standard [Part 85, The Control of Hazardous Energy Sources](#) (Part 85, The Control of Hazardous Energy Sources).
 - N. General Industry Standard [Part 92, Hazard Communication](#) (Part 92, Hazard communication).
 - O. General Industry Standard [Part 301, Air Contaminants for General Industry](#) (Part 301, Air Contaminants for General Industry).
 - P. General Industry Standard [Part 430, Hazard Communication](#) (Part 430, Hazard Communication).
 - Q. General Industry Standard [Part 433, Personal Protective Equipment](#) (Part 433, Personal Protective Equipment).
 - R. General Industry Standard [Part 472, Medical Services and First Aid](#) (Part 472, Medical Services and First Aid).
 - S. General Industry Standard [Part 474, Sanitation](#) (Part 474, Sanitation).
 - T. Michigan Cannabis Regulation Agency (CRA) (a.k.a. Michigan Marijuana Regulatory Agency), webpage, [interactive map of marijuana facilities](#).
 - U. Michigan Department of Licensing and Regulatory Affairs (LARA), Advisory Bulletin, April 10, 2018, [Processor Gas Detection System](#).
 - V. Michigan Marijuana Regulatory Agency (MRA), Advisory Bulletin, September 30, 2019, [Microbusiness or Grower Gas Detection System and Fumigation](#).
 - W. Michigan Occupational Safety and Health Act, [MCL 408.1001 et. seq., P.A. 154 of 1974](#), as amended.
 - X. MIOSHA Administrative Standard [Part 11, Recording and Reporting of Occupational Injuries and Illnesses](#) (Part 11, Recording and Reporting of Occupational Injuries and Illnesses).
 - Y. MIOSHA [Field Operations Manual](#), as amended (FOM).
- IV. Distribution. MIOSHA Staff; Federal OSHA; S-drive Accessible; MIOSHA Messenger; and Internet Accessible.
- V. Next Review Date. This instruction will be reviewed in one (1) year from date of issuance.
- VI. Contact. [Tarah M. Kile](#), CET Director, and [Adrian Z. Rocskay](#), GISHD Director.
- VII. Originator. Barton G. Pickelman, Director
- VIII. Background. MIOSHA has established this SEP to address safety and health hazards associated with the growing, harvesting, and processing of cannabis. This industry emerged in Michigan during the last five years due to changes in the legal status of

cannabis. In November 2018, voters in Michigan passed a proposal that legalized cannabis for recreational use and required the State to create a licensing system for growers, processors, and retailers. Since the implementation of the licensing system, the number of growers in Michigan has swelled to over 1,000, and the state now has 228 processors and 1,040 dispensaries.

This SEP covers the growing, harvesting, and processing of cannabis because the occupational safety and health hazards are mainly found at those operations; the SEP does not include retail establishments. According to a review by National Institute for Occupational Safety and Health (NIOSH), studies have found that workers in cultivation, harvesting, and processing of cannabis face dermal exposure to the psychoactive and medicinal chemicals in cannabis, ergonomic stressors, and potential exposure to allergens and respiratory hazards through inhalation of organic dusts (such as fungi, bacteria, and endotoxins) and volatile organic compounds (VOCs) such as diacetyl and 2, 3-pentanedione. The exposure to organic dusts and VOCs was most evident in the decarboxylation and grinding of dried cannabis material, activities that produced elevated concentrations of VOCs and endotoxins.

In 2022, a cannabis worker in Massachusetts died from an asthma attack due to breathing in marijuana dust at a cultivation factory. Across the US, more than a dozen fires and explosions have been reported at extraction facilities, typically caused by the use of highly flammable chemicals to extract the hash oil from the marijuana, which are ignited by open flames or sparks. The fires and explosions have resulted in workers receiving serious burn injuries, and these workers include responding firefighters.

As of June 2023, MIOSHA conducted 12 enforcement inspections of cannabis facilities and found 37 violations of MIOSHA regulations. The deficiencies encompassed respiratory protection, personal protective equipment, chemical hazard communication, eyewash facilities, the storage and handling of flammable liquids, electrical safety, equipment guarding, recording and reporting of occupational injuries and illnesses, and a chemical overexposure to peracetic acid.

IX. Enforcement Activities.

- A. All programmed inspections under this SEP will be conducted by a team consisting of a safety officer (SO) and an industrial hygienist (IH).
- B. Number of Inspections. GISHD will inspect at least ten worksites and conduct at least 20 inspections, ten health inspections and ten safety inspections, under this SEP each fiscal year.
- C. Inspections will be part of the SEP and will be coded as such in OSHA Information System (OIS), per section XI. of this instruction, if their scope involves the growing, harvesting, or processing of cannabis. The inspections would include:
 - 1. Programmed inspection assignments issued under this SEP;
 - 2. Unprogrammed activities (i.e., complaints, referrals, or fatalities) at establishments that grow, harvest, or process cannabis; and

3. Follow-up inspections at establishments that grow, harvest, or process cannabis.
- D. Targeting. A target list of establishments for programmed inspections will be created using publicly available databases and information at the CRA website. Assignments will be chosen at random from the following categories of licensed facilities: adult-use excess marijuana grower, adult-use marijuana class b and c grower, adult-use marijuana processor, medical marijuana class b and c grower, and medical marijuana processor. The target list will not include retail establishments.
 - E. Enforcement Delay. Since this is a new SEP, there will be a three-month enforcement delay on programmed inspections after the issuance date of the agency instruction to allow for initial outreach. The enforcement delay does not apply to unprogrammed activities, such as complaints, referrals, and fatalities.
 - F. Scope of Inspection. On programmed inspections assigned under this SEP, the SO/IH shall evaluate the employer's compliance with all applicable MIOSHA standards. During an unprogrammed activity at a facility that grows, harvests, or processes cannabis, if an SO/IH discovers potential hazards beyond those in the assignment, the SO/IH shall expand the scope of the investigation to address the other hazards using the procedures in MIOSHA-COM-20-1, Companion and Expanded Inspections, as amended. Per the MIOSHA FOM, if the inspection scope is partial, the SO/IH must expand the scope to address any potentially serious hazards in plain view or discovered during the inspection process.

The SO/IH will be observant for and understand the hazards associated with the growing, harvesting, and processing of cannabis. Applicable health standards include Part 301, Air Contaminants for General Industry (for example, carbon dioxide and carbon monoxide); Part 430, Hazard Communication; Part 433, Personal Protective Equipment; Part 451, Respiratory Protection; Part 472, Medical Services and First Aid; Part 474, Sanitation; and the general duty clause of the Michigan Occupational Safety and Health Act to address ergonomics. Applicable safety standards include Part 2, Walking-Working Surfaces; Part 6, Fire Exits; Part 33, Personal Protective Equipment; Part 39, Design Safety Standards for Electrical Systems; Part 56, Storage and Handling of Liquefied Petroleum Gases; Part 69, Compressed Gases: Acetylene, Hydrogen, Oxygen, and Nitrous Oxide; Part 75, Flammable Liquids; Part 85, The Control of Hazardous Energy Sources; and Part 92, Hazard Communication. Both safety and health inspections are to examine employer compliance with Part 11, Recording and Reporting of Occupational Injuries and Illnesses.

- G. Staff Training and Resources.
 1. A training webinar will be held for enforcement and consultation staff, after the issuance of this agency instruction and before the enforcement delay ends. The training PowerPoint will be saved and available as a reference for staff.

2. The SO/IH will read the Guide to Worker Safety and Health in the Marijuana Industry by the Colorado Department of Public Health & Environment prior to performing a cannabis SEP inspection to become acquainted with the common hazards in this industry.
 3. Other reference materials available to the SO/IH are:
 - a) LARA Advisory Bulletin, Processor Gas Detection System (found at the CRA website).
 - b) MRA Advisory Bulletin, Microbusiness or Grower Gas Detection System and Fumigation (found at the CRA website).
 - c) ANSI/UL Standard for Safety 1389-2023, Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations (single copy available at the MIOSHA Standards Section library).
 - d) NIOSH review of cannabis-related health hazard evaluations and research (article available online).
- H. Employer Resources. Employers will be directed to the MIOSHA webpage for cannabis. The webpage will contain links to training and educational materials created by MIOSHA and by other government organizations.
- X. Outreach. CET will conduct outreach programs for this SEP. The outreach will include informing the public of the SEP through the MIOSHA eNews, MIOSHA News, and GovDelivery announcement; sending letters to establishments that could be targeted for programmed inspections under the SEP advising them of their targeted status and offering CET consultation services; the creation of a MIOSHA webpage for cannabis; and updating the MIOSHA outreach materials for cannabis. The full outreach plan is provided in [Appendix A](#).
- XI. OIS Coding. All enforcement inspections and compliance assistance interventions conducted under this SEP shall be coded in OIS as “CANNABIS.” Enforcement will find the emphasis under the State Emphasis Program field in the Inspection Data section, and consultants will find it under the Request tab.

**Appendix A
Outreach Plan**

Name of Initiative: State Emphasis Program (SEP) on Cannabis

Initiative Liaison: Eric Zaban **Email:** zabane@michigan.gov **Phone:** 517-719-7444

Date Submitted: 7/21/2023

Check all that Apply: New/Revised Standard New Targeted Industry New Targeted Hazard

Divisions Involved:

- | | | |
|---|---|---|
| <input type="checkbox"/> Administration | <input type="checkbox"/> Appeals | <input checked="" type="checkbox"/> CETD
(Lead) |
| <input type="checkbox"/> CSHD | <input checked="" type="checkbox"/> GISHD | <input type="checkbox"/> TSD |

Purpose/Scope:

This plan identifies MIOSHA activities that will be completed from the effective date of the SEP to the expiration date of the SEP to educate MIOSHA staff, as well as employers and employees in the State of Michigan, about the implementation of the SEP to identify and reduce or eliminate worker exposures to hazards associated with the growing, cultivating, and processing of cannabis. This outreach program will inform MIOSHA staff, employers, and employees of the SEP.

Much of the outreach will be concentrated during the first three months of the SEP during which there is an enforcement delay. Ongoing outreach will continue during the nine months after.

1. Policy/Procedure

New or revised MIOSHA policies, procedures, instructions, or interpretations.

2. Staff Training

MIOSHA staff training. All staff with enforcement or consultation responsibilities under the SEP will need training. Joint CET-GISHD training will be conducted via Teams. The two divisions will also conduct training at a division staff meeting (for example, a case study in enforcement or outreach; an update on recent developments).

3. Communication (Check all that apply.)

Press Release – NOTE: MIOSHA does not typically issue a release for new SEPs.

MIOSHA News – GISHD and/or CET will author one or more cannabis article(s) during the SEP.

MIOSHA eNews

- MIOSHA Website – Create MIOSHA webpage for cannabis. Include hyperlinks to the agency instruction on the Cannabis SEP, the MIOSHA fact sheet on cannabis, the two-module MIOSHA PowerPoint on cannabis, and reference documents from other government agencies.
- MIOSHA Messenger – When SEP is effective, announcement will be made to MIOSHA staff.
- GovDelivery Message – When SEP is effective, CET will draft announcement to its subscribers.
- Social media – When SEP is effective, CET will post an announcement to its subscribers.
- Other –
 - Include information on no-cost on-site consultation services.
 - Presentation on Cannabis Safety at the 2024 Michigan Safety Conference.
 - Present annually at education seminars of the Michigan Cannabis Regulatory Agency (CRA).

4. Educational Resources (Check all that apply.)

- Promote existing DVDs in lending library and available for MIOSHA staff use.
- New reference materials for MIOSHA staff use.
- New or revised MIOSHA publications/fact sheets.
- New or revised MIOSHA presentations/training.
 - Review MIOSHA fact sheet on cannabis to ensure it is up to date.
 - Revise two-module PowerPoint on cannabis to include latest information available on safety and health hazards in the cannabis industry such as the asthma fatality in Massachusetts, fires and explosions from across the US, and findings (cited hazards) from enforcement inspections, on-site consultations, and hazard surveys in Michigan.

5. Outreach Activities (Check all that apply.)

- Develop, revise, and conduct training program. Training and Consultation Core Committee to compose / generate training presentation for use by CET staff.
- Consultation. CET IH staff to discuss cannabis grow, cultivating, and processing facility hazards with clients as appropriate.
- Alliances/partnerships with impacted public or private organizations.
 - Contact all alliance partners with potential exposures.
 - Target co-sponsors and MVPP companies or alliances.
- Coordination with other government agencies. Continue to coordinate activities and share resources with the CRA. Request that CRA create a hyperlink at its website for occupational safety and health resources, with the hyperlink connecting to MIOSHA webpage for cannabis.
- Letters to target industries – Informing them of CET services, make them aware of the SEP.
- Targeted enforcement – As specified in SEP.
- No outreach activities needed.

6. Data Generated (Check all that apply.)

- Number of training seminars conducted.
- Number of employees trained.

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- Number of consultation activities conducted.
- Number of compliance inspections conducted.

7. Workgroup

- Create a workgroup to implement outreach plan.

Anticipated Launch Date: 8/28/2023

Length of Initiative: 1 year