

Hazards Associated with the Cannabis Industry

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Disclaimer

The following presentation is an examination of hazards seen by employees in the Cannabis industry. This presentation does not constitute an endorsement nor deterrence from consumer use of the fore mentioned product.

Goods for consumer use

- Substances such as flour, sugar, wood dust and cannabis dust although considered safe for consumption can have negative effects on employees in an industrial setting
- Occupational exposure is much different from the amounts and levels seen by consumers
 - Using a hand grinder to make a cannabis joint with 1 oz of flower is not the same as industrially grinding 100 lbs. a day
- Health hazards are unique in that dose makes the poison
 - A product that is ordinarily not hazardous in small amounts can become hazardous to an employee's health in an occupational setting

Combustible dust

- Substances such as but not limited to flour, sugar, wood and cannabis dust are combustible
- Care must be taken to routinely clean areas of excess dust accumulation
- Areas where large dust creating activities are being done, may be considered hazardous atmosphere areas and require specialized ventilation or electrical wiring and accessories (switches etc.)
- The use of compressed or pressurized air SHALL be prohibited to clean combustible dust up or remove from parts and machines(respirable dust hazard)

Combustible dust

- Cleaning up this dust Shall be in regular intervals
- Shall include upper areas of the building, a fall hazard may present during this task
- Accumulations under and around equipment
- Areas near sources of ignition, electrical heat etc.

Pesticides, herbicides and fertilizers

- The EPA jurisdiction on regulations into what amounts, and types of these products can be used
 - **Be aware:** Not all gloves are created equal. The SDS sheet will be very specific on the type of glove and its thickness to be used.
- Some fungicides contain mercury compounds, which can be absorbed by the skin or inhaled
 - Mercury compound exposure can present with neurological and digestive disorders

HAZCOM

- A hazardous material is any item or agent (biological, chemical, radiological, and/or physical) that has the ability to cause harm to humans, animals, or the environment. This could be as a result of the material by itself or interaction with other materials.
- Hazardous materials are defined and regulated in the United States primarily by laws and regulations administered by the U.S. Environmental Protection Agency (EPA), the U.S. Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation (DOT), and the U.S. Nuclear Regulatory Commission (NRC).
- There are instances where natural products such as baking flour, wood chips\dust and even plants can be considered hazardous materials, (combustible dusts)(sensitizers)(lung contaminants\bakers' lung)

HAZCOM

- If an employer utilizes, works with or processes hazardous materials as part of their business and in turn employees are or may be exposed to these chemical(s) the employer SHALL have a hazard communication program
 - That program SHALL consist of:
 - A Written hazard communication program
 - Employee training
 - Chemical inventory
 - Right to know station (SDS sheets)

HAZCOM Program Highlights

- Primary and secondary containers SHALL be labeled with their contents and specific hazards associated with them
- SDS Sheets SHALL be available to all employees 24/7
- If a process produces a hazardous by product (decomposition), an SDS sheet for that product SHALL be maintained on site, formaldehyde, CO
- Retired SDS sheets SHALL be maintained on site for 30 years

HAZCOM Program Highlights

- Employee training SHALL be conducted prior to exposing an employee to hazardous materials and all affected employees shall be retrained anytime a new material is introduced to the workplace
- Employee training SHALL be certified as completed in writing and maintained with the HAZCOM program
- Chemical inventory is a list of materials on site or in use, not a physical accounting of the quantity on hand

Respiratory Protection Programs

- Respiratory protection programs \fall into two main categories: Mandatory Use and Voluntary Use
- **Voluntary** use is when the choice to wear a respirator is strictly decided by the employee and not by either a known hazard such as chemical exposure, or respiratory virus as with COVID 19
- **Mandatory** use is when an either a manufacturer (chemicals) or regulatory body (NIOSH\CDC\FDA\OSHA) requires the use of respiratory protection

Respiratory Protection Programs

- **Voluntary** use requires that the employer provide the employee with training, and appendix D for filtering face pieces such as N95 masks.
- Medical evaluation and fit testing is required for employees utilizing a tightfitting respirator such as an elastomeric half face respirator, training, and a copy of appendix D

Respiratory Protection Programs

- **Mandatory** use requires that the employer provide the employee with a medical evaluation, training (documented), respirator, and fit testing

The fit test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

1910.134 App. A, line 9

- An initial assessment of the concentrations and types of chemical or other hazards shall be made. Until such time as exposure levels are determined, the employer shall utilize the highest protection factor required for the suspect hazard.

Fit testing

- Fit testing must be performed utilizing either qualitative or quantitative measurements at least once annually for all employees which may be required to utilize a respirator.
- Conditions which will warrant more frequent retesting include
 - Change in available models and sizes of respirators (example N95s)
 - Change in physical appearance of an employee, recent dental work, weight gain\loss, scarring due to an injury may cause a new fit test to be performed

Fit testing

- Qualitative testing may be used for negative pressure respirators requiring a protection factor of less than 100, N95s can be fit tested with his method
 - Examples of qualitative are irritant smoke, banana oil smoke test
- Quantitative testing is required for establishing a fit factor greater than 100
 - These utilize an analytical machine which measures the atmosphere inside the mask and outside the mask and using a quantitative formula determines a protection factor

Fit testing

- When a fit factor must be obtained and/or respirator use is required
- Facial Hair
 - The wearer SHALL not have facial hair which impedes the seal area of a respirator
 - Instances where an employee has facial hair which will interfere with the seal of a respirator, either the facial hair SHALL be removed from that area of the face or an alternative means of respiratory protection SHALL be provided
 - Powered respirators can be used in lieu of tight fitting, they do not require fit testing but do require the medical evaluation and training

Facial Hair and Respirators



Injury and Illness reporting

- Employers Shall train employees in reporting and recording injuries and illnesses and shall not retaliate against employees for reporting such injuries or illnesses
- Employers shall investigate reported injuries and illness to determine root causes, corrective actions and identify hazards not previously identified
- Employers shall provide for prompt medical care in the event of an injury or illness (emergency action plans)

Additional Items to consider

- Use of portable ladders
- Standing water and uneven surfaces
- Small appliances and machinery
- Laboratory hazards
- Ergonomic hazards