Oregon OSHA

OSHSPA State Plan Report
Oct 2018

Michael Wood, Administrator

I. Significant Legislative/Programmatic Changes

Legislatively Mandated Rulemaking: Nothing to report.

Legislative Activity: Nothing to report.

Other Rulemaking Activity: Pesticide Worker Protection Standard. Oregon OSHA adopted rules on June 29, 2018 that will become effective on January 1, 2019 regarding the Division 4/W Worker Protection Standard, specifically the application exclusion zone (AEZ). The comment period for this rulemaking ended on March 15, 2018. The agency received over 1,000 comments, both written and oral, on this proposed rulemaking. Oregon OSHA adopted two new administrative rules related to the application exclusion zone and spray innovations with amendments based on comments received.

Permissible Exposure Limits (PELs). In March 2017, Oregon OSHA selected lead and manganese from the PEL advisory group’s list of suggested candidates as the first two of approximately four to six candidates to undergo a PEL reduction through the rulemaking process. These substances were selected because of their broad exposure to workers in Oregon across a wide range of industries. Both lead and manganese rulemakings have formed separate advisory committees who are meeting and beginning the rulemaking process.

Lead- This advisory committee is comprised of representatives from a wide variety of businesses and organizations. Stakeholder meetings are continuing, and potential rule language is being drafted. Oregon OSHA is working with WA-DOSH in this rulemaking as they are addressing the same issue at the same time, the rules may be different, but stakeholders and technical specialists involved are going to both Oregon and Washington rulemakings.

Manganese- The first stakeholder meeting was in August of 2017. Meetings were held throughout September and the Advisory Committee has expanded to include additional stakeholders from affected industries that will be considering the economic impact of any proposed rule changes. Advisory committee meetings are continuing and potential rule language is being drafted.

Standards Improvement Project for Division 1. Oregon OSHA is making minor changes to its Division 1 rules. These are technical corrections to rectify inaccuracies and errors discovered through a comprehensive review of Division 1. Changes include correcting rule reference errors, typos, comma usage, website and physical addresses. This rulemaking will also correct filing errors. The partnership advisory committee was consulted concerning this rulemaking. Proposed
rule amendments were filed at the end of September. There will be one public hearing on November 1, 2018 and the public comment period will remain open until November 16, 2018.


II. New Developments/Activities/Notable Cases Activities:

**New Publication**: Understand Table 1 and the specified exposure control methods for silica dust. This guide is intended to help construction employers understand the methods listed in Table 1 for controlling exposures to silica dust. These are available at [http://osha.oregon.gov/pubs/Pages/index.aspx?type=Fact%20sheets](http://osha.oregon.gov/pubs/Pages/index.aspx?type=Fact%20sheets)

**Oregon OSHA News Releases**: Oregon GOSH: Nominations are being accepted for the 2019 Oregon GOSH Awards, which will honor organizations and individuals who make exceptional contributions to workplace safety and health. The awards will be presented March 6, 2019, as part of the Oregon Governor’s Occupational Safety and Health (GOSH) Conference, slated for March 4-7. The conference – the largest of its kind in the Pacific Northwest and one of the largest in the U.S. – will be held at the Oregon Convention Center in Portland.

Workers’ Compensation: In 2019, Oregon employers, on average, will pay $1.12 per $100 of payroll for workers’ compensation insurance, down from $1.23 in 2018, under a proposal by the Oregon Department of Consumer and Business Services (DCBS). That figure covers workers’ compensation claims costs, assessments, and insurer profit and expenses. This will mark the sixth year in a row that businesses will experience an average decrease in their workers’ compensation costs. Those costs have steadily declined over the years – even as workers continue to receive strong benefits – because of Oregon’s long-running success in managing the workers’ compensation system.

Workers’ Memorial Scholarship: Nine Oregon high school graduates are recipients of the 2018 Workers’ Memorial Scholarship awards, the Oregon Occupational Safety and Health Division (Oregon OSHA) announced. The awards program helps finance higher education for family members of Oregon workers who have been fatally injured or permanently disabled on the job. The recipients were honored during a public ceremony on Friday, Aug. 10. These are available at [http://www.osha.oregon.gov](http://www.osha.oregon.gov).

**Oregon Young Worker Health and Safety Coalition**: - Oregon Young Employee Safety, O[yes] 2017 video contest: First-place was awarded to the contestant featuring a video titled “The Silent Condition” that garnered her $500, with a matching amount for her school.

The video, which deftly blends voiceover narration, body language, and props, features a teen worker who suffers from being silent on the job and, as a result, gets needlessly exposed to safety hazards. However, with knowledge, confidence, and “an extra 10 decibels,” as the narrator puts it, teen workers have the power to overcome the silent condition, and to speak up and work safe. A second-place prize was awarded, and two teams tied for third place and won prizes.

**Newsletters**: Oregon OSHA publishes two newsletters: The “Resource” (a general interest publication which includes construction) is published every two months, and the “Forest Activities News” (for the logging and forest industry) is an occasional newsletter from Oregon OSHA covering topics of interest to the logging and forest activities employers. These are available at [http://www.osha.oregon.gov](http://www.osha.oregon.gov).
Notable Case:
On April 12, 2018 – A Burnt River Farms LLC employee was about 3 minutes into the recovery process of butane hash oil extraction when the clamp on the recovery chamber came apart, and resulted in a release of a pressurized mixture of hash oil and liquid butane into a bath of hot water. The resulting splash covered the entire processing room and an employee working in the room. The employee quickly left the room, but started back toward the processing room to determine what had happened. When the liquid butane became exposed to the open air environment in the room, the liquid butane converted to a gas, when the right mix of gas and air met an ignition source – it exploded. The employee soaked from the splash, was standing outside the room when the explosion occurred and was caught in the fire ball, which ignited his butane soaked clothing. He dropped instantly to the ground and started to roll, extinguishing the flames on his clothing. Coworkers immediately attended to him, and summoned emergency services. The employee was flown by Life Flight to Boise, Idaho for treatment of 2nd and 3rd degree burns to his arms, hands and face.

Overview of the Butane Hash Oil Extraction Process:
The material (cannabis) is soaked in the solvent (liquid butane) for 30 minutes. The closed loop system is made up of a solvent tank, a material column, a recovery chamber, recovery pumps and condensing coils all connected together by high pressure hoses to form a loop. The loop goes from solvent tank to the material column to the recovery chamber to the recovery pump to the condensing coils and back to the solvent tank. Each of the components have ball valves at the hose ends to isolate and shut off flow as needed. The next step is to open the ball valve below the material column and let the mixture of liquid butane and hash oils drain off the material into the recovery chamber. Once the mixture is drained off the material, the ball valves on the top and bottom of the recovery chamber intake are closed. The material is then removed from the loop and set aside. The recovery pumps are turned on and the ball valves on the hoses from the recovery chamber to the recovery pumps are opened. The recovery chamber is then placed into a bath of warm water. The warm water (90-110 degrees) causes the butane to boil (butane boiling point is 70 degrees) and changes back to a gas. The recovery pumps creates a vacuum and draws the butane gas out of the recovery chamber and through the condensing coils where it changes back into a liquid and back into the solvent tank for reuse.

Findings:
The employee was trained in the process, and has extensive training with pressure vessels in the military.

The closed loop extraction system was purchased from Subzero Scientific LLC as a turn key system. A turn key system is a complete ready to use system with no additions or modifications needing to be made in order to operate it.

This processing room was retrofitted to meet Class 1, Division 2 specifications.

One of the two nuts, on the two bolts, that secure the two halves of a high pressure clamp fractured into three pieces. This failure allowed the high pressure clamp to disconnect from the bottom of the recovery chamber. The high pressure clamp held the collection tray to the bottom of the recovery chamber. The collection tray is where the hash oil settles after the butane is boiled off as a gas.

The manufacturer (Subzero) supplied the standard operating practices (SOP) for the system and required that Burnt River Farms LLC purchase all replacement and wear item parts from them.
Burnt River Farms LLC has kept detailed records of the equipment and parts purchases along with maintaining the replaced parts in their storage area.

Extraction manager has overseen the maintenance of the extraction system since it was purchased in 2015. All maintenance procedures were set forth by the manufacturer in the Owners Manual. The schedule is to visually check all nuts, bolts and the pressure relief valve every 20-30 runs. To visually check the quick disconnects, pumps and the column before every run. The nut and bolt connectors were changed every 40 runs.

Burnt River Farms LLC did not perform a PPE assessment. The extraction operator was wearing denim jeans, a polar fleece jacket and a polar fleece cap. With the possible exposures the operator should be using appropriate gloves, goggles and apron/protective clothing. The use of proper PPE would have reduced the amount of liquid saturation caused by the splash.

Burnt River Farms LLC did not have an Emergency Action Plan (EAP) in effect. The EAP would have instructed the employee to move to a secure/safe zone until the exposure area was evaluated through a process and found safe.

Burnt River Farms LLC did not have a communication system in place to alert employees of an event or emergency. The communication system along with the EAP guides employees in the steps to take if and when emergency’s happen.

A determination was made that Burnt River Farms could not predict or expect the component failure to happen, that they followed all the manufacturer’s standard operating practices, that they maintained the equipment to the manufacturer’s schedule.

Burnt River Farms LLC was inspected and complied with all local building codes for at “B” occupancy. They were inspected and approved by the local Fire Marshall and inspected and licensed by the Oregon Liquor Control Commission.

Penalty/Violation:
**V1-1a** OAR 437-004-0450(1): The employer did not have an emergency action plan that included all the requirements of paragraph (2) of this section: This was rated as medium/serious with a civil penalty of $280 after adjustment for size.

**V1-1b** OAR 437-004-0450(3): There was no communication system to alert employees or an employee alarm system with a distinctive signal for each purpose: This was rated as medium/serious with a civil penalty of $280 after adjustment for size.

**V1-2** OAR 437-004-1005(2a): The employer did not assess the workplace to determine if hazards were present, or were likely to be present, that would make the use of personal protective equipment (PPE) necessary to protect employees: This was rated as medium/serious with a civil penalty of $280 after adjustment for size.

**V1-3** OAR 437-004-0251(3)(e)(A): The employer did not ensure that the committee met at least monthly: This was rated as low/serious with a civil penalty of $120 after adjustment for size.

**V1-4** OAR 437-004-0099(1)(b): The employer did not maintain and use in an operable condition any safeguards or devices required by any rule in this division to fulfill its intended purpose: This was rated as low/serious with a civil penalty of $120 after adjustment for size.

**V2-4** OAR 437-001-0700(14)(a): The OSHA 300 and 300A Summary forms were not kept on a calendar year basis: This was rated as low/other than serious with a mandatory civil penalty of $100.
Accident Pictures:

Inside View: Damage that occurred to the structure wall during the explosion. Part of the closed loop system remained after the explosion.

Outside View: Damage that occurred to the structure wall during the explosion.

The broken nut in the foreground that was used to secure the clamp. The nut shattered into 3 separate pieces, releasing the clamp, which released pressurized hash oil and liquid propane into the warm water bath.

Conference dates and locations can be found at: http://osha.oregon.gov/conferences/Pages/index.aspx

Questions? Contact the Conference Section at (503) 378-3272 or toll-free in Oregon at (888) 292-5247, option 1. or send email to: oregon.conferences@state.or.us

III. Areas of Concern: Nothing new to report.

IV. Information Sought from Other State Programs: Nothing new to report.

V. Administrative Changes: The new Oregon OSHA Administrative Services Manager Danae Hammitt started 5/22/18.

VI. Contact Information: Phone: (503) 378-3272, Fax: (503) 947-7461, Internet: www.osha.oregon.gov, Federal Liaison: Pamela Lundsten, pamela.g.lundsten@oregon.gov