

Explosives Safety Stakeholder Group Meeting Summary, July 24, 2019

Washington State Department of Transportation, North Central Region
2830 Euclid Avenue, Wenatchee, WA, 8:30am-5:00pm

Division of Occupational Safety and Health (DOSH) Staff Present:

Safety and Health Specialist
Administrative Regulations Analyst
Technical Services Safety Program Manager
Senior Program Manager, DOSH Standards, Technical and Laboratory Services
Standards Program Manager

Organization represented (in no particular order):

Sportsman's Warehouse-Compliance
Vail Resorts
Northwest Energetics
Richland Police, Bomb Squad
Emergency Management Division, Washington Military Department
Institute of Makers of Explosives (IME)
Private Rocketeer
King County Sheriffs
Joyson Safety
Northwest Energetics
Washington State Department of Transportation

Via WebEx:

Dyno Nobel
Alaska Occupational Safety and Health Enforcement
Port of Seattle Police, SWAT
Wolverine West Fireworks

Summary:

DOSH staff called the meeting to order at 8:27am.

An attendee representing Institute of Makers of Explosives (IME), Director of Technical Services, addressed the group. The attendee provided a history of IME, and IME's mission: "To promote safety and security for the commercial explosives industry." IME is frequently called to provide assistance to legislators and regulators for policies relating to explosives products. The attendee detailed the Institute of Makers of Explosives Safety and Analysis for Risk (IMESAFR); which supplements the American Table of Distances. IMESAFR is a Quantitative Risk Assessment (QRA). IMESAFR is a tool which is a supplement to the American Distance Tables. IMESAFR is used to "calculate risk to personnel from commercial explosives facilities and operations. IMESAFR, uses information about the donor structure, about the explosives type and activity at the donor, and about the exposed site structure to calculate risk and is an effective supplement to the longstanding American Table of Distances."

The attendee provided information on IMESA FR training.

An attendee stated he would provide the information related to IMESA FR training to the Pacific Northwest Chapter of ASSE. Limited funding may be available.

The group discussed the use of, and addition of IMESA FR language to Part E. Proposed changes approved by the group.

The attendee concluded his presentation.

An attendee, representing Emergency Management Division, Washington Military Department Hazardous Materials Planning Program Supervisor, SW Region Planner, SERC Coordinator Preparedness Unit, addressed the group. The attendee also runs the State Emergency Operations Center (SEOC) and State Emergency Response Commission (SERC). The attendee detailed SARA Title III. Title III is also known as the Emergency Planning and Community Right-to-Know Act (EPCRA) which was passed in 1986. EPCRA was passed “in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the 1984 disaster in Bhopal, India, caused by an accidental release of methylisocyanate. The release killed or severely injured more than 2000 people.” SARA Title III requires states to:

- “Promote outreach for developing local emergency preparedness programs to respond to chemical releases.
- Receive reports from the regulated community.
- Organize, analyze and disseminate the resulting information on hazardous chemicals to local governments and the public.”

The attendee stated Local Emergency Planning Committee (LEPC) and State Emergency Response Commission (SERC) meetings are open to the public.

DOSH staff suggested adding language to the code about sharing information regarding the location of magazines with LEPC and SERC to decrease risk to the public.

DOSH manager stated this would be beneficial during a wildfire.

The attendee concluded her presentation.

The Senior Program Manager of DOSH Standards, Technical and Laboratory Services, addressed the group. He provided an overview of the (standard) rulemaking process, including the activities, requirements and timing for each step in the rulemaking process: CR-101, CR-102 and CR-103.

CR-101: Filing of CR-101 is the start of the rulemaking process. Notifies public of the department’s intent of possible rulemaking via Washington Register. Public comments are solicited from stakeholders. Proposed rule drafted, and reviewed internally.

CR-102: Public notice of proposed rule and public hearing(s). Comments from the public collected and reviewed. Response prepared to each and every comment received during the public comment period.

Proposed language finalized. Cost analyses completed: Cost Benefit Analysis (CBA), Small Business Economic Impact Statement (SBEIS) and Lease Burdensome Analysis (LBA) completed. Concise Explanatory Statement (CES) prepared.

CR-103: Language (rule) incorporating consideration of public comments reviewed by and signed by the director of the agency. Rule adopted upon filing with Code Reviser. Public notified of rule adoption via Washington Register. Effective date published.

DOSH Senior Program Manager summarized the individuals and groups involved in rulemaking:

- Occupational Safety and Health Administration (OSHA)
- Labor and Industries Standards team within Division of Occupational Safety and Health (DOSH)
- Labor and Industries Technical Services team within DOSH
- Labor and Industries Fiscal team
- Legislative Governmental Affairs Office
- Attorney General's Office
- Entity initiation the rule (if not agency)
- Stakeholders/committees
 - Construction Advisory Committee (CAC)
 - Electrical Utility Safety Advisory Committee (EUSAC)
 - Hazardous Drug Advisory Committee
- Other state agencies

DOSH Senior Program Manager thanked attendees for their participation in this rulemaking process; acknowledging their expertise in the subject matter; and, for the time commitment required for the rulemaking process.

Chapter 296-52 WAC Safety Standards for Possession, handling and use of explosives Part E Storage of Explosives Materials

WAC 296-52-50025 Notification of fire safety authority

DOSH staff proposed changes which require the department to notify the State Emergency Operations Center of the location of explosives. Details will include frequency of notification and information to be shared; for example, whom to notify, how to notify, quantity of explosives etc. DOSH staff stated the "goal" is to save time and money.

An attendee stated he supported the idea; it is important for local fire department to have the information. The attendee stated if "it saves one firefighter, you gotta do."

An attendee stated it is difficult to call agencies on a holiday weekend; or, a "live person."

An attendee, representing Emergency Management Division, Washington Military Department Hazardous Materials Planning Program, suggested documenting 24 hour number to eliminate communication issues.

Proposed changes approved by the group. DOSH staff to provide wording. See Addendum.

WAC 296-52-5500 Institute of Makers of Explosives Safety Analysis for Risk (IMESA FR), Supplement to the American Table of Distances – proposed

An attendee suggested changing the word “and” to “or” to Number 1. The group discussed the proposed section and updated to read as follows:

WAC 296-52-5500 Institute of Makers of Explosives Safety Analysis for Risk (IMESA FR), Supplement to the American Table of Distances.

In the event the storage distance requirements in tables E-1 through E-8 cannot practically be met, use of Institute of Makers of Explosives Safety Analysis for Risk (IMESA FR) is permitted with approval of the department and ONLY when the following criteria are met:

- (1) Distance in tables E-1 through E-8 are not feasible due to terrain or other physical restriction; or
and
- (2) Location proposed by IMESA FR enhances either:
 - a. Security of the explosives; or
 - b. Safety of all persons is improved through reduced exposure.
- (3) The final siting criteria must meet the values for annual risk as follows:
 - a. Annual risk to an individual member of the public was found to be less than one in a million;
 - b. Annual risk to the public group was found to be less than one in one-hundred thousand.

Proposed change above approved by the group.

An attendee stated he was in favor of adding IMESA FR.

The group approved the inclusion of IMESA FR language with the changes noted above.

**Chapter 296-52 WAC Safety Standards for Possession, handling and use of explosives
Part F Magazine Construction**

The group discussed various locking systems. An attendee brought up “master lock.” DOSH staff stated it does not have a hood. No protection against sawing and prying. An attendee noted the ATF (Bureau of Alcohol, Tobacco, Firearms and Explosives) is good with use of Puck Lock.

WAC 296-52-6700 Reduced ARC Magazine-proposed
DOSH staff to provide wording. See Addendum.

**Chapter 296-52 WAC Safety Standards for Possession, handling and use of explosives
Part C Use of Explosives Materials**

Chapter 296-52-3030 User (Blaster) responsibilities - proposed

DOSH staff discussed the proposed requirements with the group. Attendees expressed concerns with the proposed WAC which would require “*All users (blasters) working under the direction of a Blaster in Charge on a blast*” share responsibility.

In addition, proposed WAC 296-53-3030(4) would require all licensed blasters on site to:

“(4) Ensure they use every reasonable precaution to ensure the safety of the general public and workers.”

An attendee stated the proposed requirement is “illegal.” The attendee stated it is the same as an officer issuing a ticket to all adult licensed drivers in a car in addition to the driver when pulling the car over for exceeding the speed limit or reckless driving.

An attendee noted there may be individuals who are licensed who may be in a truck; and, could not be held responsible.

An attendee asked how to identify “who” is responsible.

DOSH staff stated the blast record lists all who are involved in the blast.

An attendee stated there may be more than one blaster on site. One must take the role of blaster-in-charge. The blaster-in-charge has the authority, me there to see the holes are filled.

An attendee stated he would submit language after the meeting.

An attendee opposed the language within the section.

An attendee stated all blasters have had an unexpected flyrock and are not criminals; do not was to see this used as a bludgeon. Further, the attendee stated all blasts have a blast record.

An attendee stated that as the blaster-in-charge, “I am responsible.”

WAC 296-52-3030(5) proposed

The group expressed concern with the proposed language. The group discussed and applied the following changes:

Exercise and apply independent professional judgment regarding blasting activities, when following instructions from others could result in an illegal act or ~~affect the outcome of a blast~~ cause physical injury.

DOSH staff to submit proposed WAC 296-52-3030 User (Blaster) responsibilities to the assistant attorney general for review.

WAC 296-52-3035(1)(d)(i) proposed

The group expressed concern with the word “and” and proposed the following changes:

Keeping a running inventory of all explosives ~~and including~~ blasting agents stored at the blast area; and

WAC 296-52-3015 Blast design proposed

The group briefly discussed; and, requirement for a Certified Professional Engineer (CPE) licensed in

the state of Washington to inspect and approve plans produced by anyone other than the Blaster in Charge.

With the exception of proposed WAC 296-52-3030 User (Blaster) responsibilities, the proposed change in Part C, Use of Explosive Materials, approved by the group.

Chapter 296-52 WAC Safety Standards for Possession, handling and use of explosives

Part B Licensing

WAC 296-52-20090 Employee Possessor information

WAC 296-52-20090(7)

The group discussed the “Note,” and, added new language to provide clarification in relation to employees working in retail small arms smokeless powder establishments. The “Note” reads as follows:

“Note: For organizations not subject to ATF oversight Employee Possessors must be cleared by L&I. Employees working in retail small arms smokeless powder establishments performing sales only at the store do not meet the definition of Employee Possessors.”

WAC 296-52-20090(8)

The group discussed K-9 handlers. Not all may be law enforcement; and, may not be “blasters.” Suggestion to change “license” to “certificate” and require training as individuals transport and handle explosives; however, not all K-9 handlers are “blasters.” An attendee offered to submit wording for “handler. Proposed changes approved by the group.

The group briefly discussed the training requirements to obtain and renew K-9 Handlers certificate. The group discussed the number of hours of initial and continued training. The group again discussed whether the license should be related to the individual, versus dependent upon employment relationship with specific employer.

An attendee noted the reference to license for K-9 handler will need to be consistent throughout all parts of the chapter.

DOSH staff to research and provide suggested language to ESSG members via email for review and approval.

WAC 296-52-2300 Responsibility to obtain a User’s (Blaster’s) license

WAC 296-52-2300(2)(d) License Classifications Table

The group discussed the previously suggested classification of “Explosive Detection Dog,” and approved the removal of the classification from List A.

An attendee suggested the addition of a classification of “FF, Firefighting” to List B. Proposed changes approved by the group.

The group discussed the designation of “Industrial Ordinance.”

An attendee expressed concern with the code not agreeing with the ATF. The attendee stated employees

at Sportsman’s Warehouse are not purchases or dealers, yet have to have a license for smokeless powder; and, the ATF does not consider smokeless powder an explosive.

DOSH staff to provide additional wording.

WAC 296-52-2300(2)(e)

The group discussed aerial blasting; and, if needed. DOSH staff and an attendee both stated aerial blasting is used, although not common. Aerial blasting is used for removal of danger trees and in forest fighting.

The group discussed whether there is a need to create a separate test for this classification.

An attendee asked “why” make new license; should be kept in forestry (logging) chapter.

An attendee stated it is probably easier for the department to have more defined categories.

DOSH staff stated the list shows the level of skill and training.

DOSH staff to follow up with an attendee, who represents the Department of Natural Resources, regarding the use of aerial blasting when fighting forest fires.

The group discussed adding tables to identify the capabilities or tasks one may perform with each type of license listed in the tables. The group discussed “where” to add the information. Attendees were split in terms of adding to the beginning of Part A, or, at the end. DOSH staff to develop wording and distribute via email to attendees for review and approval. See Addendum.

Chapter 296-52 WAC Safety Standards for Possession, handling and use of explosives

Part A Definitions, Purpose, Scope, and Application

WAC 296-52-099 Definitions Black Powder

The group discussed and added a definition for Black Powder:

“Black Powder. A deflagrating or low explosive compound of an intimate mixture of sulfur, charcoal, and an alkali nitrate, usually potassium or sodium nitrate.”

Proposed changes approved by the group.

WAC 296-52-099 Definitions Blast Site

The group discussed minimum distances in relation to the definition for Blast Site. The group updated the definition for Blast Site to read as follows:

Blast site. ~~*The area where explosive material is handled during loading and fifty feet in all directions from loaded blast holes or holes to be loaded.*~~ *The area where explosive material is handled during loading of blastholes, including:*
(1) 50 feet (15.2 m) in all directions from the perimeter formed by loaded holes: or

(2) A minimum of 30 feet (9.1 m) may replace the 50 feet (15.2 m) requirement if the perimeter of loaded holes is marked and separated from nonblast site areas by a barrier.

Note: The 50 feet (15.2 m) or 30 feet (9.1 m) distance requirements, as applicable, shall apply in all directions along the full depth of the blasthole.

(3) In underground mines, at least 15 feet (4.6 m) of a solid rib, pillar, or broken rock can be substituted for the 50-foot (15.2 m) distance.

Proposed changes approved by the group.

WAC 296-52-099 Definitions Hand charge facility

An attendee suggested changing “licensed” to “approved”.

The group updated the definition for Hand charge facility to read as follows:

“Hand charge facility. A purpose built ~~licensed~~ approved structure used to prepare explosive charges for avalanche control operations.”

Proposed changes approved by the group.

WAC 296-52-099 Definitions Handler

The group discussed and updated the definition for handler to read as follows:

“Any individual who handles explosives ~~or~~ (including blasting agents) for the purpose of transporting, moving, or assisting a licensed ~~blaster~~ person ~~in~~ loading, firing, blasting, or disposing of explosives outside the company premises.”

Proposed changes approved by the group.

WAC 296-52-099 Definitions Responsible Person

The group discussed and updated the proposed definition for Responsible person to read as follows:

Responsible Person. For an explosives ~~magazine~~ License ~~???~~ is:

- (a) The person legally responsible for the license; and
- (b) Directs the management or policies of the business or operations as they pertain to explosives; and
- (c) Is responsible for the proper transport, storage, protection, and removal of explosives, and may be the owner, lessee, or authorized operator.

Proposed changes approved by the group.

WAC 296-52-099 Definitions Small arms ammunition primers

The group discussed and updated the proposed definition for Small arms ammunition primers to read as follows:

“Small percussion sensitive explosive charges ~~encased in a detonator cap or capsule~~ and used to ignite propellant powder ~~or percussion detonators used in muzzle loaders.~~”

Proposed changes approved by the group.

WAC 296-52-099 Definitions Smokeless powder

The group discussed and updated the proposed definition for smokeless powder to read as follows:

“Solid ~~chemicals or solid chemical mixtures that function by rapid combustion~~ propellants, commonly referred to as smokeless powders, used in small arms ammunition, cannons, rockets, or propellant-actuated devices.”

Proposed changes approved by the group.

WAC 296-52-10030 Exemptions

WAC 296-52-10030(1)(a)

An attendee noted the WAC exempts Washington State Patrol.

DOSH staff stated the exemption is only when under jurisdiction of the Federal Department of Transportation.

WAC 296-52-10030(1)(k)

The group also discussed the exemption for consumer fireworks.

DOSH staff noted the department does not regulate Division 1.4 fireworks. The chapter provides for, or regulates, the storage of Division 1.1, 1.2 and 1.3 fireworks. The use of fireworks is covered under the fireworks law (Chapter 212-17 WAC Fireworks).

WAC 296-52-13050 Daylight blasting

The group discussed the WAC; noting it may not be possible to perform all blasting operations during daylight hours. The group updated the WAC to read as follows:

“Blasting operations ~~should~~ must be conducted during daylight hours whenever possible.”

Proposed changes approved by the group.

Emails/proposed changes received during the meeting from stakeholders attending via WebEx attached.

Meeting adjourned at 4:40pm.

Materials available at the meeting:

Chapter 296-52 WAC Safety standards for possession, handling, and use of explosives (all parts)

Materials presented at the meeting:

IME Presentation

Senior Program Manager, DOSH Standards, Technical and Laboratory Services Power Point presentation