OHS Code Review
Draft Proposed Changes

Technical Briefing Sessions

Edmonton - May 20, 2014

Calgary – May 21, 2014

Presented by:

OHS Policy and Legislation

OHS Policy and Legislation

OHS Code Technical Briefing

- **Welcome**
- **Purpose of the session**
  - Share “proposed changes” from “what we heard”
  - Update review process and next step

T O D A Y

- **Opening Remarks (9:00)**
- **First Session (9:10- 10:10)**
  - Part 4 Chemical & Biological hazards (OEL)
  - Part 16 Noise
- **Networking Break (10:10 – 10:30)**
- **Second Session (10:30 – 12:00)**
  - Part 18 Personal Protective Equipment
  - Part 10 Fire & Explosion Hazards
  - Miscellaneous Parts
  - Part 6 Cranes, Hoists and Lifting Devices
- **Lunch (12:00 – 12:55)**
- **Third Session (12:55 -2:20)**
  - Part 21 Rigging
  - Part 23 Scaffolds & Temporary Work Platforms
  - Part 32 Excavating and Tunneling
  - Part 37 Oil and Gas Well

T O D A Y

- **Networking Break (2:20 - 2:40)**
- **Forth Session (2:40 – 3:40)**
  - Part 33 Explosives
  - Part 36 Mining
- **Closing and staff available for questions (3:40- 4:15)**

- **Today's Presentation**
  - History of Alberta OHS Code
  - Current Code Review Process
  - Parts Under Review
  - Highlights of Changes
  - Current Status
  - Way Forward
  - Questions/Comments?

OHS Code: Brief History

- Introduced in 2003, replacing 11 regulations
- The intent was to make it easier to update the legislation to keep it more current and technically relevant
- Initially, the Code was updated on a three year cycle, with 2003, 2006 and 2009 editions
- Later on, feedback received was that the process was too frequent and industry did not have a chance to fully implement and evaluate the changes
- Working group included OHS staff, industry, safety and labour organizations

New Five-Year Review Cycle

- A five-year review cycle is currently being adopted
- According to new code review process;
  - Specific parts are selected for review each year
  - All stakeholders are invited for suggested changes
  - Working group members limited to departmental staff (OHS Policy and Delivery) unlike previous process, external expertise involved if required.
  - Public consultation on all suggested changes
  - OHS Council to review recommendations that incorporated feedback from public consultation
  - Minister has authority to enact updated Code (Current Plan in 2015)

Principles for OHS Code Review

- Shared accountability by all work site parties
- Clarity of requirements to reduce the need for interpretation
- Minimize redundancy and repetition
- Prevent conflicts within the legislation and with other legislation
- Evidence-based
- Use of objective based requirements instead of prescriptive

Parts Under Review

- Part 4 Chemical/Biological Hazards
  - » including Occupational Exposure Limits (OELs)
- Part 6 Cranes, Hoists and Lifting Devices
- Part 10 Fire and Explosion Hazards
- Part 16 Noise Exposure
- Part 18 Personal Protective Equipment
- Part 21 Rigging
- Part 23 Scaffolds and Temporary work platforms
- Part 32 Excavating and Tunneling
- Part 33 Explosives
- Part 36 Mining
- Part 37 Oil and Gas
- Miscellaneous

Extent of Proposed Changes

- Proposed changes cover:
  - 277 sections and 27 new sections
  - about 1/3 of the Code (currently has 849 sections)
- Majority of the changes:
  - technical standards (e.g. CSA) updates
  - wording changes for clarification
  - Professional engineer certification
- Other changes:
  - rules changes
  - new requirements

Highlights of Proposed Changes

Part 4 - Chemical & Biological Hazards

Schedule 1 Occupational Exposure Limits

Definitions

- Restricted area: only to apply to asbestos
- Exposed worker: incorporated into Section 40 and not linked to restricted area
- Fibre: repeal
  - Definition in Part 1 is specific to asbestos fibres in the context of analysis using the NIOSH7400 Method
  - “fibre” is used in Part 4 and the rest of the OHS Code in different contexts that are inconsistent with the definition (e.g. Sections in Parts 18 and 19),
  - Term is already defined in the NIOSH Method
- Pulmonary function technician: reworded to add clarity to competency required

Section 16: Worker Exposure to Harmful Substances

- Change in wording “reasonably achievable” to “reasonably practicable”
  - Legal terminology that has a defined meeting
  - Does not change the requirement
- Where no occupational exposure limit (OEL) has been established an employer must implement appropriate controls to protect workers
- Put back section on short term exposure limits which was inadvertently removed in last Code revision

Section 18: Adjustment of OELs

- For work shifts longer than 8-hours
- Added weekly adjustment formula
- Calculate with both and use most stringent result
- Change to ensure that the correct formula is used appropriate to the length of the work shift and frequency of work

Section 20: Exposure Monitoring

- During the review, the following issues were identified:
  - Allowance required to address new size selective limits
  - How to handle laboratory modifications to listed methods
  - Competency of people who were collecting the exposure monitoring data

Proposed Changes to Section 20

- New subsection to allow the use of inhalable and thoracic samplers
- New subsection to allow the modification of methods by laboratories under specified circumstances
- Clarification on what is meant by a “competent worker”
  - Trained in conducting exposure assessments
  - Trained in calibration, operation and maintenance of monitoring equipment
  - Can explain the method used for measurement
- To address measurement issues generally
  - Method used must be technically correct and appropriate to the exposure circumstances
  - New requirement to specify minimum elements that must be recorded when collecting measurements (consistency with Part 16)

Section 21: Code of Practice

- Current requirement is linked to the presence of a substance listed in Table 1, Schedule 1
  - Limited guidance as to content in Section 33 of the *OHS Act* and in Section 26 of the OHS Code
- Feedback from stakeholders:
  - Need for a code of practice should be based on the potential for exposure to a harmful substance
  - More clarity needed on required elements

Section 21: Code of Practice

- Consolidate requirements for exposure assessment and code of practice (S21, 22 and 26)
- Link need for a code of practice to potential for exposure above an OEL (apart from some specified substances where other exposure routes may be significant, such as lead)
- Specify required elements, consistent with current requirements for lead exposure control plan (incorporate S41 and 42)
- Add obligation for workers to follow the code of practice

Asbestos Requirements

- Sections 28-38
- Proposed changes:
  - Restricted area requirements to apply only to asbestos (silica, coal dust and lead to be removed from the definition of a restricted area)
  - New requirement to conduct an assessment of asbestos containing materials and prepare a report (replace current S31)
  - Notification time for asbestos projects increased to three working days prior to the start of work and employer must receive a acknowledgement of receipt of notification prior to starting work
  - Training for asbestos workers linked to potential for exposure to asbestos

Section 39:
Use of Silica in Abrasive Blasting

- Proposal to repeal this section
- The requirement for hazard elimination or substitution is already covered under Section 9 of the OHS Code

Section 40: Health Assessment

- “Exposed Worker” definition incorporated into Section 40 (not linked to restricted area definition)
- Additional information requirements for health history
- Changes to frequency for health assessments (fewer x-rays)
- Requirement to notify Director of Medical Services for workers suffering from occupational disease from exposure to silica, coal dust, asbestos or lead
- Employers to keep records of workers in hazardous occupations

Section 41: Lead Exposure Control Plan

- Current requirement to be incorporated into revised section 21 (code of practice)
- Section re-worded to focus on housekeeping and decontamination requirements since lead was removed from the definition of “restricted area”

Section 43: Blood Lead Monitoring

- Specify frequency of testing
  - Initial baseline
  - 12-months following baseline
  - Annually thereafter (or more frequently depending on exposure and test results)
- Specify what information must be provided by the physician to the worker
- Specify threshold at which reporting is required to Director of Medical Services (consistent with Section 6 of the OHS Regulation) and the information that must be reported

Section 43.1: Mould

- Section to be repealed
- Is not enforceable as written since there are no standards for mould exposure
- Requirement is redundant with sections 7 and 9 of the OHS Code

Occupation Exposure Limits (OELs)

Background

- There are almost 800 substances with Occupational Exposure Limits (OELs)
- OELs currently in the Alberta OHS Code are based on 2006 American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) with some exceptions
- OELs are reviewed on a 5-year cycle in Alberta

Western Provinces OEL Collaboration

- Committee with representation from BC, Alberta, Saskatchewan and Manitoba
- MOU signed in 2012:
  - Agreement to collaborate and share information
  - Review on a consistent schedule
  - Be as consistent as possible

OEL Review Process

- Technical Working Group with representation from industry, labour and government conducted review (May 2012-March 2013)
- 2012 ACGIH TLVs used as a starting point
- Evaluation criteria established to identify a short list of substances requiring detailed review by the working group
- Additional specific stakeholder groups participated in technical review for substance-specific issues
- After review, the technical working group provided recommendations to OHS Policy
- OHS Policy reviewed technical working group recommendations and prepared regulatory proposal

Review Criteria

- Scientific documentation and rationale for ensuring health and safety of workers
- Availability of sampling/analytical methods
- Limits set in other jurisdictions
- Existing and potential compliance issues
- Applicability to Alberta
- Social expectations

Technical Working Group

- Alberta Construction Safety Association
- Alberta Federation of Labour
- Alberta Forest Products Association
- Alberta Health Services
- Alberta Human Services (Policy, Delivery, Occ. Dis.)
- Alberta Mine Safety Association
- Alberta Union of Provincial Employees
- American Industrial Hygiene Association, AB Chapter
- Canadian Association of Oilwell Drilling Contractors
- Canadian Association of Petroleum Producers (also representing the Petroleum Services Association of Canada)
- Canadian Fertilizer Institute
- Canadian Fuels Association
- Chemistry Industry Association of Canada
- Communication, Energy, Paperworkers Union
- Health Sciences Association of Alberta
- International Brotherhood of Boilermakers
- International Union of Painters and Allied Trades
- Manufacturers Health and Safety Association

Size Selective Limits

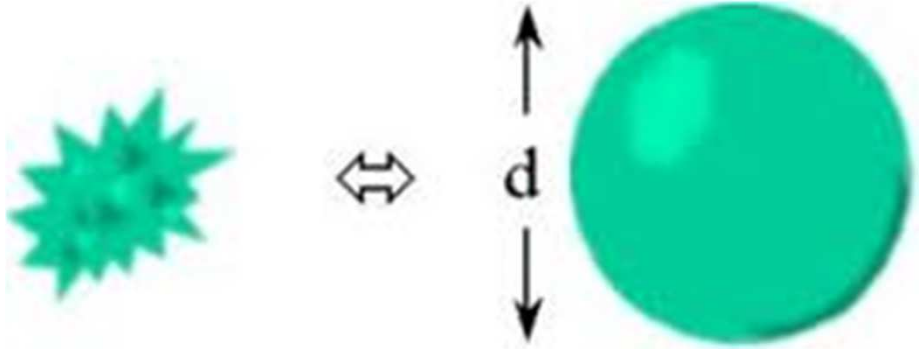
- Occupational exposure limits (OELs) for particulates may be:
  - Total
  - Inhalable
  - Thoracic
  - Respirable

What are Size Selective Limits?

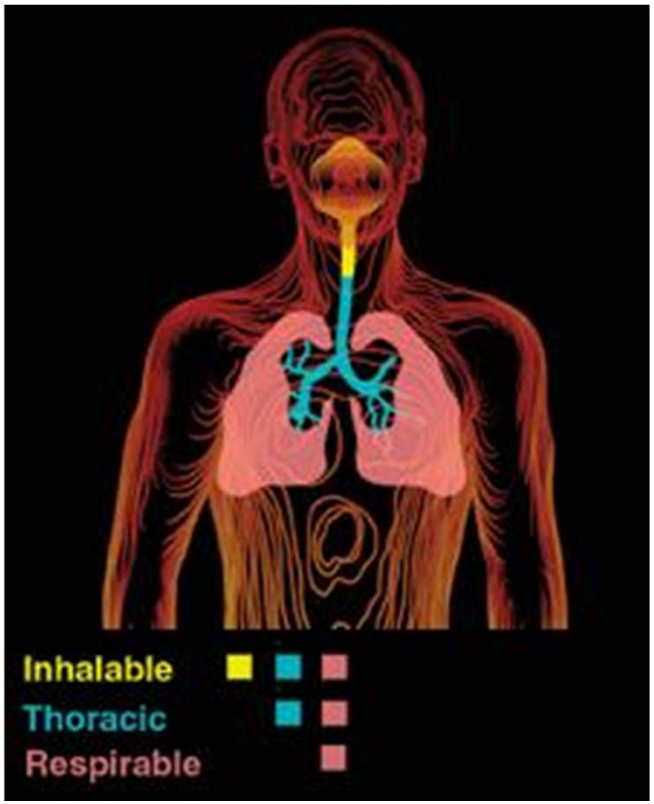
The collection of particles below or within a specified aerodynamic size range, usually defined by the upper 50% cut-point size to measure particle size fractions that have some special significance (e.g., health, visibility, source distribution

Aerodynamic Diameter

- The diameter of a sphere of unit density that has aerodynamic behavior identical to that of the particle in question
- Particles having the same aerodynamic diameter may have different dimensions and shapes
- A 50% cut-point (median aerodynamic particle diameter) is used to describe the size convention



What Does this Mean?



- Inhalable (100 µm cut-point), hazardous when deposited anywhere in the respiratory tract
- Thoracic (10 µm cut-point), hazardous when deposited in the lungs
- Respirable (4 µm cut-point), hazardous when deposited in the gas exchange regions of the lungs

What about total?

“Total” is not Total

- Only includes particulate that can be sampled using a 37 mm filter cassette
- Why is this not the same as “total particulate in the air”?
  - Under-estimation of the concentration of larger dust particles (30 to 100 microns)
  - The sampler inlets are not effective at capturing larger particulate
  - Particulate can stick to the cassette walls and sample loss can occur
- ACGIH is transitioning from total to inhalable limits

Highlights of Technical Review

- Proposed changes to about 150 OELs
- About 110 substances reviewed in detail (but did not always result in a proposal for change)
- Rational for identifying these substances was that they were likely to be used or present at Alberta work sites **AND**

1. There was a significant difference between the current OEL and the TLV
2. The substance did not have an OEL
3. The substance did not have a TLV
4. Change to a different size selective limit

Highlights of Technical Review

- More deviations from the TLVs—a lot of focus on availability of measurement methods
- Alberta specific limits (no TLV) maintained
- Consensus reached on a number of “high profile” substances
- Introduction of new size selective limits (inhalable, thoracic)

Substance	Alberta OEL mg/m^3 (ppm)	ACGIH TLV mg/m^3 (ppm)	Working Group Recommendation mg/m^3 (ppm)
Asphalt	5 (total)	0.5 (inhalable)	0.5 (inhalable)
Carbon Black	3.5 (total)	3.0 (inhalable)	3.0 (inhalable)
Ethyl Benzene	100/125	20	20
Flour Dust	0.5 (total)	0.5 (inhalable)	0.5 (inhalable)
Formaldehyde	0.75/1 (c)	0.3 (ceiling)	0.75(ceiling)
Hydrogen Sulfide	10/15	1/5	10 (ceiling)
Naphtha	400	calculation	400
Nitrogen Dioxide	3/5	0.2	1 (ceiling)
Portland Cement	10 (total)	1 (respirable)	1 (respirable)
Sulfur Dioxide	2/5	0.25	2/5
Sulfuric Acid	1 (total)	0.2 (thoracic)	0.2 (thoracic)
Toluene	50	20	20
Trichloroethylene	50/100	10/25	10/25
Wood Dust	0.5 (WRC) 5 (total)	0.5 (WRC) 1 (other) Inhalable Limits	0.5 (WRC) 1 (hardwood) 5 (other) Total Limits

OEL Adjustment

- Recommendation to not require adjustment of OEL for silica for work shifts longer than 8-hours
- Request to also review coal dust and asbestos OELs in this context
- Outcome:
  - Coal dust and silica—add new “do not adjust” notation
  - Asbestos—will still need to adjust

Review of Recommendations

- Most of the working group recommendations were accepted
- Changes:
  - Proposing an OEL for flour dust of 1.5 mg/m^3 (inhalable)
  - Will not be adopting “IFV” (inhalable fraction and vapour) size selective notation—may be sampling/analysis issues

Part - 16 Noise Exposure

Noise control design

- 217 (2.1) New requirement for employer to *document* that noise exposure has been addressed in accordance with the existing requirement in 217(1) that noise exposure be minimized during design and construction phases.
  - Requirements follow the hierarchy of controls
  - Documents serve as evidence of compliance

Worker exposure to noise

- 218(2) New requirement to consider ototoxic substances concurrently with noise exposure
  - addresses concurrent exposure to noise and ototoxic substances and resulting synergistic effects
  - ototoxic effects of many chemicals are long standing and are well documented.
  - Includes a new table in schedule 3
  - Supports occupational disease prevention

Noise exposure assessment

- 219(1) Reduction in dBA Lex cut point for employers to conduct a noise assessment to 82 dBA.
  - Reduces likelihood of exceeding the OEL
  - In line with neighboring jurisdictions
  - Will provide earlier identification of toxic noise environments.
  - Movement from identification of NIHL to prevention of NIHL

Noise exposure assessment

- 219(2) Adoption of new CSA Standard Z107.56-13 Measurement of Noise Exposure
- 219(4) Definition of competency as it relates to conducting noise assessments
  - Clarity of “competency” for this section has been requested by stakeholders

Hearing Protection

- 222(1) Change to class or grade
  - Technical correction: previous wording was class *and* grade; mix & match are not allowed under the CSA standard

Hearing Protection

- 222(2) Requirement for the employer to ensure that a report of the training provided to the workers to be available at the work site
  - Currently there is no requirement for employers to have proof that training has been done; documentation will provide evidence of compliance

Audiometric testing

- 223(1) Requirement for the initial baseline test to be within three months as opposed to six
  - Increases likelihood of early detection of harmful effects of noise
  - Increases likelihood of including those who work short-terms such as transient, young and seasonal workers
- Requirement for annual testing as opposed to bi-annual testing
  - Annual testing provides more timely evidence of noise program effectiveness
  - Can allow for earlier identification of NIHL
  - Supported by evidence in the literature

Audiometric testing

- 223(2) New requirement for audiometric testing to be under the direction of a physician, audiologist or occupational health nurse
  - Will ensure accuracy of interpretation
  - Ensures quality of product for the employer

Audiometric testing

- 223(3) Requirement for audiometric technician to categorize results as normal, abnormal, or showing abnormal shift
  - Defines which audiograms need to be forwarded to physician or audiologist
- 223(4)Requirement for the reviewing physician to be knowledgeable about NIHL
  - Audiogram assessment is a specialization
- 223(5)Requirement for physician or audiologist to provide a cumulative report of the abnormal results to the employer
  - Report must be cumulative and *not* identify individuals
  - Employer needs to be aware of the results to implement appropriate controls

Noise management program

- 223(6) Requirement for employers to keep an annual report of the cumulative audiometric test results for noise exposed workers
  - Occupational hearing loss is a notifiable disease under the regulation, we need to ensure this is prevented by requiring that employers have a comprehensive program that is reviewed.
  - Helps the employer evaluate noise management program results on an ongoing basis
  - Will enhance surveillance for noise exposed workers
  - Movement away from documenting deafness to the prevention of NIHL

Question for stakeholders

- Would you (as an employer or a worker) support government in collecting work site data by requiring the employer to submit the above cumulative worker audiometric test records [section 223(6)] to the department?
  - This information would be used for hearing loss prevention purposes and earlier interventions by all parties
  - Helps to evaluate noise management program policies, requirements, interventions on an ongoing basis
  - Provides information to enhance surveillance
  - Allows for cross-industry comparisons

Schedules

- Addition of a new table to schedule 3 outlining ototoxic substances

- Addition of a new table to schedule 3 outlining maximum noise exposure, time, when wearing double hearing protection

Part 18 - Personal Protective Equipment

Review of Part 18

- Focus of the detailed review was the requirements for protective eyewear and the respirator requirements
- Comments received from stakeholders during the online consultation also considered
- No proposed changes to definitions that go along with this Part

Update of Standards

- There are 23 standards currently referenced in this Part
  - Six had not been updated
  - Two were re-affirmed with no change
  - One was withdrawn
  - Remainder had been updated
- Standards were reviewed and updated, as appropriate

Section 229: Protective Eyewear

- Current requirements reference a number of versions of the same CSA Standard
- The 2010 version of the ANSI Standard (Z87.1) was found to offer workers an equivalent or better level of safety compared to the CSA Standard
- Proposal that both the current versions of the CSA and ANSI Standards be referenced

Section 232: Flash Fire and Arc Flash

- Current requirement does not specify the type of protective clothing that must be worn to protect workers
- Issues with “counterfeit” clothing, however no requirement for clothing to meet a particular standard
- Proposed changes:
  - Protective clothing for flash fire to meet NFPA2112
  - Protective clothing for electrical arc flash to meet ASTM F1506-10a and CSA Z462-12

Section 236: Protective Headwear and Vehicles

- Wording changes to remove redundant requirements (e.g. section 236(2) for older equipment that is in good condition) and improve clarity of existing requirements
- New sub-section for headwear worn by workers riding snow vehicles at ski resorts that references two additional standards

Section 237: Protective Equipment for Fire Fighters

- Currently the OHS Code allows for the use of protective footwear and headwear that meets NFPA standards for fire fighters in addition to CSA approved equipment (either/or)
- Issues:
  - CSA approved footwear and headwear is not intended to be used for fighting fires
  - No standards provided for bunker gear (protective clothing)

Protective Equipment for Fire Fighters

- Sections 233(5) and 237 to be repealed
- New section 239.1:
  - Protective equipment must meet NFPA 1971 (structural fire fighting) or NFPA 1977 (wildland fire fighting), as appropriate
  - Includes requirements for headwear, clothing and footwear
  - Applies in addition to the requirements for respiratory protective equipment in section 244

Section 243: Protection of the Skin

- Re-wording to clarify requirement: must protect the skin, eyes and mucous membranes from harmful substances that may injure the tissue or adversely affect health if absorbed by the tissue

Section 244: Need for RPE

- Propose to adopt the 2011 version of the CSA respirator standard (Z94.4)
  - Includes biological hazards (delete sub-sections that apply to biological hazards)
  - Fit test requirements covers equipment that seals on the face or neck
  - Incorporate parts of the standard that address selection, fit testing, training and health surveillance
- Retained requirement to have RPE available to workers in section 244(3) but to apply to all work sites

Section 245: Code of Practice

- Specify required elements of code of practice:
  - Roles and responsibilities
  - Hazard assessment
  - Selection
  - Training
  - Fit testing
  - Use
  - Cleaning, inspection, maintenance, storage
  - Health surveillance
  - Program evaluation
  - Recordkeeping
- Require annual training of workers (all work sites)
- Add responsibility for worker to follow code of practice

Section 247.1: Cartridge Change Out

- 2002 CSA respirator standard address air-purifying cartridge change-out in the respirator selection section (adopted via section 247 of the OHS Code)
- 2011 CSA standard moved this information to section 10 of the standard (was previously in the section on respirator selection)
- New section added to ensure that the requirement to consider the service life of cartridges on air-purifying respirators is retained

Section 247.2: Respirator User Actions

- New section to address actions that must be taken by the worker and employer if the respirator user detects and odour or irritation while wearing a respirator
  - Worker must exit work area and
  - Report condition to employer
- Under Section 12 of the OHS Regulation, the employer must take action if equipment is not functioning the way it is intended to

Section 249: Compressed Breathing Air Systems

- Adopt new version of CSA compressed breathing air standard (compressed breathing air quality)
  - Main change is increase in level for carbon dioxide from 500 to 600 ppm
- Allowance to use tool compressors as part of a compressed breathing air system as long as they meet CSA compressed breathing air standard (Z180.1) notwithstanding Section 12 of the OHS Code
- Remove pressure requirement for abrasive blasting hoods (Section 255)

Part 10 - Fire & Explosion Hazards

Flammable or explosive atmospheres a hazard

- 161.1 Repeal section
  - Delete hazard assessment requirement as it is repetitive with Part 2 of the OH&S Code “Hazard Assessment”.

Prohibitions

- 162(3) Smoking prohibition
- Add a minimum distance, 7.5 metres, and a requirement to assess the hazard as opposed to a complete prohibition
  - Consistency with other sections, & provides a clear requirement

Prohibitions

- 162(3.1) Use of an open flame when flammable substances are present
- Repeal section
  - Unenforceable, creates unintended compliance issues with facilities such as; kitchens, and labs.
  - Alberta Fire Code Div B, part 4 & 5

Prohibitions

- 162(6) Storage of contaminated rags, repeal section
  - Regulated by other agencies, AFC 2.4.1

Classification of work sites

- 162.1(1) & (2) Repeal sections
  - Regulated and required by other agencies, Alberta Energy Regulator; Code for Electrical Installations at Oil and Gas Facilities, 19-100, Alberta Municipal Affairs, CEC, ABC; 3.6.1.2 AFC, 2.1.2.1.

Procedures and precautions

- 163(1) New requirement for combustible dusts;
- General requirements to minimize release, address hazardous accumulations, & prevent airborne generation during cleaning.
  - A recognized hazard supported by recent incidents
  - Prevention of large scale serious incidents

Procedures and precautions

- 163(2) Remove reference to NFPA 30
  - Inconsistent with AFC; CSA B 376 & ULC C30

Procedures and precautions

- 163 (2.1) Repeal section, control of static electricity
  - Addressed under section 165(3) grounding and bonding

Contaminated clothing and skin

- 164(2) Move requirement to Part 4 section 23
  - Not a fire and explosion issue, but a worker exposure issue

Flare stacks, flare pits and flares

- 167 Repeal section
  - Regulated by other sections of the code, hot work.
  - Some flare operations are required to be done in hazardous locations such as during a NG hot tap

Industrial furnaces and fired heaters

- 168(1) & (2) Repeal sections
  - Regulated by other sections of the code
    - Manufacturers specifications
  - Regulated by other agencies and codes;
    - Natural gas code
    - Alberta Building Code 9.33.5.2 Appliance installation Standards

Hot Taps

- 170(1) New requirement to have a hot tap plan on site and for workers to follow the plan.
  - Clarification of requirement

Spray operations

- 170.1(1) Repeal section
  - Regulated by other agencies, Municipal Affairs, AFC 5.4.5 Spray Coating Operations
  - Previously referenced the Alberta Fire Code, which in turn references NFPA 33.

Compressed and liquefied gas

- 171(1) Repeal requirements a, b, e
  - Regulated by other sections of the code
  - Regulated by other agencies
    - (a) Manufacturers specifications Part 3
    - (b) Alberta Fire Code requirement
    - (c) Section 171(3) of the code

Compressed and Liquefied Gas

- **1**71(8) Moved the compressed air for cleaning clothing prohibition to Part 4 section 23.
- 171(8) New Requirement; The employer must ensure that the Worker follows the requirements of 171(7), and the worker must follow the requirements.
  - Highlights the joint responsibility between the employer and the worker.

Welding — general

- 171.1(1) Adoption of updated CSA Standard W117.2-12, Safety in Welding Cutting and Allied Processes
- 171.1(4) Addition of grinding
  - It is not listed as an allied process in the CSA standard
  - Has similar hazard characteristics as welding; fume, spark

Handling Cylinders

- 174 Introduction of employer requirements in addition to worker requirements for ensuring cylinders are handled and stored properly.
  - Previously only a worker requirement
  - Highlights the joint responsibility between the employer and the worker.

Miscellaneous Parts

Hazard assessment

- **7(2)** Additional wording added to clarify that a hazard assessment report must be in writing.
- **7(4)(e) New subsection**

  Requires the employer repeat the hazard assessment when a worker may be exposed to new hazards because of changes in work environments.

  – Even if a work process or operation does not change, if the work environment changes that may impact the safety of a worker (e.g. a worker has to work with a violent person under a specific circumstance), a hazard assessment has to be conducted

Protection – hazardous substances and energy

- **49(3) Repeal section**

  Removes the requirement that any hazardous energy in a restricted space be controlled in accordance with Part 15

  – By definition, if a restricted space contains a source of hazardous energy that could create a potential hazard to workers in the space, it is a confined space.

  – Repealing this section will remove confusion that could lead to a misclassification of a confined space.

Tending worker

- **56** New wording added to allow a tending worker to be located at a remote monitoring station instead of outside the confined space entrance.
  - The remote monitoring station must be physically located at the same work site as the confined space being monitored, and have a live video display simultaneously showing the outside entrance area and inside of the confined space.
  - The tending worker must have two-way continuous communication with each worker inside the confined space.
  - The number of confined spaces and number of workers monitored by the tending worker must not exceed the tending worker's cognitive ability to provide sufficient attention to ensure the health and safety of all workers whose work activity is being monitored.

Emergency response plan

- **115(4) New subsection**

requiring the employer address wildfire emergencies in the emergency response plan if the work site is located in an area with high wildfire potential.

  - Intended to enhance worker safety.

Fixed Ladders Design Criteria

- **130** Fixed ladders installed after the release of the 2015 OHS Code must meet the requirements of ANSI Standard ALI A14.3-2008, *American National Standard (ASC) for Ladders - Fixed - Safety Requirements* instead of the PIP Standard STF05501, *Fixed Ladders and Cages.*
  - The ANSI Standard is broader in scope than the PIP Standard, and includes all the requirements mentioned in current legislation.

Clearance, maximum arresting force and swing

- **151(1)** Reworded to state that, where a personal fall arrest system cannot be arranged to eliminate the hazard of a worker hitting the ground, object or level below the work area, the hazard be controlled.
  - A stakeholder indicated that in some situations, such as when working from bucket trucks positioned between power lines, the clearance is so small that it is not reasonable to limit the length of the travel restraint so that there is no possibility of the worker striking the lower object.

Installation of horizontal lifeline systems

- **153.1** Reworded to state that the requirement for the manufacturer or a professional engineer certify that the system was properly installed applies only to permanent systems.
  - Officers have indicated that this is a very difficult requirement for employers to meet for temporary installations since manufacturers do not certify installations, nor do they authorize competent persons to certify installations.
  - The original requirement in 2003 applied only to permanent installations.

First Aid: Providing services, supplies, equipment

- **178** Reworded to exclude urgent care centres from the requirement to provide first aid services, equipment, supplies and first aid room in accordance with the OHS Code
  - Urgent care centers have an internal policy and procedure to ensure first aid standards are maintained as required by OHS legislation.
  - There have been numerous acceptances issued for these facilities, which indicates a need for OHS Code change in this area
  - Includes a new definition for urgent care centers

First aid providers

- **181** Reworded to exclude urgent care centres from the requirement to have first aiders at the work site in accordance with the OHS Code.
  - Urgent care centers have an internal policy and procedure to ensure first aid standards are maintained as required by OHS legislation.
  - There have been numerous acceptances issued for these facilities, which indicates a need for OHS Code change in this area
  - Includes a new definition for urgent care centers

Securing equipment and materials

- **189** Reworded to require that steps be taken to eliminate the potential of equipment and materials from being dropped.
  - Existing requirement only addresses equipment and materials that could be dislodged, moved, spilled or damaged.
  - Change will address situations where tools, fasteners, etc. that a worker is holding could be dropped.

Skeleton structures

- **190** Additional wording added to clarify that the employer must erect the skeleton structure in accordance with the erection drawing and procedures that have been certified by a professional engineer.
  - Officers and legal council have indicated that the current wording requires that the erection drawings and procedures be prepared and certified by a P.Eng., but does not explicitly require that they be followed during the erection.

Securing by complex group control

- **215.1(1)** Additional wording added to allow employers to use a complex group control process that is certified by a professional engineer as safe and appropriate for the protection of workers.
  - Currently, only a Director of Inspection can approve an employers complex group control process.
  - A professional engineer who works for the employer, knows the operation better, and has better control over the worksite could approve the process.

Parts Miscellaneous

256 Operator responsibilities
257 Visual inspection
259 Pedestrian traffic
260 Inspection and maintenance
262 Starting engines
267 Warning signal

- Additional wording added to these sections to make the requirements apply to motor vehicles.
  - Motor vehicle serious incidents and fatalities are a leading source of injuries to workers in the province of Alberta.
  - Part 19 addresses issues that are common to both powered mobile equipment and vehicles.

Rollover protective structures

- **270(1)(g) New subsection**

  Side boom tractors (pipe layers) now required to have rollover protective structures.

  – BC and Yukon both explicitly reference the requirement for side boom tractors to have rollover protective structures, as there have been many incidents where the equipment has rolled into trenches.

Safety requirements

- **290.2(3)** New wording added to specify that the outriggers of a concrete pump truck must be set up on load-bearing floats or pads that are of adequate size, strength and rigidity, and supported by solid footings.
  - Manufacturer specifications don't always address the pads to be used or the soil types that may be encountered, resulting in somewhat common tip overs.
  - New wording mimics the existing requirement for mobile cranes.

Parts Miscellaneous

798	Application
799	Protective devices or equipment
800	Safe work practices for electric utilities and rural electrification associations
803	Communication lines, cables

- These sections are being changed to replace the referenced ULC Standards and *Alberta Electrical and Communication Utility Code* with the ULC Standard S801-10, *Standard on Electric Utility Workplace Electrical Safety for Generation, Transmission, and Distribution.*
  - Industry has indicated that the ULC-S801 standard includes the content specified in the other ULC standards listed in section 799.
  - Alberta's electrical utility industry is now contributing to and following safety rules from CAN/ULC-S801-10

Safe work practices

- **823** Section changing to require that the safe work practices for industrial rope access work specified by either the IRATA International Code of Practice for Industrial Rope Access (2013), or by Safe Practices for Rope Access Work, 2012, published by the Society of Professional Rope Access Technicians, is followed.
  - The International Code of Practice is free to download and is more in depth and detailed than the old, hard to find Guideline.
  - Subsection (c) is being repealed as the Industrial Rope Access Technique, ARAA Industry Code, September 2000, published by the Australian Rope Access Association is not taught by trainers in North America and it is very difficult to find.

Worker competency

- **841 Repeal**
  - No compliance orders have been issued for this section, and the caving publications are not easily obtained.
  - It is very difficult to enforce a training requirement for guiding, climbing and caving activities that is based on skills described in technical handbooks.

Part 6 - Cranes, Hoists and Lifting Devices

Not commercially manufactured

- **60** Lifting devices that are not commercially manufactured must be certified by a professional engineer as safe to operate at least every 12 calendar months.
  - Certification by P.Eng switches from a one-time requirement to an annual one.
  - Change is in line with the existing requirements of s.13(2)(b).

Rated load capacity

- **62(3) Repeal section**
  - A-frames and gin poles must have the rated capacity marked permanently regardless if commercially manufactured or not.
  - This is currently a requirement for all lifting devices, including those for which Part 6 does not apply (<2000kg capacity).

Operator requirements

- **64(5)** New requirement for operator of lifting device to complete a visual inspection of equipment and surrounding area prior to startup.
  - Same requirement as currently required for powered mobile equipment (pme - section 257).
  - This would cover overhead cranes and other non-pme lifting devices.

Log books

- **65(3)** Additional wording added to clarify that log book details are to be entered prior to use or first lift of the day or shift.
  - Stakeholders have indicated that the current wording of this section does not require the employer to enter details into log books ASAP.
  - New wording will keep lifting device operators informed of all recent repairs, modifications, defects, incidents, etc.

Safety code for digger derricks

- **75.2 New section**
  - Digger Derricks must meet the requirements of ANSI Standard A10.31-2006, *Safety Requirements, Definitions and Specifications for Digger Derricks.*
  - This section, and revised section 88, will eliminate the need for this equipment to comply with CSA mobile crane standard.

Safety code for manually lever operated hoists

- **80.1 New section**
  - A manually lever operated hoist must meet the requirements of ASME Standard B30.21-2005, *Manually Lever Operated Hoists.*

Safety code for underhung overhead hoists

- **80.2 New section**
  - Hand chain-operated chain hoists, electric chain hoists, electric wire rope hoists, air-powered chain hoists and air-powered wire rope hoists must meet the requirements of ASME Standard B30.16-2012, *Overhead Hoists (Underhung).*

Safety code for mobile cranes, locomotive cranes and telescoping boom trucks

- **88** Mobile cranes, locomotive cranes and telescoping boom trucks must meet the requirements of ASME Standard B30.5-2011, *Mobile and Locomotive Cranes*.
  - Will eliminate the need for locomotive cranes, digger derricks, articulating boom cranes, etc. to comply with CSA mobile crane standard.
  - This standard is similar, and in some cases superior, to CSA Z150-**11**.

Personnel baskets

- **88.1** A personnel basket used with a mobile crane is designed, constructed, maintained and used in accordance with clause 6.4.8 of CSA Standard Z150-11, *Safety Code on Mobile Cranes*,
  - Adverse weather now addressed.
  - No longer any explicit requirement to test the secondary support before initiating a lift.
  - Self-retracting lanyards now recognized.

Inspections

- **88.2** Despite section 88, an employer must ensure that a mobile crane, locomotive crane or telescoping boom truck is inspected in accordance with clause 5.3 of CSA Standard CAN/CSA Z150-11, *Safety Code on Mobile Cranes.*
  - Unlike the CSA Z150-11 standard, the ASME B30.5 standard does not specify a requirement for annual or complete inspections.

Safety code for articulating boom cranes

- **88.3 New section**
  - An articulating boom crane must meet the requirements of ASME Standard B30.22-2010, *Articulating Boom Cranes.*
  - These cranes are not covered by the ASME and CSA mobile crane standards.

Safety code for side boom tractors

- **88.4 New section**
  - A side boom tractor must meet the requirements of ASME Standard B30.14-2010, *Side Boom Tractors.*
  - This section, and revised section 88, will eliminate the need for this equipment to comply with CSA mobile crane standard.

Non-destructive testing

- **89** Section wording change to require annual non-destructive testing on the load-bearing components of side boom tractors.
  - Stakeholders have expressed concern with the frequency or absence of NDT on this equipment.

Counterweights and outriggers

- **90** Mobile cranes, locomotive cranes and telescoping boom trucks equipped with outriggers are to be set up with the outriggers on load-bearing floats or pads of adequate size, strength and rigidity, and outriggers extended and supported by solid footings before being used.
  - Reworded to capture the section 92.2 requirements for outriggers floats and pads.

Load blocks

- **92.1** Reworded to require load blocks of a mobile crane be maintained and repaired only in accordance with the manufacturer's specifications.
  - Current wording requires following CSA Z150-98 (R2004) if manufacturer does not specify.
  - Change will reflect the decision by CSA to remove the requirements for tear down of the load blocks and lubrication of the hooknut every five years.

Outriggers

- **92.2 Repeal**
  - Requirements rolled into section 90.

Safety code for overhead cranes

- **94** Reworded to require overhead cranes meet the applicable requirements of ASME B30.2, B30.11 or B30.17 instead of CSA-B167-96 (R2007).
  - Three ASME volumes much more robust, including need for daily inspections.
  - The CSA standard is only 7 pages long and requires design and testing in accordance with the 1964 version.
  - Stakeholders have indicated that most overhead cranes in Alberta are designed in accordance with B30.17.

Safety code for portal and pedestal cranes

- **107.1 New section**
  - A portal or pedestal crane must meet the requirements of ASME B30.4-2010, *Portal and Pedestal Cranes*.

Part 21- Rigging

Design Factors

- **292.1(2)** Reworded to additionally require rigging used for towing be legibly and conspicuously marked as being for towing purposes only.
  - Will help prevent the accidental use of rigging components used for towing in hoisting operations.
  - “Safety” factors being reworded as “Design” factors throughout section. ASME did this in their standards since their legal folks consider “safety factor” to imply “free from all harm”.

Load ratings

- **293(2) Repeal subsection**
  - This subsection exempts the requirement in subsection 293(1) to mark rigging with the load rating if “not practicable”. Stakeholders have indicated that it is always possible to mark/label rigging.
  - ASME requires labelling of rated load on rigging hardware, slings and hooks with no exceptions. Repealing this subsection will require the employer ensure that the maximum load rating is legibly and conspicuously marked on all rigging.

Standards

- **297(5) New section**
  - All hooks must meet the requirements of ASME B30.10-2009, *Hooks.*

Standards

- **297(6) New section**
  - All rigging hardware, other than hooks, must meet the requirements of ASME B30.26-2010, *Rigging Hardware*.

Slings

- **298(1)** Reworded to require marking the angles upon which all hitches are based, and the type of fibre material from which the sling is constructed.
  - ASME B30.9-2010, *Slings*, requires only *"the rated loads for at least one hitch type and the angle upon which it is based*".

Slings

- **298(2)** Reworded to clarify that the prohibition of pull tests of slings beyond 100% of the rated capacity does not apply to sling manufacturers when done in accordance with ASME B30.9-2010, *Slings*.
  - The intent of the original requirement was to prevent employers from exceeding the rated capacity of slings.
  - Sling manufacturers have expressed concern that the current wording prevents them from conducting proof tests on new and repaired slings at 200%+ capacity.

Safety latches

- **303** Remove the word “shackle” everywhere in section.
  - Current wording requires the employer ensure hooks have a safety latch, mousing or shackle to close the hook opening if the hook could cause injury if it is dislodged while in use.
  - Stakeholders have indicated that shackles are used as rigging hardware, but not as an alternative to hook safety latches or mousing.

Makeshift rigging and welding

- **304(c) Repeal subsection (c)**
  - Alloy steel chain rigging can be welded or annealed, and repairs of alloy steel chains by welding is already covered by subsection (b).
  - ASME B30.9 covers very specific reduction factors for chains exposed to heat, and the temperature at which the chains must be removed from service.

Rejection criteria – wire rope

- **306 Repeal section**
  - Rejection criteria for wire rope to be removed from section 306 as it is better covered in ASME B30.5, *Mobile and Locomotive Cranes*, and ASME B30.9, *Slings*.

Rejection criteria – damaged hooks

- **309 Repeal section**
  - Rejection criteria for hooks to be removed from section 309 as ASME B30.10-2009, *Hooks*, goes into great detail regarding removal criteria.

Part 23 - Scaffolds & Temporary Work Platforms

CSA Standard applies

- **323(2) New subsection**
  - Scaffolds to be inspected according to the requirements of clause 8 of CSA Standard CAN/CSA-Z797-09, *Code of practice for access scaffold.*
  - Inspection covered in CSA S269.2 (subsection 323(1)) is very general since it is mainly a design standard. CSA Z797 provides detailed inspection criteria as well as rejection criteria for lumber, laminated, and manufactured scaffold planks.

Tagging requirements

- **326** Method of communication of scaffold status expanding to include written and verbal communication as alternatives to tagging requirement.
  - Officers and employers have indicated that tagging requirement alone is problematic.
  - Proposed wording closely mimics clause 7.2.3 of CSA Standard Z797, *Code of practice for access scaffold.*

Scaffold planks

- **329(6) New subsection**
  - Planks that have been used as sills are to be clearly marked to indicate they have been used as sills and shall not be used as scaffold planks.
  - Addresses stakeholder concerns that "*scaffold planks are sometimes used as mud sills*".

Pump jack scaffolds

- **335.1(1) New section**
  - Components of a pump jack scaffold system are to be compatible with one another and with the environment in which they are used, and the compatibility of components of different systems or manufacturers is to be verified in writing by the original scaffold manufacturer, or certified by a professional engineer.
  - Addresses concerns with use of pump jack scaffolds that have components from multiple manufacturers, components that are designed and installed by the user (such as makeshift guardrails), or components that are not intended for the given purpose (ladders being used as workbenches).

Pump jack scaffolds

- **335.1(2) New section**
  - Pump jack scaffold poles are not to be made of wood.
  - Pump jack poles made of wood are no longer used by industry in Alberta and are inferior to the widely available metal pump jack poles.
  - The fully erected height of a pump jack scaffold system is not to exceed 14.7 metres in height.
  - The maximum height is based on two 24 ft pump jack poles being used together.

Standards

- **347(6) New standard referenced**
  - Mast climbing elevating work platforms must meet the requirements of CSA B354.5-07 (R2011).
  - This new CSA standard is far more prescriptive than the currently referenced standard ANSI/SIA A92.9-1993.

Standards

- **347(6.1) New subsection**
  - A transport platform used to transport workers, materials and necessary tools to various access levels on a building or structure must meet the requirements of ANSI/SIA A92.10-2009, *Transport Platforms.*
  - Stakeholders have indicated that this equipment is starting to be used in Alberta, and is designed in accordance with this standard.

Part 32 - Excavating and Tunneling

Locating buried or concrete-embedded facilities

- **447(1)(e) New subsection**

  Employers must have verification at the worksite that the owners of underground facilities have been notified and that the location of any facilities at the proposed excavation site have been determined.

  – Officers have indicated that proof of locates is not always readily available for viewing at the excavation site.

Spoil Piles

- **453** Distance of leading edge of spoil pile from edge of excavation being increased from 1 metre to a distance equal or greater than the depth of the excavation.
  - The consultant hired to evaluate the current trench shoring requirements calculated earth pressures on the shoring members based on the absence of spoil piles. As such, the consultant recommended increasing the distance that spoil piles are placed away from the excavation.

Schedule 9

Shoring components used in excavations and trenches

Soil Type	Depth of excavation or trench (metres)	Uprights		Stringers		Cross Braces			
						Minimum dimensions (millimetres)		Maximum spacing	
		Minimum dimensions (millimetres)	Maximum horizontal spacing (millimetres)	Minimum dimensions (millimetres)	Maximum vertical spacing (millimetres)	Width of excavation or trench less than 1.8 metres	Width of excavation or trench 1.8 to 3.7 metres	Vertical (millimetres)	Horizontal (millimetres)
Hard and compact soil	1.5 to 3.0	38 x 235	1800	184 x 184	1200	89 x 89	140 x 140	1200	1800
	>3.0 to 4.5	64 x 235	1200	184 x 184	1200	140 x 140	140 x 140	1200	1800
	>4.5 to 6.0	64 x 140	Close/Tight	235 x 235	1200	184 x 184	184 x 184	1200	1800
Likely to crack and crumble soil	1.5 to 3.0	64 x 235	1200	184 x 184	1200	140 x 140	140 x 140	1200	1800
	>3.0 to 4.5	64 x 235	900	235 x 235	1200	140 x 140	184 x 184	1200	1800
	>4.5 to 6.0	89 x 140	Close/Tight	286 x 286	1200	184 x 184	235 x 235	1200	1800
Soft, sandy or loose soil	1.5 to 3.0	64 x 140	Close/Tight	286 x 286	1200	140 x 140	184 x 184	1200	1800
	>3.0 to 4.5	89 x 140	Close/Tight	286 x 286	1200	184 x 184	235 x 235	1200	1800
	>4.5 to 6.0	89 x 140	Close/Tight	286 x 286	1200	235 x 235	235 x 235	1200	1800

Underlined dimensions are different than those currently specified and are based on the earth pressure calculations performed by a geotechnical engineer

Part 37 - Oil and Gas Wells

Part 37 – Oil and Gas Operations

- **Application**
  - Scope of this part has been broadened by naming specific activities involved in oil and gas operations.
  - producing, distributing and processing oil, gas, crude bitumen or geothermal energy from a well are the new inclusions.
- **Re-Structuring of Part**
  - Part 37 has been restructured in to six sub parts, each entailing the requirements pertaining to specific operation. New section numbers will be allocated after the final draft is prepared.

Re- Structuring of Part 37

- **Divisions**
  I. General Oil & Gas Operations
  II. Oilfield Equipment Design & Integrity
  III. Geophysical Operations
  IV. Drilling & Well Servicing Equipment Specifications
  V. Drilling & Well Servicing Equipment Operation
  VI. Oilfield Trucking

I - General Oil & Gas Operations

- **Health & Safety Management System**
  - Employers, owners and prime contractors are required to establish a health & safety management system based on the size, nature and complexity of operations.
  - Basic components of such a system shall include identification, analysis and control of workplace hazards, worker competency and training, investigation of serious incidents and emergency response.
- **Application of Oil & Gas Industry Recommended Practices**
  - OHS recognizes the effectiveness of IRPs and has encouraged employers to perform work in accordance with them where appropriate.

I - General Oil & Gas Operations

- **Size of Work Area**
  - An employer must ensure that work area is of sufficient size and can accommodate safe movement of equipment, emergency activities etc.
- **Retaining Walls & Diked Area**
  - Such areas to be treated as confined space and requirements of Part 5 “Confined Space” to be filled
- **Fire Hazards**
  - Use of flames (smoking, ignition etc.) within 25 m of a wellbore is strictly prohibited except in accordance with Sec 169 of the Code “ Hot Work”
  - Tanks with presence of pyrophoric iron Sulphides must be kept wetted down or in an inert atmosphere.

I - General Oil & Gas Operations

- **Control of Ignition Sources**
  - Employers are required to ensure that the internal combustion engines are shut down in class I hazardous locations (CEC 2012), diesel engines have a positive air shutoff and tanks/open containers used for storage of flammable substances are protected from sources of ignition.
- **Control of Static Electricity**
  - Employers are required to control the static electricity by taking reasonable measures such as grounding, bonding, bottom filling of containers etc.
  - A wellhead may be used as a grounding electrode while setting up drilling rig or service rigs according to requirements of CEC 2012.

I - General Oil & Gas Operations

- **Handling Pipe and Tubular Goods**
  - Employers are required to restrain pipes or tubular goods from uncontrolled movement. This section includes detailed requirements.
  - Requirements related to transfer of pipes between pipe racks, catwalks or trucks has been added.
- **Oilfield Sample Containers**
  - This is a new title which replaces “Gas Sample Containers”.

II - Oilfield Equipment Design and Integrity

- **Pumping Equipment**
  - Change in Title to the existing Sec. 776 “ Drilling Fluid”
  - Revision of the order has been proposed to better capture the safety issues specific to pumping non-compressible fluids with positive displacement pumps.
- **Temporary or Portable Well Site Piping**
  - Change in Title to the existing Sec. 783 “ Well site Piping System” as well as the wording has been revised accordingly.
  - Newer version of referenced standard ANSI B1.20.1 has been proposed to adopt.

III - Geophysical Operations

- **Seismic Drilling Operations**
  - Change in Title to the existing Sec. 757 “ Geophysical Operations”
  - Two workers are required to be present on the same shot hole while drilling.

IV - Drilling and Well Servicing Equipment Specifications

- **Guy Lines and Ground Anchors for Derricks and Masts**
  - Change in Title to the existing Sec. 763 “ Guy Lines” as well as an option of employing a professional engineer to certify the installations in addition to existing two requirements has been proposed.
  - This is a merger of sections 763 and 764 as these were related issues with the identical references
- **Emergency escape system**
  - Change in Title to the existing Sec. 762 “ Emergency Escape Route” as well as the replacement of word ‘buggy’ with ‘system’ has been proposed.

IV - Drilling and Well Servicing Equipment Specifications

- **Power Tongs**
  - Change in Title to the existing Sec. 774 “ Tong Safety” has been proposed.
- **Emergency escape system**
  - Change in Title to the existing Sec. 762 “ Emergency Escape Route” as well as the replacement of word ‘buggy’ with ‘system’ has been proposed.
- **Catheads**
  - Except the existing Sec 771(1) all the remaining sub sections in this section have been proposed to be repealed.

IV - Drilling and Well Servicing Equipment Specifications

- **Drilling Rig, Service Rig, and Snubbing Unit Inspections**
  - The inspection requirements for hybrid equipment has been proposed as an addition in this section.
- **Operational Readiness Inspection**
  - Change in Title to the existing Sec. 760 “ Safety Check” as well as the inclusion of snubbing unit and hybrid equipment in addition to drilling and service rig has been proposed.
- **Handling Blowout Preventers**
  - Requirements regarding Installation of blowout preventers have been proposed

IV - Drilling and Well Servicing Equipment Specifications

- **Derricks and Masts**
  - Two new requirements regarding lifting points have been proposed.
- **Drawworks**
  - Two new requirements regarding minimum number of wraps of the hoisting line have been proposed.
- **Man Lifting and Rescue**
  - Change in Title to the existing Sec. 770 “ Tugger or Travelling Block” has been proposed.

V - Drilling and Well Servicing Specialized Operations

- **Well Swabbing**
  - Requirements regarding fluid recovery during darkness have been proposed.
- **Servicing of Wells**
  - Change in Title to the existing Sec. 781 “ Well Servicing” as well as merger of sections 781 & 782 has been proposed.
  - Referenced standard CSA-Z321-96 (R2006) has been withdrawn.
- **Man Lifting and Rescue**
  - Change in Title to the existing Sec. 770 “ Tugger or Travelling Block” has been proposed.

VI – Oilfield Trucking

- **Transporting Liquids**
  - Liquids must be transported into properly designed and constructed containers as per Federal TDG requirements.
- **Rigging Up and Rigging Out of Equipment**
  - Written procedures must be available for rigging up and out of equipment based on the hazard assessment.
- **Design and Operation of Fluid Trucking Equipment**
  - Requirements regarding the design of such trucks and competence of drivers have been proposed.

VI – Oilfield Trucking

- **Loading and Unloading of Fluid Handling and Vacuum Trucks**
  - Requirements pertaining to loading and off loading of vacuum trucks have been proposed.
- **Venting of Tank and Vacuum Trucks**
  - Tank and vacuum trucks or loading facilities must have a venting system for protecting workers.

Summary of Changes?

# of Existing Sections with Proposed Changes	# of new Sections	# of Existing Sec with no change	Total Sections
17	14	13	44

Part 33 - Explosives

Part 33 - Explosives

- **Safe Work Procedure**
  - A generic requirement for explosive related activities
- **Safe Distance**
  - To be decided by employer in safe work procedure depending on the nature of activities
    - Specifying a common safe distance is not practical as this distance may differ depending on the activities
    - Special effects and movie industry cannot follow this requirement as burning is integral part of their operations

Part 33 - Explosives

- **Blasting within 60 m of overhead power line**
  - New requirements to allow blasting within 60 m of overhead power line
    - Seismic industry some time has to conduct activities within 60 m and they have to apply for an acceptance
    - Director of Inspection issues acceptance based on the information provided on the paper work

Part 33 - Explosives

- **Oil well Blasting and Perforating**
  - Additional option for industry to use safe work procedures based on *Recommended Practice for Oilfield Safety, API- RP -67, Second Edition 2007*
    - API RP 67 is already followed by industry and also strongly recommended to OHS

Part 33 - Explosives

- **Pyrotechnics and Fireworks Operations**
  - New Section added
- **NFPA Standards 1123 and 1126 Replaced with NRCan Manuals**
    - NFPA Standard 1123, *Code for Fireworks Display* (2006 Edition), and
    - NFPA Standard 1126, *Standard for the Use of Pyrotechnics Before a Proximate Audience* (2006 Edition).
  - Display Fireworks Manual, 2010, by Natural Resources Canada
  - Pyrotechnic Special Effects Manual, April 2003 – Second Edition, by Natural Resources Canada.

Part 36 - Mining

Part 36 – Overall Changes

- **Approval by 'Director of Inspection' minimized by certification of a professional engineer**
- **'Exemption' requirements repealed**
- **'Coal' deleted from most of u/g coal mines**
- **Mine Plans, Mine Roads and Mine Walls**
  - Additional requirements by adding new subsections
- **Mine Ventilation, Seals, control of equipment, Magazines and Refuge Stations**
  - Additional requirements
- **Reference Standards**
  - Latest versions introduced
  - New standards

Part 36 - Mining

- **Building and Equipment Safety**
  - All pressure vessels on and in mine sites must have a Canadian Registration Number (CRN) in accordance with *CSA B51-11 , Boiler, Pressure Vessel, and Pressure Piping Code*. [New sub-section, 532(2)]
- **Record Retention**
  - Record retention time increased from 12 months to 24 months
- **Excavation**
  - At a surface mine, walls of excavations to be designed and certified by a professional engineer. [535(2)]

Mine Plans

- Modification in existing requirements
- New requirements
- An employer at an underground mine must ensure that there is a mine plan that shows the location of all fire fighting pipelines, water control valves, fire stations and fire cabinets in the mine.
- The employer at an underground ‑mine must ensure that the mine plan is:
  - (i) reviewed at intervals of not more than three months and updated as required, and
  - (ii) readily available to workers in a work area during an emergency.
- Mine plans will be certified by a professional engineer annually. [subsections of 533]

Mine Roads

- **New width requirements**
- mine road is built and maintained so that the largest vehicle in use on the road can travel safely along its distance.
- The width of a one lane mine road should be 2.0 times the maximum width of the largest vehicle in use on the mine road.
- The width of a two lane mine road should be 3.5 times the maximum width of the largest vehicle in use on the mine road.
  The width of a three lane mine road should be 5.0 times the maximum width of the largest vehicle in use on the mine road.
  The width of a four lane mine road should be 6.5 times the maximum width of the largest vehicle in use on the mine road.
- **all berms are constructed of materials of suitable particle size and composition to maintain long-term stability during all seasons.**
- **539(4) An employer must provide sufficient mobile equipment for maintenance of mine roads during seasonal periods that require greater than normal road maintenance efforts.**
- **539(5) An employer must provide dust suppression on all mine roads sufficient to protect visibility on the road**

Part 36- Mining

- **Discard from Mines**
  - A dump or impoundment design to be certified by a professional engineer
- **Mine Walls**
  - a new subsection for mine walls procedures
  - Requirement of a competent Person to monitor high-wall stability, top of high wall inspections
- **Reporting dangerous occurrences**
  - Additional requirements for investigating a dangerous occurrence and keeping the records for two years
  - Submitting report to Director every six months

Part 36- Mining

- **Emergency response team**
  - Additional requirement for emergency response team member to be provided with a document bearing a recent photograph of that rescue team member, setting out the results of the medical examinations undergone by that rescue team member and a summary of the training and practices undertaken by that rescue team member.
- **Fire Precautions**
  - All vehicles and stationary equipment acquired, installed, or refurbished for use in underground mines shall be equipped with automatic fire suppression systems.

Refuge Stations

- (a) For underground mines with a history of explosive gases, once the underground mine has advanced inby more than 300 meters, an employer at an underground mine must ensure that there are refuge stations located within 300 meters from the nearest working face, and at strategic places outby no more than one (1) hour foot-travel distance apart such that a person leaving his working place is no more than a 30-minute travel distance from a refuge alternative or safe exit.
- (b) For underground mines with no history of explosive gases, a refuge station must be provided for every employee who cannot reach the surface from his/her working place within a time limit of one hour foot-travel. Outby refuges must be positioned so that the employee can reach a refuge station or safe exit within 30 minutes from the time he/she leaves his/her workplace.
- (c) The location must be and certified by a professional engineer and clearly marked on all escape plan maps.
- 559(2) A refuge station must
- (a) be big enough to safely accommodate all workers working in the vicinity during one shift for a period of no less than 96 hours..

Part 36- Mining

- **Electrical drawings**
  - To be certified by professional engineer
- **Overhead power lines**
  - 'CSA Standard M421-11 *Use of Electricity in Mines'* requirements to be followed.
- **'Prototype' changed to 'First-time-use'**

Part 36- Mining

- **Heated Rock or Hot Holes**
  - New requirement to have certified procedure by professional engineer, in areas where the rock or material exceeds 55 degree Celsius.

Underground Coal Mine Manager

- **New Requirements;**
  - Each underground coal mine operation to be managed by a separate certified underground coal mine manager.
  - The worker appointed as an acting underground coal mine manager must be a certified underground coal mine manager

Control of equipment

- **Proximity detection / collision avoidance systems**
  - Requirement of a proximity detection/collision avoidance systems to be installed and maintained on continuous miner and underground mining equipment
  -

Part 36- Mining

- **Extractions**
- Additional requirements for the extraction plan showing the method and sequence of extraction
- **Operating procedures**
  - A code f practice to be revised by employer for installing, maintaining or removing ground supports, under certain conditions

Underground Ventilation System

- **Ventilation system**
  - return air is not re-entering a fresh air split
  - fresh air to be directed over workers and equipment towards the working face and then removed directly to a return air way
  - air passing by the gob must not be used to ventilate a working face
  - compressed air may only be used for ventilation in refuge chambers and must be specialized for ventilation purposes.
- **Air velocity**
  - A minimum air velocity of 0.3 m/sec to be maintained at each working face and all accessible areas of mine

Underground Ventilation System

- **Stoppings**
  - Ventilation stoppings shall be maintained as close as reasonably practicable to the working face .
  - Ventilation stoppings shall be constructed of non-combustible material and sealants shall have a reduced flame spread index such that the stopping will serve its function for one hour
- **Seals**
  - Seals are to be installed to seal-off all worked out areas and to contain fire, spontaneous heating or another similar hazard
  - Additional requirements about seals

Underground Ventilation System

- **Fans**
  - in the event of a failure of one or more of the active fans there remains sufficient spare capacity to ensure positive airflow in the mine
  - each return portal shall be equipped with CH4, CO, smoke detectors and if the return air current contains 1% (20% LEL) of CH4,or 100 ppm (0.01 %) CO or more an automatic alarm shall be sounded at the permanently attended surface communication station
  - An employer shall inspect the main fan(s) and booster fans every six months with respect to the mechanical, power supply, monitoring / recording systems and shall keep such record of inspection for at two years.

Underground Ventilation System

- **Reverse flows**
  - should any part of a mine ventilation system require the reversal of air flow then
    - the whole mine ventilation system shall be re-designed and certified by a professional engineer
    - safe operating procedures shall be developed and communicated to the affected workers prior to the reversal of the ventilation system.
- **Auxiliary fans**
  - the auxiliary fan(s) for ventilation must be installed in the fresh air split in such a way that no recirculation takes place and
  - the quantity of air in each fresh air split is at least 50 % greater than the capacity of the auxiliary fan

Underground Ventilation System

- **Ventilation monitoring**
  - Weekly ventilation plan and monitoring requirements
  - Weekly ventilation plan to be submitted to the OHS within same week it was created.
- **Operating in split**
  - Only one machine to operate in one ventilation split
- **Flammable gas levels**
  - Additional requirements of weekly bleeder system inspection flammable gas levels.

Details of proposed Changes

- After approval from the Minister, three column documents related to all proposed changes will be posted at;

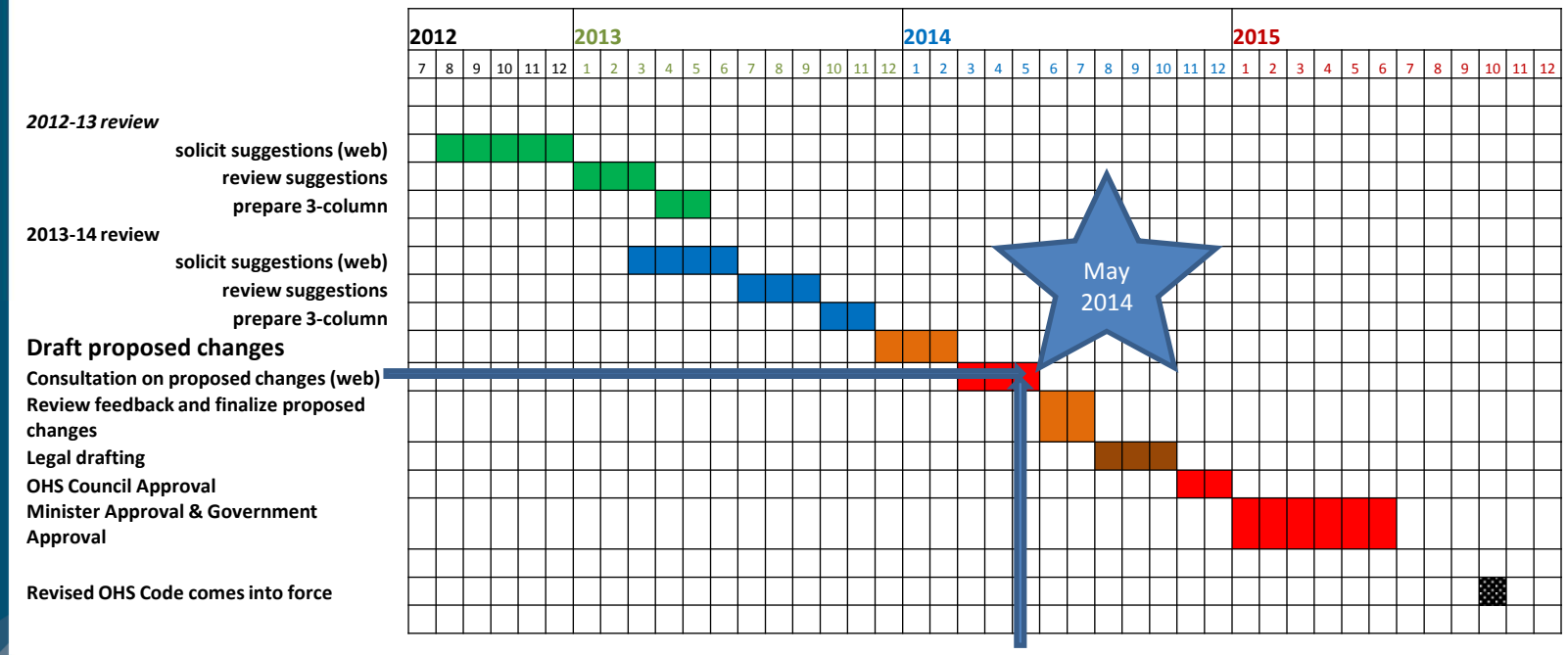
- http://work.alberta.ca/occupational-health-safety/307.html

Way Forward

- Public consultation after Minister’s approval
- Proposed changes posted on web
- Stakeholders will be informed about the consultation by mail, e-news, email etc.
- Feedback from public consultation reviewed by working groups
- Internal processes like OHS Council approval, legal drafting and Minister's final approval
- Department is planning to have the OHS Code enacted in 2015

Work Plan
(consultation now postponed to fall 2014)

OHS Code Review Timelines



For any Feedback/Questions/Comments

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