

## INDEX

Note: The numbers appearing in this index refer to section or "rule" numbers.

**1,2-Dibromoethane (Ethylene dibromide)**

code of practice required, 26, Schedule 1, Table 1

**1,3-butadiene**

code of practice required, 26, Schedule 1, Table 1

**3 decibel exchange rate** *See* noise**A****A-frames**

safe practices, 75

**abrasive blasting**

crystalline silica use, 39  
respiratory protective equipment, 255

**abrasive wheel** *See* grinders**Access Scaffolding for Construction Purposes (CSA), 3, 323****acetylene**

upright storage of cylinders, 171(6)

**Act**

*See* Occupational Health and Safety Act

**actuated fastening tools**

application of Code, 465(3)  
safety precautions, 374

**adjustable lanyard for work positioning, 148**

*See also* lanyards

**advanced first aider**

defined  
advanced first aider, 1  
in definition of nurse, 1  
as first aid provider, 181(2)—(5)  
non-first aid duties, 181(4)  
*See also* first aid and first aiders

**aerial devices** *See* elevating platforms and aerial devices**agricultural tractors**

rollover protective structures, 270  
seatbelts and restraint systems, 271  
*See also* powered mobile equipment

**air gouging** *See* hot work**air line respirator, 249—252**

facial seal, 250  
for immediate danger, 251  
for no immediate danger, 252  
quality of breathing air, 249  
*See also* respiratory protective equipment

**air purifying equipment, 253****airborne OELs** *See* occupational exposure limit (OEL)**airless spray machinery**

nozzle guards, 170.1(5)—(6)

**alarm systems** *See* warning devices and alarms**Alberta Electrical and Communication Utility Code (Alberta Municipal Affairs), 3, 227, 798, 800, 803(a)****Alberta Fire Code (Alberta Municipal Affairs), 3, 170.1(3), 171(1)(b)**

in definition of combustible liquid, 1  
in definition of flash point, 1

**Alberta Municipal Affairs, 3****all-terrain vehicles, 280—282**

defined, 1  
documents  
safe work procedures on sloping ground, 282(2)  
load and slope limitations, 282  
manufacturer's specifications  
safe work procedures on sloping ground, 282(2)  
operator's manual, 281  
safety helmets, 236  
three-wheeled cycles, prohibition, 280

**allied welding processes** *See* welding or allied process**alloy steel chain**

makeshift rigging and welding, 304(c)  
sling standard, 297

**alone, working** *See* working alone**aluminum alloys**

aluminum alloy ferrules, 301(2)  
light metal alloys in mines, 538

**ambulance services, 180**

availability under normal conditions, 180(1)—(2)  
communication systems to summon, 180(4)  
communication systems with health care facility, 180(3)(c)  
licensed services, 180(2)—(4)  
when not available, 180(3)  
*See also* first aid and first aiders; health care

**Ambulance Services Act, 3, 180(2)—(4)****American National Standard for Automotive Lifts — Safety Requirements for Construction, Testing and Validation (ANSI), 3, 112****American National Standard for Industrial Head Protection (ANSI), 3, 234, 831(1)(b)—(c), 831(2)(b)—(c), 844(c)****American National Standard for Ladders — Portable Metal — Safety Requirements (ANSI), 3, 135(c)****American National Standard for Ladders — Portable Reinforced Plastic — Safety Requirements (ANSI), 3, 135(d)****American National Standard for Ladders — Wood — Safety Requirements (ANSI), 3, 135(b)****American National Standards Institute (ANSI), 3****American Petroleum Institute (API), 3**

## Index

- American Society for Testing and Materials (ASTM), 3**
- American Society of Mechanical Engineers (ASME), 3**
- anchors, 152—152.4**  
defined, 1  
anchor connectors, 152.2(4)—(5)  
anchors  
    for boom-supported work platforms and aerial devices, 156(1)  
    for powered mobile equipment in mines, 542(a)  
duty to use, 152.2  
Flemish eye splices, 152.4  
independence of anchors, 152.3  
inspection by employee before use, 152.2(2)  
maintenance and repair, 152.2(3)  
oil and gas operations, ground anchor pull-tests, 764  
permanent anchors, 152  
personal fall arrest system, 152.1(2)  
rope access work, industrial, 828—829  
rope access work, non-industrial, 843  
temporary anchors  
    personal fall arrest system, 152.1(2), 152.3  
    travel restraint systems, 152.1(1)  
wire rope sling as, 152.4
- animals, lifting** *See lifting and handling loads*
- ankle protection** *See foot protection and footwear*
- ANSI (American National Standards Institute), 3**
- API (American Petroleum Institute), 3**
- approved**  
defined, approved to, 1  
approved equipment, identifying marks, 15  
*See also* specifications, certifications and standards
- aprons as protective clothing**  
duty to use, 228  
use of, 242—243  
*See also* personal protective clothing
- ARAA (Australian Rope Access Association), 3**
- arboriculture** *See tree care operations*
- arm protection**  
personal protective clothing, 242  
*See also* personal protective clothing
- arsenic and arsenic compounds**  
code of practice required, 26, Schedule 1, Table 1
- articulating aerial devices** *See elevating platforms and aerial devices*
- AS/NZS (Standards Australia/Standards New Zealand), 3**
- asbestos, 16—27, 31—38**  
defined  
    abate, 1  
    asbestos waste, 1  
    exposed worker, 1  
    restricted area, 1  
buildings, 31—36  
    air distribution systems, prohibition, 33  
    crocidolite asbestos, prohibition, 32(1)  
    release of asbestos, unsafe condition, 31  
    removal of asbestos before demolition, 34, 36, 417  
    removal, encapsulation, or enclosure of asbestos before renovation or alteration, 35—36  
    spraying asbestos, prohibition, 32(2)  
code of practice required, 26, Schedule 1, Table 1  
decontamination  
    methods, 28(c)  
    of protective clothing, 30  
Director of Inspection  
    projects, notice, 36  
documents  
    code of practice, 26  
    health assessment, 40  
    original certificate of completion of asbestos course, 37  
health assessment of exposure, 40  
    contents of report, 40(2)  
    costs, 40(11), 40(13)  
    frequency of assessments, 40(6)—(8)  
    information to worker, 40(3)  
    performed during work hours, 40(12)  
    privacy of information, 40(5)  
    refusal by worker, 40(9)—(10)  
    retention of records, 40(4)  
housekeeping, 28(b)  
OEL, Schedule 1, Table 2  
OEL measurements (NIOSH), 20(3)  
release of, 28(a)  
restricted areas, 29  
    asbestos worker course, 37  
    authorized persons, 29(1), 29(2)(b), 37  
    decontamination of workers, 29(4)(c)  
    emergencies, 29(5)  
    harmful substances, 29(2)  
    no eating, drinking or smoking, 29(2)(c)  
    prohibited activities, 29(2)(c)  
    protection of worker's street clothing, 29(4)  
    protective clothing for workers, 29(4), 30  
    signs, 29(2)—(3)  
signs for restricted area, 29(2)—(3)  
training of workers, 37  
waste, 38  
    labelling containers, 38(2)  
    sealed containers, 38(1)  
    unnecessary accumulations, 28(b)
- ascenders**  
standards for industrial rope access work, 837  
*See also* rope access work

**ASME (American Society of Mechanical Engineers), 3**

**Association of Canadian Mountain Guides, 3**

**ASTM (American Society for Testing and Materials), 3**

**atmospheric electrical storms** *See* **weather**

**atmospheric tests in confined spaces, 52**  
*See also* confined and restricted spaces

**ATV** *See* **all-terrain vehicles**

**audiometric testing, 223—224**  
defined  
    abnormal audiogram, 1  
    abnormal shift, 1  
    audiometer, 1  
    audiometric technician, 1  
    abnormal audiograms, 223(3)  
    audiometric technician role, 223(2)  
    background noise during testing, permissible levels, 223(2)(c), Schedule 3, Table 3  
    baseline tests, 223(1)  
    confidentiality, 223(2)(g), 223(4)—(5)  
    costs and credit of time, 223(1), 224  
    documents, in noise management programs, 221(2)(f)  
    documents, records of abnormal audiograms or abnormal shifts, 223(3)—(4)  
    information to workers, 223(3)(a), 223(4)(a)  
    medical history from worker, 223(3)(b)  
    noise management program effectiveness, 223(4)(c)  
    retention of records, 223(4)(d)  
    to physician or audiologist, 223(3)(c), 223(4)(b)  
    documents, records of testing, 223(2)  
    audiometer calibrations, 223(2)(b)  
    confidentiality, 223(2)(g)  
    information to workers, 223(2)(e)  
    retention of, 223(2)(f)  
    test results, 223(2)(d)  
    how often to test, 223(1)  
    types of tests, 223(1)  
*See also* noise

**auger mining** *See* **surface mines**

**Australian Rope Access Association, 3**

**automobiles** *See* **vehicles**

**Automotive Lifts — Safety Requirements for Operation, Inspection and Maintenance (ANSI), 3, 112**

**auxiliary steering in mine vehicles** *See* **vehicles, use in mining**

**avalanche control, 515**  
    priming charges away from site, 515(2)(a)  
    priming charges, conditions, 515(3)  
    priming more than one charge, 515(2)(b)  
    pull-wire fuse lighters, prohibitions, 515(4)—(5)  
*See also* explosives (other than at mine sites)

**B**

**back hoes, 270—271**  
    rollover protective structures, 270  
    seatbelts and restraint systems, 271  
*See also* powered mobile equipment

**backstops**  
    for powered mobile equipment, 459—460  
    for powered mobile equipment in mines, 542(b)

**bags** *See* **containers**

**band saws, 378—379**  
    band saw wheels, 379  
    blade crack limits, 378  
    retensioning, 378(3)  
    shake band saw blades, cracked, 378(4)

**barrels** *See* **containers**

**barriers**  
    public highway traffic control, 194(7)(b)  
    underground coal mine explosion barriers, 745  
*See also* safeguards and warnings

**bars**  
    in powered mobile equipment with ROPS, 271(2)

**baths and showers** *See* **toilets and washing facilities**

**battery systems**  
    electric blasting, prohibition, 505  
    underground mines  
        battery charging stations, 566(1), 662(6)  
        battery repairs, 566(2)

**beards** *See* **facial hair**

**Below the Hook Lifting Devices (ASME), 3, 297(1)**

**belts, conveyor** *See* **conveyor belts**

**benzene**  
    code of practice required, 26, Schedule 1, Table 1

**beryllium**  
    code of practice required, 26, Schedule 1, Table 1

**bicycle riders**  
    safety helmets, 235

**bins**  
    safeguards and warnings, 316

**biohazardous materials, 526—530**  
defined  
    biohazardous material, 1  
    contaminant, 1  
    harmful substance, 1  
    safety-engineered medical sharp, 1  
    sharps, 1  
    hazard elimination and control, 525.1  
    limited exposure, 529  
    policies and procedures, 525.2(4)—(7), 528  
    post-exposure management, 530  
    removal before demolition, 417  
    respiratory protective equipment  
        code of practice, 245

## Index

- training in use of, 245(2)
- when needed, 244
- sharps
  - containers, 526
  - hazard elimination and control, 525.1
  - medical sharps, 525.2
  - recapping waste needles, prohibition, 527
- blades** *See* sharps
- blades, saw** *See* saws and sawmills
- Blankets of Insulating Material for Electrical Purposes (ULC)**, 3, 799(1)
- blast hole drill**
  - dust control at mine site, 532, 537
- blasters and blasting** *See* explosives (at mine sites); explosives (other than at mine sites); mines and mining, definitions
- Blasting Explosives and Detonators — Storage, Possession, Transportation, Destruction and Sale (NRCAN)**, 3, 470(1), 508
- blasting machine, 505—506**
- blasting mat**
  - defined, 1
  - above-ground charge, 502
  - community protection, 498(b)
- blood borne pathogens**
  - exposure control, 525.1
  - See also* biohazardous materials
- blood lead level test, 43**
- blowoffs and blowouts** *See* tire servicing
- boatswain's chairs, 351**
  - defined, 1
  - ropes, 351(3)—(4)
  - standards, 351(1)
  - See also* elevating platforms and aerial devices
- body belts**
  - defined
    - body belt, 1
    - lanyard, 1
  - for wood pole climbing, 149
  - standards, 142.1(a)
- Body belts and saddles for work positioning and travel restraint (CSA)**, 3, 142.1(a)
- body harness** *See* full body harness; sit harness
- body protection**
  - duty to use, 228
  - use of, 242—243
- Boom-Supported Elevating Work Platforms (ANSI)**, 3, 347(1)
- booms and boom trucks**
  - defined
    - boom, 1
    - boom truck, 1
    - jib, 1
  - boom and jib stops, 92
  - counterweights and outriggers, 90, 92.2
  - ladders on extending booms, prohibitions, 128
  - load charts, 63(1)
  - personal fall arrest system, 156
  - preventing damage, 92
  - See also* cranes; elevating platforms and aerial devices
- booster fans in mines**
  - fan blades with light metal alloys, 538
  - fire resistant materials, uses, 548(2)(c)
  - operations, 722, 725
  - See also* ventilation systems
- bootleg, 486**
  - defined, 1
  - destruction, 486(2)
  - examination, 486(1)
  - See also* explosives (other than at mine sites)
- boots** *See* foot protection and footwear
- bottles** *See* containers
- boxes** *See* containers
- boys** *See* males
- bracelets, 362**
  - contact with equipment and machinery, safety precautions, 362
  - medical alert bracelets, 362(3)
- bracing, 457—458**
  - alternatives to temporary protective structures, 457
  - installation and removal, 458
  - lumber and plywood standards, Schedule 9
  - shoring component dimensions, Schedule 9
  - See also* temporary protective structures; temporary supporting structures
- bracket scaffolds**
  - design and specifications, 332
  - See also* scaffolds and temporary work platforms
- Braking Performance — Rubber-Tired, Self-Propelled Underground Mining Machines (CSA)**, 3, 574
- brand name** *See* Workplace Hazardous Materials Information System (WHMIS)
- breathing equipment** *See* respiratory protective equipment
- bridges**
  - for crossing conveyor belts, 373(1)—(2)
  - for logging industry vehicles, 525
  - overhead cranes, standards, 93—94
  - standards
    - overhead cranes, 93—94
- British Columbia Cave Rescue, 3**
- British Columbia Cave Rescue Companion Rescue Workshop, 3, 841(c)(ii)**
- British Standards Institute (BSI), 3**
- brush cutting** *See* tree care operations
- BSI (British Standards Institute), 3**
- bucking and felling** *See* forestry
- buffing disc** *See* grinders
- buggy, safety**
  - for emergency escape from oil or gas well, 762(3)

**building shaft hoists** *See* **tower and building shaft hoists**

**building shafts**  
 defined, 1  
 demolitions, 422  
 safeguards  
   main and secondary work platforms, 313(1)  
   no platform at doorway, safety structures, 313(2)  
   under construction, warning signs, 313(3)  
 safeguards on cage of shaft hoists, 318(7)—(8)

**buildings**  
 first aid high hazard work, Schedule 2, Table 2  
*See also* asbestos; building shafts; demolition

**bulk fuel storage in underground coal mines, 696, 713**

**bulk shipment** *See* **Workplace Hazardous Materials Information System (WHMIS)**

**bulkheads, 268**

**bulldozers, 270—271**  
 rollover protective structures, 270  
 seatbelts and seatbelt restraint systems, 271  
*See also* powered mobile equipment

**bump hat, 238**  
*See also* head protection and headwear

**buried or concrete-embedded facilities, 447—448**  
 defined  
   buried facility, 1  
   hand expose zone, 1  
 application of Code to disturbing the ground, 441  
 as-built record drawings, 447(4)—(5)  
 documents  
   as-built record drawings, 447(4)—(5)  
   buried facility no longer in use, consent for excavation, 448(2)  
   hand expose zone variation for high pressure pipeline, approval, 448(3)  
   pipeline right-of-way ground disturbance, consent, 448(4)  
 electric utilities  
   communication cables near, 803  
   exemptions, 448(5.1)  
 locate marks, 447(2)—(3)  
 locating buried facilities, 447  
 mechanical excavation equipment location, 448(1)—(2), 448(5)  
 non-destructive techniques in hand expose zone, 448(1)  
 pipelines  
   direct supervision of pipeline, 448(5), 448(7)  
   pipeline exposure, notice before backfilling, 448(7)  
   pipeline right-of-way ground disturbance, 448(4)  
 protection and support of facilities, 448(6)  
*See also* excavating and tunneling

**burning** *See* **hot work**

## C

**cable clips**  
 double base clips, 300(4)  
 double-saddle clips (fist clips), 300(3)—(4)  
 specifications, 300, Schedule 5  
 U-bolt clips for wire rope, 300(1), Schedule 5

**cables**  
 communication cables near electrical utilities, 803  
*See also* buried or concrete-embedded facilities

**cabs**  
 in powered mobile equipment, 269  
*See also* powered mobile equipment

**cadmium**  
 code of practice required, 26, Schedule 1, Table 1

**cages**  
 on hoists, 318(7)—(8)  
 on vertical ladders, 327(3)—(4)

**caissons** *See* **confined and restricted spaces**

**Canadian Association of Oil Well Drilling Contractors**  
 log books, 755

**Canadian Cave Conservancy, 3**

**Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations (CSA)**  
 defined, Canadian Electrical Code, 1  
 classification of work sites, 162.1(1), 166(5)—(7), 168(4)—(5)  
 in definition of hazardous location, 1  
 standards for overhead cranes, 93(a)

**Canadian General Standards Board (CGSB), 3**

**Canadian Softwood Plywood (CSA), 3, 457(1)(b)(i)**

**Canadian Standards Association (CSA), 3**

**cancer** *See* **health assessments for exposure to asbestos, silica or coal dust**

**CANMET (Canadian Explosives Atmospheres Laboratory, Natural Resources Canada)**  
 defined, 1  
 explosive initiating and testing devices, 639(b)

**cans** *See* **containers**

**cantilever hoists**  
 defined, 1  
 certification by engineer, 76(a)  
 installation and use, 76  
*See also* hoists

**canyoning activities**  
 in definition of non-industrial rope access work, 1  
*See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)

## Index

- carabiners**  
defined, 1  
standards for fall arrest system, 143  
standards for industrial rope access work, 835—836
- carbon monoxide in underground coal mines**  
inspections, 730  
*See also* underground coal mines
- cars** *See* vehicles
- cartridge explosives, 479**  
*See also* explosives (other than at mine sites)
- CAS (Chemical Abstract Service), Schedule 1, Table 2**
- catch basins** *See* buried or concrete-embedded facilities
- catheads, drilling or service rigs, 771**
- Cave Guiding Standards for British Columbia and Alberta (Canadian Cave Conservancy), 3, 841(c)(i)**
- caving activities**  
in definition of non-industrial rope access work, 1  
*See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)
- cellular telephones**  
defined  
electromagnetic radiation, 1  
radiofrequency transmitter, 1  
blasting operation distances, 503(3)—(4), Schedule 10, Table 3  
*See also* radiofrequency transmitters and explosives
- CEN (European Committee for Standardization), 3**
- certification by professional engineer**  
defined, 1  
*See also* specifications, certifications and standards
- Certification Requirements for Rope Access Work (Society of Professional Rope Access Technicians), 3, 826(b)**
- CGSB (Canadian General Standards Board), 3**
- chainsaws**  
chain adjustments, 376(2)  
footwear protection, 233(2)—(4)  
specifications, 376(1)
- changing rooms**  
clean and sanitary facilities, 361(1)  
storage of other materials, 361(2)  
*See also* toilets and washing facilities
- Chemical Abstract Service (CAS), Schedule 1, Table 2**
- chemical energy**  
in definition of hazardous energy, 1  
*See also* hazardous energy control (for service, repair, tests, adjustments, inspections)
- chemical name** *See* Workplace Hazardous Materials Information System (WHMIS)
- chemical substances** *See* occupational exposure limit (OEL)
- Chief Inspector of Explosives, Natural Resources Canada**  
in definition of permitted explosives, 1  
notice of loss or theft of explosives, 514
- chimney hoists, 77—79**  
defined, 1  
equipment requirements, 77  
operator responsibilities, 78  
worker in lifting device, 79  
*See also* hoists
- chipping** *See* hot work
- chloroethylene (vinyl chloride)**  
code of practice required, 26, Schedule 1, Table 1
- chocking, 285**  
*See also* pile driving equipment and practices
- chutes**  
materials chute at demolition work site, 420  
safeguards and warnings, 316
- cigarettes** *See* smoking tobacco
- circuit testers for testing electric detonators, 495**
- circular saws**  
blade crack limits, 377  
power-fed circular saws, 380
- claim for disclosure exemption**  
defined, 1  
*See also* Workplace Hazardous Materials Information System (WHMIS)
- Clearance, Sidemarker, and Identification Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width (SAE), 3, 592(1)(b)**
- client/resident handling**  
defined in safe patient/client/resident handling, 1  
*See also* lifting and handling loads
- climbable structure**  
defined, 1  
fall protection systems, 154
- climbing activities**  
in definition of non-industrial rope access work, 1  
*See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)
- Climbing Gym Instructor Technical Manual (Association of Canadian Mountain Guides), 3, 841(b)**
- climbing wood poles** *See* wood pole climbing
- clips, cable, 300**
- close work site**  
defined, 1  
first aid requirements

- low hazard work, Schedule 2, Table 5  
 medium hazard work, Schedule 2, Table 6  
 high hazard work, Schedule 2, Table 7  
*See also* first aid and first aiders
- clothing** *See* **foot protection and footwear; head protection and headwear; personal protective clothing; worker's clothing**
- coal dust**  
 defined  
   exposed worker, 1  
   restricted area, 1  
 building safety, 532  
 certification by engineer  
   electrical equipment for surface mines, 563(1)  
 decontamination methods, 28(c)  
 Director of Inspection  
   dust control, alternate protections, approval, 537(2)  
   dust sampling records, 744(a)  
   exhaust fans, dust collection devices, order, 742(5)  
   ignition of dust, report, 544(1)(d)  
   incombustible dust, approval, 743(1.2)—(2)  
 documents  
   dust sampling records, 744  
   ignition of dust, report, 544(1)(d)  
   stone dusting program, report, 743(1.2)  
 dust control in underground coal mines, 742—744  
   airborne dust, 742  
   dust sampling, 744  
   exhaust fans, dust collection devices, 742(5)  
   housekeeping, 743(1.1)  
   incombustible dust, 743  
   monitoring program, 742(4)  
   roadway used by rubber-tired vehicles, 742(3)  
   stone dusting program, report, 743(1.2)  
   water supply to suppress dust, 742(1)—(2)  
 dust-suppression devices, 548(3)  
 electrical equipment for surface mines, manufacturer or engineer approval, 563(1)  
 explosives, 664(2)  
 health assessment for exposure, 40  
   costs, 40(11), 40(13)  
   frequency of assessments, 40(6)—(8)  
   information to worker, 40(3)  
   performed during work hours, 40(12)  
   privacy of information, 40(5)  
   refusal by worker, 40(9)—(10)  
   report contents, 40(2)  
   retention of records, 40(4)  
 housekeeping, 28(b)  
 minimization of release, 28(a)  
 OEL, Schedule 1, Table 2  
 OEL, amended to come into effect May 1, 2010, 16(2.1)
- restricted areas  
 authorized persons, 29(1), 29(2)(b)  
 decontamination of workers, 29(4)(c)  
 emergencies, 29(5)  
 harmful substances, 29(2)  
 no eating, drinking or smoking, 29(2)(c)  
 prohibited activities, 29(2)(c)  
 protection of worker's street clothing, 29(4)  
 protective clothing for workers, 29(4)  
 signs, 29(2)—(3)  
 signs for restricted area, 29(2)—(3)
- coal mines** *See* **underground coal mines**
- coal tar pitch volatiles**  
 code of practice required, 26, Schedule 1, Table 1
- coats, lab**  
 duty to use, 228  
 use of, 242—243  
*See also* personal protective clothing
- Code**  
*See* *Occupational Health and Safety Code*
- Code for Electrical Installations at Oil and Gas Facilities (Alberta Municipal Affairs), 3, 162.1(1)(b)**
- Code for Fireworks Display (NFPA), 3, 467(2)(a), 499(3)(a)**
- Code for Tower Cranes (CSA), 3, 100**
- code name and code number** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- College and Association of Registered Nurses of Alberta**  
 in definition of nurse, 1
- colour coding**  
 scaffold tagging, 326  
 transfer of controlled products, 402
- Combination Pelvic/Upper Torso (Type 2) Operator Restraint Systems for Off-Road Work Machines (SAE), 3, 271**
- combined operation**  
 defined, 1  
*See also* surface mines; underground mines
- combined ventilation system** *See* **ventilation systems**
- combustible dust**  
 defined  
   combustible dust, 1  
   hazardous location, 1  
*See also* coal dust; mines and mining
- combustible gas detectors, 738—740**
- combustible liquids**  
 defined  
   combustible liquid, 1  
   hazardous location, 1  
*See also* fire and explosion hazards
- coming into force (OHS Code), 6**

- committee on work site health and safety** *See*  
**joint work site health and safety committee**
- common name of hazardous materials** *See*  
**Workplace Hazardous Materials Information System (WHMIS)**
- communication lines and cables**  
near electrical utilities, 803
- communication systems**  
chimney hoists, 77(f)  
confined and restricted spaces, 48(1)(f), 56  
designated signaller replacement, 191(8)  
emergency systems  
to call for first aid services, 179(d)  
to call for transportation of ill or injured workers, 180(4)  
to communicate with health care facilities when transporting ill or injured workers, 180(3)(c)  
in emergency response plans, 116(g)  
underground coal mines, 697—699  
working alone, 394  
*See also* cellular telephones; designated signallers; mobile communications systems and explosives
- community protection from explosives, 498**
- compact soil** *See* **soils and soil types**
- Competency Standard for Diving Operations (CSA), 3, 424, 437**
- competent worker** *See* **workers**
- Components for slings — Part 1: Forged steel components grade 8 (CEN), 3, 292(1)**
- Compressed Breathing Air and Systems (CSA), 3, 249**
- compressed/liquefied gas, 171**  
certification by engineer  
dislodgment hazards, 171(5)  
gas welding or allied process, 171.2  
precautions  
acetylene cylinders, storage, 171(6)  
back-flow prevention devices, 171(4)  
clean and without contaminants, 171(3)  
compressed gas equipment, 171(8)  
dislodgment hazards, 171(5)  
flashback devices, 171(4)  
heat exposure, 171(2)  
oxygen, stored away from, 171(1)(b)  
oxygen-fuel systems, 171(4)  
use, storage and transportation, 171(1)  
sparks and flame exposure, 171(8)(c)  
standards  
compressed oxygen storage, 171(1)(b)  
*See also* fire and explosion hazards; welding or allied process; Workplace Hazardous Materials Information System (WHMIS)
- concrete pump trucks**  
defined, 1  
inspection by operators, 290.2(2)  
movement of truck, 290.2(5)  
non-destructive testing, 290.2(1)  
outriggers, 290.2(3)  
workers not under boom or mast, 290.2(4)
- concrete-embedded facilities** *See* **buried or concrete-embedded facilities**
- conduits** *See* **buried or concrete-embedded facilities**
- confidential business information (WHMIS), 408—414**  
defined, claim for disclosure exemption, 1  
duty to disclose information, 411  
filing a claim with Hazardous Materials Information Review Commission, 408  
information confidential, 412—414  
interim procedures before notice of exemption, 409  
procedures after notice of exemption, 410  
term of exemption, 409(3), 410 (3)  
*See also* Workplace Hazardous Materials Information System (WHMIS)
- confidentiality** *See* **information access and privacy for workers**
- confined and restricted spaces, 44—58**  
defined  
confined space, 1  
inerting, 1  
purge, 1  
restricted space, 1  
bins, safeguards, 316  
chutes, safeguards, 316  
code of practice required, 44, 52(5)  
communication systems, 48(1)(f), 56  
documents  
code of practice required, 44, 52(5)  
emergency response plan, 55  
entry permit system, 47, 58  
evacuation procedures, 53(4)  
hazard assessment, 45, 52(3), 52(6), 58  
inspection records, 48(3)  
inspections of equipment, 48(2)—(3), 58  
retaining records, 58  
training records, 46  
emergency equipment, 45(e), 46(3), 48(1)(d)—(e), 48(2)  
emergency response plan, 55, 116  
entry by unauthorized persons, 50  
entry permit system, 47, 56—58  
evacuation procedures, 53(4)—(5), 55  
first aid, 46(3)(a)  
hazard assessment, 45, 52, 58  
hazardous substances and energy, 49, 52  
hoppers, safeguards, 316  
inerting, 54  
inspections and tests  
atmosphere, 52  
emergency equipment, 48(2)  
for hazard assessment, 45(b)—(c), 52



- monitoring of changing atmosphere, 52(3.1)
- personal protective equipment, 48(2), 58
- lifeline, 48(1)(a)
- personal protective equipment
  - inspection of, 48(2), 58
  - provision for, 45(d)—(e), 48(1)(b)—(e), 48(2), 53(2)
- purging, 53
- safety and protection, 48
- supplied-air respiratory protection equipment
  - for confined spaces, inerted, 54(2)
- tending worker, 56
- traffic hazards, 51
- training, 46
- ventilation, 53
- water dangers, 49
- Connecting Components for Personal Fall Arrest Systems (PFAS) (CSA), 3, 143(1), 835(d)**
- connectors**
  - standards for fall arrest system, 143(1)
- constructed portable ladders** *See* **ladders**
- Construction and Demolition Operations — Personnel and Debris Nets (ANSI), 3, 320(1)(a)**
- Construction and Test of Electric Cranes and Hoists (CSA), 3, 93(b)**
- consultation**
  - defined, 1
  - See also* workers
- consumer products**
  - WHMIS not to apply, 395(5)(e)
- Consumer Products Safety Commission, 3**
- contact lenses, 230**
  - See also* eye protection
- containers**
  - defined
    - bulk shipment, 1
    - container, 1
  - fire and explosion hazards
    - static electricity, 163(2.1)
    - storage of flammable substances, 163(2)
  - for compressed gas cylinders for welding from vehicles, 172
  - for controlled products (WHMIS), 398—402
    - bulk shipments, 398(7)
    - decanted products, 400
    - label required, 398 laboratory samples, 403
    - placards, 398(4)(b)—(c), 401, 402
    - portable containers, 400(2)
    - transfer of controlled products, 402
    - work site labels, 399, 400(1), 402
  - for hoisting, 74
  - for sharps, 526
  - standards, 163(2)
  - See also* supplier labels (WHMIS); work site labels (WHMIS); Workplace Hazardous Materials Information System (WHMIS)
- Containers, Safety (ULC), 3, 163(2)(d)**
- contaminant** *See* **fire and explosion hazards; occupational exposure limit (OEL)**
- contamination** *See* **decontamination of workers**
- continuous reading direct reading instruments**
  - OEL measurements by, 20(2)
- continuous-feed machinery** *See* **feeding materials into machinery**
- contractors, prime** *See* **prime contractors**
- control devices**
  - defined
    - control system isolating device, 1
  - controls on machinery, 368
- control zone, 161**
  - definition in fall protection system, 1
  - crossing a zone, 161(4)—(5)
  - marking of, 161(6)
  - unauthorized persons, 161(8)
  - unguarded edges, 161(1), 161(3), 161(5)
  - use of travel restraint system, 161(7)
  - See also* elevating platforms and aerial devices
- controlled products (WHMIS)** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- Controlled Products Regulations (Canada)**
  - labels, 398(6)
  - laboratory samples, labels and containers, 403(1)
- conveyor belts, 372—373**
  - crossing over moving belts, 373
  - elevated belts, 372
  - transfer of controlled products, 402
  - workers crossing over or under moving belts, 372(2)—(3)
- conveyors in mines**
  - certification by engineer
    - riding conveyor belts for workers, 603(1)
  - clearances
    - roof supports, 602(2)
    - rubber-tired vehicles, 602(1)
    - track-guided vehicles, 602(1)
  - combustible dust, 601
  - conveyor roadways, 606
  - Director of Inspection
    - approval, fire suppression for conveyor belt system, 598(b)
  - documents
    - riding conveyor belts procedures, 603(3)—(4)
  - explosives on conveyor, prohibition, 660
  - fire resistance, 598
  - riding conveyor belts for workers, 603
  - standards for fire resistance, 598(a)
  - stopping, 599
  - travelling room in underground mines, 600
  - underground coal mines

## Index

- belt line examination, 604
- carbon monoxide monitors, 605
- clearances, 550
- fire precautions, 548(4)
- fireproofing of, 549
- travelling room, 600
- See also* conveyor belts
- cosmetics under Food and Drug Act**
  - WHMIS not to apply, 395(5)(b)
- costs**
  - audiometric testing, 223(1), 224
  - blood lead level test, 43(3)
  - health assessments for asbestos, silica or coal dust exposure, 40(11)
- coveralls as protective clothing**
  - duty to use, 228
  - use of, 242—243
  - See also* personal protective clothing
- covers for openings**
  - covering openings, 314(1)(a)
  - guardrails and toe boards, 314(1)(b)
  - temporary covers, 314(2)—(3)
  - warning signs, 314(3)
  - See also* safeguards and warnings
- cow's tail, 819**
  - See also* rope access work
- CPSC (Consumer Products Safety Commission), 3**
- crane booms for pile driving equipment**
  - inspections and certifications, 290
  - See also* pile driving equipment and practices
- cranes, 59—73**
  - defined, 1
  - A-frame safe practices, 75
  - application of Code, 59
  - certification by engineer
    - not commercially manufactured, 60, 62
    - repairs and modifications, 65(3)(f), 73
  - collision prevention, 67
  - containers for hoisting, 74
  - documents
    - log books, 64(4), 65, 73(2)
    - procedures preventing collisions, 67
  - gin pole safe practices, 75
  - hoisting lines, 70
  - identification of components, 61, 62(1), 73
  - lift calculations, 68.1
  - load charts, 64(2)
  - load weight, 68
  - loads over work areas, 69
  - log books, 64(4), 65
    - certification by engineer, 65(3)(f), 73
    - contents, 65(3)
    - each device, 65(1)
    - inspections and tests, 65(3)(d)
    - new owner transfer, 65(2)
    - operator requirement, 64(4)
    - paper or electronic for each device, 65(1)
    - person doing work, 65(5)
    - repairs and modifications, 73(2)
    - signature, 65(4)
    - tower crane, correct entries confirmed, 65(6)
  - not commercially manufactured, 60, 62
  - operator requirements, 64
  - rated load capacity, 62
  - remote controls, 72(3)
  - repairs and modifications, 73
  - signal systems, 64(2), 71, 191
  - tag lines, 70
  - unsafe lift prevention, 66
  - See also* mobile cranes; overhead cranes; tower cranes
- crawl board, 129**
- crawler, tracked, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
  - See also* powered mobile equipment
- crystalite** *See* silica-crystalline, respirable
- crocidolite asbestos, prohibition on use, 32**
- cross-braces**
  - shoring component dimensions, Schedule 9
- crumbling soil** *See* soils and soil types
- crystalline silica** *See* silica-crystalline, respirable
- CSA (Canadian Standards Association), 3**
  - cut-off saws, 381
  - cutting** *See* compressed/liquefied gas; machinery; welding or allied process
  - cutting back walls for excavations, 449—451**
    - See also* excavating and tunneling
  - cutting brush using a tree for support** *See* tree care operations
  - cutting disc** *See* grinders
  - cutting or piercing explosives, 478**
    - See also* explosives (other than at mine sites)
  - Cycling Helmets (CSA), 3, 235**
  - cylinders** *See* containers
- D**
- D-rings**
  - standards for fall arrest system, 143(1)
  - standards for industrial rope access work, 835
- dams**
  - Director of Inspection, report of dangerous occurrence, 544(2)
  - See also* water dangers
- Dangerous Goods Transportation and Handling Act**
  - transporting explosives, 473(1)
  - WHMIS not to apply, 395(4)
- darkness**
  - defined
    - hours of darkness, 1
    - test fluid recovery during darkness, 779(6)
    - well swabbing during darkness, 780(6)
- dba** *See* noise

**decanted controlled products (WHMIS), 400—403**

for immediate use, 400(2)  
 laboratory samples, 403(4)—(6)  
 placards, 398(4)(b)—(c), 401—402  
 transfer of controlled products, 402  
 work site label required, 400(1), 401  
*See also* Workplace Hazardous Materials Information System (WHMIS)

**decontamination of workers**

defined  
 contaminant, 1  
 contaminated, 1  
 contaminated environment, 1  
 articles and clothing, 23  
 asbestos, silica, coal dust and lead, 28  
 baths and showers, 23—24  
 eye wash equipment, 24  
 flammable or combustible liquid on clothing and skin, 164  
 in lead exposure control plans, 41(2)(e)  
 OEL overexposure, 23—24  
 restricted areas, 29(4)(c)

**deflectors**

in powered mobile equipment, 269

**demolition, 415—422**

defined, 1  
 asbestos removal, 34, 36  
 certification by engineer  
 procedures for dismantling buildings, 421(1)(b)—(c)  
 competent worker in charge, 415  
 disconnecting utilities, 419  
 dismantling buildings and shafts, 421—422  
 accumulation of materials or debris, 421(2)  
 adjoining structures, 421(1)(b)  
 procedures certified by professional engineer, 421(1)(b)—(c)  
 removal of glass, 421(1)(a)  
 removal of hazardous materials, 34, 36, 417  
 removal of structural members, 421(1)(f)  
 shafts, 422  
 steel structures, 421(1)(e)  
 top down, 421(1)(d)  
 unintentional collapse, 421(1)(g)  
 documents  
 demolition procedure for explosives, 418  
 demolition procedures, certified, 421(1)(b)—(c)  
 disconnection of utilities, 419  
 explosives use, 418  
 falling objects, protections, 416, 420  
 first aid, high hazard work, Schedule 2, Table 2  
 hazardous substance removal, 417  
 housekeeping on work sites, 421(2)  
 location of equipment and offices, 416  
 materials chute, 420  
 angle, 420(1)

warning signs, 420(2)(b)  
 workers not to enter area, 420(2)(a)  
 shaft demolitions, 422  
 warning signs for materials chute, 420(2)

**descenders**

standards for descent control device for PFAS, 146  
 standards for industrial rope access work, 839  
**Descent Control Devices (CSA), 3, 146, 148.1**  
**Design of Active Fall-Protection Systems (CSA), 3, 153(1), 156(1)(a)**

**designated signallers, 191**

defined, 1  
 additional signallers, 191(8)(a)  
 as stop for powered mobile equipment in mines, 542(c)  
 communication system as replacement, 191(8)(b)  
 cranes, hoists and lifting devices, 71  
 designation by employer, 191(1)  
 ensure no hazards, 191(4)  
 equipment operator to follow signals, 191(5), 191(7)  
 for felling of trees near roads, 522  
 for powered mobile equipment  
 by excavations, 459—460  
 generally, 267(2)  
 only one signaller, 191(6)—(7)  
 special clothing, 191(2)—(3)  
 STOP signals from non-designated signallers, 191(7)

*See also* designated traffic controllers

**designated traffic controllers, 194**

handheld signal lights, when needed, 194(6)  
 public highway traffic control, 194(7)(h)  
 special clothing, 194(4)—(5)  
 tree felling by public roads, 522

**detonators and detonation**

defined  
 detonating cord, 1  
 detonator, 1  
 detonator leg wire, 1  
 electric blasting detonator, 1  
 handling, 1  
 misfire, 1  
 prime, 1  
 safety fuse, 1  
 safety fuse assembly, 1  
 above-ground charge, 502  
 avalanche control, 515  
 blasting machine, 505—506  
 cartridge explosives, 479  
 community protection, 498  
 cutting or piercing, 478  
 cutting or sectioning, alternatives, 477(3)  
 different manufacturers, prohibition, 483  
 Director of Inspection

## Index

- extension of detonation period, application, 493
- electric blasting detonator
  - defined, 1
  - blasting machines, 505—506
  - cellular telephones, 503(3)—(4), Schedule 10, Table 3
  - circuit testers for testing electric detonators, 495
  - misfire waiting period, 509(2)
  - radiofrequency transmitter distances, 503
  - stray electric currents, prevention of premature detonation, 500
- electrical or dust storms, prohibition on electric detonators, 484
- first aid, high hazard work, Schedule 2, Table 2
- length of safety fuse assembly, 482, 504
- loading explosives, 489—497
  - cellular telephones, 503(3)—(4), Schedule 10, Table 3
  - connecting down lines to trunk cords, 497
  - damaged leads and wires, prohibition, 496
  - detonation within 30 days, 493
  - detonator leg wires, 494
  - radiofrequency transmitters, 503, Schedule 10, Tables 2 and 3
  - sequential firing, 492
  - static electricity, 490
  - tamping explosives, 491
  - testing electric detonators and circuits, 495
  - unwinding detonator leg wires, 489
- misfires, 509—512
  - abandoned charge, 512
  - destroying a misfire, 511
  - waiting period for electric detonator, 509(2)
  - waiting period for safety fuse assemblies and delay detonators, 509(1)
  - warning signs and markings, 511, 512(2)
  - withdrawing misfire, 510
- oil well blasting and perforating, 516
  - blaster responsibilities, 516(5)—(7)
  - competent worker, not a blaster, 516(3)—(4)
- overhead power lines, 501 priming, 481
- safety fuses
  - length of fuse assembly, 482, 504
  - misfire waiting period, 509(1)
  - tools for cutting fuses, 480
  - unused fuse assemblies, storage and disposal, 476
- stray electric currents, 500
- tools, 480
- tools for cutting or piercing, 478
- transportation of detonators, 473(1)
- unused detonators, storage and disposal, 476
- warning signs and markings
  - loaded holes, 507
  - misfires, 511
- See also* explosives (other than at mine sites)
- Deutsche Forschungsgemeinschaft (DFG)**
  - OEL measurements, 20(1)(g)
- device** *See* labels
- DFG (Deutsche Forschungsgemeinschaft)**
  - OEL measurements, 20(1)(g)
- diesel fuel**
  - storage near oil and gas wells, 778(4)
- diesel powered machines** *See* **underground coal mines**
- dikes**
  - Director of Inspection, report of dangerous occurrence, 544(2)
  - See also* water dangers
- dining rooms** *See* **lunch rooms**
- direct reading instruments, continuous**
  - OEL measurements by, 20(2)
- direct supervision** *See* **workers**
- Director of Inspection**
  - defined, 1
  - applications and approvals
    - diesel powered machine in underground coal mine, 597(2)
    - dust control alternate protections, 537(2)
    - elevating work platform alternate standards, 347(9)
    - explosives detonation period extension, 493
    - explosives, electric conveyance, 660
    - explosives, shock blasting, 676
    - explosives, underground transport, 662
    - explosives, use of unclassified explosive, 659, Schedule 11, Table 3
    - fall protection systems, 1
    - hazardous energy management, complex group control processes for, 215.1(1)
    - non-industrial rope access work, 840
    - oil well blasting practices, 516(2)
    - use of unclassified explosive, Schedule 11, Table 3
  - applications and approvals for mines emergency response station exemption, 545(1)
  - fire resistance in conveyors, 598(b)
  - magazines in underground mines, 611(b)
  - overhead power lines, 567
  - representative vehicles, 576
  - underground coal mine refuge, exemption, 559(4)
  - underground mine vehicles, standards exemption, 574
  - vehicles, excessive weight and loads, 573
  - vehicles, fire precautions, 548(7)
- notice and reports
  - abandoned explosives, 638(2)
  - asbestos project, 36
  - dangerous occurrences in mines, 544
  - dangerous occurrences with dams or dikes, 544(2)
  - electrical systems in mines, 561

- theft or unlawful removal of explosives in mines, 607(2)
- unlawful entry into magazine, 607(2)
- orders and requests
- fire detection system as specific location in underground coal mine, 551(2)
  - for health and safety plan, 11
  - joint work site health and safety committee meeting, request by Director for, 203(2)
- Director of Medical Services**
- Defined
- acceptance, 1
  - approved training agency, 1
- agreements, acceptances and approvals
- first aid service, supply and equipment requirements, 178(1)
  - first aid training, 177
  - first aid training courses, 181(2)
  - pulmonary function technician courses, 1
  - removal of employee from lead exposure, 43(6)
- Director of Occupational Hygiene**
- applications
- review of OEL limits, 19
- approvals
- 8-hour OEL adjustments, 18(3)
  - noise assessment instruments, 219(3)(d)
  - OEL measurement, alternate methods, 20(1)(h)
  - respiratory protective equipment, 246, 250(b)
  - training courses for asbestos workers, 37
- dirt** *See* **soils and soil types**
- discard** *See* **mines and mining; mines and mining, definitions**
- disclosure exemptions** *See* **confidential business information (WHMIS)**
- diseases, notifiable** *See* **asbestos; coal dust; lead and lead compounds; noise; silica-crystalline, respirable**
- distant work site**
- defined, 1
- first aid requirements
- low hazard work, Schedule 2, Table 5
  - medium hazard work, Schedule 2, Table 6
  - high hazard work, Schedule 2, Table 7
- See also* first aid and first aiders
- diving operations**
- application of Code, 423
  - locking out intakes, pipes, tunnels, 437
  - sport diving exclusion, 423(2)
  - standards, 424
- doors, 120**
- building shafts, safeguards and warnings, 313(2)
  - good working order, 120(2)(a)
  - inside opening, 120(2)(b)
  - opening without effort or obstruction, 120(1)
- See also* entrances, walkways, and stairways
- double base clips** *See* **cable clips**
- double-pole scaffolds**
- design and load, 324—325, 333, Schedule 6, Tables 1—4
  - See also* scaffolds and temporary work platforms
- double-saddle clips (fist clips)** *See* **cable clips**
- Douglas Fir Plywood (CSA), 3, 457(1)(b)(i)**
- drawworks** *See* **oil and gas wells**
- drilled or bored underground shafts, 462—463**
- See also* underground shafts
- drilling** *See* **explosives (other than at mine sites); hot work; oil and gas wells**
- drilling rigs** *See* **oil and gas wells**
- drills, hand held electric use in mines, 572**
- drinking fluids, 354—355**
- adequate supply, 355(1)
  - no unreasonable restrictions, 354
  - potable water available, 355(2)
  - potable water labelled, 355(4)
  - single-use drinking cups, 355(3)
- drive belts on machinery, 370**
- drowning** *See* **water dangers**
- drugs under Food and Drug Act**
- WHMIS not to apply, 395(5)(b)
- drums** *See* **containers; rigging**
- ducts** *See* **buried or concrete-embedded facilities**
- dumping block**
- for powered mobile equipment, 459—460
  - for powered mobile equipment in mines, 542
- dust**
- defined
- combustible dust, 1
  - in definition of flammable substance, 1
  - incombustible dust, 1
- See also* coal dust; health assessments for exposure to asbestos, silica or coal dust; mines and mining
- E**
- ear damage** *See* **noise**
- earth-moving machinery**
- lights and lighting, 264
  - See also* powered mobile equipment
- Earth-moving machinery — Basic types — Vocabulary (ISO), 3, 575(1)(a), 576(1)(a)**
- Earth-moving machinery — Braking systems of rubber-tyred machines — Systems and performance requirements and test procedures (ISO), 3, 575(2), 575(6), 578(b)**
- Earth-moving machinery — Roll-over, protective structures — Laboratory tests and performance requirements (ISO), 3, 270(2)(d)**

## Index

### **Earthmoving Machinery — Falling-Object Protective Structures — Laboratory Tests and Performance Requirements (SAE), 3, 272(2)(b)**

#### **electric arc welding**

- damage to rigging, 308
  - electric supply cable procedures, 171.1(6)
  - eye and face protection, 231
  - in mines, 571
  - unattended electric welding machine, removal of electrode, 171.1(5)
- See also* welding or allied process

#### **electric blasting detonator *See* detonators and detonation**

#### **Electric Utilities Act, 3**

- in definition of rural electrification association, 1

#### **electrical equipment in mines *See* mines and mining**

#### **electrical storms *See* weather**

#### **electrical utilities and utility workers, 797—804**

- defined
    - electric utility, 1
    - industrial power producer, 1
    - rural electrification association, 1
    - utility employee, 1
  - application of Code, 797—798
  - buried facilities, 448(2), 448(5.1), 803
  - certification by engineer
    - live line work procedures, 804
  - coordinated work, 802
  - emergencies, 804(3)
  - overhead power lines, exemption for approach distances, 227
  - protective equipment aerial devices, 804(1)
    - flame resistant clothing, 232
    - footwear, 233
    - ladders, 127
  - safe work practices
    - electric utilities, 800
    - industrial power producers, 801
    - rural electrification associations, 800
  - standards
    - for protective devices or equipment, 799(1)—(2)
    - for safe work practices, 800
    - for testing laboratories, 799(3)
    - utility disconnection for demolition, 419
    - work near energized equipment or lines (above 750 v), 804
- See also* hazardous energy control (for service, repair, tests, adjustments, inspections)

#### **Electroacoustics — Sound Level Meters — Part 1: Specifications (IEC), 3, 219(3)(c)**

#### **Electroacoustics — Sound Level Meters — Part 2: Pattern evaluation tests (IEC), 3, 219(3)(c)**

#### **electromagnetic radiation**

- defined, 1
- See also* radiation

#### **elevated conveyor belts *See* conveyor belts**

#### **elevating platforms and aerial devices, 346—353**

- definitions
    - aerial device, 1
    - control zone, 1
  - boatswain's chairs, 351
  - certification by engineer
    - boatswain's chairs, 351(1)
    - fork-mounted platforms, 349(2)
    - permanent suspension powered platforms, 348(1)
    - temporary supporting structures, 352(3)—(4)
  - control zones
    - defined, 1
    - water dangers, 157
  - Director of Inspection
    - alternate standard, approval, 347(9)
  - electrical equipment or lines with live line work procedures, 804
  - fly form deck panels, 353
  - fork-mounted platforms, 349
  - logging industry structures, 525
  - manufacturer's specifications
    - boatswain's chairs, 351(1)
    - permanent suspension powered platforms, 348
    - personal fall arrest system, 156
    - restraining hoses and piping, 188
    - skeleton structures, 190
  - standards, 347
    - alternate, approval by Director of Inspection, 347(9)
    - boom-supported platforms, 347(1)—(2)
    - manually propelled elevating platforms, 347(4)
    - mast-climbing work platforms, 347(6)
    - order pickers, 347(8)
    - permanent suspension powered work platforms, 348(1)
    - self-propelled elevating platforms, 347(3)
    - temporary supporting structures, 352(1)—(2)
    - vehicle-mounted aerial devices, 347(5)
  - temporary supporting structures, 352
  - worker safety, 346, 364
  - worker travelling in moving device, prohibition, 346
- See also* man baskets

#### **elevators *See* building shafts**

#### **emergency escape routes *See* escape routes**

#### **emergency first aider *See* first aid and first aiders**

#### **emergency lighting, 186(3)—(4)**

#### **Emergency Medical Responder *See* first aid and first aiders**

**Emergency Medical Technician** *See first aid and first aiders***Emergency Medical Technician-Paramedic** *See first aid and first aiders***Emergency Medical Technicians Regulation**

in definitions of Emergency Medical Responder, Emergency Medical Technician, and Emergency Medical Technician-Paramedic, 1

**emergency response, 115—118**

defined

emergency response plans, 1

communication systems

confined and restricted spaces, 48(1)(f)

emergency response plans, 116(g)

telephone numbers on lab samples, 403(3)

to call for first aid services, 179(d)

to call for transportation of ill or injured workers, 180(4)

to communicate with health care facilities when transporting ill or injured workers, 180(3)(c)

confidential information to medical professionals, 413—414

confined and restricted spaces (*See also* confined and restricted spaces)

emergency equipment, 45(e), 46(b), 48(1)(d)—(e), 48(2)

emergency response plan, 55

tests and inspections of emergency equipment, 48(2)

controlled products (WHMIS)

telephone numbers on lab samples, 403(2)—(3)

training in emergencies, 397(1)(g), 398(4)(c)(iii)

designation of workers, 117(1)

documents

emergency response plan, written, 115—116

emergency lighting, 186(3)—(4)

emergency response plan, written, 115—116

alarms, 116(g)

communication systems, 116(g)

current, 115(3)

designated competent person to prepare, 2.2

emergency equipment, 116(c)

facilities, 116(e)

fire protection, 116(f)

first aid, 116(h)

identification and procedures, 116(a)—(b)

involvement of affected workers, 115(2)

requirement, 115

rescue and evacuation, 116(i)—(j)

training, 116(d)

emergency washing equipment, 23

escape routes from work areas, 119(4)—(5)

evacuation procedures

confined and restricted spaces, 53(4)—(5), 55

emergency response plan, written, 116(i)—(j)

personal protective clothing for rescue and evacuation workers, 118

underground coal mines, 553

hazards, emergency control, 10

personal protective clothing and equipment, 118

Prusik and similar knots, 150.3

respiratory protective equipment, 248(2), 254

training and simulation exercises, 117(2)—(4)

training and simulation exercises, PFAS exemption, 138

transportation of injured or ill workers to health care facilities, 180

*See also* decontamination of workers; first aid and first aiders; mines and mining; oil and gas wells

**emergency stop circuit** *See robots***emissions** *See fugitive emission***employers**

duty of prime contractors to inform employers of work site hazards, 7(5)

duty to consider flammable or explosive atmospheres as hazards, 161.1

duty to designate competent person to prepare plans, 2.2

duty to designate competent person to take OEL measurements, 20(2.1)

duty to make legislation available, 2.1

extended application of Code to prime contractors, 2

**employer member** *See joint work site health and safety committee***employer's material safety data sheets (WHMIS), 404—414**

defined

material safety data sheet, 1

availability, 407

confidential business information, 408—414

duty to disclose information, 411

filing a claim with Hazardous Materials Information Review Commission, 408

interim procedures before notice of exemption, 409

procedures after notice of exemption, 410

term of exemption, 409(3), 410 (3)

employer's data sheets, requirement, 405(1)

format different from supplier's data sheet, 405(3)

fugitive emissions, 405(2)

information current, 406

reaction vessels, 405(2)

supplier's data sheet, 404

## Index

- training in, 397(1)(b)  
*See also* confidential business information (WHMIS); Workplace Hazardous Materials Information System (WHMIS)
- EMR (Emergency Medical Responder)** *See* first aid and first aiders
- EMT (Emergency Medical Technician)** *See* first aid and first aiders
- EMT-Paramedic (Emergency Medical Technician-Paramedic)** *See* first aid and first aiders
- end-effector** *See* robots
- Energy absorbers and lanyards (CSA), 3, 142.2 (1)(a), 142.3 (1)(a), 148**
- energy, hazardous** *See* hazardous energy control (for service, repair, tests, adjustments, inspections)
- engineer certifications** *See* specifications, certifications and standards
- Engineering, Geological and Geophysical Professions Act**  
in definition of professional engineer, 1
- engines, internal combustion** *See* internal combustion engines
- entrances, walkways, and stairways, 119—123**
- doors, 120  
good working order, 120(2)(a)  
inside opening, 120(2)(b)  
opening without effort or obstruction, 120(1)
- ramps, 121
- runways, 121
- safe entry and exit, 119
- secondary escape routes, 119(4)—(5)
- stairways, 122, 123  
handrails on, 122(2), 123  
rise heights, 122(1)(a)  
temporary stairs, 122(3)  
tread widths, 122(1)
- toe boards and guardrails, 321(2)
- walkways, runways and ramps, 121  
strength, 121(1)(a)  
toe boards and guardrails, 121(1)(d), 321(2)  
traction, 121(2)  
walkways to separate pedestrians from areas for powered mobile equipment, 259  
width, 121(1)(b)—(c)
- entry permit system for confined and restricted spaces, 47, 56—58**
- Environmental Protection Agency (EPA)**  
OEL measurements, 20(1)(d)
- EPA Test Methods**  
OEL measurements, 20(1)(d)
- equipment**  
defined  
equipment, 1  
operate, 1  
contact by clothing, jewellery or hair, 362
- fire and explosion hazards, precautions, 165(3), 165(5)  
for moving workers, 364  
hazardous energy control (for service, repair, tests, adjustments, inspections), 212—215.3  
complex group control, 215.1  
group control, 215  
individual control, 214  
isolating piping, 215.4  
isolation procedures, 212  
isolation verification, 213  
manufacturer's specifications, 212(2)  
pigging and testing of pipelines, 215.5  
remotely controlled systems, 215.2  
returning to operation, 215.3  
*See also* machinery; respiratory protective equipment; toilets and washing facilities; tools
- escape routes**  
by oil and gas wells, 762  
from work areas, 119(4)—(5)  
in surface haul roads, 539(2)  
in underground mines, 702—703  
*See also* emergency response
- Ethylene dibromide (1,2-Dibromoethane)**  
code of practice required, 26, Schedule 1, Table 1
- ethylene oxide**  
code of practice required, 26, Schedule 1, Table 1
- European Committee for Standardization (CEN), 3**
- evacuation procedures**  
confined and restricted spaces, 53(4)—(5), 55  
emergency response plan, written, 116(i)—(j)  
personal protective clothing for rescue and evacuation workers, 118  
underground coal mines, 553  
*See also* emergency response
- excavating and tunneling, 441—464**  
defined  
disturbing the ground, 441  
excavation, 1  
hand expose zone, 1  
hard and compact soil, 442(1)  
likely to crack or crumble soil, 442(2)  
soft, sandy, or loose soil, 442(3)  
spoil pile, 1  
trench, 1  
tunnel, 1  
workings, 1  
certifications and specifications by engineer  
ground formation, certification, 449  
soil stabilization, certification, 443(2)  
temporary protective structures in trenches, certifications, 457(4)—(5)



- temporary protective structures, specifications, 456
- tunnel excavation, 464(1)
- cutting back walls, 450(1)(a), 450(1)(c), 451
- disturbing the ground, application of Code, 441
- entry and exit, 446, 455
- ground formation certification by engineer, 449
- marking an excavation, 444
- mechanical excavation equipment location, 448(1)—(2), 448(5)
- power pole support, 454
- powered mobile equipment access and block, 459—460
- powered mobile equipment dumping blocks in mines, 542
- protection methods, 450—451
- shoring component dimensions for excavations, Schedule 9
- soils
  - soil classifications, 442
  - soil stabilization, 443
  - soil type, more than one, 442(4)
- solid rock, 450(2)
- spoil pile and loose materials, 452—453
- surface mines, safe distances from right of way, 535
- temporary protective structures, 456—458
  - alternatives for trenches, 457, Schedule 9
  - as protection method, 450(1)(b)—(c)
  - installation and removal, 458
  - methods of protection, 450
  - shoring component dimensions, Schedule 9
  - specifications by engineer, 456
  - standards for lumber and plywood, Schedule 9
- tunnel excavation, 464
- water hazards, 445, 464(2)
- worker access, 446
- See also* buried or concrete-embedded facilities; soils and soil types; underground shafts
- excess noise** *See* noise
- exploration for oil and gas, 751**
- explosive atmosphere** *See* fire and explosion hazards
- explosives (at mine sites), 607—679**
  - defined
  - misfire, 1
  - abandoned or undetonated, 636—638
    - abandoned explosives, 638
    - misfire safe work procedures, 637
    - unused explosives not abandoned, 636
  - access to explosives, 615
  - blast area access, 630
  - blast area control, 629
  - blaster duties
    - blasting machine control, 635
    - general safe procedures, 631
  - records, 633
  - secondary blasting, 632
  - blaster-in-charge, 629(2)
  - blasting machines and circuits, 639—642
    - capacity marked, 640(1)
    - circuit requirements, 642
    - circuit testing, 639, 640(2), 641
    - lead wires requirements, 642(2)—(3)
  - certification by engineer
    - magazines in underground mines, 611
  - confined and restricted spaces (*See* confined and restricted spaces)
  - damaged blasting wires, 634
  - Director of Inspection, approvals
    - application to Director to use unclassified explosive, Schedule 11, Table 3
    - explosive initiating and testing devices, alternate, 639
    - magazines in underground mines, 611(b)
  - Director of Inspection, reports and notice
    - abandoned explosives, notice, 638(2)
    - theft or unlawful removal of explosives, 607(2)
    - unlawful entry into magazine, 607(2)
  - documents
    - blaster's daily records, 633
    - magazine records, 618
  - drilling
    - dust control, 532, 537
  - electric detonators, 614
  - explosive atmospheres as hazards, 161.1
  - first aid, high hazard work, Schedule 2, Table 2
  - magazines
    - approval by Director, 611(b)
    - certification by engineer, 611(a)
    - illumination, 612
    - records, 618
    - storage of explosives, 619
    - unlawful entry, 607
  - manufacturer's specifications
    - explosives, 627
  - non-sparking tools, 608
  - oldest explosives, use first, 617
  - removal from magazine, 616
    - authorized workers without delay, 620
  - secondary blasting, 632
  - standards
    - explosive initiating and testing devices, 639
  - stored explosives, 613
  - surface mine blaster requirements, 610
  - theft or unlawful removal of explosives or detonators, 607
  - transportation of explosives, 620—626
    - detonators separated from explosives, 625(1)
    - electric conveyance, prohibition, 660
    - fire extinguishers, 622(3)
    - no smoking or open flames, 621

## Index

- original packaging, 624
- placards, 622(4)
- radio transmitters, prohibition, 625(2)
- removal and transfer, 620
- vehicle breakdown, 626
- vehicle requirements, 622
- weather protection, 623
- underground mine blaster
  - requirements to handle explosives or misfires, 609
- unsafe explosives, 613, 628
- vehicles for transporting explosives, 622, 626
- WHMIS not to apply, 395(5)(a)
- See also explosives, defined; surface mines; underground coal mines; underground mines
- explosives (other than at mine sites), 465—517**
  - application of Code, 465
  - avalanche control, 515 blasters, 468
    - blaster responsibilities, 468, 471, 474, 516(5)—(7)
    - compliance with Canadian guidelines, 470(1)
    - two or more blasters, blaster in charge, 468(3)—(4)
  - demolition of buildings, 418
  - destroying explosives, 508—512
    - abandoned charge, 512
    - destroying a misfire, 511
    - misfire waiting period, 509
    - standards, 508
    - withdrawing misfires, 510
  - Director of Inspection, applications and approvals
    - for extension of detonation of loaded holes, 493
    - oil well blasting practices, 516(2)
    - unclassified explosives, Schedule 11, Table 3
  - documents
    - loss or theft, 514
    - misfires, 512(2)(d)
    - safe work procedures, 467
  - drilling, 485—488
    - bootlegs, 486
    - close to other explosives, 485
    - looking directly at hole, prohibition, 488
    - size of borehole or drill hole, 487
  - explosive atmospheres as hazards, 161.1
  - fire extinguishers required, 473(4), 517(3)(f), Schedule 10, Table 1
  - firing, 498—507
    - above-ground charge, 502
    - blasting machine, 505—506
    - community protection, 498
    - length of fuse assembly, 482, 504
    - loaded hole, 507
    - overhead power lines, 501
    - radiofrequency transmitters, 503
    - safe distance, 499
    - shunting the firing line, 506
    - stray electric currents, 500
  - first aid, high hazard work, Schedule 2, Table 2
  - handling and storage, 470—488
    - appropriate quantities, 477
    - cartridge explosives, 479
    - compliance with Code, 476
    - cutting, sectioning or piercing, 477(3), 478
    - damaged or deteriorated, 475
    - detonators made by different manufacturers, prohibition, 483
    - electrical or dust storms, prohibition on electric detonators, 484
    - intermittent use, 471
    - length of fuse assembly, 482
    - light sources in magazines, 472
    - oldest used first, 474
    - priming, 481
    - standards and guidelines, 470
    - tools, 480
    - unused, 476
  - loading, 489—497
    - connecting down lines to trunk cords, 497
    - damaged leads and wires, 496
    - detonation within 30 days, 493
    - detonator leg wires, 494
    - marking the position of the drill hole, 494(2)
    - sequential firing, 492
    - static electricity, 490
    - tamping explosives, 491
    - testing electric detonators and circuits, 495
    - unwinding detonator leg wires, 489
  - loss or theft, report, 514
  - misfires, 509—512
    - abandoned charge, 512
    - destroying a misfire, 511
    - reports, 512(2)(d)
    - waiting period for electric detonator, 509(2)
    - waiting period for safety fuse assemblies and delay detonators, 509(1)
    - warning signs and markings, 511, 512(2)
    - withdrawing misfire, 510
  - no smoking or material burning, distances, 466
  - no smoking or material burning, exception for seismic drills, 517(2)—(3)
  - pyrotechnic and special effects devices, 467(2)
  - reports
    - loss or theft, 514
    - unplanned or uncontrolled explosions or fires, 469
  - safe work procedures, 467, 468(4)
  - seismic blasting and drilling, 517
  - separation distances
    - between explosives and fixed radio transmitters, Schedule 11, Table 1

between explosives and fixed radiofrequency transmitters, Schedule 10, Table 2

between explosives and mobile radio transmitters, Schedule 11, Table 2

between explosives and mobile radio-frequency transmitters, Schedule 10, Table 3

standards

- destroying explosives, 508

transporting explosives, 473

- compliance with Acts, 473(1)
- drivers and passengers, 473(2)
- fire extinguishers on vehicles, 473(4)
- leg wires of detonators, 473(3)

warning signs and markings

- loaded holes, 507
- misfires, 511, 512(2)

waste removal, 513

WHMIS not to apply, 395(5)(a)

*See also* demolition; detonators and detonation; explosives, defined; magazines

**explosives, defined**

- blaster, 1
- blasting area, 1
- blasting machine, 1
- blasting mat, 1
- bootleg, 1
- CANMET, 1
- detonating cord, 1
- detonator, 1
- detonator leg wire, 1
- direct supervision, 1
- explosives, 1
- handling, 1
- lower explosive limit, 1
- magazine, 1
- mine blaster, 1
- misfire, 1
- permitted explosive, 1
- prime, 1
- surface mine blaster, 1
- underground mine blaster, 1

**Explosives Act (Canada)**

- transporting explosives, 473(1)
- WHMIS not to apply to explosives under, 395(5)(a)

**exports from Canada**

- controlled products with placards, 401(1)(b)

**exposed worker** *See* asbestos; coal dust; lead and lead compounds; silica-crystalline, respirable

**exposure limits, occupational (OEL)** *See* occupational exposure limit (OEL)

**external safety toecaps in protective footwear, 233(4)**

*See also* foot protection and footwear

**extinguishers, fire** *See* fire extinguishers

**Eye and Face Protectors (CSA), 3, 229**

**eye protection, 229—231**

- contact lenses, 230
- duty to use equipment, 228, 229(2)
- electric arc welding, 231
- eye wash equipment, 24
- face piece respirators, 229(3)
- prescription eyewear, 229(2)—(2.2)
- standards, 229

**F**

**f/cc (fibres per cubic centimeter of air)** *See* fibres

**face protection** *See* eye protection; skin

**facial hair**

- clean shaven for facial seals, 250(2)
- contact with equipment and machinery, safety precautions, 362

**facial seals in respiratory protective equipment** *See* respiratory protective equipment

**facilities, changing** *See* changing rooms

**facilities, lunch** *See* lunch rooms

**facilities, washing** *See* toilets and washing facilities

**facility, buried** *See* buried or concrete-embedded facilities

**fall arrest system** *See* personal fall arrest system (PFAS)

**Fall Arresters, Vertical Lifelines, and Rails (CSA), 3, 144, 147(1), 154(1)**

**fall arresting device** *See* personal protective equipment (PPE)

**fall protection systems, 138—161**

- defined
  - fall protection system, 1
  - swing drop distance, 1
  - unusual possibility of injury, 139(2)
- certification
  - horizontal lifeline system, 153—153.1
- fall protection plans, 140—141
  - contents of plan, 140(2)
  - designated competent person to prepare plans, 2.2
  - when needed, 140(1)
  - when to prepare, 140(3)—(4)
  - worker training, 141
- guardrails, 139(3)—(5)
- horizontal lifeline systems, 153—153.1
- leading edge fall protection systems, 158
- life safety rope, 147
- on vehicles and loads, 155
- procedures in place of, 159
- Prusik and similar knots, 150.3
- standards
  - body belts, 142.1(a)
  - connecting components, 143(1)

## Index

- lanyards, 142.2(1)
  - shock absorbers, 142.3(1)
- training, fall protection plan, 141
- travel restraint systems, 139(5)—(6)
- tree care operations, 793(1)(d), 794
- unusual possibility of injury, 139(1)—(2)
- water dangers, 157
- when needed, 139, 141
- work positioning system, 160.1
- worker use, requirement, 139(7)
- See also* anchors; personal fall arrest system (PFAS); safety nets; travel restraint system
- Fall Protection Systems — American National Standard for Construction and Demolition Operations (ANSI), 3, 142.1(a)**
- Fall Restrict Equipment for Wood Pole Climbing (CSA), 3, 149**
- fall restrict system**
  - defined
    - fall restrict equipment, 1
    - fall restrict system, 1
    - work positioning system, 1
  - wood pole climbing, 149
  - work positioning system, 160.1
- falling into holes** *See* openings and holes
- falling objects**
  - blasting operations safe distance, 499
  - from demolition, 416, 420
  - from elevated conveyor belts, 372, 373(3)
  - from welding or allied process, 171.1(4)
  - in drilled or bored underground shafts, 462(3)—(4)
  - powered mobile equipment protective structures, 272—273
  - safeguards
    - hoists or scaffolds, safeguard specifications, 318(4)
    - overhead safeguard, 318(1)—(3)
  - toe boards, 321
    - openings and holes, 314
    - specifications, 321(1), 321(5)
    - when needed, 321(2)—(4)
  - warning signs and other devices, 318(4)
- See also* demolition; forestry; safety nets
- falling objects protective structures (FOPS)**
  - for powered mobile equipment, 272—273
- See also* powered mobile equipment
- falsework** *See* temporary supporting structures
- Falsework for Construction Purposes (CSA), 3, 352(1)—(2)**
- fans** *See* ventilation systems
- fastening tools, actuated**
  - application of Code, 465(3)
  - safety precautions, 374
- feeding materials into machinery**
  - continuous-feed devices, 371
  - preventing machine activation, 366
  - push stick or block, safeguard, 319
- See also* machinery
- feet** *See* foot protection and footwear
- felling and bucking** *See* forestry
- females**
  - feminine hygiene products disposal, 360(c)
  - toilet requirements, 357, Schedule 7
- fence** *See* safeguards and warnings
- ferrules, 301**
- fibres**
  - defined
    - f/cc (fibres per cubic centimeter of air), Schedule 1, Table 2
    - fibres, 1
    - hazardous location, 1
    - in definition of flammable substance, 1
    - OEL measurements (NIOSH), 20(3)
- fibre ropes**
  - on sawmill log carriages, 383(2)
  - standards, synthetic fibre rope, 297(1)
- fibres in manufactured goods** *See* fibre ropes; synthetic fibre ropes; synthetic fibre slings
- fight** *See* violence, workplace
- fingers** *See* hand protection
- fire and explosion hazards, 162—171**
  - defined
    - combustible liquid, 1
    - explosive atmosphere, 1
    - flammable liquids, 1
    - flammable substances, 1
    - flash point, 1
    - hazard, 1
    - hazardous location, 1
    - hot taps, 1
    - hot work, 1
  - certification by engineer
    - classification of work sites, 162.1(1)
  - confined and restricted spaces, 52
  - contaminated clothing and skin, 164
  - documents
    - classification of work sites, 162.1(1)(d)
    - hot tap plan, 170(1)—(2)
    - hot work permit, 169(2)
    - prepared by competent person, 162.1(1)(d)
  - flame resistant clothing, 232
  - flammable or explosive atmospheres as hazards, 161.1
  - hot taps, 170
  - hot work, 169
  - industrial furnaces and fired heaters, 168
    - flammable substances, 163(2)(c)
    - ignition after shutdown, 168(3)
    - inserted blinds or double block and bleed systems, 168(2)
    - operations in hazardous locations, 168(4)—(5)
    - other safeguards, 168(6)

- safe operation, 168(1)
- internal combustion engines, 166
- combustion air intakes and exhaust discharges (not vehicles), 166(1)
  - gas monitoring equipment, 166(6)
  - general precautions, 166(2.1)
  - no use in classified locations, 166(5)—(7)
  - storage of flammable substances, 163(2)
  - temperature of exposed surfaces (not vehicles), 166(2)—(3)
  - vehicles, 166(4)
- powered mobile equipment
- flammable, combustible or explosive materials, 277
  - refuelling, 279
- precautions, 163, 165
- air intakes, no storage near, 163(2)(c)
  - boundary identifications, 165(4)
  - equipment not to ignite substances, 165(3), 165(5)
  - fences, 165(4)
  - flammable substances in approved containers, standards, 163(2)(d)
  - flammable substances not contacting oxygen, 165(6)—(7)
  - flammable substances not released inadvertently, 165(6)—(7)
  - flare stacks, flare pits and flares, safe distances, 167
  - other safeguards, 165(7), 168(6)
  - quantities insufficient for explosions, 163(2)(a)
  - standards for classification of hazardous locations, 168(4)—(5)
  - static electricity control, 163(2.1), 165(3), 165(5)
  - transfer of liquids in metallic or conductive containers, 163(2.1)
  - underground shafts, storage distance, 163(2)(b)
  - warnings, 165(4)
- prohibitions, 162
- ignition sources distance when refuelling vehicles, 279(1)—(2)
  - no entry or work when percent of substance present, 162(1)—(2)
  - no improper storage of contaminated rags, 162(6)
  - no light metal alloys in mines, 538
  - no open flames, 162(3.1)
  - no smoking, 162(3)
  - no smoking by explosives, 466
  - no smoking when refuelling vehicles, 279(1)—(2)
  - no use near ignition sources, 162(4)
  - no use of flammables in washing and cleaning operations, 162(5)
  - refuelling vehicles when running, 279
- spray operations, 170.1
- standards
- for classification of hazardous locations, 162.1(1), 166(5)—(7), 168(4)—(5)
  - for containers of flammable substances, 163(2)(d)
  - for spray operations, 170.1(3)
- transporting explosives in vehicles, 473
- ventilation system, when needed, 386(d)
- work sites classification, 162.1
- See also* compressed/liquefied gas; confined and restricted spaces; industrial furnaces and fired heaters; internal combustion engines; underground coal mines; ventilation systems; welding or allied process
- fire boxes of furnaces *See* industrial furnaces and fired heaters**
- fire extinguishers**
- on vehicles transporting explosives at mine sites, 622(3)
  - on vehicles transporting explosives other than at mine sites, 473(4), Schedule 10, Table 1
  - seismic blasting and drilling, 517(3)(f)
  - underground coal mines, 555
  - See also* emergency response
- fire fighters and fire fighting**
- protective headwear, standards, 237
  - safety footwear, standards, 233(5)
  - See also* emergency response; underground coal mines
- Fire Performance and Anti-static Requirements for Conveyor Belting (CSA), 598(a)***
- Fire-Performance and Antistatic Requirements for Ventilation Materials (CSA), 3, 724(2)***
- Fire-Resistant Hydraulic Fluids (CSA), 3, 548(5)***
- fired heaters *See* industrial furnaces and fired heaters**
- fireworks *See* explosives (other than at mine sites); pyrotechnic and special effects devices**
- first aid and first aiders, 177—184**
- defined
- advanced first aider, 1
  - approved training agency, 1
  - close work site, 1
  - distant work site, 1
  - emergency first aider, 1
  - Emergency Medical Responder, 1
  - Emergency Medical Technician, 1
  - Emergency Medical Technician-Paramedic, 1
  - first aid, 1
  - first aider, 1
  - health care facility, 1
  - high hazard work, Schedule 2, Table 2
  - isolated work site, 1

## Index

- low hazard work, Schedule 2, Table 1
- standard first aider, 1
- ambulance services
  - availability under normal conditions, 180(1)—(2)
  - communication systems to summon, 180(4)
  - communication systems with health care facility, 180(3)(c)
  - licensed services, 180(2)—(4)
  - when not available, 180(3)
- availability and location, 178—179, 181(3)
- clean condition and fitness of first aider, 181(4)—(5)
- close work sites
  - low hazard work, Schedule 2, Table 5
  - medium hazard work, Schedule 2, Table 6
  - high hazard work, Schedule 2, Table 7
- communication systems, 179, 180(4)
- Director of Medical Services
  - first aid requirements, acceptance, 178(1)
  - training course approvals, 181(2)
  - training providers, 177
- distant work sites
  - low hazard work, Schedule 2, Table 5
  - medium hazard work, Schedule 2, Table 6
  - high hazard work, Schedule 2, Table 7
- duty to report illness or injury, 182
- first aid kits, 178—179, Schedule 2, Table 3
- first aid rooms, 178—179, Schedule 2, Tables 4
- first aiders, 181
  - access and use of first aid records, 184
  - availability for duty, 181(3)—(5)
  - number and type required, 181, Schedule 2, Tables 5—7
  - record of first aiders, 181(6)
  - training, 181(2)
- health information access and use, 184
- in emergency response plans, 116(h)
- isolated work sites
  - low hazard work, Schedule 2, Table 5
  - medium hazard work, Schedule 2, Table 6
  - high hazard work, Schedule 2, Table 7
- mines, emergency response team, 546
- non-first aid duties, 181(4)
- nurses (advanced first aider), 181(2)—(5)
- records
  - access and use, 184
  - of first aiders at work site, 181(6)
  - of illness or injury, 183
- signs, 179(c)
- temporary or mobile first aid rooms, 178, Schedule 2, Table 4
- training standards and agencies, 177
- transportation plan, 180
  - accompaniment of worker in transportation, 180(5)—(6)
  - alternate transportation, 180(3)
  - ambulance service, 180(2)
  - communication systems, 180(3)(c), 180(4)
  - designated competent person to prepare plan, 2.2
  - when to prepare, 180(1)
  - workplace violence, 392
- fit clips, 300(3)—(4)**
- fit testing for facial seals, 250**  
*See also* respiratory protective equipment
- fixed ladders, 130(1)—(2), 130—132**  
defined, 1
  - certification by engineer
    - climb assist device, for rest platform exemption, 132
    - material other than steel, 130(3)
  - design criteria, 130
  - fall protection systems, 154
  - in manholes, 131
  - rest platform exemption, 132
  - safety gates, 130(4)—(5)
  - shock absorbers in fall arrest systems, 142.3(4)*See also* ladders
- Fixed Ladders and Cages (PIP), 3, 130(1)—(2)**
- flags**
  - excavation markings, 444
  - for warning of trees to be felled, 522(b)
- flame resistant clothing**
  - duty to use, 228
  - type of clothing, 232(2)
  - when needed, 232(1)
- Flameproof Non-Rail-Bound Diesel- Powered Machines for Use in Gassy Underground Coal Mines (CSA), 3, 597(1)**
- Flammable and Combustible Liquids Code (NFPA), 3, 163(2)(d)**
- flammable substances** *See* fire and explosion hazards
- flares**
  - hazardous locations, safe distances, 167
  - public highway traffic control, 194(7)(e)
- flash point** *See* fire and explosion hazards
- flashing lights and beacons**
  - falling objects warnings, 318(3)
  - public highway traffic control, 194(7)(d)*See also* warning devices and alarms
- Flemish eye splices, 152.4, 301(1)**
- flexible horizontal lifeline systems** *See* horizontal lifeline systems
- Flexible Horizontal Lifeline Systems (CSA), 3, 153(1)**
- flotation devices** *See* personal flotation devices
- fly form deck panels, 353**  
defined, 1
  - certification by engineer, 353(4)
  - design and specifications, 353(1)—(2), 353(4)
  - erection drawings and procedures, available to workers, 353(3)—(4)

- manufacturer's specifications, 353(4)  
 safety procedures, 353(5)—(6)  
*See also* elevating platforms and aerial devices; temporary supporting structures
- FMVSS (U.S.A. Federal Motor Vehicle Safety Standard), 3**
- Food and Drug Act**  
 WHMIS not to apply to substances governed by, 395(5)(b)
- foot protection and footwear, 233**  
 appropriate for hazards, 233(1), 233(3)  
 duty to use, 228  
 external safety toecaps, 233(4)  
 fire fighters' safety footwear, standards, 233(5)  
 standards for footwear, 233(2), 233(4)  
 toecaps, 233(4)  
*See also* decontamination of workers
- FOPS (falling objects protective structures)**  
 for powered mobile equipment, 272—273  
*See also* powered mobile equipment
- forestry, 518—525**  
 documents  
   logging trucks hazard assessment, 524(3)  
 felling and bucking, 518—523  
   bucking, safe procedures, 518(5)  
   clear path of retreat, 518(1)  
   cutting timber, safe procedures, 518(4)  
   distance of workers from, 518(2)—(3)  
   hand felling, 519  
   mechanized feller or limber, standards for operator protective structures, 520—521  
   partially cut trees, 523  
 logging trucks, 524—525  
 road warnings, 522  
 standards  
   operator protective structures, 521  
 traffic safety  
   passing vehicle traffic control system, 525(2)—(4)  
   structures for safe transit, 525(1)  
 warning signs, 522  
   traffic safety, 525(3)  
*See also* tree care operations
- fork-mounted platforms, 349**  
 certification by engineer, 349(2)  
 design and specifications, 349(1)—(2)  
 safety procedures, 349(3)—(4)  
 worker on moving platform, prohibition, 349(4)  
*See also* elevating platforms and aerial devices
- forklift trucks, 283—284**  
 load charts, 283  
 personal fall arrest systems, 156  
 seat belts, 284  
 standards, 347(8)  
*See also* powered mobile equipment
- forms See temporary supporting structures**
- frames of glasses See eye protection**
- free fall distance See personal fall arrest system (PFAS)**
- free-standing scaffolds**  
 design, 334(1)  
 use in demolition work, 422  
*See also* scaffolds and temporary work platforms
- freezing soil for stabilization, 443(2)—(3)**
- fuel storage**  
 in oil and gas operations, prohibitions, 778  
 oxygen-fuel systems, prohibitions, 171(1)(b), 171(4)  
 powered mobile equipment  
   fuel tank in cab of, 274  
   portable fuel tanks, 277(1)  
   refuelling hazards, 279  
 underground coal mines  
   bulk fuel storage, 696, 713  
   diesel fuel, 704—705
- fugitive emission**  
 defined, 1  
 employer's material safety data sheet, exemption, 405(2)  
 training in procedures, 397(1)(f), 398(4)(c)  
*See also* Workplace Hazardous Materials Information System (WHMIS)
- full body harness**  
 defined  
   cow's tail, 1  
   full body harness, 1  
   lanyard, 1  
 in personal fall arrest system, 142  
 standards  
   industrial rope access work, 834  
   standards, 142(1)  
   wood pole climbing, 149  
   working positioning systems, tree care, 795  
*See also* personal fall arrest system (PFAS); sit harness
- Full Body Harnesses (CSA), 3, 142(1), 795(1)(c)**
- furnaces See industrial furnaces and fired heaters**
- fuse assemblies See detonators and detonation**
- G**
- gallows frame roofer's hoist, 97(6)—(7)**  
*See also* roofer's hoists
- galvanometer for testing detonators, 495**
- gantry, overhead cranes, standards, 93—94**
- gas furnaces See industrial furnaces and fired heaters**
- gas lines See buried or concrete-embedded facilities**
- gas monitors, flammable, 543**
- gas sample containers**  
 oil and gas wells, 784

## Index

- gas, compressed/liquefied** *See* **compressed/liquefied gas**
- gates** *See* **safeguards and warnings**
- General requirements for certification of personnel engaged in industrial rope access methods (International Rope Access Trade Association), 3, 826(a)*
- generic name** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- geothermal operations** *See* **oil and gas wells**
- gin poles**
- safe practices, 75
- girls** *See* **females**
- glass windows and windshields**
- in powered mobile equipment, 265
- glasses** *See* **eye protection**
- gloves**
- duty to use, 228
  - use of, 242—243
- gob** *See* **underground coal mines**
- goggles** *See* **eye protection**
- goods, lifting** *See* **lifting and handling loads**
- grain bins** *See* **confined and restricted spaces**
- gravitational energy**
- in definition of hazardous energy, 1
  - See also* hazardous energy control (for service, repair, tests, adjustments, inspections)
- green tags, scaffolds, 326(1)(a)**
- grills in powered mobile equipment, 269**
- grinders, 375**
- defined
  - grinder accessory, 1
  - hand held grinders, 375(1)(c), 375(2)
  - manufacturer's specifications, 375(1), 375(3)
  - tool rests, 375(3)—(4)
- grinding** *See* **hot work**
- ground anchors**
- oil and gas wells, 764
  - See also* anchors
- ground falls**
- notice to Director of dangerous occurrences in mines, 544(1)(a)
- guardrails, 314—315**
- bridges for crossing conveyor belts, 373(1)—(2)
  - for walkways, runways and ramps, 121(1)(d)
  - fork-mounted work platforms, fall protection systems, 349(2)(b)
  - openings and holes, 314
  - securing of, 315(3)
  - specifications
    - guardrails, 315(1)
    - temporary guardrails, 315(2)
    - toe boards, 321(1)  - toe boards, 321
  - travel restraint systems in place of, 139(5)—(6)
  - when required, 139
- See also* safeguards and warnings
- guards** *See* **safeguards and warnings**
- guy lines**
- derrick mast or self-contained snubbing unit, 763
- GVW (manufacturer's rated gross vehicle weight)**
- defined, 1
- ## H
- hair**
- clean shaven for facial seals, 250(2)
  - contact with equipment and machinery, safety precautions, 362
  - See also* head protection and headwear
- half-horse scaffolds**
- design and specifications, 335
  - See also* scaffolds and temporary work platforms
- hand cleaning facilities** *See* **toilets and washing facilities**
- hand expose zone**
- defined, 1
  - exposing buried facilities, 448(1), 448(3)
  - See also* buried or concrete-embedded facilities
- hand held equipment and tools**
- defined
  - hand tool, 1
  - electrical drills, use in mines, 572
  - grinders, 375
  - signal lights, 194(6)
- hand protection**
- duty to use, 228
  - finger rings in contact with machinery, precautions, 362
  - use of, 242—243
- hand shields** *See* **eye protection**
- hand signals** *See* **designated signallers**
- hand tool** *See* **hand held equipment and tools**
- Hand Tools for Live Working up to 1000 V a.c. and 1500 V d.c. (ULC), 3, 799(1)**
- hand-operated hoists**
- holding suspended load, 80
  - See also* hoists
- handling explosives** *See* **explosives (at mine sites); explosives (other than at mine sites)**
- handling loads** *See* **lifting and handling loads**
- handrails on stairways, 122(2), 123**
- hard and compact soil** *See* **soils and soil types**
- hard hats** *See* **head protection and headwear**
- harmful substances**
- defined, 1
  - See also* occupational exposure limit (OEL)
- harness** *See* **full body harness; sit harness**
- haul roads**



- for mines, 539
- hazard assessment, elimination and control, 7—11**
- definitions
    - hazard, 1
    - hazard assessment, 1
  - classification of work sites, 162.1
  - Director of Inspection
    - health and safety plan, order, 11
  - documents
    - classification of work sites, 162.1(1)(d)
    - hazard assessment, 7
    - health and safety plan, 11
    - prepared by competent person, 162.1(1)(d)
  - emergency control, 10
  - hierarchy of elimination and control
    - elimination, 9(1)
    - engineering controls, 9(2)
    - administrative controls, 9(3)
    - personal protective equipment (PPE), 9(4)
    - combination of controls and personal protective equipment, 9(5)
  - prime contractors to inform employers of work site hazards, 7(5)
  - report of assessment, 7(2)—(3), 10(2)
  - when to assess, 7(1), 7(4)
  - worker participation, 8
- hazard information** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- hazardous energy control (for service, repair, tests, adjustments, inspections), 212—215.5**
- defined
    - hazardous energy, 1
    - isolate, 1
    - secure, 1
  - complex group control, 215.1
  - Director of Inspection, approvals
    - complex group control processes, 215.1(1)
  - group control, 215
  - individual control, 214
  - isolating piping, 215.4
  - isolation procedures, 212
  - isolation verification, 213
  - locking out and tagging
    - after safeguard removal, 311(4)
    - diving operations by intakes, pipes and tunnels, 437
  - manufacturer's specifications, 212(2)
  - pigging and testing of pipelines, 215.5
  - remotely controlled systems, 215.2
  - restricted spaces, 49
  - returning to operation, 215.3
- hazardous locations** *See* **fire and explosion hazards**
- Hazardous Materials Information Review Act (Canada), 411(2), 412**
- Hazardous Materials Information Review Commission, 408—414**
- duty to disclose information, 411
  - exemption non-disclosure procedures, 410
  - filing a claim for confidential business information, 408
  - information confidential, 412
  - interim non-disclosure procedures, 409
  - term of exemption, 409(3), 410 (3)
- hazardous materials information system** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- Hazardous Products Act (Canada)**
- confidential business information, 412
  - in definitions
    - of controlled product, 1
    - of material safety data sheet, 1
    - of supplier label, 1
    - of supplier's material safety data sheet, 1
  - laboratory samples, 403(1)—(3)
  - symbols, 398(6)
- hazardous waste**
- defined, 1
  - controlled products, 395(3)(c), 396
- head protection and headwear, 234—239**
- all-terrain vehicles, 236
  - bicycles, 235
  - bump hat, 238
  - duty to use, 228
  - exemptions, 239
  - fire fighters, 237
  - in-line skates, 235
  - industrial headwear, 234, 235(2)
  - industrial headwear, exemption, 239
  - motorcycles, 236
  - motorized trail bike, 236
  - rope access work, industrial, 831—833
  - rope access work, non-industrial, 844—846
  - skates, 235
  - small utility vehicles, 236
  - snow vehicles, 236
  - See also* decontamination of workers; respiratory protective equipment
- health and safety committee** *See* **joint work site health and safety committee**
- Health and Safety Executive of Great Britain (HSE)**
- OEL measurements, 20(1)(c)
- health and safety plan**
- designated competent person to prepare plan, 2.2
  - on order of Director, 11
- health assessments for exposure to asbestos, silica or coal dust, 40**
- contents of report, 40(2)
  - costs, 40(11), 40(13)
  - frequency of assessments, 40(6)—(8)

## Index

- information to worker, 40(3)
- performed during work hours, 40(12)
- privacy of information, 40(5)
- refusal by worker, 40(9)—(10)
- retention of records, 40(4)
- See also* asbestos; coal dust; silica-crystalline, respirable
- health assessments for exposure to lead**
  - blood lead level test, 43
  - See also* lead and lead compounds
- health care**
  - defined
    - biohazardous material, 1
    - health care facility, 1
    - load, 208(4)
    - medical sharp, 1
    - musculoskeletal injuries, 1
    - parenteral contact, 1
    - safe patient/client/resident handling, 1
    - safety-engineered medical sharp, 1
    - sharps, 1
  - blood lead level test, 43
  - documents
    - policies and procedures, 528, 530
  - lifting and handling loads, 208—211.1
    - adapting heavy or awkward loads, 209
    - appropriate equipment, 209.1
    - handling program, 209.2
    - hazard assessment, 210
    - prevention of injuries, 210—211.1
    - use of equipment provided, 208
  - limited exposure, 529
  - medical professionals
    - confidential information disclosure in emergencies, 413—414
    - emergency phone numbers on lab samples (WHMIS), 403(2)—(3)
  - medical sharps
    - coming into effect, 525.2(1)
    - recapping waste needles, prohibition, 527
    - safe work procedures, 525.2(4)—(6), 528
    - safety-engineered medical sharps, 525.2(2)—(3)
    - sharps containers, 526
  - policies and procedures
    - for post-exposure management, 530
    - for safety, 528
  - transportation to health care facility, 180
    - availability under normal conditions, 180(1)—(2)
    - communication systems to summon, 180(4)
    - communication systems with health care facility, 180(3)(c)
    - when not available, 180(3)
  - See also* biohazardous materials; first aid and first aiders; health assessments for exposure to asbestos, silica or coal dust
- health care facilities**
  - lifting and handling loads
    - adapting heavy or awkward loads, 209
    - appropriate equipment, 209.1
    - handling program, 209.2
    - work site design, 209.1
  - Health Professions Act**
    - in definition of nurse, 1
  - hearing** *See* noise
  - Hearing Protection Devices — Performance, Selection, Care, and Use (CSA), 3, 222(1)**
  - heaters** *See* industrial furnaces and fired heaters
  - heavy duty scaffolds**
    - defined, 1
    - See also* scaffolds and temporary work platforms
  - Helmet Standard for Use in Motorcycling (Snell Memorial Foundation), 3, 236(1)**
  - helmets** *See* head protection and headwear
  - hexachlorobutadiene**
    - code of practice required, 26, Schedule 1, Table 1
  - high hazard work**
    - defined, Schedule 2, Table 2
    - first aid requirements, 178, 181(1), Schedule 2, Table 7
    - See also* first aid and first aiders
  - high lift trucks** *See* forklift trucks
  - high pressure pipeline** *See* pipes and pipelines
  - highways**
    - blasting warnings, 656
    - right of way, safe distances for excavations in surface mines, 535(b)
    - traffic control to protect workers, 194(7)
    - See also* vehicle traffic control
  - hitch knots, 150.3**
    - See also* personal fall arrest system (PFAS)
  - hitting** *See* violence, workplace
  - hoists, 59—87**
    - defined
      - cantilever hoists, 1
      - chimney hoists, 1
      - hoist, 1
      - material hoists, 1
      - tower hoist, 1
    - A-frame safe practices, 75
    - application of Code, 59
    - cantilever hoists, 76
    - certification by engineer
      - boom on tower hoist, 99
    - cantilever hoists, 76(a)
    - not commercially manufactured, 60, 62
    - repairs and modifications, 65(3)(f), 73
  - chimney hoists, 77—79
    - equipment requirements, 77
    - operator responsibilities, 78

- worker in lifting device, 79
  - collision prevention, 67
  - containers for hoisting, 74
  - documents
    - load charts, 64(2)
    - log books, 64(4), 65
  - gin pole safe practices, 75
  - hand-operated hoists, 80
  - hoisting lines, 70
  - identification of components, 61, 62(1), 73
  - load charts, 64(2)
  - load weight, 68
  - loads over work areas, 69
  - log books, 64(4), 65
    - certification by engineer, 65(3)(f), 73
    - contents, 65(3)
    - each device, with exclusion, 65(1)—(1.1)
    - inspections and tests, 65(3)(d)
    - manually operated hoists, not to apply, 65(1.1)
    - new owner transfer, 65(2)
    - operator requirement, 64(4)
    - paper or electronic for each device, 65(1)
    - person doing work, 65(5)
    - signature, 65(4)
    - tower crane, correct entries confirmed, 65(6)
  - manually operated hoists, 65(1.1)
  - not commercially manufactured, 60, 62
  - on suspended scaffolds, 341(6)
  - operator requirements, 64
  - personnel hoists, 96 pile hoisting, 286
  - protection from falling objects, 318
    - building shaft hoist or tower hoist, 318(7)(a)
    - hoist cage in underground shaft, 318(7)—(8)
    - overhead safeguard, 318(1)—(2)
    - specifications, safeguard, 318(4)—(5)
    - warning signs and devices, 318(3)
  - rated load capacity, 62
  - remote controls, 72(3)
  - repairs and modifications, 73
  - rigging protection, 296
  - safety latches, 303
  - signal systems, 64(2), 71
  - standards
    - personnel hoists, 96
  - tag lines, 70
  - tower and building shaft hoists
    - certification by engineer, boom, 99
    - design, 99
    - protective enclosure, 98
    - safeguards, 318(7)(a)
  - underground coal mines, 749.1
  - unsafe lift prevention, 66
  - vehicle hoists
    - safe use, 113
    - standards, 112
  - winching operations, 114
- See also material hoists; rigging; roofer's hoists; underground shaft hoist
  - holes** See openings and holes
  - hoists**
    - respiratory protective equipment for abrasive blasting, 255
    - See also eye protection
  - hooks**
    - damaged hooks, rejection criteria, 309
    - safety hooks on safety nets, 320(1)(b)
    - safety latches, 303
    - snap hooks, standards for fall arrest system, 143(1)
  - hoppers**
    - safeguards and warnings, 316
    - See also confined and restricted spaces
  - horizontal lifeline systems**
    - defined, 1
    - installation of, 153—153.1
    - See also anchors; travel restraint system
  - horns**
    - falling objects warnings, 318(3)
    - See also warning devices and alarms
  - horticultural tractors, 270—271**
    - rollover protective structures, 270
    - seatbelts and restraint systems, 271
    - See also powered mobile equipment
  - hoses**
    - pile driving equipment, restraining hoses and connections, 287
    - safety precautions, 188
    - sliding down hoses on oil and gas wells, prohibition, 756(2)—(3)
    - unrestrained hoses, certification by engineer or manufacturer's specifications, 188(2)—(3)
  - hot taps, 170**
    - defined, 1
    - hot tap plans, 170(1)—(2)
    - precautions, 170(4)
    - procedures, 170(3)
    - See also fire and explosion hazards
  - hot work, 169**
    - defined, 1
    - locations
      - preparation of, 169(2)(b)
      - underground coal mines, 746
    - permits, 169(2)(a)
    - safe procedures, 169(2)(c)
    - testing of atmosphere, 169(2)(d), 169(3)
    - underground coal mines explosion control, 746
  - housekeeping**
    - asbestos, 28
    - clean work sites, 185
    - coal dust, 28
    - condition of facilities, 361
    - demolition sites, 421(2)
    - lead and lead compounds, 28
    - mines and mining, 532

## Index

- mould exposure, 43.1  
oil and gas wells, 762(1)  
pile driving equipment and practices, 289(b)  
powered mobile equipment, 256(3)(f), 275(2)  
safety precautions, general, 185  
silica-crystalline, respirable, 28  
underground coal mines, 702(1), 703(3), 743(1.1)  
*See also* waste
- HSE (Health and Safety Executive of Great Britain)**  
OEL measurements, 20(1)(c)
- hydraulic energy**  
in definition of hazardous energy, 1  
*See also* hazardous energy control (for service, repair, tests, adjustments, inspections)
- hydraulic equipment**  
alternatives to temporary protective structures, 457(2)
- hydraulic fluids**  
in underground coal mines, fire precautions, 548(5)—(6)
- hydrazines**  
code of practice required, 26, Schedule 1, Table 1
- hydrogen sulphide**  
code of practice required, 26, Schedule 1, Table 1  
OEL, Schedule 1, Table 2
- Hyperbaric Facilities (CSA), 3, 424**
- hypodermic needles**  
recapping prohibited, 527
- I**
- ice, working on, 195**
- IEC (International Electrotechnical Commission), 3**
- illness or injury**  
defined  
acute illness or injury, 1  
musculoskeletal injury, 1  
duty to report, 182  
first aid records, 183—184  
musculoskeletal injuries  
prevention, 210—211.1  
*See also* first aid and first aiders; violence, workplace
- immediately dangerous to life or health**  
defined, 1
- impoundment dike**  
Director of Inspection  
reports on dangerous occurrences, 544(2)
- in-line skates**  
safety helmets, free of damage or modification, 235(1)(b)  
safety helmets, standards, 235(1)(a)
- inclement weather** *See* weather
- incombustible dust**  
defined, 1  
in underground coal mines, 743  
*See also* coal dust
- Industrial Eye and Face Protectors (CSA), 3, 229**
- industrial furnaces and fired heaters, 163, 168**  
precautions against fires and explosions  
flammable substances, 163(2)(c)  
ignition after shutdown, 168(3)  
inserted blinds or double block and bleed systems, prohibitions, 168(2)  
operations in hazardous locations, 168(4)—(5)  
other safeguards, 168(1), 168(6)  
standards for classification of hazardous locations, 168(4)—(5)  
*See also* fire and explosion hazards
- industrial headwear**  
duty to use, 234  
exemption, 239  
*See also* head protection and headwear
- industrial minerals** *See* mines and mining
- industrial power producers**  
defined  
industrial power producers, 1  
utility employee, 1  
coordinated work, 802  
safe work practices, 801  
*See also* electrical utilities and utility workers
- Industrial Protective Headwear (CSA), 3, 234, 831(1)(a), 831(2)(a)**
- industrial radiofrequency heaters**  
electromagnetic radiation  
defined, 1
- industrial robot system** *See* robots
- Industrial Robots and Robot Systems — General Safety Requirements (CSA), 3, 384(1)**
- Industrial Rope Access Technique (ARAA), 3, 826(c)**
- industrial rope access work**  
in definition of occupational rope access work, 1  
*See also* rope access work
- industrial tractors, 270—271**  
rollover protective structures, 270  
seatbelts and restraint systems, 271  
*See also* powered mobile equipment
- inerting**  
defined  
inerting, 1  
in confined spaces, 54
- inflating tires** *See* tire servicing
- information access and privacy for workers**  
asbestos, silica or coal dust exposure records, 40(5)  
audiometric testing records, 223

- first aid records, 184  
 health information in emergencies, 413—414  
 noise exposure assessment records, 223
- information system for hazardous materials**  
*See Workplace Hazardous Materials Information System (WHMIS)*
- injury** *See illness or injury*
- inspect machinery, isolating hazardous energy to** *See hazardous energy control (for service, repair, tests, adjustments, inspections)*
- Installing Poles (Insulating Sticks) and Universal Tool Attachments (Fittings) for Live Working (ULC)**, 3, 799(1)
- Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST)**  
 OEL measurements, 20(1)(e)
- instructional signs**  
 logging industry vehicle traffic control, 525(3)
- Instrument Face Design and Location for Construction and Industrial Equipment (SAE)**, 3, 581(d)
- integrating sound level meter, standards**, 219(3)
- interlock barrier**  
 defined, 1  
*See also robots*
- internal combustion engines, 166**  
 combustion air intakes and exhaust discharges, 163(2)(c)(ii), 166(1)  
 flammable substances, 163(2)(c), 166(2)—(3)  
 gas monitoring equipment, 166(6)  
 hazardous locations, classification of, 166(5)—(7)  
 storage of flammable substances, 163(2)  
 vehicles with, 166(4)—(7)  
*See also fire and explosion hazards; hot work*
- International Electrotechnical Commission (IEC)**, 3
- International guidelines on the use of rope access methods for industrial purposes (International Rope Access Trade Association)**, 3, 823(a)
- International Organization for Standardization (ISO)**, 3  
 OEL measurements, 20(1)(f)
- International Rope Access Trade Association**, 3
- ionizing radiation**  
 defined, 1  
 prevention and protection, 291
- IRSST Workplace Air Contamination Sampling Guide**  
 OEL measurements, 20(1)(e)
- ISO (International Organization for Standardization)**, 3  
 OEL measurements, 20(1)(f)
- isocyanates**  
 code of practice required, 26, Schedule 1, Table 1
- isolate**  
 defined  
 isolate, 1  
 isolated, 1  
*See also hazardous energy control (for service, repair, tests, adjustments, inspections)*
- isolated work site**  
 defined  
 isolated work site, 1  
 first aid requirements  
 low hazard work, Schedule 2, Table 5  
 medium hazard work, Schedule 2, Table 6  
 high hazard work, Schedule 2, Table 7  
*See also first aid and first aiders*
- isolating pipes and pipelines** *See pipes and pipelines*
- isolation** *See working alone*
- J**
- jackets as protective clothing**  
 duty to use, 228  
 use of, 242—243  
*See also life jackets*
- jewellery**  
 contact with equipment and machinery, safety precautions, 362
- jib**  
 defined, 1  
 electrical components and functions, standards, 93  
 overhead cranes, standards, 93—94  
 preventing damage by crane or boom truck, 92
- Joint First Aid Training Standards Board**  
 defined, 1  
 standards for first aid certificates, 177
- joint work site health and safety committee, 196—207**  
 defined  
 employer member, 1  
 joint work site health and safety committee, 1  
 worker member, 1  
 Director of Inspection, request for meetings, 203(2)
- documents  
 minutes, 202  
 worker overexposure (OEL), reports, 22(3)
- employer members  
 appointment of, 200  
 co-chair selection, 201(3)  
 number on committee, 197(a)  
 term of membership, 198
- establishment of committee, 196
- inspection of work site  
 co-chairs present, 207  
 duty, 206

## Index

manufacturer of controlled product, duty to disclose information, 411(1)(c)  
material safety data sheet availability, 407  
meetings  
  by request of Director of Inspection, 203(2)  
  co-chairs, 201  
  minutes, 202  
  officer attendance, 205  
  quorum, 204  
  when to hold, 203  
membership on committee  
  appointment of employer members, 199  
  co-chairs, 201  
  election of worker members, 199  
  number of members, 197  
  term of membership, 198  
Minister, order for establishment, 196  
WHMIS procedures, 397(2)  
worker members  
  co-chair selection, 201(2)  
  election of, 199  
  number on committee, 197(a)  
  term of membership, 198  
  trade union or worker associations, elections, 199(2)

## K

**knives** *See* sharps

## knots

Prusik and similar knots, 150.3  
tree care operations, 796

## L

### lab coats

duty to use, 228  
use of, 242—243  
*See also* personal protective clothing

### labels

defined, 1  
asbestos waste containers, 38  
*See also* supplier labels (WHMIS); work site labels (WHMIS)

### laboratory samples of controlled products (WHMIS), 403

defined  
  laboratory sample, 1  
label exemptions, 403(1)  
label information, 403(2)  
*See also* Workplace Hazardous Materials Information System (WHMIS)

### ladderjack scaffolds

defined, 1  
design and specifications, 336  
platforms, 330  
*See also* scaffolds and temporary work platforms

### ladders, 124—137

defined

fixed ladder, 1  
portable ladder, 1  
crawl board, safe use, 129  
installation of shoring, stringers or bracing in excavations, 458(1)—(2)  
on scaffolding  
  vertical ladders, 327  
  working from ladders, 328  
painting, prohibition, 126  
portable ladders, 133—137  
  constructed ladders, design criteria, 134  
  personal fall arrest systems, 137  
  positioning and securing, 136  
  working from top 2 rungs, prohibition, 133  
protective coatings, 126(2)  
roof ladder, safe use, 129  
single rail, prohibition, 125  
standards, 135  
uses  
  near energized electrical equipment, 127  
  on extending booms, 128  
  restrictions, 124  
*See also* fixed ladders

### lancet

defined as medical sharp, 1  
*See also* sharps

### land description in mine plan, 533(d)

### landings

portable ladders used with, 136(c)

### lane control devices

public highway traffic control, 194(7)(c)

### lanyards, 142.2

adjustable lanyard for work positioning, 148  
appropriate material, 142.2(2)—(3)  
standards, 142.2(1)

### latches, safety

on hooks, 303

### lawnmowers, ride-on *See* ride-on lawnmowers

### lead and lead compounds, 41—43

defined  
  exposed worker, 1  
  restricted area, 1  
blood lead level test, 43  
code of practice required, 26, Schedule 1, Table 1  
costs of blood lead level test, 43(3)  
decontamination methods, 28(c), 41(2)(e)  
decontamination of protective clothing, 30  
documents  
  exposure control plan, 41  
  hazard assessment, 41  
  exposure control plan, 41  
  contents of plan, 41(2)  
  designated competent person to prepare plan, 2.2  
  updating and maintenance of plan, 41(2)(h)  
  when needed, 41(1)

- hazard assessment, 41(2)(b)  
 health monitoring, 41(2)(f)  
 housekeeping, 28(b)  
 minimization of release, 28(a)  
 OEL, Schedule 1, Table 2 records, 41(2)(g)  
 refusal to take blood lead level test, 43(4)—(5)  
 removal of employee from further exposure, 43(6)  
 restricted areas  
   authorized persons, 29(1), 29(2)(b)  
   decontamination of workers, 29(4)(c)  
   emergencies, 29(5)  
   no eating, drinking or smoking, 29(2)(c)  
   protection of worker's street clothing, 29(4)  
   protective clothing for workers, 29(4), 30  
   signs, 29(2)—(3)  
 tests, air monitoring and surface testing, 42  
 training of workers, 41(2)(c)  
 waste and unnecessary accumulations, 28(b)
- leading edge**  
 defined, 1  
 fall protection systems, 158
- leaks** *See fugitive emission*
- leg protection**  
 personal protective equipment, 242
- legislation**  
 availability to employees, 2.1
- L<sub>ex</sub>**  
 defined, 1  
 occupational exposure limit, 218, Schedule 3, Table 1  
*See also* noise
- life jackets, 240—241**  
 defined, 1  
 duty to use, 228  
 standards, 240(1)  
 use of devices, 241  
 use with fall protection system, 157  
*See also* personal flotation devices; water dangers
- life safety rope, 147**  
 one worker per rope, 147(4)  
 standards, 147(1)  
 swing drop distance limits, 147(3)  
 use in fall protection system, 147(2)—(4)  
*See also* fall protection systems
- Lifejackets, Inherently Buoyant Type (CGSB), 3, 240(1)**
- lifelines**  
 defined, 1  
 for confined and restricted spaces, 48(1)(a)  
*See also* horizontal lifeline systems; personal fall arrest system (PFAS)
- lifting and handling loads, 208—211.1**  
 defined  
   load, 208(4)  
   musculoskeletal injuries, 1  
   safe patient/client/resident handling, 1  
   adapting heavy or awkward loads, 209  
   appropriate equipment, 209.1  
   handling program, 209.2  
   hazard assessment, 210  
   prevention of injuries, 210—211.1  
   use of equipment provided, 208
- lifting devices, 59—75**  
 A-frame safe practices, 75  
 application of Code, 59  
 certification by engineer  
   not commercially manufactured, 60, 62  
   repairs and modifications, 65(3)(f), 73  
 collision prevention, 67  
 containers for hoisting, 74  
 documents  
   load charts, 64(2)  
   log books, 65  
 gin pole safe practices, 75  
 hoisting lines, 70  
 identification of components, 61, 62(1), 73  
 in health care facilities, 209.1  
 load charts, 64(2)  
 load weight, 68  
 loads over work areas, 69  
 log books, 65  
   certification by engineer, 65(3)(f), 73  
   contents, 65(3)  
   each device, 65(1)  
   inspections and tests, 65(3)(d)  
   new owner transfer, 65(2)  
   operator requirement, 64(4)  
   paper or electronic for each device, 65(1)  
   person doing work, 65(5)  
   signature, 65(4)  
   tower crane, correct entries confirmed, 65(6)  
 not commercially manufactured, 60, 62  
 operator requirements, 64  
 rated load capacity, 62  
 remote controls, 72(3)  
 repairs and modifications, 73  
 scissor lifts, 156  
 signal systems, 64(2), 71  
 tag lines, 70  
 travel restraint system, 156(2)  
 unsafe lift prevention, 66
- light duty scaffolds**  
 defined, 1  
*See also* scaffolds and temporary work platforms; swingstage scaffolds
- light metal alloys in mines, 538**
- Lighting and Marking of Construction, Earth-moving Machinery (SAE), 3, 264(2)**
- lightning** *See weather*
- lights and lighting**  
 defined  
   hours of darkness, 1  
   emergency lighting, 186(3)—(4)  
 flashing lights and beacons

## Index

- falling objects warnings, 318(3)
    - public highway traffic control, 194(7)(d)
  - for well swabbing, 781(6)
  - light sources protected from damage, 186(2)
  - magazines, 472, 612
  - powered mobile equipment, 264
  - sufficient for safety, 186(1)
  - vehicles in mines, 594
  - See also* darkness; vehicles, use in mining
  - likely to crack or crumble soil** *See* **soils and soil types**
  - limb and body protection**
    - duty to use, 228
    - skin protection, 243
    - See also* personal protective clothing
  - limestone quarries** *See* **mines and mining**
  - limit devices on tower cranes, 101—102**
  - Lineman's Body Belt and Lineman's Safety Strap (CSA), 3, 149**
  - liquefied gas** *See* **compressed/liquefied gas**
  - liquids**
    - defined
    - combustible liquid, 1
    - flammable liquids, 1
    - See also* fire and explosion hazards
  - Live Working — Conductive Clothing for Use at Nominal Voltage Up to 800 kV A.C. and +/- 600 kV D.C. (ULC), 3, 799(1)**
  - Live Working — Gloves of Insulating Materials (ULC), 3, 799(1)**
  - Live Working — Insulating Foam-Filled Tubes and Solid Rods for Live Working (ULC), 3, 799(1)**
  - load blocks for mobile cranes, 92.1**
    - See also* mobile cranes
  - loaded hole warnings, 507**
  - loaders, 270—271**
    - rollover protective structures, 270
    - seatbelts and restraint systems, 271
    - See also* powered mobile equipment
  - loading poles for loading explosives, 491**
  - locking out and tagging**
    - after safeguard removal, 311(4)
    - diving operations by intakes, pipes and tunnels, 437
  - locomotives**
    - in underground coal mines, 706
  - log carriage, sawmill, 383**
  - logging trucks, 524—525**
    - hazard assessment, 524(3)
    - loads that exceed manufacturer's specifications, 524(3)
    - passing vehicle traffic control system, 525(2)—(4)
    - road warnings, 522
    - structures for safe transit, 525(1)
    - See also* forestry
  - loose materials**
    - in excavations, 452—453
  - loose soil** *See* **soils and soil types**
  - low hazard work**
    - defined, Schedule 2, Table 1
    - first aid requirements, 178, 181(1), Schedule 2, Table 5
  - low lift trucks** *See* **forklift trucks**
  - lower explosive limit**
    - defined, 1
    - See also* explosives (at mine sites); explosives (other than at mine sites)
  - lumber**
    - defined, 1
    - standards for alternative temporary protective structures in trenches, 457(1)
  - lunch rooms**
    - clean and sanitary facilities, 361(1)
    - storage of other materials, 361(2)
- ## M
- machinery, 362—385**
    - defined
    - hazardous energy, 1
    - machinery, 1
    - operate, 1
    - actuated fastening tools, 374
    - alarm systems for starting, 365
    - alternative safeguards, 310(4)—(5)
    - certification by engineer
      - machinery for moving workers, 364
    - contact by clothing, jewellery or hair, 362
    - controls, 368
    - conveyor belts, 372—373
      - crossing over moving belts, 373
      - elevated belts, 372
      - transfer of controlled products, 402
      - workers crossing over or under moving belts, 372(2)—(3)
    - drive belts, 370
    - feeding materials into machinery
      - continuous-feed devices, 371
      - preventing machine activation, 366
      - push stick or block, safeguards, 319
    - for moving workers, 364
    - grinders, 375
    - hazardous energy control (for service, repair, tests, adjustments, inspections), 212—215.5
      - complex group control, 215.1
      - group control, 215
      - individual control, 214
      - isolating piping, 215.4
      - isolation procedures, 212
      - isolation verification, 213
      - manufacturer's specifications, 212(2)
      - pigging and testing of pipelines, 215.5
      - remotely controlled systems, 215.2
      - returning to operation, 215.3



immobilizing machines, 369  
 machines close together, precautions, 363  
 manufacturer's specifications  
   grinders, 375(1), 375(3)  
   machinery for moving workers, 364  
 operator responsibilities, 367  
 preventing machine activation, 366  
 push stick or block, safeguard, 319  
 safeguards and warnings, 310—312  
   alternative protections, 311(3)  
   alternative work procedures, 310(4)—(5)  
   locking out and tagging, 311(4)  
   machine failure, 317  
   no safeguards, 312  
   personal protective equipment, 312(2)  
   push stick or block to feed machinery, 319  
   removing safeguards, 311  
   toe boards around top of pit with machine, 321(4)  
   when safeguards are needed, 310(2)—(3)  
 warning signs and alarms  
   for automatic starts, sign, 310(6)  
   starting machinery, alarm, 365  
*See also* robots; saws and sawmills; vehicles

**magazines**  
 defined, 1  
 construction standards, 470(2)  
 intermittent use of explosives, 471  
 light sources, 472  
 oldest used first, 474  
 priming of charges, prohibitions, 481  
 removal of appropriate quantities, 477  
 transporting explosives, 473  
   compliance with Acts, 473(1)  
   drivers and passengers, 473(2)  
   fire extinguishers on vehicles, 473(4)  
   leg wires of detonators, 473(3)  
 unused explosives stored safely, 476, 481  
*See also* explosives (at mine sites); explosives (other than at mine sites)

**magnesium**  
 in light metal alloys, 538  
*See also* mines and mining

**males**  
 facial hair  
   clean shaven for facial seals, 250(2)  
   contact with equipment and machinery, safety precautions, 362  
 toilet requirements, 357, Schedule 7

**man baskets**  
 chimney hoists, 77(g), 79  
 personnel baskets  
   for chimney hoists, 79  
   for mobile cranes, standards, 88—88.1

**manholes**  
 fixed ladders in, 131  
 in underground coal mines, 703

*See also* buried or concrete-embedded facilities; confined and restricted spaces

**manual lifting and handling** *See* **lifting and handling loads**

**Manual of Uniform Traffic Control Devices for Canada**, 3, 194(7)(i)

**Manually Propelled Elevating Aerial Platforms (ANSI)**, 3, 347(4)

**manufacturers of controlled products** *See* **Workplace Hazardous Materials Information System (WHMIS)**

**mark** *See* **labels**

**masonry walls**  
 stabilization, 192

**mast-climbing elevating platforms**  
 standards, 347(6)  
*See also* elevating platforms and aerial devices

**Mast-Climbing Work Platforms (ANSI)**, 3, 347(6)

**material hoists, 81—87**  
 defined, 1  
 braking system, 86  
 gate interlocks, 83  
 location protected, 87  
 operator responsibilities, 84  
 rider restriction, 82  
 safety codes, 81  
 signal systems, 85  
   buildings more than 20 metres high, 85(2)  
   electrical or mechanical systems, 85(1)(c)  
   operator and signaller communication, 85(1)(b)  
   posting of signal descriptions, 85(1)(a)  
*See also* hoists

**material safety data sheets (MSDS) WHMIS, 404—414**  
 defined, 1  
 availability, 407  
 employer's data sheet, 405  
 information current, 406  
 supplier's data sheet, 404  
 training in, 397(1)(b)  
*See also* employer's material safety data sheets (WHMIS); supplier's material safety data sheet (WHMIS); Workplace Hazardous Materials Information System (WHMIS)

**material-lifting aerial devices**  
 on motor vehicle, standards, 347(5)  
*See also* elevating platforms and aerial devices

**materials chute**  
 at demolition work site, 420

**materials information system, hazardous** *See* **Workplace Hazardous Materials Information System (WHMIS)**

**mechanical energy**  
 in definition of hazardous energy, 1  
*See also* hazardous energy control (for service, repair, tests, adjustments, inspections)

## Index

### **mechanized feller or limber, 520**

*See also* forestry

### **medical alert bracelets, 362(3)**

### **medical clinic *See* health care**

### **medical patients, lifting**

appropriate equipment, 209.1

defined in safe patient/client/resident handling, 1

handling program, 209.2

hazard assessment, 210

prevention of injuries, 210—211.1

*See also* lifting and handling loads

### **medical professionals *See* health care**

### **medical sharps**

coming into effect, 525.2(1)

defined

medical sharp, 1

parenteral contact, 1

safety-engineered medical sharp, 1

recapping waste needles, prohibition, 527

safe work procedures, 525.2(4)—(6), 528

safety-engineered medical sharps, 525.2(2)—(3)

*See also* biohazardous materials

### **medium hazard work**

defined, 1

first aid requirements, 178, 181(1), Schedule 2, Table 6

### **meets the requirements of**

defined, 1

*See also* specifications, certifications and standards

### **men *See* males**

### **mesh, wire**

in safeguards, specifications, 322

### **metal mesh slings**

rejection criteria, 307

standards, 297

### **metal scaffolding**

specifications and certifications, 331

*See also* scaffolds and temporary work platforms

### **metatarsal protection in footwear, 233(2)—(4)**

*See also* foot protection and footwear

### **methane in underground coal mines**

inspections, 730

*See also* underground coal mines

### **methyl bromide**

code of practice required, 26, Schedule 1, Table 1

### **methyl hydrazine**

code of practice required, 26, Schedule 1, Table 1

### **mg/m<sup>3</sup>**

defined, Schedule 1, Table 2

### **mine blaster *See* explosives (at mine sites)**

### **mines and mining, 531—544**

airborne dust, 742

building safety, 532

certification by engineer

walls, 541(1)

dangerous occurrences to report to Director

dam or dike dangers, 544(2)

electrical equipment failures, 544(1)(f)

ignition of gas or dust, 544(1)(d)

incidents with hoists, sheaves, shafts or headframes, 544(1)(i)

out of control vehicles, 544(1)(c)

outbursts and inrushes, 544(1)(h)

subsidence or unexpected ground fall, 544(1)(a)

underground ventilation system stoppages, 544(1)(b)

unexpected dangerous events, 544(1)(g)

worker withdrawal in emergencies, 544(1)(e)

Director of Inspection

application to use unclassified explosive, Schedule 11, Table 3

approval of dust control alternate protections, 537(2)

electrical systems, notice and approval, 561

electrical systems, overhead power lines

approvals, 567

emergency response station, exemption, 545(1)

reports of dangerous occurrences, 544

discards in dump or impoundment, 540

documents

dangerous occurrences reports, 544

electrical systems approval by Director, 561

inspection records, 534

mine plans, 533

records of electrical systems installation and repairs, 562(2)

tests of supply systems for mobile electrical equipment, 565

dumping blocks, 542

dust control, 532, 537

electrical systems, 560—572

authorized worker to install, 562(1)

Director, notice and approvals, 561

drills, hand held electric, 572

overhead power lines, 567

records of installation and repairs, 562(2)

standards, 560

supply systems for mobile electrical equipment, 565

welding, 571

emergency escape routes on surface haul roads, 539(2)

emergency response stations, 545 emergency response team, 546

first aid, high hazard work, Schedule 2, Table 2

flammable gas monitors, 543

housekeeping, 532

inspections and tests  
 supply systems for mobile electrical equipment, 565

light metal alloys, 538

mine plans, 533

separation distances between explosives and fixed radio transmitters, Schedule 11, Table 1

separation distances between explosives and mobile radio transmitters, Schedule 11, Table 2

separation distances between explosives and mobile radiofrequency transmitters, Schedule 10, Table 3

stockpiles, 536

surface haul roads, 539

tests and inspections  
 of electrical systems, 562  
 record retention period, 534

walls  
 certified by engineer, 541(1)  
 specifications, 541(2)

*See also* conveyors in mines; surface mines; underground coal mines; underground mines; vehicles, use in mining

**mines and mining, definitions**

authorized worker, 1

blaster, 1

blasting area, 1

blasting machine, 1

blasting mat, 1

combined operation, 1

combined ventilation system, 1

discard, 1

explosive, 1

gob, 1

incombustible dust, 1

mine, 1

mine blaster, 1

mine entrance, 1

mine level, 1

mine material, 1

mine official, 1

mine plan, 1

mine shaft, 1

mine site, 1

mine tunnel, 1

mine wall, 1

outlet, 1

portable power cables, 1

portal, 1

processing plant, 1

quarry, 1

split, 1

surface mine, 1

surface mine blaster, 1

underground mine, 1

underground mine blaster, 1

underground shaft, 1

underground shaft hoist, 1

ventilation stopping, 1

working face, 1

workings, 1

**Mining Diesel Fuel (CGSB), 3, 705(1)(a)**

**Minister**

joint work site health and safety committee, order, 196

**misfires, 509—512**

defined, 1

abandoned charge, 512

destroying a misfire, 511

waiting period, 509

warning signs, 511(2)

withdrawing misfire, 510

**mittens**

duty to use, 228

use of, 242—243

**mobile communications systems and explosives**

defined

electromagnetic radiation, 1

explosives  
 separation distances between explosives and mobile radio transmitters, Schedule 11, Table 2  
 separation distances between explosives and mobile radiofrequency transmitters, Schedule 10, Table 3  
 signs to turn off mobile radio transmitters, surface mines, 656

**mobile cranes**

defined, 1

boom and jib stops, 92

counterweights and outriggers, 90, 92.2

documents  
 load charts, 63(1)  
 log books, 65  
 preventing damage procedures, 92

engineer control of non-destructive testing, 89

load blocks, 92.1

load charts, 63(1)

log books, 65

personnel baskets, standards, 88—88.1

preventing damage, 92

standards, 88—88.1, 92.1

warning devices, 91, 267

*See also* cranes

**mobile equipment**

defined, 1

*See also* powered mobile equipment

**mobile work site**

toilets and washing facilities, 356(b)

**monorail**

overhead cranes, standards, 93—94

**mopeds**

protective headwear, 236

## Index

- motor graders, 270—271**  
rollover protective structures, 270  
seatbelts and restraint systems, 271  
*See also* powered mobile equipment
- motor vehicles** *See* **powered mobile equipment; snow vehicles; vehicles**
- Motorcycle Helmets (FMVSS), 3, 236(1)(a)**
- motorcycles**  
protective and safety helmets, 236
- motorized trail bike**  
safety helmets, 236
- mould exposure, 43.1**
- mountaineering**  
in definition of non-industrial rope access work, 1  
*See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)
- Mountaineering and Climbing Equipment — Connectors (UIAA), 3, 835(c), 849(b)**
- Mountaineering and Climbing Equipment — Dynamic Ropes (UIAA), 3, 818(b), 819(1)(b)**
- Mountaineering and Climbing Equipment — Harnesses (UIAA), 3, 847(c)**
- Mountaineering and Climbing Equipment — Helmets (UIAA), 3, 831(1)(e), 831(2)(f), 844(b)**
- Mountaineering and Climbing Equipment — Low Stretch Ropes (UIAA), 3, 817(c)**
- Mountaineering and Climbing Equipment — Rope Clamps (UIAA), 3, 837(b), 838(c)**
- mountaineering association** *See* **Association of Canadian Mountain Guides**
- Mountaineering equipment — Connectors — Safety requirements and test methods (CEN), 3, 143(1), 835(b), 849(a)**
- Mountaineering equipment — Dynamic mountaineering ropes — Safety requirements and test methods (CEN), 3, 818(a), 819(1)(a)**
- Mountaineering equipment — Harnesses — Safety requirements and test methods (CEN), 3, 847(b)**
- Mountaineering equipment — Helmets for mountaineers — Safety requirements and test methods (CEN), 3, 831(1)(d), 831(2)(e), 844(a)**
- Mountaineering equipment — Rope clamps — Safety requirements and test methods (CEN), 3, 837(a), 838(b)**
- mousing on hooks, 303**
- mouth bit and nose-clamp respirators**  
as emergency escape equipment, 254
- movement of loads**  
in powered mobile equipment, 258
- movement of workers**  
safety precautions, 364
- mud gun, 776(2)**
- musculoskeletal injury**  
defined, 1  
prevention of injuries, 210—211.1  
*See also* illness or injury; lifting and handling loads
- mustaches** *See* **facial hair**
- N**
- National Fire Protection Association (NFPA), 3**  
defined, 1
- National Institute for Occupational Safety and Health (NIOSH)**  
defined, 1  
in definition of respirable particulate, 1  
OEL measurements, 20(1)(a)
- National Lumber Grades Authority (NLGA) Standard, 3**
- natural gas and oil wells** *See* **oil and gas wells**
- Natural Resources Canada (NRCan), 3**  
explosive initiating and testing devices (CAN-MET), 639(b)  
notice of loss or theft of explosives, 514
- neckwear, dangling**  
contact with equipment and machinery, safety precautions, 362
- needle-beam scaffolds**  
design and specifications, 337  
*See also* scaffolds and temporary work platforms
- needles**  
defined as medical sharp, 1  
recapping waste needles, prohibition, 527  
*See also* sharps
- needles, recapping prohibited, 527**
- NFPA (National Fire Protection Association), 3**
- NIOSH (National Institute for Occupational Safety and Health)**  
in definition of respirable particulate, 1  
OEL measurements, 20(1)(a), 20(3)
- NLGA (National Lumber Grades Authority) Standard, 3**
- noise, 216—224**  
defined  
3 decibel exchange rate, 1  
abnormal audiogram, 1  
abnormal shift, 1  
audiometer, 1  
audiometric technician, 1  
dBA, 1  
excess noise, 1  
L<sub>ex</sub>, 1  
noise, 1  
Director of Occupational Hygiene  
noise assessment equipment, approval, 219(3)(d)

- documents  
 audiometric testing, 223  
 noise exposure assessment, 220  
 noise management program, 221  
 duty to reduce, 216  
 hearing protection devices  
 in noise management programs, 221(2)(e)  
 standards, 222(1),  
 Schedule 3, Table 2  
 training of workers, 222(2)(a)  
 worker cooperation, 222(2)(b), 222(3)  
 integrating sound level meter, standards,  
 219(3)  
 $L_{ex}$  occupational exposure limit, 218  
 manufacturer's specifications, hearing protec-  
 tion equipment, 222(2)(a)  
 noise dosimeter, standards, 219(3)  
 noise exposure assessment, 219  
 assessor's competency, 219(4)(a)  
 measurement instruments, 219(3)  
 standards and specifications, 219(2)—(3)  
 when to assess, 219(1), 219(4)  
 noise management program  
 contents of program, 221(2)  
 when required, 221(1)  
 when to review program, 221(2)(g)  
 worker cooperation, 221(3)  
 occupational exposure limits, 218, Schedule 3,  
 Table 1  
 records of audiometric testing in noise man-  
 agement program, 221(2)(f)  
 records of noise exposure assessment  
 contents, 220(1)  
 information to workers, 220(2)(a)  
 retention of records, 220(2)(b)  
 signs warning of levels exceeding limits,  
 221(2)(c)  
 sound level meters, standards, 219(3)  
 training  
 hearing protection device use, 222(2)(a)  
 noise management measures, 221(2)(a),  
 221(2)(g)  
 when to use noise control design, 217  
*See also* audiometric testing; hazard assess-  
 ment, elimination and control  
**non-industrial rope access work**  
 in definition of occupational rope access work,  
 1  
*See also* rope access work, non-industrial  
 (mountaineering, caving, canyoning, sport  
 climbing)  
**Non-Rail-Bound Diesel-Powered Machines  
 for Use in Non-Gassy Underground  
 Mines (CSA), 3, 597(2)**  
 notifiable diseases *See* asbestos; coal dust;  
 lead and lead compounds; noise; silica-  
 crystalline, respirable
- nozzle guards**  
 for airless spray machinery, 170.1(5)—(6)  
**NRCan (Natural Resources Canada), 3**  
 explosive initiating and testing devices (CAN-  
 MET), 639(b)  
 notice of loss or theft of explosives, 514  
**nuclear energy**  
 in definition of hazardous energy, 1  
*See also* hazardous energy control (for service,  
 repair, tests, adjustments, inspections)  
**Nuclear Safety and Control Act (Canada)**  
 WHMIS not to apply to products governed by,  
 395(5)(d)  
**nurse (advanced first aider)**  
 defined, 1  
 as first aid provider, 181(2)—(5)  
 non-first aid duties, 181(4)  
*See also* first aid and first aiders
- O**  
**O-rings**  
 standards for fall arrest system, 143(1)  
 standards for industrial rope access work, 835  
**Occupational and Educational Personal Eye  
 and Face Protection Devices (ANSI), 3,  
 229**  
**occupational exposure limit (OEL), 16—22**  
 defined  
 harmful substance, 1  
 occupational exposure limit, 1  
 ppm (parts per million), Schedule 1, Table 2  
 restricted area, 1  
 code of practice  
 chemical substances, 26(1)  
 uncontrolled release procedures, 26(2)  
 decontamination of workers, 23  
 Director of Occupational Hygiene  
 8-hour OEL adjustments, approval, 18(3)  
 measurement methods, approval, 20(1)(b)  
 review of OEL limits, 19  
 documents  
 code of practice for chemical substances,  
 26(1)  
 code of practice for uncontrolled release  
 procedures, 26(2)  
 hazard assessment, 21  
 measurements of airborne concentrations,  
 20(4)  
 overexposure report, 22  
 hazard assessment, 21  
 list of chemical substances and OELs, Sche-  
 dule 1, Table 2  
 measurements of airborne concentrations  
 alternate methods, approval, 20(1)(h)  
 competency of person taking measure-  
 ments, 20(2.1)

- continuous reading direct reading instruments for, 20(2)
- DFG methods, 20(1)(g)
- EPA methods, 20(1)(d)
- fibres, 20(3)
- HSE methods, 20(1)(c)
- IRSST methods, 20(1)(e)
- ISO methods, 20(1)(f)
- NIOSH methods, 20(1)(a), 20(3)
- OSHA methods, 20(1)(b)
- records, 20(4)
- no eating, drinking or smoking in contaminated areas, 25
- potential exposure, 21
- review of OEL limits, 19
- storage of harmful substances, 27
- training in overexposure to harmful substances, 21(2)(c), 21(3)
- ventilation system, when needed, 386
- worker exposure
  - exceeds 8-hour OEL but less than 15-minute OEL, 16(3)
  - informed worker, 21(2), 22(2)
  - list of chemical substances and OELs, 16(1)
  - multiple substances, 17
  - no 15-minute OEL is established, 16(4)
  - no OEL is established, 16(2)
  - not to exceed ceiling limit, 16(3.1)
  - not to exceed OEL, 16(1)
  - shifts longer than 8 hours, 18
- worker overexposure
  - hazard assessment, 22(2)
  - measurements, 22(1)
  - report to joint work site health and safety committee, 22(3)
- See also* lead and lead compounds; ventilation systems
- Occupational Health and Safety Act**
  - Act, defined, 1
  - availability of legislation, 2.1
  - confidential business information, 412
- Occupational Health and Safety Code, 3**
  - availability of legislation, 2.1
  - coming into force, 6
  - extended application to prime contractor, 2
- Occupational Health and Safety Regulation**
  - availability of legislation, 2.1
  - in definitions
    - of Joint First Aid Training Standards Board, 1
    - of surface mine blaster, 1
    - of underground coal mine electrical superintendent, 1
    - of underground coal mine foreman, 1
    - of underground coal mine manager, 1
    - of underground mine blaster, 1
    - required qualifications for underground coal mine manager or foreman, 684
- occupational rope access work**
  - defined, 1
  - See also* rope access work
- Occupational Safety and Health Administration Standard (OSHA), 3**
  - OEL measurements, 20(1)(b)
- Occupational Safety Code for Diving Operations (CSA), 3, 424**
- OEL *See* occupational exposure limit (OEL)**
- oil and gas exploration, 751**
- oil and gas wells, 750—784**
  - defined
    - electromagnetic radiation, 1
    - hours of darkness, 1
    - snubbing, 1
  - application of Part, 750
  - breathing equipment, 752
  - catheads, 771
  - certification by engineer
    - drilling fluid, 776(2)
    - ground anchor pull-tests, 764
    - operating load of derrick or mast, 753
  - competent supervisor, 751
  - derricks and masts
    - counterweights, 775
    - erection or bringing down, 754
    - guy lines, 763
    - log book for inspections and repairs, 755
    - manufacturer's specifications, 754(1)
    - operating load, 753
  - diesel fuel storage, 778(4)
  - Director of Inspection
    - derrick or mast erection or bringing down procedures, approval, 754(1)
  - documents
    - derrick or mast inspections or repairs, log book, 755
    - drilling rig, service rig, and snubbing unit inspections, 758(2)
    - ground anchor pull-tests, 764(2)
    - hazard assessment for overloaded service rig trucks, 759
    - safe work practices, 751(2)
    - well servicing safety procedures, 781(2)
  - drawworks, 59(1.1), 766—767
  - drill stem testing, 779
  - drillers
    - cathead or tong line hazards, 756(1)
    - sliding down pipes, hoses, cables or ropes, prohibition, 756(2)—(3)
  - drilling fluid, 776—777, 779
  - drilling rigs, service rigs, and snubbing units
    - catwalks, 761(3)
    - drawworks, 766
    - exits from enclosures, 761
    - gas-assisted sand clean-out, 781(6)
    - guy lines, 763
    - inspections, 758
    - overloaded service rig trucks, 759

- pump house enclosures, 761(2)
  - safety checks, 760
- during darkness
  - test fluid recovery, 779(6)
  - well swabbing, 780(6)
- emergency escape routes, 762
- emergency escape safety buggy, 762(3)
- first aid high hazard work, Schedule 2, Table 2
- fixed ladders, rest platform exemption, 132
- fuel storage, prohibitions, 778
- gas sample containers, 784
- geophysical operations, 757
- ground anchor pull-tests, 764
- hazard assessment
  - for overloaded service rig trucks, 759
  - for rotary table danger zone, 773(3)
- housekeeping, 762(1)
- inspections and tests
  - drawworks brakes, 767(2)
  - drill stem testing, 779(2)
  - drilling rigs, service rigs, and snubbing units, 758
  - emergency escape routes, 762(1)
- manufacturer's specifications
  - anchor lines in escape routes, 762(2)
  - derricks and masts, 754(1)
  - drilling fluid, 776(2)
  - emergency escape safety buggy, 762(3)
  - ground anchor pull-tests, 764
  - guy lines, 763(1)
  - operating load of derrick or mast, 753
  - tuggers, 770
  - weight indicators on hoist mechanisms, 768
- oil well blasting and perforating, 516
  - blaster responsibilities, 516(5)—(7)
  - competent worker, not a blaster, 516(3)—(4)
  - compliance with practices approved by Director of Inspection, 516(2)
- racking pipes, 772
- rig tank or pit enclosures, 777
- rope-operated friction catheads, 771
- rotary table danger zone, 773
- rotary tong, 774
- safety checks on drilling rigs, service rigs, and snubbing units, 760
- service rig trucks, overloaded, 759
- shot hole drilling, 757
- snubbing units
  - drawworks, 766
  - exits from enclosures, 761
  - gas-assisted sand clean-out, 781(6)
  - guy lines, 763
  - inspections, 758
  - safety checks, 760
- standards
  - guy lines, 763
  - warning signs, 781(3)
  - well site piping systems, 783
- trailer pipe racks, 765
- travelling blocks, 769—770
- tuggers, 770
- warning signs for well servicing, 781(3)
- weight indicators on hoist mechanisms, 768
- well servicing, 781
- well site piping system, 783
- well stimulation, 782
- well swabbing, 780
- working alone, 393—394, 752
- oil sands** *See* **mines and mining**
- open pit mine**
  - defined
    - excavation, not an, 1
    - soil stabilization, 443
  - See also* surface mines
- openings and holes, 314**
  - covers for openings
    - covering openings, 314(1)(a)
    - guardrails and toe boards, 314(1)(b)
    - temporary covers, 314(2)—(3)
    - warning signs, 314(3)
  - fixed ladders in manholes, 131
  - guardrails, 314(1)(b), 315
  - manholes in underground coal mines, 703
  - materials chutes at demolition sites, 420
  - temporary covers, 314(2)—(3)
  - toe boards, 314(1)(b), 321
  - underground shafts
    - fences and gates, 461(3)—(4)
    - safeguards around surface openings, specifications, 318(6)
    - warning signs, 314(3)
  - See also* safeguards and warnings
- Operator Protection for General-Purpose Industrial Machines (SAE), 3, 270(2)(b), 272(2)(c)**
- Operator Protective Structure Performance Criteria for Certain Forestry Equipment (SAE), 3, 521**
- Operator Restraint System for Off-Road Work Machines (SAE), 3, 271**
- order pickers** *See* **forklift trucks**
- ore cars**
  - transfer of controlled products, 402
- OSHA Standard (Occupational Safety and Health Administration), 3**
  - OEL measurements, 20(1)(b)
- outlet** *See* **mines and mining, definitions; underground mines**
- outrigger scaffolds**
  - defined, 1
  - design and specifications, 338
  - See also* scaffolds and temporary work platforms
- outriggers**
  - concrete pump trucks, 290.2(3)
  - ladders on extending booms, 128

## Index

- mobile crane or boom truck, 90, 92.2
- oval rings**
  - standards for fall arrest system, 143(1)
  - standards for industrial rope access work, 835
- overexertion** *See* **illness or injury**
- overhead cranes, 93—95**
  - codes for maintenance and inspection, 106
  - codes, travelling cranes, 93—94
  - safe movement, travelling cranes, 95
  - See also* cranes
- overhead power lines**
  - blasting operations, 501
  - demolition procedures, disconnections, 419
  - Director of Inspection
    - electrical systems, mines, approvals, 567
    - mines
      - electrical systems, 567
      - overhead power line, blasting in surface mines, 651(2)
    - power pole support when excavating, 454
    - safe limit of approach distances, 225—226, Schedule 4
    - utility worker and tree trimmer exemption, 227
    - when to contact power line operator, 225(1)—(2)
  - Overhead Protection for Agricultural Tractors — Test Procedures and Performance Requirements (SAE), 3, 272(2)(a)**
  - overuse of muscles** *See* **illness or injury**
  - oxygen content in air**
    - defined
      - immediately dangerous to life or health, 1
      - flammable substances not contacting oxygen, 165(6)—(7)
      - in confined and restricted spaces, 55(3)
      - in confined spaces, 52, 56(3)
      - in underground coal mines, 730
      - respiratory dangers, 244(1)(b), 253(a)
      - ventilation systems, worker exposure levels, 386(e)
  - oxygen, compressed** *See* **compressed/liquefied gas**
  - P**
  - painting ladders**
    - general prohibition, 126
  - pallets and storage racks, 187**
    - damage prevention, 187(4)
    - no danger to workers, 187(1)
    - report of damage to storage rack, 187(3)
    - support for loads, 187(2)
  - paramedics** *See* **first aid and first aiders**
  - parenteral contact**
    - defined, 1
    - See also* medical sharps
  - particulate materials**
    - defined
      - particulate not otherwise regulated, 1
      - respirable particulate, 1
      - total particulate, 1
    - ventilation system, when needed, 386(c)
    - See also* fibres
  - patient/client/resident handling**
    - defined in safe patient/client/resident handling, 1
    - See also* lifting and handling loads
  - pedal cyclist**
    - protective headgear, 235
  - pedestrian traffic** *See* **entrances, walkways, and stairways**
  - pendant** *See* **robots**
  - perchlorates**
    - code of practice required, 26, Schedule 1, Table 1
  - permanent (generally)**
    - defined, 1
  - permanent suspension powered work platform, 348**
    - defined, 1
    - certification by engineer, 348(1)(b)
    - standards, 348
    - See also* elevating platforms and aerial devices
  - permitted explosive** *See* **explosives (at mine sites); explosives (other than at mine sites)**
  - personal fall arrest system (PFAS)**
    - defined
      - cow's tail, 1
      - fall protection system, 1
      - free fall distance, 1
      - full body harness, 1
      - horizontal lifeline system, 1
      - lanyard, 1
      - personal fall arrest system, 1
      - shock absorber, 1
      - swing drop distance, 1
      - total fall distance, 1
    - adjustable lanyard for work positioning, 148
    - anchors
      - independence of, 152.3
      - permanent, 152
      - temporary, 152.1(2)
    - certification
      - horizontal lifeline system, 153—153.1
    - clearance, maximum arresting force and swing, 151
    - control zones, 161
    - descent control device, 146
    - equipment compatibility, 150
    - equipment inspection and maintenance, 150.1
    - equipment removal from service, 150.2
    - fall arresters, standards, 144
    - full body harness, 142
    - horizontal lifeline systems, 153—153.1
    - man baskets
      - chimney hoists, 77(g), 79



- mobile cranes, standards, 88—88.1
- portable ladders, requirement, 137
- Prusik and similar knots, 150.3
- rope adjustment device for work positioning, 148.1
- self retracting devices, 145
- shock absorbers, 142.3
- standards
  - connecting components, 143(1)
  - for shock absorbers or shock absorbing lanyards, 142.3(1)
  - full body harness, 142(1)
  - full body harness, tree care, 795
  - sit harness, 847
- swingstage scaffolds, 345(4)—(5)
- water dangers, 157 when required, 139, 141
- work positioning system, 160.1
- See also* fall protection systems
- Personal Flotation Device (CGSB), 3, 240(2)**
- personal flotation devices, 240—241**
  - defined, 1
  - duty to use, 228
  - standards, 240(2)
  - use of devices, 241
  - use with fall protection system, 157
  - See also* life jackets; water dangers
- personal protective clothing**
  - compressed/liquefied to blow substances, prohibition, 171(8)(d)
  - coveralls as protective clothing
    - duty to use, 228
    - use of, 242—243
  - flame resistant clothing, 232
  - footwear, 233
  - for rescue and evacuation workers in emergency response, 118
  - restricted areas, 29(4), 30
  - See also* decontamination of workers; head protection and headwear
- personal protective equipment (PPE), 228—255**
  - defined
    - fall arresting device, 1
    - personal protective equipment, 1
  - condition of equipment, 228(1)(c)
  - condition to perform function, 228(1)(c)
  - correct for hazard, 228(1)(a)
  - duty to use, 228
  - for confined and restricted spaces, 45(d)—(e), 48
  - for hot tap operations, 170(3)(e)
  - hearing protection devices
    - in noise management programs, 221(2)(e)
    - standards, 222(1), Schedule 3, Table 2
    - training of workers, 222(2)(a)
    - worker cooperation, 222(2)(b), 222(3)
  - in hierarchy of hazard elimination and control, 9(4)—(5)
  - limb and body protection, 242
  - no safeguards present, 312(2)
  - not to endanger worker, 228(3)
  - skin, 243
  - training in use, care, limitations and maintenance, 228(1)(d)
  - worker cooperation, 228(1)(b), 228(2)
  - See also* eye protection; life jackets; respiratory protective equipment
- Personal protective equipment against falls from a height — Connectors (CEN), 3, 143(1), 835(a)**
- Personal protective equipment against falls from a height — Descender devices (CEN), 3, 146, 839(a)**
- Personal protective equipment against falls from a height — Energy absorbers (CEN), 3, 142.3(1)**
- Personal protective equipment against falls from a height — Full body harnesses (CEN), 3, 142(1), 795(1)(e), 834(b), 848(a)**
- Personal protective equipment against falls from a height — Lanyards (CEN), 3, 142.2(1), 819(2)**
- Personal protective equipment against falls from a height — Part 2: Guided type fall arresters including a flexible anchor line (CEN), 3, 144, 838(a)**
- Personal protective equipment for prevention of falls from a height. Sit harnesses (CEN), 3, 795(1)(b), 847(a)**
- Personal protective equipment for the prevention of falls from a height — Low stretch kernmantle ropes (CEN), 3, 147(1), 817(a)**
- Personal protective equipment for work positioning and prevention of falls from a height — Belts for work positioning and restraint and work positioning lanyards (CEN), 3, 142.1 (a), 148**
- personal vehicles**
  - for work purposes, 290.1
- personnel baskets**
  - chimney hoists, 79
  - mobile cranes, standards, 88—88.1
  - See also* man baskets
- personnel hoists**
  - standards, 96
  - See also* hoists
- persons, lifting**
  - defined in safe patient/client/resident handling, 1 (*See also* lifting and handling loads)
- Pest Control Products Act (Canada)**
  - WHMIS not to apply to products governed by, 395(5)(c)
- PFAS *See* personal fall arrest system (PFAS)**
- physician's office *See* health care**
- pigging, 215.5**

## Index

### **pile driving equipment and practices, 285—290**

brake bands and clutches, 288  
chocking, 285  
housekeeping, timber piles, 289(b)  
inspections, maintenance, and certifications  
  brake bands and clutches, 288  
  crane booms, 290  
pile hoisting, 286  
restraining hoses and connections, 287  
riding on loads, prohibition, 286(2)  
timber piles, 289  
*See also* powered mobile equipment

### **pilot vehicles**

public highway traffic control, 194(7)(f)

### **PIP (Process Industry Practices) Standard, 3**

#### **pipe racks**

on trailers, 765

### **Pipe Threads, General Purpose (Inch) (ANSI), 3, 783(1)**

#### **Pipeline Act, 448(3)**

included in definition of pipeline, 1

#### **pipes and pipelines**

defined  
  bulk shipment, 1  
  buried facility, 1  
  hand expose zone, 1  
  hazardous energy, 1  
  high pressure pipeline, 1  
  hot tap, 1  
  pipeline, 1  
buried or concrete-embedded facilities, excavating, 447—448  
  
certification by engineer  
  isolating pipes and pipelines, alternate means, 215.4  
  unrestrained pipes, 188(2)—(3)  
diving operations, locking out, 437  
hazardous energy control (for service, repair, tests, adjustments, inspections), 212—215.5  
  complex group control, 215.1  
  group control, 215  
  individual control, 214  
  isolating piping or a pipeline, 215.4  
  isolation procedures, 212  
  isolation verification, 213  
  manufacturer's specifications, 212(2)  
  pigging, 215.5  
  remotely controlled systems, 215.2  
  returning to operation, 215.3  
hoses or piping, safety precautions, 188  
manufacturer's specifications  
  unrestrained pipes, 188(2)—(3)  
pigging, 215.5  
transfer of controlled products, 402

*See also* buried or concrete-embedded facilities; confined and restricted spaces; hot taps

#### **pits *See* confined and restricted spaces**

#### **placards (WHMIS), 401—402**

for controlled products, 398(4)(b)—(c), 401  
transfer of controlled products, 402

*See also* Workplace Hazardous Materials Information System (WHMIS)

#### **platforms**

building shafts, safeguards  
  main and secondary work platforms, 313(1)  
  no platform at doorway, safety structures, 313(2)  
falling objects protections  
  cantilever hoist platforms, 318(5)  
  toe boards, 321  
on suspended scaffolds, 341(7)  
portable ladders used with, 136(c)  
*See also* elevating platforms and aerial devices; scaffolds and temporary work platforms

#### **pneumatic energy**

in definition of hazardous energy, 1  
*See also* hazardous energy control (for service, repair, tests, adjustments, inspections)

#### **pneumoconiosis *See* health assessments for exposure to asbestos, silica or coal dust**

#### **polishing disc *See* grinders**

#### **portable containers for decanted controlled products, 402(2)**

#### **Portable Containers for Gasoline and Other Petroleum Fuels (CSA), 3, 163(2)(d)**

#### **Portable elevating work platforms (CSA), 3, 347(4)**

#### **portable ladders *See* ladders**

#### **Portable Ladders (CSA), 3, 135(a)**

#### **portable power cables *See* mines and mining**

#### **portable two-way radio base stations *See* radiofrequency transmitters and explosives**

#### **portal *See* underground mines**

#### **potable water *See* drinking fluids**

#### **power lines and poles *See* overhead power lines**

#### **power producers, industrial *See* industrial power producers**

#### **power-fed circular saws, 380**

#### **powered mobile equipment, 256—279**

defined, 1  
all-terrain vehicles, 280—282  
authorized worker, 256(1)  
bulkheads, 268  
certification by engineer  
  falling objects protective structures, 272(3), 273  
  modification of ROPS, 273

- refuelling practices for motor vehicles or watercraft, 279(4)
- rollover protective structures, 270(3)
- clearance distances, 258(2)
- dangerous movements
  - bulkheads and protective structures, 268
  - clearance distances, 258(3)
  - during worker transportation, 275(2)
  - entry restrictions, 258(3) precautions, 258(1)
- documents, written
  - inspection records, 260(5)
  - operator's manual for ATV or snow vehicle, 281
  - procedures for rollover protection, 270(3)
- dumping block in mines, 542
- elevated parts, 261
- excavations, access and block, 459—460
- exhaust gases not to enter enclosed body, 275(4)
- extending booms, ladders, 128
- falling objects protective structures, 272—273
- flammable, combustible or explosive materials, 277—279
- flying or projecting objects, protections, 269
- forklift trucks, 283—284
- fuel tank in cab, 274
- guards and screens, 269
- hazardous energy control (for service, repair, tests, adjustments, inspections), 212—215.3
  - complex group control, 215.1
  - group control, 215
  - individual control, 214
  - isolating piping, 215.4
  - isolation procedures, 212
  - isolation verification, 213
  - manufacturer's specifications, 212(2)
  - pigging and testing of pipelines, 215.5
  - remotely controlled systems, 215.2
  - returning to operation, 215.3
- hazardous loads, 277
- housekeeping, 256(3)(f), 275(2)
- inclement weather protections during worker transportation, 275(3)
- inspection and maintenance
  - by competent worker, 260(1)
  - elevated parts, 261 hazards, 260(3)
  - manufacturer's specifications, 260(2)
  - records, 260(5)
  - report to employer, 260(4)
  - visual inspections, 257, 267(2)
- lights, 264
- maintenance, 260—261, 277
- manufacturer's certifications and specifications
  - load and slope limitations for ATVs and snow vehicles, 282
- manufacturer's specifications and recertifications
  - falling objects protective structures, 273
  - inspections, 260(2)
  - refuelling practices for motor vehicles or watercraft, 279(4)
  - rollover protective structures, 270(3), 273
- operator responsibilities, generally, 256
  - authorized operator, 256(1)
  - full control of equipment, 256(3)(c)
  - housekeeping, 256(3)(f)
  - report on conditions, 256(3)(a)
  - safe operation, 256(3)(b)
  - seat belt use, 256(3)(d)—(e)
  - starting engines, 262
  - unattended equipment, 263
  - visual inspection, 257
- pedestrian traffic, 259
- refuelling, 279
  - dispensing flammable fuels, 279
  - ignition sources, distances, 279(1)(b), 279(2)(b)
  - no smoking, distances, 279(1)(a), 279(2)(a)
  - riding on loads, prohibition, 276, 286(2)
- rollover protective structures (ROPS), 270
  - certification by engineer, 270(3)
  - seatbelts and restraint systems, 271
  - standards, 270(2)
  - when needed, 270(1)
- seats, 266(c)
- snow vehicles, 280—282
- standards
  - falling objects protective structures, 272(2)
  - glazing materials, 265(2)
  - lights on earthmoving construction machinery, 264(2)
  - portable fuel tanks, 277(1)
  - rollover protective structures, 270(2)
  - seat belts and restraint systems for equipment with ROPS, 271(1)
- starting engines, 262
- stop devices, 266(a), 267(1)(c)
- tank trucks, 278
- tire servicing, 193
  - competent worker, 193(1)
  - manufacturer's service manuals, availability, 193(2)
  - tire inflation methods, precautions, 193(3)—(6)
- traffic control system, 267(2)
- trailer hitch safety devices, 266(d)
- unattended equipment, 263
- walkways, 259
- warning system to workers, 266(b), 267
- wheel and tire assemblies
  - competent worker, 193(1)
  - manufacturer's service manuals, availability, 193(2)
  - tire inflation methods, precautions, 193(3)—(6)

## Index

- windows and windshields, 265
- worker in training, 256(2)
- worker transportation, 275
- See also* pile driving equipment and practices
- ppm (parts per million)**
  - defined, Schedule 1, Table 2
- Practice for Occupational and Educational Eye and Face Protection (ANSI), 3, 229**
- prescription eyewear**
  - safety eyewear, 229(2)—(2.2)
  - See also* eye protection
- prime contractors**
  - duty to inform employer of work site hazards, 7(5)
  - extended application of Code to, 2
  - joint provision of first aid, 178(2)—(3)
- prime movers** *See* **powered mobile equipment**
- priming of explosives, 481**
  - See also* avalanche control
- privacy of information** *See* **confidential business information (WHMIS); information access and privacy for workers**
- Procedures for the Measurement of Occupational Noise Exposure (CSA), 3, 219(2)**
- Process Industry Practices (PIP) Standard, 3**
- process systems**
  - in definition of hazardous energy, 1
  - See also* hazardous energy control (for service, repair, tests, adjustments, inspections)
- processing plant**
  - defined, 1
  - mines, building safety, 532
  - ventilation system, when needed, 386(c)
- product identifier** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- professional engineer** *See* **specifications, certifications and standards**
- propane installations in underground coal mines, 695**
- protective clothing** *See* **personal protective clothing**
- Protective Clothing and Equipment for Wildland Fire Fighting (NFPA), 3, 233(5)(c), 237(b)**
- protective enclosure** *See* **safeguards and warnings**
- Protective Ensemble for Structural Fire Fighting (NFPA), 3, 233(5)(b), 237(a)**
- Protective Footwear (CSA), 3, 233(2), 233(4)—(5)**
- Protective Frames for Wheel-type Agricultural Tractors — Tests, Procedures and Performance Requirements (OSHA), 3, 270(2)(e)**
- protective structures, temporary** *See* **temporary protective structures**
- prototype vehicles**
  - in mines, 575
- pruning trees** *See* **tree care operations**
- Prusik and similar knots, 150.3**
  - See also* personal fall arrest system (PFAS)
- Public Health Act, 356(a)**
- Public Health Agency of Canada**
  - biohazardous material, defined, 1
- public highway traffic control, 194(7)**
- pull-wire fuse lighters**
  - use in avalanche control blasting, 515(4)—(5)
- pulmonary function technician**
  - defined, 1
  - in health assessments, 40(2)
  - See also* health assessments for exposure to asbestos, silica or coal dust
- pump jack scaffolds**
  - platforms, 330
  - See also* scaffolds and temporary work platforms
- pump truck, concrete** *See* **concrete pump trucks**
- puncture resistant footwear**
  - standards, 233(2)—(4)
- purge** *See* **confined and restricted spaces**
- push sticks**
  - for feeding machinery, 319
- pyrotechnic and special effects devices**
  - safe work procedures, 467(1)
  - standards, 467(2)
  - standards for blasting distances, 499(3)
  - See also* explosives (other than at mine sites)

## Q

- quarry** *See* **mines and mining, definitions**
- quartz** *See* **silica-crystalline, respirable**

## R

- racking pipes, 772**
- radiation, 291**
  - defined
    - electromagnetic radiation, 1
    - ionizing radiation, 1
  - documents
    - safe work practices and procedures, 291(a)
  - electric arc welding, 231
  - safe work practices and procedures, 291(a)
  - WHMIS not to apply, 395(5)(d)
  - worker involvement in practices and procedures, 291(b)
  - workers informed of practices and procedures, 291(c)
- radio towers** *See* **radiofrequency transmitters and explosives**
- radio transmitters and explosives**
  - defined
    - electromagnetic radiation, 1

- separation distances between explosives and fixed radio transmitters, Schedule 11, Table 1
- radiofrequency transmitters and explosives**  
defined  
actively transmitting, 1  
radiofrequency transmitter, 1  
blasting operations distances, 503, Schedule 10, Tables 2 and 3  
cellphone blasting operations distances, 503(3)—(4), Schedule 10, Table 3
- ramps, 121**  
strength, 121(1)(a)  
toe boards and guardrails, 121(1)(d), 321(2)  
traction, 121(2)  
width, 121(1)(b)—(c)  
*See also* entrances, walkways, and stairways
- reaction vessel (WHMIS)**  
employer's material safety data sheet, exemption, 405(1)—(2)  
transfer of controlled products, 402
- Recommended Practice for Maintenance and Use of Drilling and Well Servicing Structures (API), 3, 763(1)(b), 764(1)(a)**
- recreational sports**  
defined  
non-industrial rope access work, 1  
sport diving, 423(2)  
*See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)
- red tags, scaffolds, 326(1)(c)**
- refuelling vehicles**  
powered mobile equipment, 279
- refuge**  
in underground coal mines, 559, 703
- registered nurses** *See nurse (advanced first aider)*
- Regulation, See Occupational Health and Safety Regulation**
- reinforcing steel rod**  
as makeshift fittings or attachments, 304(a)
- remote controlled equipment in mines, 706**
- remote controls**  
lifting devices, 72(3)
- repair machinery, isolating hazardous energy to** *See hazardous energy control (for service, repair, tests, adjustments, inspections)*
- requirements of, meets the**  
defined, 1  
*See also* specifications, certifications and standards
- rescue and evacuation** *See emergency response*
- residential construction**  
placement of roofing materials, 187.1
- See also* roofing
- respirable particulate** *See particulate materials*
- respiratory disease** *See health assessments for exposure to asbestos, silica or coal dust*
- respiratory protective equipment, 244—254**  
abrasive blasting operations, 255  
air line respirator  
for immediate danger, 251  
for no immediate danger, 252  
quality of breathing air, 249  
air purifying equipment, 252(a)(ii), 253  
code of practice, 245  
Director of Occupational Hygiene  
equipment standards, approval, 246(b)  
documents  
code of practice, 245  
equipment standards, approval, 246(b)  
duty to use, 228, 244(4)  
emergency equipment in emergency response plan, 116(c)  
emergency escape equipment, 248(2), 254  
facial seals  
clean shaven faces, 250(2)  
standards for fitting and testing, 250(1)  
inspections  
of emergency equipment, 248(2)  
of equipment, 248(1)  
oil and gas wells, emergency response, 752  
provision by employer, 244(3)  
self-contained breathing apparatus  
for immediate danger, 251  
for no immediate danger, 252  
quality of breathing air, 249  
standards  
breathing air, 249  
equipment, 246—247  
facial seals, 250(1)  
storage, use and inspections, 248  
supplied-air equipment for confined spaces, 54(2)  
testing  
fit test for facial seal, 250(1)  
training in use of, 245(2)  
when needed  
airborne biohazardous material, 244(1)—(4)  
conditions to consider, 244(2)  
emergency escape equipment, 254(1)  
for immediate danger, 252  
low oxygen concentration, 244(1)(b)  
no immediate danger, 253  
occupational exposure limits exceeded, 244(1)(a)  
requirement to provide, 244(1)
- rest platforms**  
fixed ladder exemption, 132
- restraining devices**

## Index

- in powered mobile equipment with ROPS, 271(2)
- restraint system, travel** *See* **travel restraint system**
- restricted areas** *See* **asbestos; coal dust; lead and lead compounds; silica-crystalline, respirable**
- restricted spaces**
  - defined, 1
  - See also* confined and restricted spaces
- restricted work envelope** *See* **robots**
- ride-on lawnmowers, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
  - See also* powered mobile equipment
- rig tank or pit enclosures, 777**
- rigging, 292—309**
  - breaking strength
    - if worker raised or lowered, 292(1)
    - other situations, 292(1)
  - cable clips, 300, Schedule 5
  - certification by engineer
    - breaking strength, 292(2)
    - electric arc damage, 308
    - load ratings, 293(1)
    - makeshift rigging and welding, 304
  - double base clips, 300(4)
  - double-saddle clips, 300(3)
  - electric arc damage, rejection criteria, 308
  - ferrules, 301
  - fist clips, 300(3)
  - hooks, 303, 309
  - inspections, 294
  - load ratings, 293
  - makeshift rigging and welding, 304
  - manufacturer's specifications
    - cable clips, 300(2)
    - damaged hooks, exceeds specifications, 309
    - end fittings and connectors, 302(4)
    - load ratings, 293(1)
    - rope wound on drum, 299(2)
    - wire ropes, sheaves, spools and drums as matching components, 302(1)
  - matching components, 302
  - noncompliance, prohibition, 295
  - rejection criteria
    - damaged hooks, 309
    - electric arc damage, 308
    - metal mesh slings, 307
    - synthetic fibre slings, 305
    - wire rope, 306
  - rigging blocks, matching components, 302(5)
  - rigging protection, 296
  - rope
    - matching components, 302(2)—(3)
    - rope wound on drum, 299
  - safety factors, 292.1
  - safety latches on hooks, 303
  - slings
    - metal mesh, rejection criteria, 307
    - standards, 297
    - synthetic fibre slings, 297(1), 298, 305
  - spreader bars, 297(3)—(4)
  - standards
    - breaking strength, 292(1)
    - slings, 297
  - U-bolts type clips, 300(1)
  - wire ropes, matching components, 302(1)—(4)
  - wire ropes, rejection criteria, 306
    - damage, wear or corrosion, 306(1)
    - nonrotating wire rope, 306(4)
    - running wire rope, 306(2)
    - stationary wire rope, 306(3)
- See also* wire ropes
- right of way**
  - for highway, safe distances for excavations in surface mines, 535(b)
  - for pipeline, safe distances for excavations in surface mines, 535(d)
  - in mine plan, 533(e)
- rigid frame dumpers** *See* **powered mobile equipment**
- rigid horizontal lifeline systems** *See* **horizontal lifeline systems**
- Rigid Protective Covers for Live Working on a.c. Installations (ULC), 3, 799(1)**
- rigs** *See* **oil and gas wells**
- rings, finger** *See* **hand protection**
- riveting** *See* **hot work**
- roads**
  - forestry warnings, 522
  - surface haul roads in mines, 539
  - See also* highways
- robots, 384—385**
  - defined
    - emergency stop circuit, 1
    - end-effector, 1
    - interlock barrier, 1
    - pendant, 1
    - restricted work envelope, 1
    - robot, 1
    - robot system, 1
    - slow speed, 1
    - teach, 1
    - work envelope, 1
  - standards, 384(1)
  - teaching a robot, 385
- roller skates**
  - protective headgear, 235
  - See also* head protection and headwear
- rollers and compactors** *See* **powered mobile equipment**
- rolling scaffolds, 334**
  - design, 334(1)
  - preventing movement, 334(3)

- prohibition against worker on rolling scaffold, 334(2)  
*See also* scaffolds and temporary work platforms
- rollover protective structures (ROPS)** *See* powered mobile equipment
- Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial and Mining Machines — Part 1: General Requirements (CSA), 3, 270(2)(a)**
- Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial and Mining Machines — Part 2: Testing Requirements for ROPS on Agricultural Tractors (CSA), 3, 270(2)(a)**
- Rollover Protective Structures (ROPS) for Agricultural, Construction, Earthmoving, Forestry, Industrial and Mining Machines — Part 3: Testing Requirements for ROPS on Construction, Earthmoving, Forestry, Industrial, and Mining Machines (CSA), 3, 270(2)(a)**
- Rollover Protective Structures (ROPS) for Wheeled Agricultural Tractors (SAE), 3, 270(2)(c)**
- roof bolting**  
 in underground coal mines, 739  
*See also* underground coal mines
- roofing**  
 placement of roofing materials, 187.1  
 roof ladder, safe use, 129  
 roofing brackets, 339  
*See also* roofer's hoists
- roofer's hoists**  
 application of Code, 59(2)  
 certification by engineer  
   not commercially manufactured, 60, 62  
   repairs and modifications, 73  
 collision prevention, 67  
 containers for hoisting, 74  
 documents  
   load charts, 64(2)  
 gallows frame roofer's hoist, design, 97(6)—(7)  
 hoisting lines, 70  
 identification of components, 61, 62(1), 73  
 inspections, 97(3)  
 load charts, 64(2)  
 load weight, 68  
 loads over work areas, 69  
 not commercially manufactured, 60, 62  
 operator requirements, 64  
 rated load capacity, 62  
 remote controls, 72(3)  
 repairs and modifications, 73  
 safe use and design, 97  
   counterweights, 97(1)—(2)  
   gallows frame roofer's hoist, 97(6)—(7)  
   inspections, 97(3)  
   load limits, not to exceed, 97(5)  
   safety pins for bolts and pins, 97(4)  
   vertical lifting only, 97(5)  
 signal systems, 64(2), 71  
 tag lines, 70  
 unsafe lift prevention, 66  
*See also* hoists
- rooms, changing** *See* changing rooms
- rooms, lunch** *See* lunch rooms
- rooms, washing facilities in** *See* toilets and washing facilities
- rope access work, 805—849**  
 defined  
   cow's tail, 1  
   industrial rope access work, 1  
   non-industrial rope access work, 1  
   occupational rope access work, 1  
 anchorage strength  
   industrial work, 828—829  
 application of Code, 824  
 arrest force, maximum, 828  
 ascenders, 837  
 back-up devices, 838  
 certification by engineer  
   removal from service, 820  
 connecting components, 835  
 descenders, 839  
 descent control device for fall arrest system, 146  
 documentation  
   safe work plan, 808—810  
   worker's personal logbook, 827  
 emergency rescue, 811, 821—822  
 equipment and tools, 813—814  
 exemptions  
   emergency rescue, 806  
   fall protection systems, 807  
   training, 805  
 fall protection, 811  
 full body harness, 142, 834  
 hazard assessment, 811  
 head protection, 831—833  
 high stretch or dynamic ropes, 816, 818  
 inspections and maintenance, 815  
 logbook, worker's  
   contents, 827(3)  
   currency, 827(4)  
   inspection of, 827(4)  
   requirement, 827(1)  
   signatures, 827(2)  
 manufacturer's specifications  
   removal from service, 820  
 removal from service, 820  
 ropes  
   cow's tail, 819  
   high stretch or dynamic ropes, 816, 818

## Index

- low stretch or static ropes, 816—817
  - safe work plan
    - availability, 810
    - conditions for, 808
    - designated competent person to prepare plan, 2.2
    - specifications, 809
  - safety, secondary, belay, or backup lines, 830
  - standards
    - ascenders, 837
    - back-up devices, 838
    - carabiners, 836
    - connecting components, 835
    - cow's tail, 819
    - full body harness, 142(1), 834
    - head protection, 831—832
    - high stretch or dynamic ropes, 818, 819(1)
    - low stretch or static ropes, 817
    - safe work practices, 823—824
    - worker competency, 826
  - trained workers present, requirement, 825
  - training of workers, 811—812, 822, 826
  - worker's personal logbook, 827
  - See also* full body harness; personal fall arrest system (PFAS)
  - rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing), 840—849**
    - defined, 1
    - anchorage strength, 843
    - Director of Inspection
      - safe work practices, approval, 840
    - fall factor, 842
    - head protection, 844—846
    - standards
      - connecting components, 849
      - full body harness, 848
      - head protection, 844—846
      - sit harness, 3, 795(1)(b), 847
      - worker competency, 841
    - training of workers, 841
    - See also* rope access work
  - rope adjustment device for work positioning, 148.1**
    - See also* personal fall arrest system (PFAS)
  - rope-operated friction catheads, 771**
  - ropes**
    - boatswain's chairs, 351(3)—(4)
    - in horizontal lifeline systems, 153—153.1
    - in needle-beam scaffolds, 337(3)—(4)
    - in scaffolding, 324(2)
    - on sawmill log carriages, 383(2)
    - synthetic fibre ropes, standards, 297(1)
    - wound on drum, 299
    - See also* rope access work
  - ROPS (rollover protective structures) *See* powered mobile equipment**
  - rotary drill**
    - dust control at mine site, 532, 537
  - rotary table**
    - danger zone, 773
  - rotary tong, 774**
  - Royal Canadian Mounted Police (RCMP)**
    - notice of loss or theft of explosives, 514
  - rubber-tired, self-propelled machines in mines *See* vehicles, use in mining**
  - running wire rope**
    - rejection criteria, 306(2)
  - runways, 121**
    - strength, 121(1)(a)
    - toe boards and guardrails, 121(1)(d), 321(2)
    - traction, 121(2)
    - width, 121(1)(b)—(c)
    - See also* entrances, walkways, and stairways
  - rural electrification association**
    - defined
      - rural electrification association, 1
      - utility employee, 1
    - coordinated work, 802
    - safe work practices, 800
    - See also* electrical utilities and utility workers
  - Rural Utilities Act**
    - in definition of rural electrification association, 1
- ## S
- Saddles, Pole Clamps (Stick Clamps) and Accessories for Live Working (ULC), 3, 799(1)**
  - SAE (Society of Automotive Engineers) *See* Society of Automotive Engineers (SAE)**
  - safe limit of approach distances from overhead power lines, 225—227, Schedule 4**
  - safe patient/client/resident handling**
    - defined, 1
    - See also* lifting and handling loads
  - Safe Practices for Rope Access Work (Society of Professional Rope Access Technicians), 3, 823(b)**
  - safeguards and warnings, 310—322**
    - defined, 1
    - safeguards (guard, shield, guardrail, fence, gate, barrier, toe board, protective enclosure, safety net, handrail, but not personal protective equipment), 1
      - alternative safeguards, 310(4)—(5), 311(3)
    - bins, 316
    - blasting operations, 498
    - building shafts, 313
    - certification by engineer
      - supporting structure for safety nets, 320(2)
    - chutes, 316
    - demolition work sites, materials chute warnings, 420
    - excavation markings, 444
    - falling objects, protections, 318



- flying particles, safeguards, 317  
generally, 310  
guardrails, specifications, 315  
guards in powered mobile equipment, 269  
holes or openings, 314  
hoppers, 316  
locking out and tagging, 311(4)  
openings or holes, 314  
public highway traffic control methods, 194  
safety nets, 320  
standards  
  safety nets, 320(1)(a)  
supporting structures  
  safety nets, 320(2)  
tampering with safeguards on machinery, 311  
toe boards, 321  
  openings and holes, 314(1)—(2)  
  specifications, 321(1), 321(5)  
  when needed, 321(2)—(4)  
warning signs  
  automatic machinery starts, 310(6)  
  falling objects, 318(3)  
  open building shaft, 313(3)  
  temporary covers, 314(3)  
wire mesh, specifications, 322  
*See also* hazardous energy control (for service, repair, tests, adjustments, inspections); machinery
- safety buggy**  
for emergency escape from oil or gas well, 762(3)
- Safety Code for Material Hoists (CSA), 3, 81**  
**Safety Code for Personnel Hoists (CSA), 3, 96**  
**Safety Code for Suspended Elevating Platforms (CSA), 3, 348**  
**Safety Code on Mobile Cranes (CSA), 3, 88—88.1, 92.1**  
**Safety Codes Act, 695(1)**  
**safety committee for the work site** *See* joint work site health and safety committee
- safety fuses** *See* detonators and detonation
- safety glass**  
in powered mobile equipment, 265
- Safety Glazing Material for Glazing Motor Vehicles and Motor Vehicle Equipment Operating on Land Highways — Safety Standard (ANSI), 3, 265(2)(b)**
- safety hooks on safety nets, 320(1)(b)**
- Safety in welding, cutting and allied processes (CSA), 3, 171.1(1), 172(1)**  
in definition of welding or allied process, 1
- safety latches on hooks, 303**
- safety nets**  
defined  
  fall protection system, 1  
certification by engineer of supporting structure, 320(2)  
specifications, 320(1)
- water dangers, 157  
when required, 139
- safety precautions, general, 185—195**  
certification by engineer  
  skeleton structures, 190  
  unrestrained hoses or piping, 188(2)  
designated signallers, 191  
emergency lighting, 186(3)—(4)  
housekeeping, 185  
ice, working on, 195  
lighting, 186  
manufacturer's specifications  
  unrestrained hoses or piping, 188(2)  
masonry walls stabilization, 192  
pallets, 187  
securing equipment and materials, 189  
storage racks, 187  
tire servicing, 193
- Safety requirements for personal fall arrest systems, subsystems and components (ANSI), 3, 142(1), 142.2(1), 142.3(1), 143(1), 144, 147(1), 154(1), 795(1)(d), 834(c), 838(d), 848(b)**
- safety rope, life** *See* life safety rope
- Safety Standard for Bicycle Helmets (CPSC), 3, 235**  
**Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks and Slings (ASME), 3, 297(1)**  
**Safety Standard for Low Lift and High Lift Trucks (ASME), 3, 347(8)**  
**Safety Standard for Maintenance and Inspection of Overhead Cranes, Gantry Cranes, Monorails, Hoists and Trolleys (CSA), 3, 94**
- safety toecaps, 233(2)—(4)**  
*See also* foot protection and footwear
- safety-engineered medical sharps**  
defined, 1  
*See also* sharps
- samples** *See* laboratory samples of controlled products (WHMIS)
- sandstone quarries** *See* mines and mining
- sandy soil** *See* soils and soil types
- saws and sawmills, 376—383**  
band saw wheels  
  certification by engineer, 379(1), 379(3)  
  manufacturer's specifications, rim thickness, 379(1)  
  testing for cracks, 379(2)  
band saws  
  blade crack limits, 378, Schedule 8, Table 2  
  retensioning, 378(3)  
  shake band saw blades, cracked, 378(4)  
chainsaws  
  chain adjustments, 376(2)  
  footwear protection, 233(2)—(4)  
  specifications, 376(1)

## Index

- circular saws
  - blade cracks, 377, Schedule 8, Table 1
  - sawmill head rig, 382
- cut-off saws, 381
- power-fed circular saws, 380
- sawmill head rig, 382
- sawmill log carriage, 383
  - ropes, rejection criteria, 383(2)
  - safety devices, 383(1), 383(4)
  - sawyer's lever, 383(3)
- top saw, sawmill, 382(2)
- scaffolds and temporary work platforms, 323—345**
  - defined
    - heavy duty scaffold, 1
    - ladderjack scaffold, 1
    - light duty scaffolds, 1
    - outrigger scaffold, 1
    - scaffolds, 1
  - bracket scaffolds, 332
  - certification by engineer
    - bracket scaffolds, 332(1)(a)
    - loads, 325(3)—(4)
    - metal scaffolding, 331(a)
    - suspended scaffolds, 341(2)
    - swingstage scaffolds, 342(1)
  - design, 324—325
  - double-pole scaffolds, 324—326, 333, Schedule 6, Tables 1—4
  - fixed ladder on, 130
  - free-standing scaffolds, 334, 422
  - half-horse scaffolds, 335
  - hoarded masonry walk-through scaffold frames, 324(4)
  - inspections and tests
    - plank loads, 329(4)(b)
    - planks, 329(4)(a)
    - suspended scaffolds, 341(4)
  - ladderjack scaffolds, 336
  - ladders
    - access ladders on, 130(6)
    - vertical ladders, 327
    - working from, 328
  - loads
    - limits, 325
    - plank load tests, 329(4)(b)
    - workers informed, 325(5)
  - manufacturer's specifications
    - bracket scaffolds, 332(1)(a)
    - ladders on ladderjack scaffolds, 336(1)
    - metal scaffolding, 331(a)
    - planks, 329(1)
    - suspended scaffolds, 341(2)
    - swingstage scaffolds, 342(1)
  - metal scaffolding, 331
  - needle-beam scaffolds, 337
  - outrigger scaffolds, 338
  - planks
    - specifications, 329
    - unpainted lumber, 324(3)
  - platforms, 330
  - protection from falling objects
    - overhead safeguards, 318(1)—(2)
    - specifications, 318(4)—(5)
    - toe boards, 321(3)
    - warning signs and devices, 318(3)
  - protection from mobile equipment or vehicles, 324(5)
  - rolling scaffolds, 334
  - roofing brackets, 339
  - safeguards
    - toe boards, 321(3)
  - single-pole scaffolds, 324—326, 340, Schedule 6, Tables 7—8
  - standards, 323
  - suspended scaffolds, 341
  - tagging requirements
    - colour-coded tags, 326(1)
    - expiry, 326(4)
    - information on tag, 326(1), 326(5)
    - when needed, 326(2)—(3)
    - when not to use scaffold, 326(6)—(7)
  - unpainted lumber in wood scaffolds, 324(3)
  - See also* elevating platforms and aerial devices; platforms; swingstage scaffolds
- scalpels**
  - defined as medical sharp, 1
  - See also* medical sharps
- scissor lift fall restraint system, 156**
- scissors** *See* sharps
- scrapers, self-propelled wheeled, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
  - See also* powered mobile equipment
- screens**
  - in powered mobile equipment, 269
  - in powered mobile equipment with ROPS, 271(2)
  - See also* eye protection
- screw jacks**
  - alternatives to temporary protective structures, 457(2)
- seal** *See* labels
- seat belts**
  - forklift trucks, 284
  - standards for powered mobile equipment with ROPS, 271(1)
  - use in powered mobile equipment, 256(3)(d)—(e)
  - use in powered mobile equipment with ROPS, 271
- secondary escape routes, 119(4)—(5)**
- securing equipment and materials, 189**
- seismic blasting and drilling**
  - seismic drill
    - use in shot hole drilling, 757

- use of open flame to warm water on, 517  
*See also* detonators and detonation; explosives (other than at mine sites)
- Selection, Use and Care of Respirators (CSA), 3, 247, 250(1)**
- self rescuers**  
 in underground coal mines, 692
- self-contained breathing apparatus, 249—252**  
 facial seal, 250  
 for immediate danger, 251  
 for no immediate danger, 252  
 quality of breathing air, 249  
*See also* respiratory protective equipment
- self-contained toilets, 375(2)—(3)**
- self-locking connectors**  
 standards for fall arrest system, 143(1)  
 standards for industrial rope access work, 835
- Self-Propelled Boom-Supported Elevating Work Platforms (CSA), 3, 347(1)**
- Self-Propelled Elevating Work Platforms (ANSI), 3, 347(3)**
- Self-Propelled Elevating Work Platforms (CSA), 3, 347(3)**
- self-propelled mechanized feller**  
 distance of workers from, 518(3)  
*See also* forestry
- self-propelled wheeled scrapers, 270—271**  
 rollover protective structures, 270  
 seatbelts and restraint systems, 271  
*See also* powered mobile equipment
- self-propelled, rubber-tired machines in mines** *See* vehicles, use in mining
- Self-Retracting Devices for Personal Fall-Arrest Systems (CSA), 3, 145**
- separation distances (explosives other than at mine sites)**  
 between explosives and fixed radio transmitters, Schedule 11, Table 1  
 between explosives and fixed radiofrequency transmitters, Schedule 10, Table 2  
 between explosives and mobile radio transmitters, Schedule 11, Table 2  
 between explosives and mobile radiofrequency transmitters, Schedule 10, Table 3  
*See also* explosives (other than at mine sites)
- service machinery, isolating hazardous energy to** *See* hazardous energy control (for service, repair, tests, adjustments, inspections)
- service rig trucks, 759**
- service rigs** *See* oil and gas wells
- service shafts** *See* building shafts
- sewage** *See* buried or concrete-embedded facilities
- shackles on hooks**  
 safety latches, 303  
 safety nets, 320(1)(b)
- shaft hoist, underground** *See* underground shaft hoist
- shafts, building** *See* building shafts
- shafts, mine** *See* underground shafts
- shake band saw blades, cracked, 378(4)**
- sharps**  
 defined  
   medical sharp, 1  
   parenteral contact, 1  
   safety-engineered medical sharp, 1  
   sharps, 1  
 containers, 526  
 hazard elimination and control, 525.1  
 medical sharps  
   coming into effect, 525.2(1)  
   safe work procedures, 525.2(4)—(6)  
   safety-engineered medical sharps, 525.2(2)—(3)  
 recapping waste needles, prohibition, 527  
*See also* health care
- shaving** *See* facial hair
- sheaves**  
 matching components, 302
- shields**  
 in powered mobile equipment, 269  
*See also* safeguards and warnings
- shock absorbers, 142.3**  
 in personal fall arrest systems, 142.3  
 standards, 142.3(1)  
*See also* personal fall arrest system (PFAS)
- shoes** *See* foot protection and footwear
- shoring**  
 alternatives to temporary protective structures, 457  
 installation and removal, 458  
 lumber and plywood standards, Schedule 9  
 shoring component dimensions, Schedule 9  
*See also* temporary protective structures; temporary supporting structures
- shot hole drilling, 757**
- shoulder belts**  
 in powered mobile equipment with ROPS, 271(2)
- showers and shower rooms** *See* toilets and washing facilities
- signal systems** *See* designated signallers; designated traffic controllers
- signs** *See* labels; warning signs
- Signs and Symbols for the Workplace (CSA), 3, 781(3)**
- silica-crystalline, respirable**  
 defined  
   exposed worker, 1  
   restricted area, 1  
 abrasive blasting use, 39  
 code of practice required, 26, Schedule 1, Table 1  
 decontamination methods, 28(c)

## Index

- health assessment of exposure, 40
  - contents of report, 40(2)
  - costs, 40(11), 40(13)
  - frequency of assessments, 40(6)—(8)
  - information to worker, 40(3)
  - performed during work hours, 40(12)
  - privacy of information, 40(5)
  - refusal by worker, 40(9)—(10)
  - retention of records, 40(4)
- housekeeping, 28(b)
- minimization of release, 28(a)
- OEL, Schedule 1, Table 2
- restricted areas
  - authorized persons, 29(1), 29(2)(b)
  - decontamination of workers, 29(4)(c)
  - emergencies, 29(5)
  - harmful substances, 29(2)
  - no eating, drinking or smoking, 29(2)(c)
  - prohibited activities, 29(2)(c)
  - protection of worker's street clothing, 29(4)
  - protective clothing for workers, 29(4)
  - signs, 29(2)—(3)
- signs for restricted area, 29(2)—(3)
- See also* health assessments for exposure to asbestos, silica or coal dust
- silos** *See* **confined and restricted spaces**
- single-pole scaffolds**
  - design and load, 324—325, 340, Schedule 6, Tables 7—8
  - See also* scaffolds and temporary work platforms
- sit harness**
  - in definition of non-industrial rope access work, 1
  - standards for non-industrial rope access work, 847
  - standards for tree care operations, 795(1)(b)
  - See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)
- skates and skateboards**
  - protective headgear, 235
  - See also* head protection and headwear
- skeleton structures, 190**
  - certification by engineer, 190(1), 190(3)
  - competent worker, 190(4)
  - erection drawings and procedures, contents, 190(2)
  - See also* elevating platforms and aerial devices
- skidders, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
  - See also* powered mobile equipment
- skidoos** *See* **snow vehicles**
- skin**
  - contamination with flammable or combustible liquids, 164
  - inclement weather protections, powered mobile equipment, 275(3)
  - personal protective equipment, 243
  - See also* safeguards and warnings
- Sleeves of Insulating Material for Live Working (ULC), 3, 799(1)**
- sliding hitch knots, 150.3**
  - See also* personal fall arrest system (PFAS)
- slings**
  - metal mesh slings, rejection criteria, 307
  - standards, 297
  - synthetic fibre slings
    - labels, 298(1)
    - not subjected to pull tests beyond capacity, 298(2)
    - rejection criteria, 305
    - standards, 297(1)
- slow speed** *See* **robots**
- small utility vehicles**
  - defined, 1
  - safety helmets, 236
- smoke**
  - Director of Inspection
    - notice of noxious smoke in underground mines, 544(1)(d)
  - ventilation system, when needed, 386(c)
- smoking tobacco**
  - prohibitions
    - explosives, 466, 517(2)—(3)
    - fire and explosion hazards generally, 162(3)
    - restricted areas, 29(2)(c)
    - surface mines, 648(3)
    - transportation of explosives, 621
    - underground coal mines, 693—694
    - when refuelling vehicles, 279(1)—(2)
    - smoking history in health assessments, 40(2)
- snap hooks**
  - standards for fall arrest system, 143
- Snell Memorial Foundation, 3**
- snow vehicles, 281—282**
  - defined, 1
  - documents
    - operator's manual, 281
    - safe work procedures on sloping ground, 282(2)
  - load and slope limitations, 282
  - manufacturer's specifications
    - load and slope limitations, 282(2)
  - operator's manual, 281
  - safety helmets, 236
- snoobing units**
  - definition
    - snoobing, 1
  - drawworks, 766
  - exits from enclosures, 761
  - gas-assisted sand clean-out, 781(6)
  - guy lines in self-contained units, 763
  - inspections, 758

- safety checks, 760  
*See also* oil and gas wells
- soap for washing** *See* **toilets and washing facilities**
- Society of Automotive Engineers (SAE), 3**
- Society of Professional Rope Access Technicians, 3**
- soft, sandy or loose soil** *See* **soils and soil types**
- Softwood Lumber (CSA), 3**  
 in definition of lumber, 1
- soils and soil types, 442—443, 451**  
 defined  
   hard and compact soil, 442(1)  
   likely to crack or crumble soil, 442(2)  
   soft, sandy, or loose soil, 442(3)  
 alternatives for soil stabilization, 443(2)  
 certification by engineer  
   alternatives for soil stabilization, 443(2)  
 classification, 442  
 cutting back walls, 450(1)(a), 451  
 hard and compact soil, 442(1), 451(a)  
 likely to crack or crumble soil, 442(2), 451(b)  
 more than one soil type, 442(4)  
 natural freezing for soil stabilization, prohibition, 443(3)  
 shoring component dimensions, Schedule 9  
 soft, sandy, or loose soil, 442(3), 451(c)  
 soil stabilization, 443  
*See also* excavating and tunneling
- soldering**  
 explosion control in underground coal mines, 746
- sole penetration protection in footwear, 233(2)—(4)**  
*See also* foot protection and footwear
- sorting hooks, 303(3)**
- sound level meters**  
 standards, 219(3)  
*See also* noise
- special effects devices** *See* **explosives (other than at mine sites)**
- Specification for Audiometers (ANSI), 3**  
 in definition of audiometer, 1
- Specification for industrial safety helmets (CEN), 3, 831(2)(c)**
- Specification for Performance Requirements for Protective Footwear (ASTM), 3, 233(2), 233(4)**
- Specification for Personal Noise Dosimeters (ANSI), 3, 219(3)(b)**
- Specification for Protective Helmets for Vehicle Users (BSI), 3, 236(1)(b)**
- Specification for Sound Level Meters (ANSI), 3, 219(3)(a), 219(3)(c)**
- Specifications for Integrating-Averaging Sound Level Meters (ANSI), 3**
- specifications, certifications and standards, 12—15**  
 defined  
   approved to, 1  
   manufacturer's rated capacity, 1  
   manufacturer's specifications, 1  
   meets the requirements of, 1  
   professional engineer, 1  
   specifications, 1  
 approved equipment, identifying marks, 15  
 certification by engineer  
   fit and safe for workers, 14(2)  
   in writing, stamped and signed, 14(1)  
 employer to follow specifications, 12  
 professional engineer's specifications (certified)  
   following by employer, 12(b)—(d)  
   how often to certify equipment, 13(2)(b)  
   safe procedures and equipment, 13(2)  
*See also* standards
- spectacles** *See* **eye protection**
- split** *See* **underground coal mines**
- spoil pile**  
 defined, 1  
 loose materials from excavations, 452—453
- spools, matching components, 302**
- sport climbing**  
 in definition of non-industrial rope access work, 1  
*See also* rope access work, non-industrial (mountaineering, caving, canyoning, sport climbing)
- sport diving, 423(2)**
- sport headgear** *See* **head protection and headwear**
- spray operations, 170.1**  
 flammable substances, not to ignite, 170.1(2)  
 nozzle guards for airless spray machinery, 170.1(5)—(6)  
 outside of spray booths, standards for, 170.1(3)—(4)  
 spraying asbestos, prohibition, 32(2)  
 ventilation systems, 170.1(1), 170.1(4)
- spreader bars**  
 standards, 297(3)—(4)  
*See also* rigging
- spring-loaded safety latch hooks, 303(4)**
- spruce-pine-fir (S-P-F)**  
 defined as lumber, 1
- stairways** *See* **entrances, walkways, and stairways**
- stairwells** *See* **building shafts**
- stamp** *See* **labels**
- standard first aider**  
 defined, 1  
 mines, emergency response team, 546  
*See also* first aid and first aiders

## Index

- Standard for Protective Headgear for Use in Non-Motorized Sports** (Snell Memorial Foundation), 3, 235
- Standard for Protective Headgear for Use with Bicycles** (Snell Memorial Foundation), 3, 235
- Standard for the Use of Pyrotechnics Before a Proximate Audience** (NFPA), 3, 467(2)(b), 499(3)(b)
- Standard Grading Rules for Canadian Lumber** (NLGA), 3  
in definition of lumber, 1
- Standard on Fire Service Life Safety Rope and System Components** (NFPA), 3, 795(1)(a), 817(b), 834(a), 835(e), 837(c), 839(b)
- Standard on Life Safety Rope and Equipment for Emergency Services**, 146, 147(1), 148.1
- Standard Practice for Calibration of Standards and Equipment for Electrical Insulating Materials Testing** (ASTM), 3, 799(3)
- Standard Specification for Helmets Used in Recreational Bicycling or Roller Skating** (ASTM), 3, 235
- Standard Specification for Reinforced Concrete Manhole Sections** (ASTM), 3, 131
- Standard Test Method for Vapour Pressure of Petroleum Products (Reid Method)** (ASTM), 3  
in definition of flammable liquid, 1
- standards**  
defined  
approved to, 1  
meets the requirements of, 1  
adopted in Code, 3  
approved equipment, identifying marks, 15  
previous editions of referenced standards, 3.1  
*See also* specifications, certifications and standards
- Standards Australia/Standards New Zealand**, 3
- stationary wire rope**  
rejection criteria, 306(3)
- steel chain**  
standards, 297(1)
- steel ferrules**, 301(1)
- steel-toed boots** *See* foot protection and footwear
- Steering for Off-Road, Rubber-Tired Machines** (SAE), 3, 590(1)
- stepladders** *See* ladders
- sticker** *See* labels
- STOP signals**  
from non-designated signallers, 191(7)
- storage** *See* buried or concrete-embedded facilities; confined and restricted spaces; containers; storage racks and pallets
- storage battery locomotives in underground coal mines**, 706
- storage racks and pallets**, 187  
damage prevention, 187(4)  
no danger to workers, 187(1)  
report of damage to storage rack, 187(3)  
support for loads, 187(2)
- Storage Standards for Industrial Explosives** (NRCan), 3, 470(2), 655(3)
- storms** *See* weather
- street clothing**  
clothing beneath flame resistant clothing, 232(2)  
compressed/liquefied gas, use to blow substances, 171(8)(d)  
in restricted areas, protection of worker's street clothing, 29(4)
- stringers**  
alternatives to temporary protective structures, 457  
installation and removal, 458  
lumber and plywood standards, Schedule 9  
shoring component dimensions, Schedule 9  
*See also* temporary protective structures; temporary supporting structures
- strip mining** *See* surface mines
- styrene in styrene resin fabrication**  
code of practice required, 26, Schedule 1, Table 1
- subsidence**  
notice to Director of dangerous occurrences in mines, 544(1)(a)
- substance interaction**  
defined, Schedule 1, Table 2
- substances, harmful**  
defined, 1  
*See also* occupational exposure limit (OEL)
- supervision**  
defined  
direct supervision, 1
- supplied-air respiratory protection equipment**  
*See* respiratory protective equipment
- supplier labels (WHMIS), 398, 401**  
defined  
supplier, 1  
supplier labels, 1  
controlled products arriving without labels, duty to provide labels, 398(5)—(7), 401  
laboratory samples, 403  
not to remove, modify or alter, 398(2)  
placards, 398(4)(b)—(c), 401, 402  
replacement of, 398(3), 401  
requirement, 398, 401  
storage without label, conditions, 398(4), 401  
training in content, 397(1)(a)

- training in significance, 398(4)(c)  
 transfer of controlled products, 402  
*See also* confidential business information (WHMIS); Workplace Hazardous Materials Information System (WHMIS)
- supplier's material safety data sheet (WHMIS), 404—407**  
 defined, 1  
   material safety data sheet, 1  
   supplier, 1  
   supplier's material safety data sheet, 1  
 disclosure exemption for information on data sheets, 408—410  
 employer's data sheet, 405  
 format different from employer's data sheet, 405(3)  
 information current, 406  
 requirement, 404(1)  
 storage time limit while actively seeking data sheet, 404(2)  
 training in, 397(1)(b)  
*See also* confidential business information (WHMIS)
- supplies, lifting** *See* **lifting and handling loads**
- supporting structures, temporary** *See* **temporary supporting structures**
- surface haul roads**  
 for mines, 539
- surface mines**  
 defined, 1  
   surface mine, 1  
   surface mine blaster, 1  
 building safety, 532  
 certification by engineer  
   electrical equipment used in presence of gas, vapour or dust, 563(1)  
   representative machines, 576(2)  
   walls, 541(1)  
 combined operations  
   declaration, 686(1)  
   mine manager, 686(2)—(3)  
 dangerous occurrences to report to Director  
   dam or dike dangers, 544(2)  
   electrical equipment failures, 544(1)(f)  
   ignition of gas or dust, 544(1)(d)  
   incidents with hoists, sheaves, shafts or headframes, 544(1)(i)  
   out of control vehicles, 544(1)(c)  
   outbursts and inrushes, 544(1)(h)  
   subsidence or unexpected ground fall, 544(1)(a)  
   underground ventilation system stoppages, 544(1)(b)  
   unexpected dangerous events, 544(1)(g)  
   worker withdrawal in emergencies, 544(1)(e)  
 Director of Inspection
- approval of dust control alternate protections, 537(2)  
 blast area signs, approvals, 644(1)  
 electrical systems, notice and approval, 561  
 electrical systems, overhead power lines approvals, 567  
 reports of dangerous occurrences, 544  
 representative machines, report, 576(2)
- documents  
 dangerous occurrences reports, 544  
 electrical systems approval by Director, 561  
 inspection records, 534  
 mine plans, 533  
 records of electrical systems installation and repairs, 562(2)  
 tests of ground electrodes, 570  
 tests of supply systems for mobile electrical equipment, 565
- dumping blocks, 542
- dust control, 537
- electrical systems and equipment, 560—572  
 authorized worker to install, 562(1)  
 Director, notice and approvals, 561  
 drills, hand held electric, 572  
 equipment used in presence of gas, vapour or dust, 563  
 grounding, 570(1)  
 overhead power lines, 567  
 records of installation and repairs, 562(2)  
 standards, 560  
 supply systems for mobile electrical equipment, 565  
 welding, 571
- emergency escape routes on surface haul roads, 539(2)
- emergency response stations, 545  
 emergency response team, 546
- excavations, safe distances, 535
- explosives, 644—657  
   blast holes, 645  
   burning explosives, 652  
   charged holes, 657  
   detonating cord, 647  
   drilling near explosives, 654  
   electrical cables and wires, 650  
   electrical storms, 646  
   electromagnetic radiation, blasting in, 651  
   ignition precautions, 648  
   misfires, 653  
   no smoking or open flames, 648(3)  
   overhead power line, blasting in, 651(2)  
   radiofrequency transmitters or fields, blasting in, 651(3)  
   safety fuses, 649  
   signs, 644(1)  
   storage boxes, 655  
   sufficient explosives, 655(1)

## Index

- unauthorized equipment, vehicles and workers, 644(2)
  - warnings and signs, 656—657
  - flammable gas monitors, 543
  - inspections and tests
    - ground electrodes, 570
    - supply systems for mobile electrical equipment, 565
  - manufacturer's specifications
    - electrical equipment used in presence of gas, vapour or dust, 563(1)
  - mine plans, 533
  - prototype machines, 575
  - representative machines, 576
  - stockpiles, 536
  - surface haul roads, 539
  - tests and inspections
    - of electrical systems, 562
    - record retention period, 534
  - walls
    - certified by engineer, 541(1)
    - specifications, 541(2)
  - warning systems
    - explosives, 656—657
  - See also* conveyors in mines; explosives (at mine sites); mines and mining; vehicles, use in mining
  - surveyor in underground coal mines, 682, 747(6)—(7)**
  - suspended elevating platforms**
    - standards, 348
    - See also* elevating platforms and aerial devices
  - suspended loads over work areas, 69**
  - suspended outrigger scaffolds**
    - design and specifications, 338
    - See also* scaffolds and temporary work platforms
  - suspended scaffolds, 341**
    - defined, 1
    - daily inspections, 341(4)
    - design and specifications, 341
    - See also* scaffolds and temporary work platforms
  - swing drop distance**
    - defined, 1
    - See also* fall protection systems; personal fall arrest system (PFAS)
  - swingstage scaffolds, 342—345**
    - certification by engineer, 342(1)(a)
    - design and specifications, 342—343
    - escape device, 344(3)—(4)
    - hoisting equipment, 344(1)—(2)
    - inspections, 345(1)
    - manually operated secondary mechanism, 344(3)—(4)
    - manufacturer's specifications, 342(1)(a)
    - personal fall arrest systems, 345(4)—(5)
    - safety procedures and devices, 344—345
    - suspension rope, 344(4)—(5)
    - use for light duty, 343(1)
    - See also* scaffolds and temporary work platforms
  - synthetic fibre ropes**
    - boatswain's chairs, 351(3)
    - standards, 297(1)
    - See also* ropes
  - synthetic fibre slings**
    - labels
      - manufacturer's information, 298(1)(a)—(b)
      - safe working load, 298(1)(c)
      - type and material of construction, 298(1)(d)
    - not subjected to pull tests beyond capacity, 298(2)
    - rejection criteria, 305
    - standards, 297(1)
- ## T
- tag lines on loads, 70**
  - tags** *See* labels; scaffolds and temporary work platforms
  - tamping poles for loading explosives, 491**
  - tank cars and trucks**
    - hazardous loads, 278
    - transfer of controlled products, 402
  - tanks** *See* containers
  - Technical Handbook for Professional Mountain Guides (Association of Canadian Mountain Guides), 3, 841(a)**
  - telephone lines** *See* buried or concrete-embedded facilities
  - telephone system**
    - connection with underground coal mines system, 699(1)
    - See also* communication systems
  - telephones, cellular** *See* cellular telephones
  - telescopic aerial devices**
    - on motor vehicle, standards, 347(5)
    - See also* elevating platforms and aerial devices
  - television towers** *See* radiofrequency transmitters and explosives
  - temporary (generally)**
    - defined, 1
  - temporary protective structures**
    - defined, 1
    - alternatives for soil stabilization, 443(3)
    - certification by engineer
      - tunnel excavations, 464
    - excavating and tunneling
      - alternative structures, 457
      - as protection method, 450(1)(b)—(c)
      - specifications of professional engineer, 456
    - trenches, standards for shoring, stringers and bracing, Schedule 9
    - underground shafts, 461(1)—(2)
    - temporary covers, 314(2)
    - tunnel excavations, 464



- See also* excavating and tunneling
- temporary stairs, 122(3)**
- temporary supporting structures, 352**  
defined, 1  
certification by engineer, 352(3)—(4)  
masonry walls stabilization, 192  
standards, 352(1)—(2)
- temporary work platforms** *See* **scaffolds and temporary work platforms**
- temporary work sites**  
toilets and washing facilities, 356(b)
- test machinery, isolating hazardous energy to** *See* **hazardous energy control (for service, repair, tests, adjustments, inspections)**
- thermal energy**  
in definition of hazardous energy, 1  
*See also* hazardous energy control (for service, repair, tests, adjustments, inspections)
- threats** *See* **violence, workplace**
- three-wheeled all-terrain vehicles**  
prohibition, 280
- ticket** *See* **labels; supplier labels (WHMIS); work site labels (WHMIS)**
- timber** *See* **forestry**
- timber piles, 289**  
*See also* pile driving equipment and practices
- tire servicing, 193**  
competent worker, 193(1)  
manufacturer's service manuals, availability, 193(2)  
tire inflation methods, precautions, 193(3)—(6)
- titanium**  
in light metal alloys, 538  
*See also* mines and mining
- tobacco**  
WHMIS not to apply to, 395(3)(b)  
*See also* smoking tobacco
- toe boards, 321**  
openings and holes, 314  
specifications, 321(1), 321(5)  
when needed, 321(2)—(4)
- toecaps, 233(2)—(4)**  
*See also* foot protection and footwear
- toilets and washing facilities, 354—361**  
feminine hygiene products disposal, 360(c)  
food establishments, exceptions, 356(a)  
hand cleaning facilities, 359—360  
circular wash fountains, 359(3)  
clean and operational, 361(1)  
hand drying, 360(b)  
hand soap, 360(b)  
number required, 359  
mobile or temporary work sites, 356(b)  
no unreasonable restrictions, 354  
requirements at work site, 357, Schedule 7  
showers and shower rooms  
clean and operational, 361(1)  
emergency washing equipment, 23  
storage of other materials, 361(2)  
storage of other materials, 361(2)  
toilet paper, 360(a)  
toilets, 357  
accessibility, 357(5)  
clean and operational, 361(1)  
drainage, 358(1)—(2)  
maintenance of self-contained units, 358(3)  
one facility for both sexes, 357(2)  
separate facilities by sex, 357(1), Schedule 7  
urinals, 357(3)—(4)  
waste receptacles, 360  
*See also* decontamination of workers; drinking fluids
- tools**  
defined  
actuated fastening tool, 1  
hand tool, 1  
actuated fastening tool, 374  
contact by clothing, jewellery or hair, 362 grinders, 375  
non-sparking tools in mines, 608
- torso protection**  
personal protective equipment, 242
- total fall distance** *See* **personal fall arrest system (PFAS)**
- total particulate** *See* **particulate materials**
- tower and building shaft hoists, 98—99**  
defined  
hoist, 1  
tower hoist, 1  
certification by engineer, boom, 99  
design, 99  
protective enclosure, 98  
safeguards, 318(7)—(8)  
*See also* hoists
- tower cranes, 100—107**  
defined, 1  
certification by engineer  
changing components, 103  
operator's cab, 103(2)  
structural testing and examination, 105  
wind and temperature limitations, 106  
changing components, 103  
documents  
load charts, 63(2)  
log books, 65  
limit devices, 101—102  
height limit device, 101(1)(c)  
overload device, 101(1)(a)  
travel limit device, 101(1)(b)  
trolley travel limit device, 101(1)(d)  
verification, 102  
load charts, 63(2)  
log books, 65  
manufacturer's specifications, 101, 103, 106

## Index

- multiple cranes, 107
  - operation, 102
  - operator's cab, 103(2)
  - standards, 100
  - structural testing and examination
    - certification by engineer, 105
    - how often to test, 105(2)
    - non-destructive testing, 105(1)
  - test weights, 104
  - wind and temperature limitations, 106
  - See also* cranes
  - tracked crawler, 270—271**
    - rollover protective structures, 270
    - seatbelts and restraint systems, 271
    - See also* powered mobile equipment
  - tractors, 270—271**
    - rollover protective structures, 270
    - seatbelts and restraint systems, 271
    - See also* powered mobile equipment
  - trade name** *See* **Workplace Hazardous Materials Information System (WHMIS)**
  - trade unions or worker associations**
    - joint work site health and safety committee, election of members, 199(2)
  - traffic control** *See* **vehicle traffic control**
  - Traffic Safety Act, 573(2)(c)**
  - trail bike, motorized**
    - safety helmet standards, 236
    - See also* head protection and headwear
  - trailer hitches in powered mobile equipment, 266(d)**
  - trailer pipe racks, 765**
  - Transportation Association of Canada, 3**
    - Manual of Uniform Traffic Control Devices for Canada*, 194(7)(i)
  - transportation of injured or ill workers to health care facilities, 180**
    - accompaniment by first aider, 180(5)—(6)
    - ambulance services, 180
    - availability under normal conditions, 180(1)—(2)
    - communication systems to summon, 180(4)
    - communication systems with health care facility, 180(3)(c)
    - licensed services, 180(2)—(4)
    - when not available, 180(3)
  - travel restraint system**
    - defined
      - fall protection system, 1
      - horizontal lifeline system, 1
      - travel restraint system, 1
    - anchors
      - permanent, 152
      - temporary, 152.1(1)
    - control zones, 161
    - horizontal lifeline systems, 153—153.1
    - in place of guardrails, 139(5)—(6)
    - procedures in place of, 159
    - scissor lift, requirement, 156
    - water dangers, 157
    - when required, 139, 141
    - See also* fall protection systems
  - travelling blocks, drilling or service rigs, 769—770**
  - tree care operations, 792—796**
    - application of Code, 792
    - fall protection, 794
    - harness standards, 795
    - knot exemption, 796
    - safe work practices and procedures, 793
      - emergency rescue, 793(1)(e)
      - hazard assessment, 793(1)(a)
      - tools and equipment, 793(1)(c)
      - training, 793(1)(b)
      - work positioning and fall protection, 793(1)(d)
  - trenchers, 270—271**
    - rollover protective structures, 270
    - seatbelts and restraint systems, 271
    - See also* powered mobile equipment
  - trenches** *See* **excavating and tunneling**
  - tricyclist**
    - protective headgear, 235
    - See also* head protection and headwear
  - tridymite** *See* **silica-crystalline, respirable**
  - tripoli** *See* **silica-crystalline, respirable**
  - trolley locomotives in underground coal mines, 706**
  - trucks** *See* **booms and boom trucks; concrete pump trucks; forklift trucks; logging trucks; service rig trucks; tank cars and trucks**
  - tuggers, oil and gas wells, 770**
  - tunnels** *See* **confined and restricted spaces; excavating and tunneling**
  - turnouts for logging industry vehicles, 525(3)**
  - two-way radios** *See* **radiofrequency transmitters and explosives**
- ## U
- U-bolt clips for wire rope, 300(1)**
    - See also* cable clips
  - U.S.A. Federal Motor Vehicle Safety Standard, 3**
  - UIAA (Union Internationale des Associations d'Alpinisme), 3**
    - defined, 1
  - ULC (Underwriters' Laboratories of Canada), 3**
    - defined, 1
  - underground coal mines, 680—749**
    - defined
      - gob, 1
      - mine official, 1
      - underground coal mine electrical superintendent, 1

- underground coal mine foreman, 1
- underground coal mine manager, 1
- adjoining underground properties, 747
- building safety, 532
- bulk fuel storage, 696, 713
- certification by engineer
  - annual mine plan, 681
  - compressed air, 675
  - degassing procedures, 733
  - explosion barriers, 745
  - explosives, 659(2)
  - extractions, 708(1)
  - geotechnical analysis for support system, 707(1)
  - hoisting equipment, 749.1
  - mine openings, 701(2.1)
  - pillar width, 747(3)
  - portals, 700(2)
  - removal of ground supports, 710(4)
  - roof and side support systems, 707(2)—(3)
  - sealed off areas, 716(4), 736
  - shaft access, 749.1
  - shock blasting, 676
  - survey plans, 682(3)
  - underground fuel station, 704(1)
  - ventilation system, 711(1)—(2), 712(4)
  - walls, 541(1)
  - water or gas close to working face, 749(2)
- chutes, 717
- coal cutting machines with combustible gas detectors, 738, 740
- combined operations
  - declaration, 686(1)
  - mine manager, 686(2)—(3)
- communication systems
  - openings, 701(2)—(3)
- communication systems, voice, 697—699
  - alarm systems, 699(2)
  - back-up power supply, 697(3)
  - interconnected stations, 697(1)—(2)
  - locations, 698(1)—(2)
  - permanently attended stations, 699
  - public telephone system, 699(1)
- conveyors
  - clearances, 550
  - fire precautions, 548(4)
  - fireproofing of, 549
- cross cuts, 728
- dangerous occurrences to report to Director
  - dam or dike dangers, 544(2)
  - electrical equipment failures, 544(1)(f)
  - ignition of gas or dust, 544(1)(d)
  - incidents with hoists, sheaves, shafts or headframes, 544(1)(i)
  - out of control vehicles, 544(1)(c)
  - outbursts and inrushes, 544(1)(h)
  - subsidence or unexpected ground fall, 544(1)(a)
  - underground ventilation system stoppages, 544(1)(b)
  - unexpected dangerous events, 544(1)(g)
  - worker withdrawal in emergencies, 544(1)(e)
- diesel fuel, 704—705
- diesel powered machines, 597, 731(4)
- diesel vehicle roads, 732
- Director of Inspection
  - annual mine plan, approval, 681
  - approval of dust control alternate protections, 537(2)
  - battery charging station, approvals, 566(1)
  - combined operations, declaration, 686
  - combustible gas detector location, approval, 738(3)
  - combustible gas detectors, approvals, 737(d)
  - communication system location, order, 698(2)
  - cross cuts, exemption, 728(3)
  - dangerous occurrences, notice, 544
  - diesel fuel storage period, approval, 705(1)
  - diesel powered machine, approval, 597
  - drill holes, mining close to, approval, 748
  - electrical systems, approval, 561
  - electrical systems, overhead power lines, approval, 567
  - explosion barriers, approvals, 745(1)
  - explosives, electric conveyance, approval, 660
  - explosives, non-permitted, approval, Schedule 11, Table 3
  - explosives, shock blasting, approval, 676
  - explosives, unclassified, approval, 659
  - explosives, underground transport, approval, 662(2)
  - fire detection systems, installation at specific location, order, 551(2)
  - flammable gas on diesel vehicle roads, 732(1)
  - hoisting equipment, approval, 749.1
  - hot work safe procedures, approval, 746(2)—(2.1)
  - mine manager appointment, notice, 685(1)
  - propane furnace, approval, 695(6)
  - refuge station, exemption, 559(4)
  - sealed off areas, approvals, 716(1)—(2)
  - shaft access, approval, 749.1
  - vehicles with automatic fire suppression system, approval, 548(7)
  - ventilation system air velocity, approval, 712(4)
  - ventilation system unplanned stoppage, report, 726
  - water or gas accumulations, approval, 749
- documents
  - code of practice, fan operating procedures, 725(3)

## Index

- dangerous occurrences reports, 544
- degassing procedures, 733
- diesel fuel, 705(5)
- electrical systems approval by Director, 561
- electrical systems installation and repair records, 562(2)
- evacuation procedures and mock exercises, 553
- fire fighting equipment inspections, 554(3)
- fire fighting training records, 547(2)
- flammable gas on diesel vehicle roads, report, 732(4)—(5)
- gas inspection report, 730(3)—(5)
- ground support code of practice, 709(2)
- hazard assessment, 688(3)
- inspection records, 534, 538(3), 725(2), 730(3)—(5)
- mine plans, 533, 556, 681
- refuge stations, posting of number of workers, 559
- self rescuers, training, 692(e)
- shift report, 690—691
- tests of ground electrodes, 570
- tests of supply systems for mobile electrical equipment, 565
- unsafe conditions, 688(4)
- ventilating pressures, 719(2)
- ventilation fan stoppages, 726(2)
- ventilation monitoring, 727(7)
- ventilation system operating procedures, 711(2)
- drill holes, 748
- dumping blocks, 542
- dust control, 537
- electrical systems, 560—572
  - authorized worker to install, 562(1)
  - batteries, 566
  - Director, notice and approvals, 561
  - drills, hand held electric, 572
  - electrical superintendent operation and approval, 564
  - flammable gas levels, 731(2)
  - ground fault protection, 568
  - grounding, 570
  - overhead power lines, 567
  - records of installation and repairs, 562(2)
  - standards, 560
  - supply systems for mobile electrical equipment, 565
  - switchgear, 569(2)
  - welding, 571
- emergency escape routes on surface haul roads, 539(2)
- emergency response stations, 545
- emergency response team, 546
- emergency warning systems, 552—553, 699
- entrances, exits, portals and outlets, 700—703
  - escape ways and manholes, 702—703
  - housekeeping, 702(1), 703(3)
  - outlets, certifications, 701(2.1)
  - outlets, communication systems, 701(2)—(3)
  - outlets, minimum number, 701(1), 701(3)
  - outlets, one only, maximum number of workers, 701(4)
  - portals, 700
  - signs and directional devices, 702(1)
- evacuation
  - flammable gas levels, 731(1)
  - procedures and reports, 553
- explosion barriers, 745
- explosion doors or weak walls, 721(2)
- explosives, 658—679
  - before firing procedures, 664(4)
  - blasting cable, 665
  - coal dust, 664(2)
  - compressed air, 675
  - delay detonator, 666
  - drilling distances, 663
  - firing in the same round, 671
  - flammable gas, 664(1)—(3)
  - flammable gas levels, 731(3)
  - mine shaft conveyance, 661
  - misfire detonation, 673
  - misfire report, 674(2)
  - misfires, 672
  - misfires, leaving, 674
  - non-permitted explosives, application to use, Schedule 11, Table 3
  - permanent firing station, 678
  - permitted explosives, 659
  - same manufacturer, 667
  - secondary blasting, 679
  - series connection, 668
  - shock blasting, 676
  - stemming, 670
  - surface shots, 677
  - transport underground, 660, 662
  - transportation by electric conveyance, prohibition, 660
  - underground mine blaster, general duties, 664
  - waiting period after detonation, 665(5)
  - warning signs for misfires, 674
  - water stemming, 670(2)
  - water-resistant explosives, 669
- fire detection systems, 551, 605
- fire extinguishers, 555
- fire fighting equipment, 554, 704
- fire fighting precautions, 548
  - dust-suppression devices, 548(3)
  - fire alarms on unattended conveyor belt transfer points, 548(4)
  - fireproof containers, 548(1)(c)
  - fireproofing roadways, 549
  - flammable construction materials, 548(1)(d)
  - flammable liquid storage, 548(1)(a)

- non-flammable material uses, 548(2)
  - propane use, prohibitions, 548(1)(f)
  - tarred or other building papers, 548(1)(e)
- fire fighting training, 547
- fire fighting water supply, 557—558
- fire resistant materials, uses, 548
  - booster fan installations, 538(2)(c)
  - coatings on roadway combustible materials, 549(2)
  - hydraulic fluids, standards, 548(5)—(6)
  - main fan installations, 548(2)(b)
  - material accumulations, 548(1)(b)
  - stoppings, regulators and doors, 548(2)(e)
  - underground portals, 548(2)(a)
  - vehicle components, exclusions, 548(6)—(7)
- flammable gas monitors, 543
- fuel stations, underground, 704
- gas, 749
- gas control, 730—741
  - bleeder systems, 731(5)
  - combustible gas detectors, 738—740
  - combustible gas detectors, portable, 739
  - combustible gas detectors, standards, 737, 739(3)
  - degassing procedures, 733
  - diesel vehicle roads, 732
  - flammable gas levels, 731
  - gas removal, 734
  - inspections, 730
  - roof bolters, use of, 741
  - sealed off areas, 736
  - unused areas, 735
- hot work explosion control, 746
- ignition means, prohibitions and warnings, 693—694
- inspections and tests
  - emergency warning systems, 552(b)
  - fire fighting equipment, 554(3)
  - flammable gas on diesel vehicle roads, 732
  - gas control, 730
  - ground electrodes, 570
  - propane installations, 695(3)—(4)
  - shift report, 690—691
  - supply systems for mobile electrical equipment, 565
- light metal alloys, 538
- manholes, 703
- manufacturer's specifications propane installations, 695(1)
- mine plans
  - annual plan, 681
  - certification by engineer, 681
  - contents, 533
  - designated competent person to prepare, 2.2
  - explosion barriers, 745
  - location of fire fighting equipment, 556
  - surveyor, 682
  - to Director, 681
  - updates, 556(2)
- no smoking or carrying ignition means, 693—694
- pillars, 747
- propane installations, 695—696
- refuge places and manholes, 703
- refuge stations, 559
  - evacuation procedures, 553
- roof and side support, 707—710
  - code of practice for ground supports, 709
  - extractions, 708
  - geotechnical analysis by engineer, 707(1)
  - removal of ground supports, 710
  - support system, 707
- sealed off areas, 716, 736
- self rescuers, 692
- shift report, 690—691
  - foreman requirement, 690(1)
  - mine inspection, 690(3)
  - posting, 690(4)—(5)
  - read and initial, 690(2)
- standards
  - auxiliary fans, 723(4)
  - combustible gas detectors, 737, 739(3)
  - fire resistant hydraulic fluids, 548(5)—(6)
  - international standards, 694.1
  - propane installations, 695(1)
- stockpiles, 536
- surface haul roads, 539
- surveyor, 682, 747(6)—(7)
- tests and inspections
  - of electrical systems, 562
  - record retention period, 534
- training of self rescuers, 692
- unsafe conditions
  - fenced off areas, 689
  - hazard assessment, 688(3)
  - notice to officials, 688(2)
  - records, 688(4)
  - types, 688(1)
  - withdrawal of workers, 688(3)
- vehicles, 704—706
  - control of equipment, 706
  - diesel fuel, 705
  - dust control on roadways, 742(3), 743
  - underground fuel stations, 704
- ventilation systems, 711—729
  - air flow not to impede fire fighting, 554(2)
  - air velocity, 712
  - auxiliary fans, 723, 725
  - batteries, 566
  - bleeder systems, 731(5)
  - booster fans, 538, 548(2)(c), 722, 725
  - brattice, 724
  - certification by engineer, 711(1)
  - chutes, 717
  - code of practice, fan operating procedures, 725(3)

## Index

- cross cuts, 728
- doors, 714
- explosion doors and weak walls, 721(2)
- fan operating procedures, 725
- fans, 538, 719, 742(5)
- flammable gas levels, 731
- gas inspections, 730
- light metal alloys, 538
- monitoring of ventilation, 727
- notice to Director of unplanned stoppages, 544(1)(b), 726(2)
- posting of code of practice, fan operating procedures, 725(3)
- posting of report of fan stopping, 726(2)
- posting of ventilation monitoring, 727(7)
- record of fan stoppages, 726(2)
- record of ventilating pressures, 719(2)
- record of ventilation monitoring, 727(7)
- return airway, 713
- reverse flows, 720
- seals, 716, 727(2)(e)
- splits, 718, 729
- stoppings, 715, 726
- surface fans, 721
- vent tubes, 724
- walls
  - certified by engineer, 541(1)
  - specifications, 541(2)
- warning systems
  - booster fans, 722
  - combustible gas detectors, 738(5)
  - emergency warning systems, 552—553, 699(2)
  - fire alarms, 551
  - flammable gas monitors, 543
  - propane leaks, 695(5)
- water, 749
- water supply for fire fighting, 557—558
- welding, cutting and soldering, 746
- workers, 683—694
  - foreman, 683—684
  - manager, 683—685
  - qualifications required, 684
  - shift change, 689
  - shift report, 690—691
  - smoking prohibitions, 693—694
  - supervision, 683
  - working alone, 393—394, 687
- See also* coal dust; conveyors in mines; mines and mining; mines and mining, definitions; vehicles, use in mining
- underground shaft hoist, 108—111**
  - defined, 1
  - certification by engineer
    - unguided suspended cage, 111
  - code for communication systems, 108(4)
  - communication systems, 108(2)—(4), 111(1)
  - hoist cage, 110
  - operator responsibilities, 109
  - safeguards on underground shaft cages, 318(7)—(8)
  - safety requirements, 108
  - speed limit, 109(2)
  - unguided suspended cage, 111
  - See also* hoists
- underground shafts, 461—462**
  - defined, 1
    - excavation, not an, 1
    - spoil pile, 1
    - underground shaft, 1
  - certification by engineer
    - temporary protective structures, 461(2), 462(2)
  - demolitions, 422
  - drilled or bored underground shafts, 462—463
  - entrances and exits, 446
  - falling materials in drilled or bored shafts, 462(3)—(4)
  - fences and gates for fall prevention, 461(3)—(4)
  - flammable substances, precautions, 163(2)
  - safeguards around surface openings, specifications, 318(6)
  - shoring component dimensions, Schedule 9
  - soil stabilization, 443
  - temporary protective structures, 461(1)—(2), 462(1)—(2), 463
  - water accumulations, prevention of, 461(5)
  - worker access, 446
- underground utility vaults** *See* **confined and restricted spaces**
- underground mines**
  - defined
    - portal, 1
    - underground mine, 1
    - underground mine blaster, 1
    - underground shaft, 1
  - building safety, 532
  - certification by engineer
    - compressed air, 675
    - shock blasting, 676
    - walls, 541(1)
  - combined operations
    - declaration, 686(1)
    - mine manager, 686(2)—(3)
  - dangerous occurrences to report to Director
    - dam or dike dangers, 544(2)
    - electrical equipment failures, 544(1)(f)
    - ignition of gas or dust, 544(1)(d)
    - incidents with hoists, sheaves, shafts or headframes, 544(1)(i)
    - out of control vehicles, 544(1)(c)
    - outbursts and inrushes, 544(1)(h)
    - subsidence or unexpected ground fall, 544(1)(a)

- underground ventilation system stoppages, 544(1)(b)
- unexpected dangerous events, 544(1)(g)
- worker withdrawal in emergencies, 544(1)(e)
- diesel powered machines, 597
- Director of Inspection
  - approval of dust control alternate protections, 537(2)
  - battery charging station, approvals, 566(1)
  - combined operations, declaration, 686
  - electrical systems approvals, 561
  - electrical systems, overhead power lines approvals, 567
  - explosives, electric conveyance, approval, 660
  - explosives, shock blasting, approval, 676
  - explosives, underground transport, approval, 662(2)
  - notice of dangerous occurrences, 544
- documents
  - dangerous occurrences reports, 544
  - electrical systems approval by Director, 561
  - evacuation procedures and training, 553
  - inspection records, 534
  - mine plans, 533
  - records of electrical systems installation and repairs, 562(2)
  - tests of ground electrodes, 570
  - tests of supply systems for mobile electrical equipment, 565
- dumping blocks, 542
- dust control, 537
- electrical systems, 560—572
  - authorized worker to install, 562(1)
  - batteries, 566(1)
  - Director, notice and approvals, 561
  - drills, hand held electric, 572
  - grounding, 570
  - overhead power lines, 567
  - records of installation and repairs, 562(2)
  - standards, 560
  - supply systems for mobile electrical equipment, 565
  - switchgear, 569
  - welding, 571
- emergency escape routes on surface haul roads, 539(2)
- emergency response stations, 545
- emergency response team, 546
- evacuation procedures, 553
- explosives
  - before firing procedures, 664(4)
  - blasting cable, 665
  - coal dust, 664(2)
  - compressed air, 675
  - delay detonator, 666
  - drilling distances, 663
  - electric conveyance, prohibition, 660
  - firing in the same round, 671
  - flammable gas, 664(1)—(3)
  - mine shaft conveyance, 661
  - misfire detonation, 673
  - misfire report, 674(2)
  - misfires, 672
  - misfires, leaving, 674
  - permanent firing station, 678
  - same manufacturer, 667
  - secondary blasting, 679
  - series connection, 668
  - shock blasting, 676
  - stemming, 670
  - surface shots, 677
  - transport underground, 660, 662
  - underground mine blaster, general duties, 664
  - waiting period after detonation, 665(5)
  - warning signs for misfires, 674
  - water stemming, 670(2)
  - water-resistant explosives, 669
- fire fighting water supply, 557—558
- flammable gas monitors, 543
- inspections and tests
  - ground electrodes, 570
  - supply systems for mobile electrical equipment, 565
- light metal alloys, 538
- mine plans, 533
- stockpiles, 536
- surface haul roads, 539
- tests and inspections
  - of electrical systems, 562
  - record retention period, 534
- ventilation systems
  - batteries, 566
- walls
  - certified by engineer, 541(1)
  - specifications, 541(2)
- warning system
  - evacuation, 553
- water supply for fire fighting, 557—558
- See also* conveyors in mines; mines and mining; vehicles, use in mining
- Underwriters' Laboratories of Canada (ULC), 3**
  - defined, 1
- Union Internationale des Associations d'Alpinisme (UIAA), 3**
- union or worker associations** *See* trade unions or worker associations
- uprights**
  - shoring component dimensions, Schedule 9
- urinals** *See* toilets and washing facilities
- Use of Electricity in Mines (CSA), 3, 560, 642(1)(a), 723(4)**
  - in definition of portable power cables, 1
- utility disconnection for demolition, 419**

## Index

- requirement, 419(a)
- written confirmation, 419(b)
- utility employee**
  - defined, 1
  - See also* electrical utilities and utility workers
- utility vehicles, small** *See* **small utility vehicles**
- V**
- valves** *See* **buried or concrete-embedded facilities**
- vehicles**
  - defined
    - GVW, 1
    - machinery, includes vehicles, 1
    - vehicle, 1
  - fall protection, 155
  - for moving workers, 364
  - headwear in vehicles with rollover protective structures and restraining devices, 236(3)
  - personal vehicles for work purposes, 290.1
  - refuelling, 279
  - transporting explosives, 473
  - See also* powered mobile equipment; vehicles, use in mining; welding or allied process
- vehicles, use in mining**
  - auxiliary steering, 588—590
  - braking systems, 577—587
    - air brakes, 577, 581
    - auxiliary air reservoirs, 582
    - dual brakes, 579
    - emergency brakes, 580, 582
    - front wheel brake control, surface mines, 583
    - hydraulic brakes, 578
    - parking brakes, surface mines or operations, 584
    - tests and records, 585—587
    - warning devices, 579
  - certification by engineer
    - prototype vehicles, 575(5)
    - representative machines, 576(2)
  - clear view, 593
  - clearances in underground coal mines, 595
  - Director of Inspection
    - brake tests by request from Director, 585(1)—(2)
    - excessive weight and loads, approvals, 573
    - exemptions, clearances, 595(2)
    - representative vehicles, 576(2)
    - underground mine vehicles, standards exemption, 574(2)
    - vehicle out of control, notice, 544(1)(c)
  - documents
    - brake tests and records, 586—587
    - excessive weight and loads, 573
    - maintenance records, 587
    - prototype vehicles, 575
    - representative machines, test report, 576
  - engine starting when transmission engaged, prevention, 591(1)(c)
  - excessive weight and loads, 573
  - explosives, transportation of, 622, 626, 660
  - fire precautions, 548
  - haulage trucks with rear dump boxes, 591(2)
  - hazard assessment
    - excessive weight and loads, 573
  - lights
    - clearance lights, 592
    - headlight alignment, 594(2)
    - types required, 594(1)
  - locomotives, control of, 706
  - maintenance records, 587
  - manufacturer's specifications
    - representative machines, 576(2)
  - prototype machines, 575
  - remote controlled equipment, 706
  - representative machines, 576
  - shock-absorbing seats, 591(1)(a)
  - standards
    - air brakes, 581
    - auxiliary steering, 590(1)
    - clearance lights, 592(1)(b)
    - hydraulic brakes, 578
    - prototype machines, 575
    - representative machines, 576
    - underground mine vehicles, 574
  - unattended machines in underground mines, 596
  - unintentional movement prevention, 591(1)(b)
  - warning systems
    - air brakes system failures, 581(e)
    - auxiliary steering system failures, 590(2)
    - dual brake system failures, 579
    - wheels in contact with ground, 591(2)—(3)
- vehicle hoists, 112—113**
  - safe use, 113
  - standards, 112
  - See also* hoists
- vehicle transporting equipment, bulkheads, 268**
  - See also* powered mobile equipment
- Vehicle-Mounted Aerial Devices (CSA), 3, 347(5), 799(1)**
- Vehicle-Mounted Bridge Inspection and Maintenance Devices (ANSI), 3, 347(7)**
- vehicle-mounted bridge inspection and maintenance elevating work platform**
  - standards, 347(7)
- vehicle-mounted winch lines, 114**
- vehicle traffic control**
  - automatic or remote controlled systems, 194(7)(g)
  - designated traffic controller, 194(4)—(6), 194(7)(h)
  - handheld signal lights, 194(6)
  - logging industry vehicles, 525



- pilot vehicles, 194(7)(f)  
 public highway traffic control methods, 194(7)  
 special clothing  
   for designated traffic controller, 194(4)—(5)  
   for worker on foot, 194(2)—(3)  
 standards for public highway traffic control, 194(7)(i)  
 when needed, 194(1)
- ventilation ducts** *See* **confined and restricted spaces; ventilation systems**
- ventilation shafts** *See* **building shafts**
- ventilation stopping** *See* **mines and mining, definitions**
- ventilation systems, 386—388**  
 defined  
   combined ventilation system, 1  
   ventilation stopping, 1  
 design and specifications, 387  
 flammable substances, precautions, 163(2)  
 in confined spaces, 53  
 in spray operations, 170.1(1), 170.1(4)  
 maintenance and operation, 387(1)  
 mines  
   application to Director to use unclassified explosive, Schedule 11, Table 3  
   light metal alloys, 538  
   notice to Director of unplanned stoppages, 544(1)(b)  
 training, 388(2)  
 warning of system failure, 388(1)  
 when needed, 386  
   airborne contaminants, 386(a)  
   atmosphere levels of oxygen, too high or too low, 386(e)  
   biological contaminants, 386(b)  
   flammables, 386(d)  
   particulates, 386(c)  
   *See also* underground coal mines
- vertical ladders on scaffolds, 327**
- vertical towers**  
 on motor vehicle, standards, 347(5)  
*See also* elevating platforms and aerial devices
- vessels** *See* **confined and restricted spaces; hot taps**
- vests**  
 duty to use, 228  
 use of, 242—243  
*See also* personal protective clothing
- vinyl chloride (chloroethylene)**  
 code of practice required, 26, Schedule 1, Table 1
- violence, workplace, 389—392**  
 defined, 1  
 documents  
   hazard assessment, 389  
   policies and procedures, 390  
   reports and investigations, 391(d), 392(2)  
 hazard assessment, 389
- response to incidents, 392  
 training, 391  
*See also* hazard assessment, elimination and control
- W**
- walkways** *See* **entrances, walkways, and stairways**
- walls**  
 masonry walls stabilization, 192
- warning devices and alarms**  
 excavation markings, 444  
 falling objects, 318(3)  
 flags  
   excavation markings, 444  
   for warning of trees to be felled, 522(b)  
 flares  
   hazardous locations, safe distances, 167  
   public highway traffic control, 194(7)(e)  
 flashing lights and beacons  
   falling objects warnings, 318(3)  
   public highway traffic control, 194(7)(d)  
 in emergency response plans, 116(g)  
 mines, flammable gas monitor alarms, 543  
 mobile cranes warning devices, 91, 267  
 powered mobile equipment, 266(b), 267  
 public highway traffic control, 194(7)(a)  
 starting machinery, alarm systems, 365  
 vehicles, use in mining  
   auxiliary steering, 590(2)  
   ventilation system failure, 388
- warning signs**  
 automatic machinery starts, 310(6)  
 explosives  
   blasting in surface mines, 656—657  
   community protection, 498  
   loaded holes, 507  
   misfires, 511, 674  
 falling objects, 318(3)  
 hazardous locations, 165(4)  
 materials chute at demolition site, 420(2)  
 noise exposure limits exceeded, 221(2)(c)  
 open building shaft, 313(3)  
 signs, 310(6)  
 temporary covers for openings or holes, 314(3)  
 tree felling near roads, 522  
 vehicle traffic control  
   logging industry, 525  
   public highways, 194(7)  
*See also* safeguards and warnings
- wash basins** *See* **toilets and washing facilities**
- washing and cleaning operations**  
 fire and explosion hazards, 162(5)
- washrooms** *See* **toilets and washing facilities**
- waste**  
 defined  
   hazardous waste, 1

## Index

- clean work site, 185
- discard from mines, 540
- feminine hygiene products disposal, 360(c)
- hazardous waste, controlled products, 395(3)(c), 396
- removal from blasting area, 513
- sharps receptacles, 526
- waste receptacles for toilets and hand washing, 360
- See also* asbestos
- watch, wrist**
  - contact with equipment and machinery, safety precautions, 362
- water dangers**
  - defined
    - life jackets, 1
    - personal flotation devices, 1
  - confined and restricted spaces, 49
  - Director of Inspection
    - dangerous occurrences with dams or dikes, report, 544(2)
  - duty to use personal protective equipment, 228
  - excavating and tunneling, 445, 464(2)
  - fall protection systems, 157
  - in underground coal mines, 749
  - in underground shafts, 461(5)
  - life jackets and flotation devices
    - standards, 240
    - uses, 241
    - with fall protection systems, 157
  - working on ice, 195
- water for drinking** *See* **drinking fluids**
- water for fire fighting**
  - in underground mines, 557—558
- water for washing** *See* **toilets and washing facilities**
- watercraft refuelling, 279**
- weather**
  - explosives
    - electrical or dust storms (not at mine site), prohibition, 484
    - electrical storms, surface mine blasting, 646
    - transportation at mine site, 623
  - powered mobile equipment, protections for workers, 275(3)
  - soil stabilization, prohibition on freezing for, 443(3)
  - tower cranes, wind and temperature limitations, 106
- See also* avalanche control
- welding or allied process, 171.1—174**
  - definitions
    - welding or allied process, 1
  - allied process, 171.2
  - application of Code, 465(2)
  - certification by engineer
    - repairs to riggings and fittings, 304(b)
    - storage compartments in vehicles, 173(3)
  - compressed/liquefied gas valve shut off when not in use, 171(8)(b)
  - Director of Inspection
    - in underground coal mine, approval, 746(2)—(2.1)
  - electric arc welding
    - damage to rigging, 308
  - electric welding machines, 171.1(5)
  - eye and face protection in electric arc welding, 231
  - gas welding, 171.2
  - in mines
    - electric welding, 571
    - in underground coal mines, 746
  - makeshift rigging and welding, 304
  - manufacturer's specifications
    - welding and allied equipment, 171.1(2)
  - precautions
    - electric supply cable, 171.1(6)
    - falling hazards, 171.1(4)
    - preparation of safe area, 171.1(3)
    - unattended electric welding machine, removal of electrode, 171.1(5)
  - services from vehicles, 172—174
    - handling cylinders, 174
    - horizontal cylinder storage, 173
    - storage compartments, 172
    - vehicle not in service, 174(3)—(4)
  - standards
    - general, 171.1(1)
    - storage compartments in vehicles, 172(1)
  - See also* compressed/liquefied gas; explosives (other than at mine sites); fire and explosion hazards; hot work
- wells** *See* **confined and restricted spaces; oil and gas wells**
- wheel and tire assemblies, 193**
  - competent worker, 193(1)
  - manufacturer's service manuals, availability, 193(2)
  - tire inflation methods, precautions, 193(3)—(6)
- See also* powered mobile equipment
- wheeled bulldozers, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
- See also* powered mobile equipment
- wheeled scrapers, self-propelled, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
- See also* powered mobile equipment
- wheeled trenchers, 270—271**
  - rollover protective structures, 270
  - seatbelts and restraint systems, 271
- See also* powered mobile equipment
- WHMIS** *See* **Workplace Hazardous Materials Information System (WHMIS)**
- winching operations, 114**
- windows and windshields**

- in powered mobile equipment, 265
- windshield wipers**
  - in powered mobile equipment, 265(4)
- wire mesh**
  - in safeguards, specifications, 322
- wire rope sling**
  - as anchor, 152.4
  - See also anchors
- wire ropes**
  - in boatswain's chairs, 351(4)
  - in horizontal lifeline systems, 153—153.1
  - in scaffolding, 324(2)
  - on sawmill log carriages, 383(2)
  - See also lifelines; rigging
- wire wheel** See **grinders**
- women** See **females**
- wood or wood products**
  - WHMIS not to apply, 395(3)(a)
- wood pole climbing, 149**
- work area** See **workers**
- work envelope** See **robots**
- work platforms** See **elevating platforms and aerial devices; platforms**
- work platforms, temporary** See **scaffolds and temporary work platforms**
- work positioning system**
  - defined, 1
  - adjustable lanyard, 148
  - fall arrest system with, 160.1
  - rope adjustment device, 148.1
  - tree care operations
    - harness standards, 795
    - safe work practices, 793(1)(d), 794
- work processes, hazards** See **fire and explosion hazards; hazard assessment, elimination and control**
- work shoes** See **foot protection and footwear**
- work site hazards** See **fire and explosion hazards; hazard assessment, elimination and control**
- work site health and safety committee** See **joint work site health and safety committee**
- work site labels (WHMIS), 398, 401**
  - defined
    - work site label, 1
  - controlled products arriving without labels, duty to provide labels, 398(5)—(7), 401
  - decanted products, 400—401
  - laboratory samples, 403
  - not to remove, modify or alter, 398(2)
  - placards, 398(4)(b)—(c), 401, 402
  - production or manufacture of controlled products, 399, 401
  - replacement of, 398(3), 401
  - requirement, 398(1), 401
  - storage without label, conditions, 398(4), 401
  - training in content, 397(1)(a)
  - training in significance, 398(4)(c), 405(1)(a)
  - transfer of controlled products, 402
  - See also confidential business information (WHMIS); Workplace Hazardous Materials Information System (WHMIS)
- work sites, close and distant** See **first aid and first aiders**
- work sites, first aid at**
  - defined
    - close work site, 1
    - distant work site, 1
    - isolated work site, 1
  - first aid requirements for close, distant and isolated sites, Schedule 2, Tables 5—7
  - See also first aid and first aiders
- work sites, temporary** See **temporary work sites**
- workers**
  - defined
    - competent, 1
    - consultation, 1
    - direct supervision, 1
    - exposed worker, 1
    - work area, 1
  - contact with machinery by clothing, jewellery or hair, 362, 773(4)(f)
  - duty to report illness, 182
  - duty to use fall protection system, 139(7)
  - duty to use protective equipment, 228, 229(2), 234, 244(4)
  - information access and privacy
    - asbestos, silica or coal dust exposure records, 40(5)
    - audiometric testing records, 223
    - availability of Code to, 2.1
    - first aid records, 184
    - health information in emergencies, 413—414
    - noise exposure assessment records, 223
  - involvement in emergency response plans, 115(2)
  - machinery or equipment for moving, 364
  - participation in hazard assessment, 8
  - personal vehicles for work purposes, 290.1
  - transportation in powered mobile equipment, 275
  - vehicles, personal, used for work, 290.1
  - working alone, 393—394
  - See also decontamination of workers; occupational exposure limit (OEL); personal protective clothing; violence, workplace; working alone
- worker associations or trade unions**
  - joint work site health and safety committee, election of members, 199(2)
- worker member** See **joint work site health and safety committee**
- worker's clothing**

## Index

- clothing beneath flame resistant clothing, 232(2)
- compressed/liquefied gas, use to blow substances, 171(8)(d)
- contact with equipment and machinery, safety precautions, 362
- contamination with flammable or combustible liquids, 164
- designated signaller, 191(2)—(3)
- in restricted areas, protection of worker's street clothing, 29(4)
- vehicle traffic control clothing  
for designated traffic controller, 194(4)—(5)  
for worker on foot, 194(2)—(3)
- See also* decontamination of workers
- working alone, 393—394**  
application of Code, 393(1)  
communication systems, 394  
hazard assessment, 393(2)  
oil and gas wells, 752(2)  
underground coal mines, 687
- working face** *See* mines and mining, definitions
- workings** *See* excavating and tunneling
- Workplace Hazardous Materials Information System (WHMIS), 395—414**  
defined  
bulk shipment, 1  
claim for disclosure exemption, 1  
controlled products, 1  
fugitive emission, 1  
hazard information, 1  
hazardous waste, 1  
laboratory sample, 1  
material safety data sheet, 1  
product identifier, 1  
supplier, 1  
supplier label, 1  
supplier's material safety data sheet, 1  
work site label, 1  
application of Code, 395  
confidential business information, 408—414  
duty to disclose information, 411  
filing a claim with Hazardous Materials Information Review Commission, 408  
information confidential, 412—414  
interim procedures before notice, 409  
procedures after notice of exemption, 410  
term of exemption, 409(3), 410 (3)  
decanted products, 400—401  
hazardous waste, controlled products, 396  
joint work site health and safety committee, role, 397(2)  
label required, 398  
laboratory samples, 403  
emergency telephone numbers, 403(3)  
exemptions, 403(1), 403(4)—(6)  
label information, 403(2)
- manufacturers of controlled products, 399  
duty to disclose information, 411  
safe manufacturing procedures, 397(1)  
WHMIS not to apply, conditions, 395(3)(d)  
work site labels, 399, 401
- material safety data sheets, 404—407  
availability, 407  
employer's data sheet, 405, 406  
information current, 406  
supplier's data sheet, 404, 405(3), 406  
training in, 397(1)(b)
- placards, 398(4)(b)—(c), 401, 402
- production or manufacture of controlled products  
duty to disclose information, 411  
label requirement, 399  
training, 397  
emergencies, 397(1)(f), 397(1)(g), 398(4)(c)(iii)  
fugitive emissions, 397(1)(f), 398(4)(c)(ii)  
identification methods for transfer of controlled products, 397(1)(e), 402  
labelling, 397(1)(a)  
material safety data sheets, 397(1)(b)  
safe manufacturing, 397(1)(d)  
safe storage, use and handling, 397(1)(c)  
supplier labels, 397(1)(a)  
work site labels, 397(1)(a)  
transfer of controlled products, 402  
*See also* employer's material safety data sheets (WHMIS); supplier labels (WHMIS); supplier's material safety data sheet (WHMIS); work site labels (WHMIS)
- workplace violence** *See* violence, workplace
- wrapper** *See* labels
- wristwatch**  
contact with equipment and machinery, safety precautions, 362
- X**
- x-rays** *See* radiation
- Y**
- yellow tags, scaffolds, 326(1)(b)**
- Z**
- zinc chromate**  
code of practice required, 26, Schedule 1, Table 1