

**TABLE 1
UNDERGROUND COAL MINING SAFETY RESEARCH COLLABORATION - U/G COAL LEGISLATIVE REVIEW - SUMMARY OF COMPARISON BC:Alta:NS:Fed(CBDC 1990).**

TOPIC	B.C. CODE	ALTA CODE	NS U/g Mining Regulations 2003	CBDC (Fed) 1990 Regs	MISSING or NOT	INITIAL COMMENTS
GENERAL						
Scope	Act 2:	Reg 1; Code Pt1.1;Pt36.531:	Act 17-18:	3: (u/g at CBDC only)	Generally in all	BC & Alta inc. surface & u/g mines in same Code; NS & Fed have Reg's (not Code) and do not; Fed is for CBDC only
Obligations - employers	Act 21/24(1)	Act 2(1); 32; Code Pt.36.685-6	Act 18-19	Not found, maybe elsewhere	Not in CBDC?	BC- Apt a mgr and comply with Act/Reg/Code
Obligations - workers	Act 24(2)	Act 2(1); 14; Code Pt36.684	Act 17-18: u/g	Not found, maybe elsewhere	Not in CBDC?	BC-comply with Act/Reg/Code
Inspectors & Powers	Act 3-9/15/19/31, Reg'n	Act 5	Act 47-53/73	Not found, maybe elsewhere	Not in CBDC?	BC-Min>Ch.Ins.Mines delegates powers to inspectors > inspections & investigations
Advisory Body	Act 9	Not found, maybe elsewhere	Act 24-26	CMSC	Not in Alta/CBDC?	BC-allows a main and regional Adv bodies to assist CI in approvals/investigations
Permits	Act 10-11;Code7.2,8.11.1,10.4.1	AUEB	35-49: NSDNR; NSDEL	CMSC/NSDNR/NSDEL	Generally in all	BC-Min>Ch.Ins.Mines issues permits from-cradle-to-grave, including bonding, others may cover this elsewhere
Mine reclamation fund (bonding)	Act 12	AUEB	NSDNR; NSDEL	Not found, maybe elsewhere	Not in CBDC?	BC-requires mine specific reclamation bonding in Code, others may cover this elsewhere
Variances	Act 13; Code 1.2	Act 34 (1); Reg.10; CodePt.1.1.A;	Act 83, Regs 3(1), 116-118	Can Lab Code (CLC) II-137(1)(2)>CMSC; 5	Generally in all	BC-Ch.Ins>variances, = or > OHS; Alta-Dir>acceptance, = or > OHS; NS-Dir>deviation; Fed-CMSC>exemption OHS not diminished
Inspections	Act15(1)-16,Reg'n.1.6.3/5.3	Act 8-11/15; Code Pt.36.604/690/730	Act 66, 82, 116-117/121	39, 41-47	Generally in all	BC-can inspect at any time, report in 7 days mgmt resp in 15 days; Alta officer has much power can sop work & order correction
Abandoned Mines	Act 17	Not found, maybe elsewhere	Not found, maybe elsewhere	Not specific (ref.161 closure)	In BC only	BC-Ins can make safe, remediate pollution for abandoned mine(s)>lien, others may cover it elsewhere
Engineering Reports	Act 18	Act 27	Not found, maybe elsewhere	CMSC	Not in NS/CBDC?	BC-Ins can order mine to provide Eng/prof report into anHS issue or invest'n concern, Alta Minister may engage on OHS matters;
Managers/Supervisors	Act 21-24/26;Code1.7.1/1.8.1/6.1-6.7	Act 34; Code Pt.36.683/685;	61-64	8-9;	Generally in all	All require a Mgr; BC-have aMineMgr/Supervisorsdaily or deign/qual'd, must comply with regs/Code;
Manager's Temp'y Absence	Act 23	Pt.36.684-685	63	Temp'y not mentioned, Perm'b-Reg 8	Not in CBDC?	BC-responsible person (Mgr's cert); Alta-acting Mgr(Mgr's cert, being reviewed); NS-alternate (Mgr's qual'n)
Contractors	Act 25	Act 2(3)-(5)/3/4	Act 14-16	Not mentioned, maybe elsewhere	Not in CBDC?	BC-Contractor & his ConMgr must comply with regs and if not treated as Mine Mgr; Alta & NS include them as responsible
Plans	Act 27, 6.3/6.8/10.1	Pt.36.533/556/681	19,25,43-51,53,55-57	Pt VI, 158-161	Generally in all	BC-Mgr post uptodate plans in office; Alta Part 2 Haz. Assess. PEng certifies changes, NS plans by approp.engr.
OHS Committee	Act 32	Act 6/7/31; Code Pt.13	Act 27-33; Reg 23-24	Not found, maybe elsewhere, CLC?	Generally in all	BC-mines must have OHScs according to regs and they must be active
Appeals/Enforcement	Act 33/35	Act 16-17/42-44	Act 54-57/67-72	Not found, maybe elsewhere	Not in CBDC?	BC-appeal to ChInsp.; insp powers to enforce
Accident Investigation	Act 7-8; Reg; 1.7	Act 18-19	Act 63-65; Reg 28	Not found, maybe elsewhere, CLC?	Generally in all	BC- CI/insp can investigate death/injury/env.damage
Absence of Code Req't	1.1.2	Not found, maybe elsewhere	Not found, maybe elsewhere	Can Lab Code II-137(1)(2)>CMSC	In BC only	Only specific mention in BC Code
Keep records at the mine site	Act27/28/30; Code 6.4.2/6.6.1/7.9	Pt5.34; Pt.36.690(1)	Act 34-35; Reg.8-18/20/29-34	4,	Generally in all	In all in one form or another
Offence/Penalty	Act 37	Act 41	Act 74; Reg.60	Not found, maybe elsewhere, CLC?	Not in CBDC?	In all in one form or another; BC-\$100k +/- jail + \$0.5-5k/day until fixed
Surveyors	Not specific [10.1.10(4)]	Pt.36.682, 747(6,7)	71	2, 160	Generally in all	BC-no specific mention, maybe for plans - only if CI requires
Hazard Assessment	Not found, maybe elsewhere (Act 18-Engr.Report?)	Pt.2	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in NS/CBDC?	Alta only has a specific requirement in Code for hazard assessment of all work sites
Board of Inquiry	Not found, maybe elsewhere	Act 38	Not found, maybe elsewhere	Not found in regulations	Not in BC/NS/CBDC?	Alta only has a specific requirement in Code for a possible Board of Inquiry if in public interest
Max. Working Hours	1.5	Not found, maybe elsewhere	89	Not found, maybe elsewhere	Not in Alta/CBDC?	BC-max 50hrs/wk, max shift 16hrs, other conditions; NS-normal shift 8hrs/wk, max shift 16hrs, other conditions; others maybe elsewhere
Bonus Plan	Not found, maybe elsewhere	Not found, maybe elsewhere	90	Not found, maybe elsewhere, CMSC?	Not in BC/Alta/CBDC?	NS-allows under certain conditions; CBDC practiced a bonus scheme under union contract
DANGEROUS OCCURENCES						
Rock/falls, subsidences	1.7, 3.1	Pt.36.544.1/2	27(1), 28, 123, 128; Act 63	162-166, 46	Generally in all	BC report in <16hrs; Alta as soon as poss; NS<24hrs; CBDC "forthwith"
Dam failures	1.7.3.2	Pt.36.544.1a	27 (1, f), 27 (2,j/n)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Hoists	1.7.3.3,4	Pt.36.544.1g	27 (2, h)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Inrushes	1.7.3.3,4	Pt.36.541.2.a/544.1g/749	27 (1, c), 109-110	54,55	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Explosions	1.7.3.5	Pt.36.544.1d	27 (1, e), (2, c)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Gas inflows	1.7.3.6	Pt.36.544.1e/749	27 (1,h//1)	54,126	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Ventilation Stop	1.7.3.7	Pt.36.544.1b	27 (1, g)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Out-of-control vehicle	1.7.3.8	Pt.36.544.1c	27 (2, j)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Fires	1.7.3.9	Pt.36.544.1d, e	27 (1, a/b)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Electrical	1.7.3.10	Pt.36.544.1f	27 (2, f/o/p/q)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Outbursts (Rock & Gas)	1.7.3.6/11,6.42.1.8.11.2	Pt.36.749?	27 (1, d)	46	Generally in all	Not specific in BC
Other	1.7.3.11	Pt.36.544.1g	27 (1) (2)	46	Generally in all	BC/Alta in detail; NS somewhat generic deals with reporting and correction asap; CBDC generic: evcuate, post report
Geological Faults	10.4.3(e)	Pt.36.707(3)f	36.e; 111	56	Generally in all	Not specific in BC
Self Rescuers	1.8.8 (not specific SCSR)	Pt.36.692(not specific SCSR)	87-88; SCSR-80	152	Generally in all	BC specifies NIOSH 42 CFR Pt 84; Alta/NS/CBDC specify none.
Right to Refuse Work	Act 15; 1.1	Act 9/35-37	Act 43-44; 27 (2, e);	Not found, maybe elsewhere, CLC?	Not in CBDC?	Could not find it in Alta.
Training	1.11	Pt. 29.397	Reg.15; Part 12	35(3), 57	Generally in all	Both require trained & qual'd supervisors.
Supervision	1.12.3	Pt.36.683/684	65,	8-9	Generally in all	BC by Board of Exam'rs; Alta/NS under OHS Reg'ns.
Job Certification Procedure	1.13	Reg: 24-34	Part 12, 424 to 468	2 - definitions "certification"	Generally in all	BC/Alta/CBDC reuire a provincial Board of Examiners to certify competency; NS does not>employers Job Training Program
						Alta allows temporary non-certified substitutes. BC min.age 18 yrs; Alta?
OCCUPATIONAL HEALTH						
Work place Contaminants	2.1	Reg 2-4	NSDEL	Not found, maybe elsewhere, CLC?	Not in CBDC?	BC-Max Exposures, Shift,Times,
Work Place Hazards	2.2	Reg 5	NSDEL	Not found, maybe elsewhere, CLC?	Not in CBDC?	BC-effective housekeeping
Hazardous Materials & Waste	2.3	Reg.4; Pt.20 Radiation, Pt.35 health	Act 58	Not found, maybe elsewhere, CLC?	Not in CBDC?	BC-Asbestos, Others-dusts, wastes, radiation, isocyanites; others less specific
Harmful Chemical Exposure	2.4	Pt.4;Sched.1	NSDEL	Not found, maybe elsewhere, CLC?	Not in CBDC?	BC-emergency wash and protection
Noise	2.6	Pt.16; Sched.3	Not found, maybe elsewhere	446 (r) [training]	Not in CBDC?	BC-mufflers required
Lasers	2.7	Not found, maybe elsewhere	Not found, maybe elsewhere	Can Lab Code II-137(1)(2)>CMSC?	Not in Alta/NS/CBDC?	BC-ANSI std/protection
Illumination (see Lighting below)	2.8(u/g 2.8.3)	Not found, maybe elsewhere	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in Alta/NS/CBDC?	BC-u/g lighting at specific places, c/v roads, shaft stns, first aid stns
Musculoskeletal Disorders	2.9	Not found, maybe elsewhere	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in Alta/NS/CBDC?	BC-modification and protection
Thermal Environment	2.1	Not found, maybe elsewhere	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in Alta/NS/CBDC?	BC-heat/cold stress
Medical Surveillance	2.12;8.3.10-11	Act 20-24/26	Act 42/62	Not found, maybe elsewhere	Not in CBDC?	BC-reqts/testing/advice/records/analysis/payment
WHMIS	2.13	Act 29-30; Pt.4; Pt.29	Act 58-60; NS WHMIS regs 196/88	Not found, maybe elsewhere	Not in CBDC?	BC-use/storage/handling/educ/training/labels/MSDS sheets.Not specific in NS OHS Act or Ug Mining Regs, but in WHMIS Regs.
Threshold Limit Values	Table 2-1	Schedule 1, Table 2	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in NS/CBDC?	BC-inc RCD and coal dust
SAFETY						
Impairment/Violence	Pt.3	Pt.12	Part II (35-58)	Not found, maybe elsewhere	Not in CBDC?	
	3.1	Pt.27	Not found, maybe elsewhere	142	Not in NS?	BC - inc.impairment, drugs, liquor, improper conduct; Alta-violence and sources of ignition; NS not specific on any except ignition; CBDC alcohol, drugs and sources of ignition
Tallying	Act 9; 3.2.2	Pt.36.691	Reg.77-78	35(1c)	Generally in all	All require a system of knowing who is u/g at any time [Fed ~37: <15 in a single heading]
Working Alone	3.2.3	Pt. 28/Pt.36.687	91,	Not found, maybe elsewhere	Not in CBDC?	BC checks <2.5 hr intervals; Alta no time limit; NS checks <2hr intervals; CBDC-could not find
Haz./Unsafe Conditions	3.3	Pt.2/Pt.36.688, Act 35	123,	45, 46, 162	Generally in all	BC manager's plan, Alta immed.notif'n.& withdrawal, NS immed.withdrawal/correction; CBDC-immediate report and action
Confined Spaces	3.4	Pt.5	Occ.Saf.Gen.Regs.12/29/137	Not found, maybe elsewhere	Not in CBDC?	Not mentioned specifically in NS OHS Act or Ug Mining Regs, but maybe as OHS Regs?
Fire Prevention	3.5	Pt.10; Pt.36.547-558	Pt.5, 145-154/164-178	146-150	Generally in all	Covered in all to varying degrees
No Open Flame	3.5.1/3.5.2	Pt.36.621/693	156-157	141	Generally in all	BC, Alta, NS-prohibit; CBDC-same as hot work, 24hr notice, test, procedure
No Contraband	3.1.2/3.5.2	Pt.10.162; Pt.36.693-694	156 (1), 157-159	142-143	Generally in all	BC/Alta-prohibit, search not pecified; NS/CBDC- prohibit and search; Alta specifies in more detail, including lights,flametraps, foil wrap; CBDC inc. alcohol & drugs
Welding/Hot Work	3.5.1(3)/3.4.4.7	Pt.10.169; Pt.18.231; Pt.36.571/693.4/746	160-161	141,	Generally in all	Found in all, procedures specified to varying degree of detail
Fire-proofing Roadways	Not found, maybe elsewhere	Pt.36.549	162	Not found, maybe elsewhere	Not in BC/CBDC?	BC/CBDC - not found; Alta-specific around c/v drives, desires fire-resistance elsewhere; NS-shafts and fans, not generic in ine
First Aid	3.6	Pt.11; Sched.2	58Scha(25)/374(1)/446/447/455/461-4	153, SchV & VI	Generally in all	Required in all, NS mainly injob training
Mine Rescue	3.7	Pt.7.117-118	68, 69, 80, 87, 135-143	151-154, Sch III, IV	Generally in all	BC specific to mine rescue; Alta is more generic; NS and CBDC in some detail

Emergency Response	3.8	Pt.7; Pt.36.545-546	124-131/165	35(1,b)	Generally in all	In all to varying degrees of detail
Emergency Training	3.8	Pt.36.545-547	126, 440, 455-458	Not found, maybe elsewhere	Not in CBDC?	Specific in BC/Alta/NS to varying degrees
U/g Firefighting	3.9-3.11	Pt.36.548-9/554-558	145-146? 164, 165, 166	Not found, maybe elsewhere	Not in CBDC?	Specific in BC/Alta/NS to varying degrees
Evacuation/Escapeways	3.13; 6.3.1	Pt.7.117, Pt.8.119, Pt.36.702/707	125 (2) f v)	35.1.a; CMSC	Generally in all	In all to varying degrees of detail
Emergency Warning system	3.13.2-4	Pt.36.551/552	125(2,g), 131-133	Not found, maybe elsewhere	Not in CBDC?	BC/Alta/NS generic: evacuation warning system req'd; CBDC-no warning system specified
BUILDING, EQUIPMENT, MACHINERY						
U/g Garages and fueling	4.3.1-4	Pt.36.704	58 SchA (13)	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
U/g Fuel Stations	4.3.3	Pt.36.697-698/704-5	165(1)d171-172	100(2)	Not in CBDC?	Varying detail across the jurisdictions
Bulk Fuel Storage	4.3.5-9	Pt.36.696	41, 168, 169-174	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Welding/Burning	3.5.1(3)/3.4.4.7	Pt.10.169; Pt.18.231; Pt.36.571/693.4/746	160-161	141,	Generally in all	Found in all, procedures specified to varying degree of detail
Main surface fans for u/g ventn	4.4.13-4.4.14	Pt.36.719-721/726	204, 218,219	114, 116-118	Generally in all	Varying detail across the jurisdictions
CONVEYORS	4.4.16	Pt.36.598-606	256, CSA M421-00	Not found specifically, maybe elsewhere	Not in CBDC?	Only Alta specifically deals with CO monitors - Pt36.605; CBDC does not specifically mention them; NS in other reg's
Manriding	4.4.16.1	Pt.36.603	)	Not found specifically, maybe elsewhere	Not in CBDC?	BC bans manriding; Alta allows it under specified conditions; NS/CBDC don't mention it.
Crossing over on bridges	4.4.16.2	Part 25 373	) (278(d)	Not found specifically, maybe elsewhere	Not in CBDC?	Not specified in Alta/CBDC
Inspection walkways	4.4.16.3	Pt.36.600/606?	)	Not found specifically, maybe elsewhere	Not in CBDC?	Alta 36.600 requires travelling room, inspection walkways not mentioned; CBDC don't mention
Pull cords to stop	4.4.16.4	Pt.36.599.1	)Occ.Safety Gen.Reg.6/97-100	Not found specifically, maybe elsewhere	Not in CBDC?	NS only has 1 brief section on c/v "testing, maintenance, insp'n of c/vs
Audible pre-start warning	4.4.16.5	Pt.36.552?	)	Not found specifically, maybe elsewhere	Not in CBDC?	Alta 36.522 requires emergency warning, c/v audible warning not mentioned; CBDC doesn't mention
Guarding of pulleys	4.4.16.6	Pt.22?	)	Not found specifically, maybe elsewhere	Not in CBDC?	Alta/CBDC don't mention
Beltslip/Sprinkler/Plugged chutes	4.4.16.7	Pt.36.599.2/604	)	Not found specifically, maybe elsewhere	Not in CBDC?	Alta - Sprinkler and plugged chute not mentioned; CBDC don't mention
Spillage cleanup	4.4.16.8	Pt.36.548.b/550.a/601	)	Not found specifically, maybe elsewhere	Not in CBDC?	CBDC don't specifically mention
Lock-outs	4.4.16.9, 4.11	Pt.15?	)	Not found specifically, maybe elsewhere	Not in CBDC?	Alta/CBDC don't mention
Guards and fences	4.4.16.10	Pt.22?	)	48,	Generally in all	Not specified in Alta
Safe working procedures	4.4.16.11	Pt.2.7-11	)	52,	Generally in all	BC specific to mine rescue; Alta/CBDC is generic,
Type of belting	4.4.16.12	Pt.36.598	256 (1)	141 (3)	Generally in all	BC/Alta/NS require CAN/CSA 422-M87; CBDC only fire performance and antistatic belting Fed??
Inspection/Examination	4.4.16.3	Pt.36.599.2/604	256 (2)	53,	Generally in all	NS only has 1 brief section on c/v "testing, maintenance, insp'n of c/vs; CBDC daily mechanic inspection
Auto Fire Alarm	4.4.16.11	Pt.36.543-545/551/605	)	129 (longwall)	Generally in all	CBDC refer specifically to longwall only
Clearances	4.4.16.11	Pt.36.550/595/600/602/606	)	48,	Generally in all	In all to varying degrees of detail
MOBILE EQUIPMENT						
Mobile Equipment	4.6/ 4.9	Reg.12;Pt.19, Pt.36.573-596/704-706	257-261,274-276,279-289	59-60	Generally in all	In all to varying degrees of detail (CBDC did not use many diesel vehicles so is light on detail)
	4.6/ 4.9	Pt.36.573-596/704-706	254-289	59-60	Generally in all	In all to varying degrees of detail
Clearances	6.1.5,2.6.16.1-2,6.17.1	Pt.36.595/600/602/606	274-277	60	Generally in all	NS rail 0.3m vert/0.6m horz; non-rail 0.6m vert, 1.5/2.0m horz;Fed 0.3mvert/0.6m horz
Diesel Equipment U/g	4.6.1	Pt.36.597/705/732	41,171-4,215,225(5),255-261	59, 99 -105, 124-125	Generally in all	Alta, also Pt.19 Mobile Equip. (eg .260 Insp.&Main.; BC specifies min. 0.06 m3/sec of ventilation air for each kW; not in others.
Trackless Diesels	4.7.1	Pt.36.574/596-597	266,	59-60	Generally in all	BC/Alta/NS - Ref.CAN/CSA 3.16-99, Mining Diesel Fuel;M424.1-88 Flame-Proof; and M424.3-M90 Braking Performance; NS also MSHA 30 CFR (2002); CBDC none of these specified
Flammable Materials	4.8.1	Pt.10.162	162.1	144-145	Generally in all	In all to varying degrees of detail
Fire suppression in diesels	4.9.6	Pt.10.166 (1)	165 (g)	Not diesel but 108-batt.char'g&115-booster fan	Not in CBDC?	In all to varying degrees of detail (CBDC did not use many diesel vehicles so is light on detail)
No sparks or flames from diesels	3.5.3	CSA424.M88/90	259,	99, 103	Generally in all	In all to varying degrees of detail
Personnel Carriers & other cars	4.9.7,4.9.8	Not found, maybe elsewhere	266-271	59, 81-92	Not in Alta?	In all to varying degrees of detail
Railways	4.10.1-4	Pt.36.706	286/386 - locomotives only	59-62, 88-89, 100-107	Generally in all	In all to varying degrees of detail
Lock-out Procedures	4.11	Pt.15	344(2) - raise climbers only	2 - definitions, 49	Generally in all	In BC/Alta/CBDC to varying details
Equipment Auto Shutdown	4.9.6, Elec = 6.43.4	Pt.36.543/738.5/6; 597 - CSA424.M-88/90	all=234, diesel=176(b),electric=235-9	115(1) booster fan	Generally in all	BC auto of power at coal face @ 1.25%; Alta auto of head, manual power off; NS auto of all including mobile equip, zoned: @ 0.5/1.25% CH4; CBDC: manual@1.25%
Remote controlled Equipment	6.18	72(3) lifting devices; 214 lock-out	76,82,231-2(env), 262-265	132 (env-gases)	Generally in all	In all to varying degrees of detail
Battery charging	6.21.1	Pt.36.566	43, 175	108	Generally in all	In all to varying degrees of detail
MECHANICAL						
fire resistant fluids	4.4-4.12/6.16	Pt.19 Mobile Powered Equipment	55, 200-202, 322-355	51-53	Generally in all	In all to varying degrees of detail
	4.8.3/4[97:4.9.6]	Pt.36.548(2)	Not found, maybe elsewhere	Not found specifically, maybe elsewhere	Not in NS/CBDC?	Found in BC and Alta
ELECTRICAL						
Electrical Standards	5.1.1/5.2.2-3	Pt.36.560	189-190, 312, 321	Not found, maybe elsewhere, CMSC?	Not in CBDC?	Ref. CSA M421-00 Use of Electricity in Mines AND Can. Electrical Code;
Electrical Equip Certific'n	5.2.3	Can Elec Code	192-193	51	Generally in all	BC - requires MSHA or NRCan's Can. Explosives Lab; Alta not specific
Lighting	2.8.1/3	Part 12 186; CEC; 603; 612	83-84, 86	36 (1-flame safy;2-cap)	Generally in all	In all to varying degrees of detail
Hazardous Zoning	5.1.1/5.2.2/5.2.4/5.3-5.4	Pt.10.165-166(5)Pt.36.522/524 CanElecCod	45, 188, 191-192	51	Generally in all	In all to varying degrees of detail
Safe Procedures	5.3.1	Not found, maybe elsewhere	Not found, maybe elsewhere	52,	Not in Alta/NS?	Varying degrees of detail, maybe elsewhere in NS
Voice Communication	7.7.5/10	Pt.36.697-699, 704-706	82/92	151SchIV(12) - mine rescue only	Generally in all	In all to varying degrees of detail but none specific to 2-way voice mine-wide and especially not to wireless
MINING						
Mine Plans	Act 27, 6.1.1/6.3.2/6.8/10.1	Pt.36.681/708	35-60, 90	158-160, CMSC?	Generally in all	BC/NS specify in detail & in permit process; Alta needs annual surveyed plan of prodn.&vent'n; 90days prior submission to CMSC
Shift Reports	6.4	Pt.36.690	117, 118, 119	33, 45	Generally in all	In all to varying degrees of detail
Pre-shift Inspections	6.7/6.25	Pt.36.690.3	75, 117, 118, 119	39, 41	Generally in all	In all to varying degrees of detail
Haul Roads	6.9	Pt.36.539	Occ.Safety Gen.Reg.15	not applicable	Not in CBDC	In BC/Alta to varying degrees of detail implicitly on surface haul roads; not in NS/CBDC as u/g mines only
Pillars	6.11,6.25.4/5	Pt.36.611.4/747.4	52, [47 (1) shaft pillar?]	159,	Generally in all	In all to varying degrees of detail; BC - body pillars >30m each side; Alta >100m each side; NS generic (but shaft pillar-60m rad?).
Exploration Boreholes (u/g)	Not found, maybe elsewhere	Pt.36.748	107-109	54	Not in BC?	Not in BC, in others to varying degrees of detail
Mine Openings	6.12	Pt.36.700-702	93, 95, 96, 97,208	38(2), 61	Generally in all	In all to varying degrees of detail
Separation of int/ret at surface	6.12.2 (30m)	Pt.36.700-701(30m)	93/95/208-30m	38,109-30m	Generally in all	BC/Alta similar req'ts for portals, mine outlets and escape routes; All need 30m solid or substantial rock separation.
Min size of roadways	Not found, maybe elsewhere	escapeways only, Pt 36:702	96,	38, 61	Not in BC?	Not in BC, in others to varying degrees of detail
Refuge Stations	6.13	Pt.36.559	146-153	Not found	Not in CBDC?	Similar req'ts for contents but BC/NS specify location; Alta more generic; CBDC were deliberately left out
Bulkheads	6.14.1 (dams)	Pt.19.268 (vehicle stop blocks), 544 (dams)	27 (dams), 41/42/50/53/58SchA(14)	Not found, maybe elsewhere	Not in CBDC?	Not in CBDC, in others to varying degrees of detail
Safety Stns/Manholes	6.17	Pt.36.703	277-278	60(1.f/3)	Generally in all	BC - inspector states distance apart; Alta is <20m apart; NS:30/50/100 depending on location; CBDC 100/30 and dimensions
Remote Control Operation	6.18	Not found, maybe elsewhere	76, 82, 262-265	132 (env.gases)	Not in Alta?	Not specified in Alta Part 36 Mining or CBDC (except for environmental monitoring)
Battery Charging	6.21	Pt.36.566	43, 156.2.A; 175	106-108	Generally in all	Alta requires Directors approval, also bans battery repairs u/g.
Drilling	6.24.3	Pt.36.537	106-107	Not found, maybe elsewhere	Not in CBDC?	BC requires dust suppression in drilling
Old Workings	6.25/6.40	Pt.36.749	108-109, 212 barricades	55,56,159	Generally in all	NS specified directly in Alta Part 36 Mining; NS probing within 100m.
Inrush/Inflows	3.3.1/3/6.25.4/6.26	Pt.36.749	108-112	54, 125 (approved procedure)	Generally in all	Alta requires a scheme for approaching old workings/surface; NS probing within 100m.
Undersea/underwater	1.7.3.4/10.1.4.1	Pt.36.749(1) by inference	110	55, 158(3)	Generally in all	
Interaction	Not found, maybe elsewhere	Pt.36.707(3)g	111-112	Not found, maybe elsewhere	Not in CBDC?	
Support of Roof and Sides	3.3.1/6.25/10.1.4.1	Pt.36.707-710/747	52, 103-104	159	Generally in all	Alta outlines support system req'ts, operating rules, support withdrawal; Others are generic; CBDC a geotech plan.
Rock Bolts	Not found, maybe elsewhere	Pt.36.741	52	159	Not in BC?	Only specified in Alta
Depillaring	Not found, maybe elsewhere	Pt.36.708/710	52	Not found, maybe elsewhere	Not in BC/CBDC?	Only specified in Alta
Backfill	Not found, maybe elsewhere	Not found, maybe elsewhere	113-114	Not found, maybe elsewhere	Not in BC/Alta/CBDC?	Only specified in NS
Rock Passes/Raises/Chutes	6.26/6.29	Pt.36.717	105-106	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Stairways/Ladders	6.27-28	Pt.8.122-137	98-102, 340	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC

Flammable Waste (u/g)	2.3.6/8, 4.3.2(5), 6.3	Pt.36.548.1.b/c	157(3), 168-169	114-115	Generally in all	In all to varying degrees of detail
Fire Doors U/g	6.32	Pt.36.514/548.2.e	179, 213	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Subsidence	10.1.4 f	Pt.36.544 a	27, 114,	55	Not in CBDC?	Varying detail across the jurisdictions, CBDC in context of undersea mining
VENTILATION	6.33	Pt.26; Pt.36.711-729	53, 203-230	109-132	Generally in all	
Vent'n Plan/surveys	6.3.2(5); 6.37.1/6.39.2	Pt.36.727	42.1.a; 204	113/119	Generally in all	
Air Quality	2.1.4, 6.37.2 (4)	Pt.36.711(1)c	204 (1, c), 209 (3)	110,120->19%O2<1.25%CO2	Generally in all	BC>19.5%O2, other gases, testing
Air Quantity	4.6.1(3); 6.3.2(5)	Pt.36.711.1.d	53(1)d/204(3) 209 (3)	110/113/119/120/124/150	Generally in all	BC-min0.6m3/sper kW, others put quantity on vent'n plan
Air Velocity	Not found, maybe elsewhere	Pt.36.712	53(2)d/204(1) 209 (3)	Not found, maybe elsewhere	Not in BC/CBDC?	BC-not found, Alta>0.3m/s, NS 20m/min, CBDC not found
Brattice	Not found, maybe elsewhere	Pt.36.724	213	160 (3) a plans	Not in BC?	Varying detail across the jurisdictions, except BC
Cross-cuts/Bleeder	Not found, maybe elsewhere	Pt.36.728/735	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in BC/Alta/CBDC?	Only specified in Alta
No compressed air for vent'n	6.36.4	Pt.36.711(3)b	209(4),229-230	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Fixed Equip/Mine Fans	4.4.13-4.4.14	Pt.36.719-721/726	204, 218,219	114, 116-118	Generally in all	Varying detail across the jurisdictions
Reverse Flow	4.4.13	Pt.36.720	223	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Explosion Doors	4.4.14.1.b	Pt.36.721(1) - w.r.t fan openings	219(2)	114(2)	Generally in all	Varying detail across the jurisdictions
Offset of fan	4.4.14.1.a	Pt.36.721(1)	219(1,b)	114 (1) c no distance spec'd	Generally in all	All specify 5m except CBDC where no distance specified
Booster Fans	6.36.3(4)	Pt.36.722, 725-726	220,	115 -118,123-125 safe op proc	Generally in all	BC-only It alloys content/ Alta/NS/CBDC specifically deal with booster fans; BC-Requires inspector's permission; Alta allows only in portal structures; NS is generic.
U/G Air Heaters	4.4.19/6.35.1	Pt.36.548.1.f/695	163,	Not found, maybe elsewhere	Generally in all	Ref. Installation Codes CSA B139.00 (Oil) B149.1-00 Nat.Gas/Propane),
Return Air	6.33.1/6.39.1	Pt.36.718	204, 207	110,	Generally in all	Clearer in BC than Alta but implied in Pt.36.718 Splits.
Barometer Readings	6.33.2	Pt.36.719/727	232-233	121	Generally in all	
Interruption to Main Fan	6.34	Pt.36.726.2	224-225	116	Generally in all	BC requires automatic withdrawal of personnel; Alta does not; NS withdrawal to a safe place.
Auxiliary Ventilation	6.36	Pt.36.712.2/723/724	204(3/5-6), 226-230	114	Generally in all	Alta specifies 0.3 m/sec as min. air velocity; BC/NS don't say; NS no comp.air.
Aux. Fans - Light Alloys	6.36.3(4,5)	Pt.36.538, 725, 726	218	CMSC	Generally in all	BC bans Al, Mg, Ti or light metal alloy in fans; Alta bans Al blades.
Single entry/blind headings	6.36.1	Pt.36.701(4), 729	93,97,248	37, (<15 people)	Generally in all	NS <500m
Degassing	6.36.2/3	Pt.36.733-735	35?,225(3), 227	Not found, maybe elsewhere	Not in CBDC?	BC specifies <1.25% expl.gas over the fan; Alta/NS don't say; CBDC not found
Ventilation Monitoring	6.37	Pt.36.719/727	205/6, 232?, 245-6	121-122	Generally in all	BC air mmts <3mths, <1wk in diesel roads; Alta some daily, vent'n<1wk; NS flam/CO/O2.
Remote Monitoring & Control	4.4.16.5 (c/v's)	Pt.36.732(5)	232(1-5), 236(3a)	132 (env. Gases)	Not in Alta?	In all to varying degrees of detail
Respirable Particulate RCD	2.1/table 2-1, 6.37.2(3)	Pt.36.742.1-744	214, 215(1,d), 215(4,f)	111-113 MRDE Casella	Generally in all	BC/NS diesel gases tested shiftly <1.5mg/m ³ RCD; Alta not specific; NS health limits ACGIH TLVs 2005 coal/silica
Diesel vent'n	4.6.1(3), 6.37.2	Pt.36.732	215,225(5) <1.25%	100	Generally in all	Varying detail across the jurisdictions
Doors Closing	6.38	Pt.36.714	213 (3)	Not found, maybe elsewhere	Not in CBDC?	BC requires auto closing; Alta one door closed at any time
Splits	6.39	Pt.36.718/727/729	204 (2), 248	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Unventilated Workings	6.40.1	Pt.36.736(1)	212,	143-159	Generally in all	Varying detail across the jurisdictions
Stoppings/Seals/barricades?	6.25, 6.40.2, 6.41	Pt.36.715/716/736	42, 207, 249, 212 barricades	50, 155-157	Generally in all	BC/NS/CBDC has no time limit on setting seals; Alta < 3mths
Explosion Proof Stoppings	6.40.2/6.41.1 (substantial)	Pt.36.716	115(1)	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
Methane layering	Not found, maybe elsewhere	Pt.36.712(2)	204(5) air velo'y>20m/min	126	Not in BC?	Varying detail across the jurisdictions, CBDC requiring detection and correction
Methane Drainage	Not found, maybe elsewhere	Not found, maybe elsewhere	250-252	50,	Not in BC/Alta?	Only in NS/CBDC reflecting their higher methane contents
Flammable Gas	6.42	Pt.36.543/730-732	54, 234	110(2) intake;126-132	Generally in all	Both BC and Alta Codes require flammable gas monitors as
Gas Detectors	3.12/6.42.1/6.43.5	Pt.36.543/738-740[MSHA/UK/CSA]	76, 120, 234	126, 132	Generally in all	Varying detail across the jurisdictions
Notify and improve	6.42.3	Pt.36.543.2	59, 125-128, 240	126	Generally in all	BC @1.0%; Alta just requires audible alarm @ 1.0% (20%LEL)
No blasting/diesels	Not found, maybe elsewhere (8.11.5(2)?)	Pt.36.731.1.3/4; 732	225(1,c), 225(5), 393	Not found, maybe elsewhere	Not in CBDC?	BC/NS/CBDC not specified; Alta @1.0% (20%LEL)
Electricity off	6.42.4	Pt.36.731.1.2	234-240	130,	Generally in all	BC @ 1.25%; Alta @ 1.25%(25%LEL); Ns non-gassy0.5%, gassy@ 1.25%; CBDC@1.25%
Withdraw personnel	6.42.5	Pt.36.731.1.1	27, 240, 243,	130,	Generally in all	BC @ 2.50%; Alta @ 2.50% (50%LEL); NS & CBDC@2.0%
Prohibited Metals	6.36.3(4-5)/6.43.3	Pt.36.538	{160, 182(1,b)} 218 (1)	CMSC	Generally in all	BC bans Al, Mg, Ti or light metal alloy u/g; Alta bans lt.metal alloys+Al blades; NS no mention of light alloys but bans on objects capable of producing heat or fire: CBDC:CMSC req't
Combustible Dust	2.3.5, 6.31, 6.44	Pt.36.742-744	180-186	133-136	Generally in all	BC has more detail than Alta; Alta has no limits<10m face; NS equiv to CBDC
Dust on floor, roof, sides	6.44.1	Pt.36.743.3/4	182-186	133-136	Generally in all	BC >30% H ₂ O or <50% combustibles; Alta >30%H ₂ O or <35% combustibles
Volatile Matter adjustment	6.44.2	Pt.36.743.6	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in NS/CBDC?	BC decr.of 1.5% comb.s for each1.0% incr. In VM; Alta same for VM<32%
Methane in air adjustment	6.44.4	Pt.36.743.5	184,	134,	Generally in all	BC incr of 1% combs per 0.1%CH ₄ if>0.25%CH ₄ &Alta if VM>32%; NS just %com;Fed1%25>20%.
Explosion Barriers	6.45	Pt.36.745	181,	137,	Generally in all	BCdry&dusty mines to Mgr's scheme; Alta by PEng design <200m face; NS generic;Fed<300mface.
Sources of Ignition	6.43	Pt.36.693	45-46	138-141	Generally in all	Varying detail across the jurisdictions
Avoidance of flammable mat's	4.8	Pt.19.277	162,	144-145	Generally in all	Varying detail across the jurisdictions
SHAFTS & HOISTING	7.1 to 7.9	Pt.6	38-9,44,93-95/97-102,272-3,290-365	63-81, 93-96	Generally in all	BC/NS more detail than Alta.
Non-destructive rope testing	7.9.6	Pt.6.89	Not found, maybe elsewhere	69, Sch I	Not in NS?	Varying detail across the jurisdictions, except NS
COMMUNICATIONS & SIGNALS	7.7/ 4.18.11	Pt.6.108/36.697-699	81/82/92	62, 96	Generally in all	Varying detail across the jurisdictions, except NS
RECORDS OF FAILURES	7.9.18	Pt.36.534	27 (2-4)	Not found, maybe elsewhere	Not in CBDC?	Varying detail across the jurisdictions, except CBDC
EXPLOSIVES/BLASTING	8.11.1-7	Pt.33; Pt.36.607-642/658-679	Pt 11 (366-423)	Pt I (10-34) Sch II	Generally in all	BC ref. Explosive Act (Canada), NRCan Explosives Branch CSA Standard M421-00, "Storage Standards for Industrial Explosives". Alta Code refers to "National" Standards only in Part 33; NS specifies NRCan Expl.Br, CSA M421-00 & certification of blasting m/c by MSHA/CANMET. A common list for BC, NS & CBDC maybe useful
OTHER STANDARDS (Separate List)	Not found, maybe elsewhere	Pt.1.3	Not found, maybe elsewhere	Not found, maybe elsewhere	Not in BC/NS/CBDC?	