

ERCB Table of Noncompliant Events and Associated Risk Rating of ERCB Requirements

The information in this table is for information purposes only. For specific reference to all ERCB requirements, a licensee should refer to those Acts and Regulations administered by the ERCB along with all Directives and Interim Directives issued by the Board. The ERCB will periodically review its requirements and make revisions to ensure each ERCB requirements risk rating referenced in this table are in alignment with current methods of practice, operations, and developing technologies. Accordingly, this table may not always be reflective of the most up to date risk rating of an ERCB requirement and associated noncompliant event.

Branch Group Section <small>Regulatory Authority</small>	Compliance Category	Noncompliance Event <i>(Noncompliance with the requirement)</i>	Risk Ranking
Applications Branch / Facilities Applications Group			
Audit Section			
Directive 056 Energy Development Applications and Schedules			
	Facilities Technical	Failure to acquire the necessary facility licence prior to commencing site preparation, construction and/or operation	High
		Filing an application when the applicant is not a working interest participant	Low
		Failure to file a licence amendment application when required	Low
		Failure to file a licence amendment application when required that results in a higher category/type	High
		Failure to apply for the correct category/type of facility.	Low
		Failure to meet the spacing requirements in the facility design	High
		Failure to obtain approval from Alberta Culture & Community Spirit for sites with Historic Resource Value 1, 2, or 3 prior to filing the application	High
		Failure to notify Alberta Culture & Community Spirit for sites with a Historic Resource Value of 4 and 5 prior to filing application	Low
		Not completing an acceptable noise impact assessment prior to application	High
		Not meeting the permissible sound levels at the nearest or most impacted residence	High
		Not including a VRU in the facility design when required	High
		Designing/constructing a facility with storage systems that have no secondary containment as required by Directive 55	High
		Designing/constructing a facility with storage systems that do not meet the applicable Low Risk requirements of Directive 55	Low
		Failure to submit a facility licence application as "Facilities-technical nonroutine" when required	High
		Failure to meet process flow diagram requirements	Low
		Failure to submit the requested audit documentation	Low
	Participant Involvement	Failure to disclose to the ERCB any outstanding public/industry objections/concerns, whether they are received prior to or after filing of the application or whether the party is inside or outside the minimum contact radius of personal consultation and notification	High
		No attempt at public and/or industry personal consultation and notification prior to filing the application	High
		Incomplete public and/or industry personal consultation and notification prior to filing the application	High
		Failure to provide the required ERCB information packages prior to filing the application	Low
		Failure to provide the required project-specific information package prior to filing the application	High
		Failure to provide all required minimum information details in the project-specific information package prior to filing the application	Low
		Failure to obtain consent from the surface improvement owner prior to filing the application	Low
		Failure to meet the coal notification requirements prior to filing the application	Low
		Failure to meet the airport notification requirements prior to filing the application	High
		Filing the application before expiry of the 14-calendar-day notification period	High
		Failure to submit the requested audit documentation	Low
	Pipelines/Pipeline Installations Technical	Failure to acquire the necessary pipeline/pipeline installation licence prior to commencing right-of-way or site preparation, construction and/or operation	High
		Failure to apply for the correct category/type of pipeline	Low
		Failure to file a licence amendment application to reflect a change in the pipeline parameters which results in a higher cat/type or higher level designation	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to file a licence amendment application to reflect a change in the pipeline parameters which does not result in a cat/type change or a change in level designation	Low
		Failure to design for the correct stress level	High
		Connecting pipelines with different MOPs and not having the appropriate pressure control devices in place.	Low
		Failure to design for sour service where required.	High
		The valves, flanges, fittings are not suitable for the applied for MOP as defined in CSA Canadian Standards Association.	High
		The substance of the connecting pipeline is not compatible with the proposed substance.	High
		Designing the pipeline to transport a corrosive substance without including the proper internal corrosion measures	High
		Failure to obtain consent from Alberta Infrastructure prior to filing the application	Low
		Failure to meet Alberta Environment requirements prior to filing the application	Low
		Failure to provide a correct pipeline H2S release volume calculation which results in a higher level designation	High
		Failure to provide a correct pipeline H2S release volume calculation which results in no change to level designation	Low
		Failure to submit a pipeline/pipeline installation licence application as "pipelines/pipeline installations technical nonroutine" when required	High
		Not completing an acceptable noise impact assessment prior to application	High
		Not meeting the permissible sound levels at the nearest or most impacted residence	High
		Failure to meet the spacing requirements in the facility design	Low
		Designing/constructing a facility with storage systems that have no secondary containment as required by Directive 55	High
		Designing/constructing a facility with storage systems that do not meet the applicable Low Risk requirements of Directive 55	Low
		Failure to meet process flow diagram requirements	Low
		Failure to submit the requested audit documentation	Low
	Wells Technical	Failure to acquire the necessary well licence prior to commencing site preparation, construction and/or operation	High
		Failure to prepare an H2S release rate assessment when information in the public domain demonstrates the potential to encounter H2S in the proposed well	High
		Filing an application when the applicant is not a working interest participant	Low
		Failure to apply for the correct category/type of well	Low
		Failure to submit a survey plan that meets all applicable requirements	Low
		Failure to design to meet the pressure testing requirements for well re-entry licence application	Low
		Failure to design the surface casing to meet all applicable requirements	High
		Failure to provide adequate groundwater protection	High
		Failure to identify the correct head lessor (freehold/crown/both)	Low
		Failure to acquire a mineral lease continuation - No agreement with DOE	High
		Failure to have permission from the mineral rights owner or lessee to exceed the 15m maximum overhole depth prior to filing the application	High
		Failure to acquire the rights to the intended formation(s)	High
		Incomplete DSU for the intended formation(s)	High
		No rights to substance(s) for the intended formation(s)	High
		Failure to acquire the abandoned wellbore rights	High
		Failure to meet or address the waterbody setback requirement prior to filing the application	High
		Failure to meet the surface improvement requirements prior to filing the application	High
		Failure to meet ERCB Directive 56 environmental requirements prior to filing the application	High
		Failure to obtain approval from Alberta Culture & Community Spirit for sites with Historic Resource Value of 1, 2, or 3 prior to filing the application	High
		Failure to notify Alberta Culture & Community Spirit for sites with a Historic Resource Value of 4 and 5 prior to filing application	Low
		Failure to provide a geological prognosis and discussion regarding the potential to encounter H2S in all prospective formations	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to provide geological mapping for the primary and secondary formations, as indicated on Schedule 4: Well Purpose	Low
		Failure to provide an engineering discussion of the H2S prospective formations	Low
		Failure to include the 15m overhole zone evaluation in the H2S release rate assessment	Low
		Failure to meet the map or schematic cross-section requirements for the H2S release rate assessment prior to filing the application	Low
		Failure to provide all basic elements, including AOF test type, in the H2S release rate assessment prior to filing the application.	Low
		Failure to tabulate the results of the AOF and H2S information in the manner required prior to filing the application	Low
		Failure to submit a well licence application as "wells-technical nonroutine" when required	High
		Failure to file a licence amendment application when required	Low
		Failure to submit the requested audit documentation	Low

Applications Branch / Resources Applications Group

Enforcement & Surveillance Section

Directive 065 Resources Applications for Conventional Oil and Gas Reservoirs

Directive 044 Requirements for the Surveillance, Sampling, and Analysis of Water Production in Oil and Gas Wells Completed Above the Base of Groundwater Protection

Oil and Gas Conservation Acts and Regulations section 5

ID 99-01-Amendment 4

Directive 007-1 Allowables Handbook

ID 94-02 Revisions to Oil and Gas Well Spacing Administration

Oil Sands Conservation Act and Regulation

Directive 025 Industrial Development Permit Applications to the ERCB - A Guide to Content

Coal Conservation Act and Regulations

Directive 065	Acid Gas Injection/Disposal	Injection without an approval	High
		Injection prior to meeting <i>Directive 051</i> requirements	High
		Acid gas is injected above specified depth	High
		Exceeding maximum injection rates	High
		Injected gas stream exceeds specified mole fraction of H2S level	High
		Failure to meet MOP	High
		Cumulative injection volume exceeds specified level	High
		Failure to inform the ERCB that a potential leak has been detected	High
		Failure to inform the ERCB of breakthrough of CO2 or H2S at producing well	High
		Failure to suspend injection operations when safety has been compromised	High
		Failure to meet testing, sampling and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit required test, sample, or analysis	Low
		Failure to submit progress report	Low
		Failure to meet application notification requirements	High
Directive 065	Coalbed Methane Schemes	Commingle above specified depth	High
		Failure to determine source of origin of water production > specified level	High
		Failure to comply with control well provisions	High
		Failure to segregate and test after exceeding gas production rates	High
		Failure to meet testing, sampling, and analysis requirements	High

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		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to meet performance presentation requirements	Low
		Failure to submit progress report	Low
Directive 065	Commingling	Commingling without approval (Section 3.060 for OGCR)	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to prorate production to pools as specified	Low
		Improper use of the decision trees (Figures 3.1 AND 3.2, 3.3, or 3.4 of Dir 065)	High
		Failure to use proper DE code	Low
		Failure to submit test results by the required deadline	Low
		Failure to meet notification requirements	High
	Concurrent Production	Concurrent production without approval (Section 39 and 42 of the OGCA)	High
		Oil well producing from gas cap perforations without approval	High
		Exceeding maximum withdrawal rates	High
		Exceeding maximum gas-oil ratio	High
		Exceeding specified rates or number of producing wells	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements	Low
		Failure to meet application notification requirements	High
	Control Wells	Producing wells without the requisite control wells in place	High
		Failure to conduct required test(s) or test conducted improperly.	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in control well validation form	High
		Failure to meet notification requirements (replacement of validated control well)	High
		Violation of Conditions of Control Well Designation	High
		Failure to meet conditions of approval - High	High
		Failure to meet conditions of approval - Low	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements	Low
			High
	Enhanced Recovery Schemes	Wasteful Operations	
		Injection of fluid without approval (excluding waterfloods)	High
		Injection prior to meeting Directive 051 requirements	High
		Failure to commence injection	High
		Inproper fluid content	High
		Inadequate injection volumes	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Injection of miscible fluid contrary to specified composition	High
		Inadequate solvent bank size	High
		Failure to meet MOP	High
		Inadequate VRR	High
		Failure to monitor fluid interface movement	High
		Failure to maintain specified injection cycles	High
		Failure to comply with GOR restrictions	High
		Inadequate sweep optimization/failure to distribute miscible fluids	High
		Inappropriate water-alternating-gas-ratios (value and cycle length)	High
		Failure to monitor/report fluid breakthrough when required	High
		Failure to sample and analyse after miscible fluid breakthrough	High
		Inappropriate migration outside scheme	High
		Implementation of final phase without notification/approval	High
		Failure to meet testing, sampling, and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements	Low
		Failure to meet application notification requirements	High
	Equity Orders	Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to meet application notification requirements	High
Directive 007-1 ID 94-02	Gas Allowables	Production prior to the assignment of a yearly allowable (Section 10.300 of the OGCR)	High
		Failure to retire all cumulative overproduction in the time provided	High
		Failure to shut-in upon written notice of overproduction (Section 10.280 of the OGCR)	High
		Resumption of production prior to retirement of cumulative overproduction	High
		Failure to meet application notification requirements	High
		Failure to resolve issues	High
Directive 065	Gas Cycling	Wasteful Operations	High
		Injection of gas from unapproved fields/pools	High
		Failure to commence injection	High
		Production of gas from unapproved wells/wells precluded	High
		Exceeding specified gas production rates	High
		Failure to meet MOP	High
		Inadequate VRR	High
		Failure to monitor fluid interface movement	High
		Inadequate sweep optimization	High
		Failure to comply with GOR restrictions	High
		Inappropriate migration outside scheme	High
		Implementation of final phase without notification/approval	High
		Failure to meet testing, sampling, and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to respond to the need to address unclear situations	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements	Low
		Failure to meet application notification requirements	High
Directive 065	Gas Storage	Gas storage without approval (Section 39 of the OGCA)	High
		Static reservoir pressure exceeds specified level	High
		Failure to meet testing, sampling, and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet application notification requirements	High
Directive 044	Groundwater Protection	Failure to conduct self-audits	High
		Failure to immediately notify the ERCB of water production above the threshold	High
		Failure to determine the source and/or composition of the water	High
		Conducting inadequate/improper tests to determine the source/or composition of water	High
		Failure to submit the required reports and groundwater protection action plan to the ERCB by the required deadline	High
		Failure to complete an ERCB approved groundwater protection action plan by the required deadline	High
		Failure to inform the ERCB that the ERCB approved groundwater protection action plan has been completed by the required deadline	Low
		Failure to resolve issues.	High
Directive 065	Injection/Disposal	Injection or disposal without approval (Section 39 of the OGCA)	High
		Disposal prior to meeting <i>Directive 051</i> requirements	High
		Disposal higher than approved depth	High
		Packer installed higher than approved depth (disposal)	High
		Failure to confirm no migration of fluid when pressures > specified (disp)	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval (disposal)	High
		Failure to meet conditions of approval (disposal)	Low
		Failure to apply for a name change or approval transfer (disposal)	Low
		Failure to submit progress report (disposal)	Low
		Failure to meet application notification requirements	High
OGCR 5.005(2)	Production Without Common Ownership	Production without common ownership throughout a DSU	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues.	High
Directive 065	Spacing	Production of too many wells per pool per DSU/Holding/ Unit/Block/Project/GTO/IW without approval (Section 4.050(1) and 5.005(1) of OGCR)	High
		Production in a fractional DSU without approval	High
		Producing wells contravene approved interwell and/or buffer zone limitations	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval (excluding target areas)	High
		Failure to meet conditions of approval (excluding target areas)	Low
		Failure to submit progress report	Low
		Failure to meet application notification requirements	High
		Failure to apply to rescind or vary the area of a Holding/Block/Project when common ownership is no longer in place.	High
		Failure to apply to change the name of the holder of a holding	Low
Directive 050 Drilling Waste Management			
IL 2001-03 Management of Drilling Wastes Associated with Advanced Gel Chemical Systems			
	Drilling Waste Audits	Cement returns were not buried on site under at least 1 metre of clean fill	High
		Cement returns were not managed appropriately	High
		Separated cuttings were not stored or managed appropriately	High
		Separated cuttings were not stored or managed appropriately	Low
		Sump closure was not completed within 12 months of drilling rig release	High
		Sump was not constructed in impermeable material	High
		Notification of drilling waste disposal form not filled out completely.	Low
		Notification of drilling waste disposal form not filled out correctly.	Low
		Notification of drilling waste disposal not submitted to the correct field office in time.	Low
		A copy of the notification of drilling waste form not kept in the licensee's well file.	Low
ID 2000-04 & Directive 058		Downhole injection or waste facility backup information not retained in well file.	Low
		Information records not maintained in well file as outlined in Directive 50, Section 1	Low
		All information requirements were not followed	High
		Analytical data not provided when requested by landowner or regulatory agencies.	High
		Landowner approval not obtained prior to disposal	High
		Landowner approval record not kept in the licensee's well file.	High
		Land treatment plan not approved by ERCB prior to commencement of activity	High
		ERCB approval not received when using a new or innovative disposal or management option.	High
		All appropriate waste sampling, preparation and testing not conducted according to requirements	High
		All appropriate receiving soil sampling, preparation and testing requirements not conducted according to requirements	High
		All appropriate post-disposal sampling, preparation and testing requirements were not conducted according to requirements	High
		An appropriate disposal option was not utilized for a given waste stream	High
		The base of the final subsoil/waste mix not at least 1 metre above the water table and a layer of permeable material, and is not covered by at least one metre of clean subsoil.	High
		Disposal method not conducted correctly as outlined in Directive 50.	High
		All appropriate disposal criteria have not been followed for a particular method	High
		All relevant calculations are not available or have not been conducted correctly	High
IL 2001-03		ERCB approval was not obtained by licensee when using advanced gel chem system	High
		Biodegradation not conducted according to Directive 058 or as otherwise outlined in an Approval	High
		Oil and Gas Conservation Regulations were not followed	High
		Oil and Gas Conservation Regulations were not followed	Low
		Failure to conduct proper paint filter test	High
		Waste characterization not conducted as per Directive 058 when disposing at waste management facility	High
Directive 055 Storage Requirements for the Upstream Petroleum Industry			
OGCR Section 8	Material Storage Audits	Primary or Secondary containment is not installed where required	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Approval not in place for alternative storage system	High
		Spills and releases are not contained or cleaned up immediately	High
		Materials storage exceeds specified duration	Low
		Permanent storage not requiring secondary containment is not operated appropriately	Low
		Temporary storage requirements are not met	Low
	OGCR Section 8	Siting for storage areas/facilities is not appropriate for environmental protection or emergency access	Low
		Equipment / fire hazard spacing from the storage area is not appropriate	High
		Stand alone storage facilities do not have appropriate signage	Low
		AST (> 1m ³ < 5m ³) not constructed or operated appropriately	Low
		Open-top nonmetallic AST not constructed or operated appropriately	Low
		AST (≥5m ³) not constructed or operated appropriately	Low
		Single-wall AST (≥5m ³) does not have secondary containment	High
		Dike for single-wall AST (≥5m ³) is not constructed appropriately	Low
		Dike liner system not suitable or impervious	Low
		Leak detection system is not constructed or operated to be able to verify the tank integrity	Low
		Indoor tank area is not constructed or operated to contain spills and leaks	Low
		Double-walled AST is not constructed and operated appropriately for secondary containment, leak detection, and overflow protection	Low
		UST installation is not appropriate double-walled tank design or installation is not appropriate to ensure tank integrity for a tank installed after Jan1/02	High
		UST is not constructed or operated appropriately	Low
		UST leak detection monitoring or records are not completed as required	Low
		Containers do not have appropriate secondary containment as required	Low
		Container storage in trailers or buildings is not appropriate	Low
	OGCR Section 8	LEE not constructed with appropriate primary and secondary containment	High
		LEE built below grade secondary containment and leak detection is not constructed appropriately	High
		Monthly leak detection monitoring for LEE is not completed appropriately or records not maintained	Low
		The liquids from the annual LEE leak detection are not collected or sent for the required laboratory analysis	Low
		Bulk Pads are not constructed or operated appropriately	High
		Bulk Pad leak detection or leachate collection system designs are not appropriate for the pad use	High
		Bulk Pad Leak detection monitoring is not completed monthly or appropriate records are not maintained	Low
		The annual laboratory analysis is not completed as required for the samples collected from the Bulk Pad leak detection system	Low
		Inventory records of products are not kept for 2 years	Low
		Inspection and monitoring program records are not maintained for 5 years	Low
		Appropriate leak detection records for lined earthen excavations or bulk pads are not maintained for 5 years	Low
		Required ground water monitoring and alternative leak detection records are not maintained for 5 years	Low
		Approval and construction records are not retained as required or not kept on site or nearest office	Low
		Criteria for surface water discharge requirements are not met prior to discharge or appropriate records are not maintained to verify compliance	High
		Contaminated surface water is not disposed appropriately	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		A tank taken out of service temporarily is not appropriately isolated, monitored, or put back into service	Low
		AST or UST taken out of service permanently does not meet the requirements	Low
		Compacted clay liner is not designed or constructed to be impermeable	Low
		Natural clay liner is not sited appropriately or constructed to be impermeable	Low
		Synthetic liner is not selected or installed to provide an impermeable liner system	Low
IL 84-11		Primary sulphur storage is not designed or operated appropriately	High
		Inadequate investigation, resulting follow-up or records for potential contamination identified during pre-96 storage device alterations	Low
		Professional engineering judgment was not exercised for selecting suitable integrity verification methods used or implementation	Low
		Pre-96 facility single-walled AST $\geq 5m^3$ secondary containment is not retrofitted appropriately	Low
		Pre-96 facility single-walled AST $\geq 5m^3$ is not integrity verified appropriately every 5 years	Low
		Monthly inspections are not conducted for pre-96 AST systems	Low
		Tank test does not verify integrity of entire AST	Low
		Pre-96 AST holding materials other than fresh water or inert solids does not meet pre-96 dike requirements	Low
		Modification of the existing pre-96 AST dike area is not appropriate	Low
		Appropriate retrofits are not used for pre-96 ASTs to replace the 5 year integrity verification requirements	Low
		Pre-96 UST retrofit design or operation do not meet the appropriate leak detection requirements	Low
		Pre-96 facility single-walled UST is not integrity verified every 3 years	High
		Small tank secondary containment not installed by Oct. 31/04 for tank volumes $>5m^3$ /site	High
		Pre-Jan 1/02 concrete Lined Earthen Excavation w/ leak detection (no secondary containment) remain in service with out verification for integrity	High
		Pre-Jan 1/02 concrete Bulk Pad remain in service where there is the potential to generate leachate without appropriately leak detection monitoring	Low
Directive 058 Oilfield Waste Management Requirements for the Upstream Petroleum Industry			
Directive 030 Digital Data Submission of the Annual Oilfield Waste Disposition Report (Latest release: February 1, 2006)			
Directive 051 Injection and Disposal Wells - Well Classifications, Completions, Logging, and Testing Requirements (Latest release: May 1994)			
ID 2000-04 An Update to the Requirements for the Appropriate Management of Oilfield Wastes			
IL 98-02 SUSPENSION, ABANDONMENT, DECONTAMINATION, AND SURFACE LAND RECLAMATION OF UPSTREAM OIL AND GAS FACILITIES Section 4.2			
IL 99-02 Use of Produced Sand in Road Construction			
	Oilfield Waste Generator Audits		
		Oilfield waste was not properly characterized	High
		Oilfield waste was not properly Classified as either Dangerous (DOW) or non-Dangerous (non-DOW)	High
		Oilfield waste was not properly identified (waste type/waste code)	Low
		Dangerous oilfield waste (DOW) was transported on public roads and the ERCB 4 part form did not accompany the waste	Low
		Containers meeting the definition of DOW were not considered as a DOW and not managed appropriately	Low
		Oilfield waste was mixed or diluted with a solid or a liquid for the primary purpose of dilution to avoid AB regulatory requirements	High
		Banned oilfield waste stream was injected down a pipeline for disposal	High
		Dangerous oilfield waste (DOW) transported on public roads did not include proper TDG information on ERCB 4-Part Form	High
		Oilfield waste generator (licensee/approval holder) has not implemented a oilfield waste tracking system	Low
		Selected oilfield waste generator (licensee/approval holder) did not prepare and submit an annual oilfield waste disposition report	Low
		Selected oilfield waste generator (licensee/approval holder) did not prepare an annual oilfield waste disposition report with appropriate summarized information	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		The oilfield waste generator (licensee/approval holder) did not identify on an appropriate shipping document that the oilfield waste being transported is non-DOW.	Low
		DOW waste transported outside of province without AENV Movement Document/Manifest	Low
		Shipments of mixed wastes not identified on ERCB 4-Part Form as the most dangerous oilfield waste (per TDG requirements)	Low
		Serious Discrepancy not reported to ERCB Waste Manifest Coordinator as soon as possible (if transporter issue)	High
		Oilfield waste volume discrepancy not reconciled and was not reported to the ERCB Waste Manifest Coordinator within 60 days	Low
		ERCB 4-Part Form or supporting documentation not retained by the generator of the oilfield waste for a minimum of two years	Low
		Oilfield waste generator (licensee/approval holder) not tracking oilfield waste from cradle to grave	High
		Oilfield waste tracking system does not enable the oilfield waste generator (licensee/approval holder) to demonstrate compliance	Low
		Oilfield waste tracking system data not maintained for a minimum of two years	Low
	Directive 030	Oilfield waste disposition report was not submitted via the Digital Data Submission System (DDS)	Low
		Oilfield waste disposition report was not submitted within the required time frame	Low
		Oilfield waste disposition report did not include any oilfield waste generated by service companies which was generated in association with the generators operations	Low
		Oilfield waste accounting was not done appropriately	Low
	Directive 055	Oilfield waste (DOW or Non-DOW) was not stored in accordance with Directive 55: Storage Requirements for the Upstream Petroleum Industry	High
		Oilfield waste was transferred to an unapproved consolidation point (storage area accepting oilfield wastes from various locations same production system)	High
		Oilfield waste was transferred to an unapproved transfer station	High
	Directive 051	Oilfield waste was not disposed of in the appropriate class of disposal well	High
		Oilfield waste was not disposed of at an approved waste processing facility	High
		Oilfield waste was not disposed of within the appropriate class of landfill	High
		Oilfield waste was treated or sent to an unapproved biodegradation facility	High
		Oilfield waste was sent to a dedicated land treatment facility	High
		Oilfield waste was not treated according to the one-time on-site land treatment requirements	High
		Oilfield waste was not treated according to the one-time, on-site biopile/biocell treatment requirements	High
		Notification was not provided to the ERCB Environment Group for the movement of oilfield waste from one location to another for the purpose of biodegradation	Low
	IL 98-02	Notification was not provided to the ERCB Environment Group for the movement of oilfield waste from one location to another for the purpose of storage	Low
		Oilfield waste was not treated at an approved Thermal Treatment Facility	High
		Notification was not provided to the ERCB for the use of a Small Batch Incinerator	High
	API Standards	Notification was not provided to the ERCB Calgary Office (Environment Group) 30 days prior to the use of a Mobil Thermal Treatment unit	Low
		Mobile thermal treatment unit operations did not comply with operating requirements of the existing oil and gas facility	High
		Mobile thermal treatment unit did not have an Alberta Environment Approval	High
		The licensee/approval holder of the site did not ensure that all landowners and residents within a 1.5 kilometers radius were notified of the details of the intended mobile thermal treatment operations at least 30 days prior to the commencement of the	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		The appropriate ERCB field centre was not notified by the licensee/approval holder of the site of the details of the mobile thermal treatment operations at least 48 hours prior to commencement of operations	Low
		ERCB approval was not obtained when utilizing a new/innovative treatment or management option, or when varying from the established criteria and requirements as published	High
		The oily by-product material characterization criteria did not meet the requirements	High
		The oily by-product characterization data sheet and letter were not provided to the ERCB and the local authority having jurisdiction over the road prior to application	Low
IL 99-02		The characterization criteria for the Use of Produced Sand in Road Construction was not followed	High
		An approval was not received from the ERCB prior to the use of oilfield waste in hot/cold mix asphalt	High
		Drilling wastes sent to an ERCB or AENV waste management facility were not tracked	Low
		Recirculated radioactive frac sands and other contaminants (e.g. hydrocarbons) were not managed appropriately	High
Directive 55		Naturally Occurring Radioactive Material (NORM) laden oilfield wastes were not sent to an approved facility for management - disposal, treatment or storage	High
Directive 30		Licensee did not respond to the oilfield waste generator audit request or the request for the annual oilfield waste disposition report submission by the request date.	Low
ID 2000-04		Oilfield waste was sent to a compost facility or managed by a compost component at waste management facilities including AENV regulated landfill	High
		Oilfield waste was sent to a registered landfill or a landfill currently operating under an Alberta Public Health Permit that will qualify for registration under AENV Code of Practice for Landfills	High
		The conditions or requirements were not followed as per the one-time approval issued for the management of oilfield waste	High
		Waste or recyclables entering or leaving Alberta were not classified as non-hazardous or hazardous in accordance with EPEA.	Low
		A recycle docket pursuant to AENV requirements or the ERCB 4-part Form did not accompany the shipment(s) of DOW going to an AENV approved recycling facility.	Low
		Oilfield wastes (with the exception of suitable cellulose materials) were sent to a compost facility or managed by a compost component at WM facility, including AENV landfills.	High
		A single Alberta Oilfield Waste Form was not utilized for each load of oilfield waste or attachments were not used to describe each load when shipping the oilfield waste.	Low
		Oilfield waste generator (licensee/approval holder) failed to submit requested information.	Low
		Oilfield waste generator (licensee/approval holder) entered misrepresented information into the Annual Oilfield Waste Disposition Report or provided misrepresented audit documentation.	High
Directive 058 Oilfield Waste Management Requirements for the Upstream Petroleum Industry			
	Oilfield Waste Receiver Audits	Treatment or disposal of imported non DOW, non-dangerous waste without appropriate ERCB approval permit or importation of DOW	High
		The licensee generating an oilfield waste does not properly characterize and classify the waste material.	High
		The waste generator does not minimize wastes generated.	Low
		DOW wastes are not manifested appropriately for transportation on public roads as per TDG requirements.	Low
		Wastes are not classified appropriately as DOW or Non-DOW based on characterization criteria or sufficient historical data is not available.	High
		Containers containing 5 L or more of DOW are not handled as DOW appropriately.	Low
		Wastes are mixed / diluted to avoid regulatory requirements.	High
		Inappropriate waste is injection into a pipeline or disposal into the pipeline for the purpose of dilution.	High
		Waste handling, movement, treatment, and disposal is not documented or tracked appropriately by the generator.	Low
		An ERCB waste manifest is not completed appropriately or does not accompany the waste shipment on public roads as required.	Low
		Form/Manifest (ERCB or AENV) is not completed or maintained appropriately.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		A serious discrepancy on the ERCB Form/manifest is not reconciled by the Generator.	High
		The Receiver does not reconcile or report a discrepancy on the ERCB Form/AENV manifest to the generator.	Low
		Generator does not have a system to or does not track waste from initial generation to final disposition.	High
		Waste volumes are not reported appropriately in tonnes or m ³ .	Low
		Siting of the oilfield waste management facility is not appropriate.	High
		The facility is not designed or operated to ensure safety for animals or people.	Low
		OGCR equipment spacing requirements are not met.	High
		Corporate Emergency Response Plan is not available on site.	High
		Facility does not meet noise control requirements.	Low
		Reportable release unreported to the ERCB or AENV.	High
		Waste facility accepts wastes they are not approved to receive or capable of handling.	High
		Facility is not designed or operated to minimize the impact to air, groundwater, surface water, or soils on/around the site.	High
		The groundwater sampling program is not completed as per the approval requirements.	High
		Required records are not maintained at the facility.	Low
		Component waste storage/transfer stations are not constructed or operated to appropriate requirements.	High
		The standalone storage or transfer station facility does not receive appropriate waste sources.	Low
		The required monthly documentation or records is not maintained.	Low
		The waste transfer station annual report is not prepared or available for review as required.	Low
		Disposal well does not meet the facility approval requirements or operational requirements of Directive 051 with the potential to cause a serious issue.	High
		Disposal well does not adequately meet the facility approval requirements, or Directive 051 requirements with the potential to cause a minor issue.	Low
		Disposal of industrial waste sources are not approved for disposal by AENV.	High
		Standalone class 1a or 1b disposal well surface facilities are not approved.	High
		Standalone 1a/1b disposal well surface facilities do not comply w/ section 11.	High
		1a standalone disposal well requirements are not met.	High
		Minimum requirements for oilfield waste processing facility or cavern are not met.	High
		Groundwater monitoring program requirements are not met..	Low
		Waste injection facilities (disposal wells & caverns) and waste processing facilities do not report monthly receipts and dispositions appropriately on the S-25 statement.	Low
		Waste injection facilities or waste processing facilities do not accurately record on the S-25 Statement incoming and outgoing waste streams to ensure waste materials are accounted for and disposed of appropriately.	High
		The oilfield landfill does not receive appropriate volumes of non-oilfield waste streams.	Low
		Waste stream disposal is not appropriate for the landfill design or the landfill classification.	High
		Prior to landfill construction or expansion of a landfill, siting criteria are not met.	High
		Operation plans do not ensure the landfill is operated in accordance with the design.	Low
		Landfill cover criteria are met for the landfill class or to control waste issues.	Low
		The Class I or II landfill groundwater does not meet the performance standards in the upper most formation, throughout the life of the landfill.	High
		Class II landfill groundwater monitoring wells are not spaced appropriately from property boundaries and landfill boundary.	Low
		Landfill topsoil is not salvaged or stockpiled to conserve the soils.	Low
		A system is not in place to manage and track waste types or volumes entering the landfill.	High
		Appropriate landfill sign is not posted at the entrance.	Low
		Waste handling at the landfill is not appropriate to contain or control the waste.	Low
		Class Ia landfill containment design or operation, gas, surface water, or groundwater management is not appropriate.	High
		Class Ib landfill design or operation of containment design, gas, surface water or groundwater management is not	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		Class II landfill design or operation of containment design, gas, surface water or groundwater management is not appropriate.	High
		Class III landfill design or operation of containment design or surface water management is not appropriate.	Low
		Waste materials are not deposited into appropriately classed, approved, or designed landfills.	High
		Disposition of DOW materials into landfill is not within the permitted limits for one or more of the permitted parameters/concentrations of a listed substance.	High
		Groundwater wells at the landfill site are not secure or not maintained in good condition to ensure sampling.	Low
		Sampling or analysis for solid, leachate, water at the landfill is not conducted appropriately.	Low
		Annual landfill report is not complete or on time.	Low
		Required landfill records are not maintained on site until the end of the post-closure period.	Low
		Landfill closure timelines, records, or ERCB notification requirements are not met.	Low
		Final landfill cover construction or maintenance requirements are not met.	High
		Biocell or Biopiles do not have the required approval or documentation.	High
		One-time, on-site Biopile or Biocell containment device or leachate collection system is not appropriately designed or operated.	Low
		Permanent Biopile or Biocell containment device or leachate collection systems are not appropriately designed or operated.	Low
		Biopile or Biocell is not operated or monitored to ensure the waste has been adequately treated or residuals are disposed of inappropriately.	High
		Biopile or Biocell reporting, notification, or records keeping is not appropriate.	Low
		One-time, on-site treatment Biopile or Biocell closure is not completed or documented appropriately.	Low
		Small batch feed incinerators or mobile thermal treatment facility does not notify ERCB as required.	Low
		Small batch feed incinerator or mobile treatment facility does not operate according to requirements.	High
		Groundwater monitoring or reporting of the site assessment and monitoring program are not appropriate.	Low
		Routine (annual) groundwater monitoring or reporting is not completed as required.	High
		ERCB is not notified of identified groundwater impact within 60 days of the sampling date.	High
		WM Approval administrative requirements are not met.	Low
		WM Approval operational requirements are not met.	High
Oil and Gas Conservation Acts and Regulations section 8			
IL 84-11 Approval, Monitoring, and Control of Sulphur Storage Sites			
Directive 055 Storage Requirements for the Upstream Petroleum Industry			
Directive 055 - OGCR Section 8		Primary or Secondary containment is not installed where required	High
		Approval not in place for alternative storage system	High
		Spills and releases are not contained or cleaned up immediately	High
Directive 055		Materials storage exceeds specified duration	Low
		Permanent storage not requiring secondary containment is not operated appropriately	Low
		Temporary storage requirements are not met	Low
Directive 055 - OGCR Section 8		Siting for storage areas/facilities is not appropriate for environmental protection or emergency access	Low
		Equipment / fire hazard spacing from the storage area is not appropriate	High
Directive 055		Stand alone storage facilities do not have appropriate signage	Low
		AST (> 1m ³ < 5m ³) not constructed or operated appropriately	Low
		Open-top nonmetallic AST not constructed or operated appropriately	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		AST ($\geq 5\text{m}^3$) not constructed or operated appropriately	Low
		Single-wall AST ($\geq 5\text{m}^3$) does not have secondary containment	High
		Dike for single-wall AST ($\geq 5\text{m}^3$) is not constructed appropriately	Low
		Dike liner system not suitable or impervious	Low
		Double-walled AST is not constructed and operated appropriately for secondary containment, leak detection, and overfill protection	Low
		UST installation is not appropriate double-walled tank design or installation is not appropriate to ensure tank integrity for a tank installed after Jan1/02	High
		UST is not constructed or operated appropriately	Low
		UST leak detection monitoring or records are not completed as required	Low
		Containers do not have appropriate secondary containment as required	Low
		Container storage in trailers or buildings is not appropriate	Low
Directive 055 - OGCR Section 8		LEE not constructed with appropriate primary and secondary containment	High
Directive 055		LEE built below grade secondary containment and leak detection is not constructed appropriately	High
		Monthly leak detection monitoring for LEE is not completed appropriately or records not maintained	Low
		The liquids from the annual LEE leak detection are not collected or sent for the required laboratory analysis	Low
		Bulk Pads are not constructed or operated appropriately	High
		Bulk Pad leak detection or leachate collection system designs are not appropriate for the pad use	High
		Bulk Pad Leak detection monitoring is not completed monthly or appropriate records are not maintained	Low
		The annual laboratory analysis is not completed as required for the samples collected from the Bulk Pad leak detection system	Low
		Inventory records of products are not kept for 2 years	Low
		Inspection and monitoring program records are not maintained for 5 years	Low
		Appropriate leak detection records for lined earthen excavations or bulk pads are not maintained for 5 years	Low
		Required ground water monitoring and alternative leak detection records are not maintained for 5 years	Low
		Approval and construction records are not retained as required or not kept on site or nearest office	Low
		Criteria for surface water discharge requirements are not met prior to discharge or appropriate records are not maintained to verify compliance	High
		Contaminated surface water is not disposed appropriately	High
		A tank taken out of service temporarily is not appropriately isolated, monitored, or put back into service	Low
		AST or UST taken out of service permanently does not meet the requirements	Low
		Compacted clay liner is not designed or constructed to be impermeable	Low
		Natural clay liner is not sited appropriately or constructed to be impermeable	Low
		Synthetic liner is not selected or installed to provide an impermeable liner system	Low
IL84-11		Primary sulphur storage is not designed or operated appropriately	High
Directive 055		Inadequate investigation, resulting follow-up or records for potential contamination identified during pre-96 storage device alterations	Low
		Professional engineering judgment was not exercised for selecting suitable integrity verification methods used or implementation	Low
		Pre-96 facility single-walled AST $\geq 5\text{m}^3$ secondary containment is not retrofitted appropriately	Low
		Pre-96 facility single-walled AST $\geq 5\text{m}^3$ is not integrity verified appropriately every 5 years	Low
		Monthly inspections are not conducted for pre-96 AST systems	Low
		Tank test does not verify integrity of entire AST	Low
		Pre-96 AST holding materials other than fresh water or inert solids does not meet pre-96 dike requirements	Low
		Modification of the existing pre-96 AST dike area is not appropriate	Low
		Appropriate retrofits are not used for pre-96 ASTs to replace the 5 year integrity verification requirements	Low
		Pre-96 UST retrofit design or operation do not meet the appropriate leak detection requirements	Low
		Pre-96 facility single-walled UST is not integrity verified every 3 years	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Small tank secondary containment not installed by Oct. 31/04 for tank volumes >5m ³ /site	High
		Pre-Jan 1/02 concrete Lined Earthen Excavation w/ leak detection (no secondary containment) remain in service with out verification for integrity	High
		Pre-Jan 1/02 concrete Bulk Pad remain in service where there is the potential to generate leachate without appropriately leak detection monitoring	Low
		Monthly sulphur balance out more than 5%	Low
		Acid gas flaring plant exceeding maximum grandfathered capacity	Low

Field Surveillance & Operations Branch / Technical Operations Group

Production Operations Section

Directive 017 Measurement Requirements for Upstream Oil and Gas Operations			
Directive 046 Production Audit Handbook (January 2003 - 2nd Edition)			
Directive 004 Determination of Water Production at Gas Wells (September 07, 2004)			
Directive 007 Production Accounting Handbook (December 20, 2007)			
Oil and Gas Conservation Acts and Regulations section 12 & 14			
Directive 049 Gas Density Measurement Frequency (February 1993)			
	Production Measurement and Reporting		
Directive 017		Inaccurate header markings	Low
Directive 017-Directive 007		Delivery point hydrocarbon liquid meas. device(s) does not exist, is not installed or used correctly, or not in use.	High
		Delivery point gas meas. device(s) does not exist, is not installed or used correctly, or not in use.	High
		Delivery point produced water meas. device(s) does not exist, is not installed or used correctly, or not in use.	Low
		Delivery point fresh / brackish water meas. device(s) does not exist, is not installed correctly, or not in use	Low
Directive 017		Gas meter(s) does not exist, is not installed or used correctly, or not in use.	High
Directive 017		Inaccurate inventory determination	Low
Directive 017		Inaccurate proration testing procedures	Low
		Inappropriate liquid sampling and S&W procedures	Low
		Inaccurate field production records	Low
OGCR 14		Test hydrocarbon liquid meas. device(s) does not exist, is not installed or used correctly, or not in use.	Low
Directive 004		Test gas or effluent meas. device(s) does not exist, is not installed or used correctly, or not in use.	Low
Directive 007-Directive 017		Inaccurate meas. of oil produced from a gas well	Low
OGCR 14		Test water meas. device(s) does not exist, is not installed or used correctly, or not in use.	Low
Directive 017		Injection / disposal meas. device(s) does not exist, is not installed or used correctly, or not in use.	Low
		Inaccurate fuel meas.	Low
		Inaccurate vent meas.	High
		Inaccurate flare meas.	High
Directive 060		Inappropriate flare system design and operation	Low
		Inaccurate acid gas meas.	High
Directive 017		Inaccurate gas chart quality and documentation	Low
Directive 046-Directive 007		Inaccurate load fluid procedures	Low
Directive 017		Meas. device(s) calibrated/proven inappropriately and not within required frequency	Low
		GIS inaccurately determined	Low
Directive 007-Dir 017		GE inaccurately determined	Low
Directive 004-Directive 007		WGR inaccurately determined and to required frequency	Low
Directive 004		ECF inaccurately determined and to required frequency	Low
Directive 017		GOR inaccurately determined and to required frequency	Low
API		Hydrocarbon liquid blending factor inaccurately determined	Low
Directive 017		Pressure and temperature corrections inaccurately determined	Low
Directive 007-Directive 017		Inaccurate fuel gas estimation	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
Directive 017 - Directive 060		Inaccurate vent gas estimation	High
		Inaccurate flare gas estimation	High
Directive 017		Inaccurate flash-gas estimation	Low
		Inaccurate gas volume calculations	High
Directive 017		Inadequate production audit trail	High
Directive 007		Inaccurate accounting and reporting of hydrocarbons liquid dispositions	High
		Inaccurate accounting and reporting of gas dispositions	High
		Inaccurate accounting and reporting of water dispositions	Low
		Inaccurate accounting and reporting of hydrocarbon liquid inventories	Low
		Inaccurate accounting and reporting of water inventories	Low
		Inaccurate accounting and reporting of hydrocarbon liquid receipts	High
		Inaccurate accounting and reporting of gas receipts	High
		Inaccurate accounting and reporting of water receipts	Low
		Inaccurate accounting and reporting of load fluid	Low
Directive 017-Directive 007		Inaccurate accounting and reporting of metering difference(s)	Low
		Inaccurate accounting and reporting of proration factor(s)	Low
Directive 007-Directive 046		Inappropriate application of GEF	Low
Directive 007- Directive 017		Inaccurate determination of estimated hydrocarbon liquid production	Low
		Inaccurate determination of estimated gas production	Low
		Inaccurate determination of estimated water production	Low
Directive 017-Dir-049		Gas and condensate composition and density not updated	Low
Directive 007		Inaccurate well production hours reported	Low
Directive 007 - Directive 017		Inappropriate application of GOR	Low
Directive 004		Inappropriate application of WGR	Low
		Inappropriate application of ECF	Low
Directive 017		Inappropriate application of GIS	Low
API		Inappropriate application of blending factor	Low
Directive 017		Inappropriate application of PC / TC	Low
Directive 060 - Directive 007		Inaccurate reporting of flare gas	High
		Inaccurate reporting of vent gas	High
Directive 007		Inaccurate reporting of fuel gas	Low
		Inaccurate reporting of processing shrinkage	Low
		Inaccurate reporting of acid gas	Low
Directive 017 - Directive 007		Inaccurate accounting and reporting of actual hydrocarbons liquid production	High
		Inaccurate accounting and reporting of actual gas production	High
		Inaccurate accounting and reporting of actual water production	Low
Directive 007		Inaccurate Registry facility sub-type	Low
		Inaccurate Well Status(es)	Low
Directive 007- Dir 060 - Directive 017		Linked well types inappropriate for battery	Low
Directive 007-Directive 017		Well meas. inappropriate for battery	Low
Directive 017		No approval when required	High
Directive 076: Operator Declaration Regarding Measurement and Reporting Requirements (released December 16, 2009, effective January 4, 2010)			
	Enhanced Production Audit Program (EPAP)		
		Failure to submit an annual Declaration on ERCB measurement and reporting requirements.	High
		Failure of the declaration to cover the 12 calendar months ending in the declaration month, or failure to submit by the end of the month following the declaration month.	Low
		Failure to submit the first Declaration within two years of the effective date of this Directive, or within two years of the first submission to the PRA.	High
		Failure to submit the annual Declaration electronically using the ERCB's EPAP system.	Low
		Failure to submit the annual Declaration on behalf of and in the name of one or more senior executives.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		Failure to provide, upon request, signed paper copies of Declarations as confirmation of electronic submission for the last three years.	Low
		Failure of the Declaration to include all facilities operated by the operator at the end of the Declaration period.	Low
		Failure to design, maintain, and operate controls that ensure compliance with ERCB measurement and reporting requirements.	High
		Failure to declare, and provide explanation for, the lack of controls over ERCB measurement and reporting requirements.	Low
		Failure to maintain up-to-date documentation on controls and associated evaluation procedures over ERCB measurement and reporting requirements, or failure to provide this information through the ERCB's EPAP system on request.	Low
		Failure to conduct reasonable and adequate evaluations of controls over ERCB measurement and reporting requirements.	High
		Failure to declare the number of evaluations of controls and an assessment of the effectiveness of the controls.	Low
		Failure to maintain three years documentation of evaluation of controls processes and results, or failure to provide this information through the ERCB's EPAP system on request.	Low
		Failure to prepare and implement a reasonable remediation plan for each control deficiency.	High
		Failure to investigate, prepare and implement a reasonable remediation plan addressing ERCB-identified possible noncompliance with ERCB measurement and reporting requirements.	High
		Failure to report a remediation plan electronically through the ERCB's EPAP system, as directed by the ERCB.	Low
Directive 039 Revised Program to Reduce Benzene Emissions from Glycol Dehydrators			
	Glycol Dehydrator Benzene Emissions	Individual dehydrator(s) or site dehydrator benzene emissions over the limits	High
		Failure to correctly complete the Decision Tree analysis (for new or relocated glycol dehydrators as of January 1, 2007)	Low
		Failure to notify resident(s) within 750 meters of a dehydrator (for new, relocated, or existing glycol dehydrators)	Low
		Dehydrator Engineering and Operations Sheet (DEOS) not done, incomplete/inaccurate, and/or not posted	Low
		Failure to submit annual Dehydrator Benzene Inventory List as required	Low
Directive 060 Upstream Petroleum Industry Flaring Guide			
Decision Tree Process/Modeling	Flaring, Incinerating and Venting Audits	Decision tree process, including an economic evaluation not completed, or results not implemented for new, existing, and temporary; flares, incinerators, and vents (Sections 2.3, 2.4, 2.5, 2.8, 3.1, 4.1, 5.1, 6.1, 7.1, 8.1 and 9.1 of Directive 060)	High
		No dispersion modeling for temporary flaring of >5% H ₂ S. (Section 3.3.1 and 7.12 of Directive 060)	High
		No dispersion modeling for flaring 1-5% H ₂ S temporary. (Section 3.3.1 and 7.12 of Directive 060)	Low
Permits/Approvals		Failure to comply with any condition of permit or approval (temporary permits, volume allowance threshold exceedance permits, and blanket permits). (Section 3.3 and 3.5 of Directive 060)	High
		No permit obtained for temporary flaring or incinerating of natural gas if gas well test volumes exceed their volume allowance (Section 3.3.1 (2) of Directive 060)	High
		Flaring or incinerating sour gas containing more than 50 mol/kmol H ₂ S or from a critical sour gas well without a permit (Section 3.3.1, 3.3.2, and 3.7 of Directive 060)	High
		Operator does not have approval to report measured gas well production on an oil battery.	Low
Notification and Consultation		Incomplete resident notification and/or consultation (Sections 2.5, 2.9, 2.11, 3.9, 4.2, 5.4, 6.4, 9.1(4), Table 1 and 2 of Directive 060)	High
		No attempt to comply with resident notification and/or consultation (Sections 2.5, 2.9, 2.11, 3.9, 4.2, 5.4, 6.4, 9.1(4), Table 1 and 2 of Directive 060)	High
		Failure to notify the appropriate ERCB Field Centre of any unresolved resident concerns regarding permitted sites (Sections 2.10, 3.5.1, 3.9.1 of Directive 060)	High
		Public information packages not as per requirement (Sections 2.9.1 and 3.9 of Directive 060)	Low
		Late public notification of temporary flaring/venting where required.	Low
		Late ERCB notification of temporary flaring/venting where required. (Section 4.2 of Directive 060)	Low
		Failure to notify the appropriate ERCB Field Centre of flaring, incinerating, or venting events as required (Section 2.9, 3.3.2, 3.9, 4.2, 5.4, 6.4, Table 1 and Table 2 of Directive 060)	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		No ERCB notification of temporary flaring/venting where required (of temporary). (Section 4.2 of Directive 060)	Low
Volume / Duration Exceedances		Flaring, incinerating, or venting solution gas from an oil/bitumen well with a GOR greater than 3000 m ³ /m ³ (Section 2.5 of Directive 060)	High
		Exceeding oil & gas well test flaring / incinerating and venting duration limits (Section 2.4 and 3.2 of Directive 060)	High
		Noncompliance with solution gas production requirements during planned shutdowns and emergency events (Section 2.11.2 of Directive 060)	Low
		Exceeding the annual flare volume limits at a gas plant (Section 5.2 of Directive 060)	High
		Exceeding the major flaring events criteria for gas plants (6-in-6) (Section 5.3 of Directive 060)	High
		Failure to submit an exceedance report within 30 days (6-in-6) (Section 5.3 of Directive 060)	High
		Failure to investigate repeated nonroutine flaring or venting events (Section 5.3 of Directive 060)	Low
		Gas is being vented, not burned, where it could support stable combustion (Section 8.1 of Directive 060)	High
Visible Emissions		Black smoke from non-routine or emergency flaring events exceeds an average of 40% opacity over 6 consecutive minutes (Section 7.2 of Directive 060)	High
		Routine combustion of gases results in continuous or repeat black smoke emissions	Low
H ₂ S Gas		Failure to comply with conditions for flaring or incinerating small volumes of sour gas containing more than 50 mol/kmol H ₂ S when a permit is not required (Section 3.3.2 of Directive 060)	High
		Failure to discontinue flaring or incinerating sour gas during temporary operations (including well test), or at a gas plant when Alberta Ambient Air Quality Objectives have been exceeded (Sections 3.3.2, 3.6, 7.12, and Appendix 8 of Directive 060)	High
		Failure to conduct dispersion modeling for flaring or incinerating gas with greater than 10 mol/kmol H ₂ S or 1 tonne per day of sulphur (Sections 3.6 and 7.12 of Directive 060)	Low
		Any off-lease H ₂ S odors (Section 7.1 and 8.2 of Directive 060)	High
Facility Design		Failure to have an adequate knockout drum or flare separator where required (Sections 7.6 and 8.1 of Directive 060)	High
		No flare or incinerator stack where one is required (Section 8 of Directive 060)	High
		Stack height or design does not conform to Directive 60 requirements (Section 7.4 of Directive 060)	Low
		No flame arrester, equivalent safety device, or adequate engineering and operating precautions to prevent back flash where required	High
		Sour pressure relief valves not tied into flare systems where required (Section 8.2 of Directive 060)	High
		Pilot/ignition devices not available/operable where required (sour and acid gas flares) (Section 7.3 of Directive 060)	High
		Insufficient heating value available to flare (Section 7.1.1 of Directive 060)	High
		Insufficient exit temperature, no automatic temperature shutdown, or no process temperature control and recording where required from incinerators (Section 7.1.2 of Directive 060)	High
		Exposed flame from an incinerator (Section 7.1.2 of Directive 060)	High
		No high level alarm or high-level facility shutdown on knockout drum/flare separator where required (Section 7.6 of Directive 060)	High
		Operating procedures and/or automatic shutdowns not in place where needed to control major sour/acid gas flaring events (Section 7.5 of Directive 060)	High
		Extinguishing of a sour gas flare pilot without approval (Section 7.3.1 of Directive 060)	High
		Flare or incinerator units not designed or reviewed by a professional engineer, certified technician or certified technologist (Section 7.1 of Directive 060)	High
		Failure to produce approved design drawings, operating limits, or procedures for flare or incinerator units upon ERCB request (Sections 7(1), 7(2), 7.1.1, and 7.1.2 of Directive 060)	Low
Spacing		Noncompliance with flare and incinerator spacing requirements (Section 7.8 of Directive 060)	Low
		Flare or incinerator stack less than 100 m from an occupied residence (Section 7.8 of Directive 060)	High
		Flare pit, flare stack, or incinerator less than 25 metres from oil or gas processing equipment (Section 7.8 of Directive 060).	High
Measurement and Reporting		Failure to keep flaring, incinerating, and venting logs as required (Section 5.3, 5.5, and 10.4 of Directive 060)	Low
		Inadequate flare or vent measurement or estimating procedures (Section 10, 10.1, and 10.2 of Directive 060)	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to measure and/or report acid gas (Section 10, 10.1, 10.3, and 10.4 of Directive 060)	High
		Acid gas flare fuel make-up not measured (Section 10.1 of Directive 060)	High
		Acid gas stream does not have continuous temperature measurement (Section 10.1 of Directive 060)	Low
		Gas usage not reported or reported inaccurately to the ERCB (Section 10 of Directive 060)	Low
		Reporting incorrect data on the ERCB Sour Gas Flaring/Incineration Data Summary Report (Section 3.5.3, 3.10, and 10.4 of Directive 060)	High
ID 2001-03 Sulphur Recovery Guidelines for the Province of Alberta			
	Sulphur Recovery Guidelines	Failure to meet the approved calendar quarter-year sulphur recovery efficiency	High
		Exceeding approved maximum daily sulphur inlet rate	Low
		Exceeding 125% baseline sulphur inlet	Low
		Failure to maintain credit balance	Low
		Monthly sulphur balance out more than 5%	Low
Well Operations Section			
ID 2003-01 1) Isolation Packer Testing, Reporting, and Repair Requirements; 2) Surface Casing Vent Flow/Gas Migration Testing, Reporting, and Repair Requirements; 3) Casing Failure Reporting and Repair Requirements			
	Packer Testing Audits	Errors in reporting	Low
		Failure to respond to written notification from the ERCB in the time provided	Low
		Failure to submit a response to an audit in the time provided	Low
		Failure to complete necessary reporting of required packer testing by Sept 1 of each year	High
		Failure to perform repairs and report repair results to the ERCB within 90 days of detection	High
		Failure to retain required records	High
	Surface Casing Vent Flow/Gas Migration Audits	Errors in reporting	Low
		Failure to respond to written notification from the ERCB in the time provided	Low
		Failure to submit a response to an audit in the time provided	Low
		Failure to perform SCVF/GM tests as required	High
		Failure to report a known SCVF/GM	High
		Producing a vent flow that does not meet the SCVF production requirements	High
		Failure to retain the required reports	High
		Failure to repair a serious SCVF/GM	High
	Well Casing Failure Audits	Errors in reporting	Low
		Failure to respond to written notification from the ERCB in the time provided	Low
		Failure to submit a response to an audit in the time provided	Low
		Failure to report a known casing Failure	High
		Failure to retain the required records	High
		Failure to repair a casing Failure	High
Draft Directive 027 Shallow Fracturing Operations - Restricted Operations (Released: August 14, 2009)			
	Shallow Fracturing Operations Assessments	Failure to conduct an assessment as outlined in Directive 027 prior to conducting a shallow fracturing operation.	High
		Fracturing operations within restricted area near a water well	High
		Failure to supply the assessment information to the ERCB within 5 working days of a request	Low
		Failure to use only non-toxic fracture fluids above the base of groundwater protection	High
		Failure to design the fracture treatment so all zones containing non-saline water are protected from contamination	High
		Fracture treatment has impacted an oilfield well	High
		Fracture treatment has impacted a water well	High
		Fracturing operations conducted within 50m of the bedrock surface.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		Maximum injected volume of nitrogen exceeded 15,000 standard cubic meters per meter of coal, without prior ERCB approval.	High
Directive 013 Suspension Requirements for Wells (Released: December 1, 2004)			
	Suspended Well Audits	Failure to submit a response to an audit within the timeframe requested	Low
		Inadequate lease security and fencing	Low
		Failure to submit inspection reports in required timeframe	Low
		Failure to retain well information or inspection information	Low
		Failure to report required information	Low
		Failure to submit the required audit documentation	Low
		Failure to conduct well inspection in required timeframe	Low
		Wellhead improperly maintained so that well control may be compromised	High
		Improper suspension for given well type (if suspended to lower risk level)	High
		Failure to follow required reactivation procedures	High
		Reporting a well in a lower risk category	High
Directive 020 Well Abandonment Guide			
	Well Abandonment Audits	Failure to notify ERCB prior to commencement of abandonment operations. (2.2), (8)	Low
		Failure to leave well open for a visual inspection in the designated site inspection region prior to cutting and capping. (7.2)	Low
		Failure to perform SCVF/GM tests as required. (7.1), (7.3)	High
		Failure to conduct a fluid level test to determine if there are any leaking plugs. (7.2)	High
		Failure to complete surface equipment removal and cleanup activities within 12 months. (8)	High
		Failure to conduct surface abandonment operations immediately following confirmation of a successful reabandonment of a leaking well. (3.3)	Low
		Failure to complete surface abandonment within specified timeframe. (4.6), (8)	Low
		Failure to inform affected parties prior to surface abandonment. (8)	Low
		Failure to conduct abandonment operations in accordance with a nonroutine approval. (Section 2.1)	Low
		Failure to abandon a well with existing zonal abandoned Level-A interval in accordance with the requirements. (Section 3.2)	High
		Failure to have written ERCB approval prior to reentering a previously abandoned well. (Section 3.3)	High
		Failure to abandon a reentry well from the reentry depth to surface. (Section 3.4)	High
		Failure to locate a cement plug using one of the approved methods. (Sections 4.5, 5.3, 5.4, 5.5, 6)	High
		Failure to correct a misplaced cement plug. (Section 4.5)	High
		Failure to set cement plugs as required. (Section 4)	High
		Failure to review the existing cement behind the casing as required. (Section 5.1)	High
		Failure to conduct remedial cementing operations as required. (Sections 4.1, 4.3, 4.4, 5.1, and 5.5.1)	High
		Failure to use a cement blend that meets the requirements. (Sections 4.1, 4.2, 5.3 and 5.4.1)	High
		Failure to fill the wellbore with the required fluid. (Sections 4.1, 4.3, 4.4 and 5.2)	High
		Failure to abandon each completed pool separately and cover all nonsaline groundwater with cement. (Section 5)	High
		Failure to abandon cased-hole wells not penetrating oil sands zones in accordance with requirements. (Section 5.3)	High
		Failure to abandon cased-hole wells penetrating oil sands zones in accordance with requirements. (Section 5.4)	High
		Failure to conduct cut and cap operations in accordance with requirements. (Section 8.1)	High
		Failure to submit the requested audit documentation	Low
		Failure to submit a response to an audit within the timeframe requested	Low
		Failure to report surface abandonments through the DDS system (Licence Abandonment: Well Licence Abandonment) within 30 days of completing the operation. (Section 2.3 and 4.6)	Low
		Failure to report a reabandonment as an updated licence abandonment through the DDS system (Section 3.3)	Low
Directive 010 Minimum Casing Design Requirements (Latest release: June 20, 2008)			

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
	Well Casing Design Requirements	A licensee fails to keep written records of all data and information used to support minimum casing design as detailed in Directive 010.	High
		A licensee fails to meet minimum casing design requirements.	High
		A licensee fails to provide within 20 days data and information used to support minimum casing design as detailed in Directive 010	Low
Field Surveillance & Operations Branch / Field Operations Group			
<i>On-line access to the Field Inspection System [FIS] is available through the Digital Data Submission [DDS] system.</i>			
Directive 036 Drilling Blowout Prevention Requirements and Procedures (Released: Jul 5, 2004; Revision 1 - Errata Jul 20, 2004)			
BOP Preventer System	Drilling Operations		
BOP Preventer (BOP) Equipment		No BOP(s) installed on well.	High
		BOP pressure rating and/or stack arrangement (including spools) does not meet minimum requirements for the well classification.	High
		BOPs not adequately supported and/or secured (to substructure).	Low
Metallic Material for Sour Service		All pressure-containing components within the BOP, bleed-off, and kill systems do not meet <i>NACE MR0175</i> requirements (critical sour wells).	High
Pipe Rams		Improper pipe ram size for drill pipe or tubulars that are in use.	High
		Pipe rams changed out and pressure test on rams not conducted.	High
Casing Rams		Casing rams installed and pressure test on rams not conducted	High
Ram Locking Devices (Hand Wheels)		Ram locking devices not readily available, incorrectly sized, and/or cannot be installed.	Low
Double Drilling/Studding		Double-drilled/studded BOP equipment (including spools) does not meet requirements.	High
Flange- and Clamp-Type Connections		Flange- or clamp-type connections not designed in accordance with standards and/or certification not provided.	High
		Bolts loose and/or missing from BOP system (spools/BOP outlets, flanges, etc.).	Low
		Connection(s) loosened or taken apart and pressure test on connection(s) not conducted.	High
Casing Bowls		Sliplock type, threaded, or weld-on casing bowl not used on class I wells.	High
		Threaded or weld-on casing bowl not used on well classes II to VI and critical sour wells.	High
Sliplock		Sliplock type casing bowl not installed and/or maintained in accordance with manufacturer's specifications.	High
Threaded		Threaded casing bowl not properly installed (with regard to make-up procedures, torque, and the use of thread	High
Welded		Casing bowl not welded in accordance with acceptable procedures.	High
Casing Bowl Flange, Outlet(s), and Valve(s)		Casing bowl flange not integral part of casing bowl.	High
		Casing bowl does not have a side outlet and valve (well classes I, II, III, and IV).	High
		Casing bowl does not have flanged or studded outlet(s) and valve(s) (classes V and VI and critical sour wells).	High
Pressure Rating		Casing bowl and/or casing bowl valve does not meet minimum pressure rating requirements.	High
		Casing bowl specifications not available at the rig.	Low
Drill-Through Components		Drill-through components above BOPs not removable with pipe/tools in the hole.	Low
Stabbing Valve & Inside BOP		Stabbing valve and/or closing handle not on location.	High
		Inside BOP not on location.	High
		Stabbing valve not certified as being capable of opening with 7000 kPa pressure below the valve (well classes V and VI and critical sour wells).	High
		Stabbing valve and/or hanger cap not full opening.	Low
		Stabbing valve in closed position.	Low
		Stabbing valve and/or inside BOP not operable.	High
		Stabbing valve and/or valve operating wrench not readily accessible.	High
		Inside BOP not readily accessible.	High
		Drill string crossover sub(s) not available or readily accessible.	High
		Stabbing valve carrying handles and/or hanger cap not provided (when required).	Low
		Stabbing valve and/or inside BOP cannot be stripped into the well (carrying handles and/or hanger cap not removable).	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Stabbing valve and/or inside BOP does not meet <i>NACE MR0175</i> standards (critical sour well).	High
Lower Kelly Cock Valve		Lower kelly cock not installed and/or not operable (well classes V and VI and critical sour wells).	High
		Lower kelly cock not equipped with valve operating wrench.	High
		Lower kelly cock not certified as being capable of opening with 7000 kPa pressure below the valve.	High
		Lower kelly cock does not meet <i>NACE MR0175</i> standards (critical sour well).	High
Stripping Operations		Stripping tubulars through an annular preventer that is part of the required BOP equipment (does not apply during well control situation).	High
		Stripping drill pipe through a pipe ram that is part of the required BOP equipment.	High
Shop Servicing and Testing of BOPs, Drill-Through Spools, Drill-Through Adapter Flanges and Flexible Bleed-off and Kill-line Hoses		BOP certification (shop servicing and testing) does not meet minimum requirements.	High
		BOP certification (shop servicing and testing) has expired.	Low
		Shop servicing, testing, and storage documents not available at the rig.	Low
Bleed-off System>Class I Wells			
Diverter Line		Diverter line does not meet minimum size and/or minimum pressure rating requirements.	High
		HCR not installed.	High
		Fluid turns and/or pipe extensions between drilling spool and	High
		Fluid turns in diverter line not made using right-angle connections constructed of tees and crosses blocked on fluid turns.	High
		Diverter line connections not flanged, hammer union, threaded, or bolted groove lock type.	High
		Diverter line improperly connected (e.g., loose unions, bolts, etc.).	Low
		Diverter line not connected.	High
		Diverter line does not terminate in a flare pit or flare tank.	Low
		End of diverter line does not terminate the minimum required distance from the wellbore.	Low
		Diverter line not adequately secured.	Low
		Fluid turn installed at end of diverter line (flare pit in use).	Low
		Diverter line not self-draining and no means incorporated to ensure that fluid can be drained (winter operations only).	High
		Visual inspection of diverter line not conducted and/or recorded.	Low
Well Classes II to VI and Critical Sour Wells			
Bleed-off Line(s)		Bleed-off line(s) does not meet minimum design requirements (e.g., size, number of lines, valves, and minimum pressure rating).	High
		Bleed-off line flange- or clamp-type connections not designed in accordance with standards and/or certification not provided.	High
		Bolts loose and/or missing from bleed-off line.	Low
		HCR not installed (primary bleed-off line).	High
		HCR in open position during normal drilling operation.	Low
		Manual valve(s) (next to HCR) in the closed position.	Low
		Fluid turns and/or pipe extensions between drilling spool/BOP outlet and innermost valve.	High
		Manual valve is innermost valve and fluid turns and/or piping extensions installed between HCR and manual valve.	High
		More than one valve on secondary bleed-off line in the closed position.	Low
		Innermost valve on the secondary bleed-off line in open position and fluid turns and/or piping extensions installed between the valves.	Low
		Manual valve(s) in bleed-off line(s) not operable.	High
		Valve handle(s) not installed on bleed-off line valve(s).	Low
		Fluid turn(s) in bleed-off line(s) not made using right-angle connections constructed of tees and crosses blocked on fluid turns.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		Bleed-off line(s) not connected to the drilling spool/BOP outlet and/or choke manifold.	High
		Bleed-off line(s) not adequately secured/supported.	Low
		Bleed-off line(s) does not meet <i>NACE MR0175</i> standards (critical sour wells).	High
Choke Manifold		The choke manifold does not meet the minimum pressure rating and/or conform to the configuration (valves, chokes, piping, etc.) for the class of well being drilled.	High
		The remote choke is not a nonrubber sleeved choke (critical sour	Low
		No adjustable choke specifications to identify the fully open and the fully closed position on the choke body and/or on the actuator.	Low
		Valve handles missing on choke manifold valve(s).	Low
		Choke manifold valve(s) not operable.	High
		remote choke control.	Low
		Choke manifold and/or remote choke control casing pressure gauge out of calibration.	Low
		Choke manifold and/or remote choke control casing pressure gauges not available for each wing of choke manifold.	High
		Choke manifold and/or remote choke control casing pressure gauge does not have readable increments of 250 kPa or less (only surface casing is set).	Low
		MACP exceeds choke manifold and/or remote choke control casing pressure gauge range (only surface casing is set).	Low
		Choke manifold and/or remote choke control casing pressure gauge does not have readable increments of 500 kPa or less (intermediate casing is set).	Low
		Range of choke manifold and/or remote choke control casing pressure gauge less than the pressure rating of the required BOP system (intermediate casing is set).	Low
		Isolation valve not provided for choke manifold and/or remote choke control casing pressure gauge(s).	High
		Choke manifold does not meet <i>NACE MR0175</i> standards (critical sour well).	High
		Choke manifold not located outside the substructure and/or readily accessible.	High
Remote Drill Pipe Pressure Gauge Assembly at Choke Control		Remote drill pipe pressure gauge(s) not provided or readily accessible for installation at choke manifold and remote choke location (if in use and/or required).	High
		Remote drill pipe pressure gauge inadequate (e.g., out of calibration).	Low
		Isolation valve(s) not provided for remote drill pipe pressure gauge at choke manifold and remote choke location (if in use and/or required).	High
Mud-Gas Separator(s) (Degasser) Primary Degasser			
		Primary degasser does not meet minimum sizing requirements for well depth.	High
		Primary degasser improperly designed (open bottom, construction, etc.).	High
		Primary degasser not connected to a separate vent line(s).	High
		Primary degasser not ready for service and fully connected.	High
		Primary degasser located in trip tank.	High
Secondary Degasser (Critical Sour Wells)			
		Secondary degasser does not meet minimum sizing requirements for well depth.	High
		Secondary degasser improperly designed (construction, etc.).	High
		Secondary degasser not connected to a separate vent line(s).	High
		Secondary degasser not ready for service and fully connected.	High
		Secondary degasser located in trip tank.	High
Degasser Inlet			
		Degasser inlet line does not meet minimum pressure rating requirements for class of well.	High
		Degasser inlet line does not meet minimum sizing requirements for well depth.	High
		Degasser inlet line connections not flanged, hammer union, or threaded.	High
		Fluid turns in degasser inlet line not made using right-angle connections constructed of tees and crosses blocked on fluid turns.	High
		Degasser inlet line improperly connected (e.g., loose unions, bolts).	Low
		Degasser inlet line not connected to the choke manifold and degasser.	High
		Valve(s) or other restrictions in the degasser inlet line (downstream of the last valve on the choke manifold).	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Degasser inlet line not adequately secured.	Low
		Visual inspection of degasser inlet line not conducted and/or recorded.	Low
		Separate degasser inlet lines not installed from each manifold wing to each degasser (critical sour well with two degassers deployed).	High
		Wall thickness test on degasser inlet line not conducted as required (where a portion of the line is submerged in drilling fluid) and/or documentation records of the wall thickness test not available at the rig site.	Low
	Degasser Vent Line	Vent line not made of suitable material composition (e.g., does not maintain its shape).	Low
		Vent line connections do not have adequate seals	Low
		Vent line does not meet minimum sizing requirements for well depth and/or mud tank fluid level (Table 1).	High
		Vent line not self-draining and no means incorporated to ensure that fluid can be drained.	Low
		Vent line not void of fluids during drilling operations.	Low
		Vent line not adequately secured to mud tank.	Low
		End of vent line does not terminate 50 m (minimum) from the wellbore in a flare pit or flare tank.	Low
		Separate vent lines not installed from each degasser to the flare pit/tank (critical sour well with two degassers deployed).	High
		Wall thickness test on degasser vent line not conducted as required (where a portion of the line is submerged in drilling fluid) and/or documentation records of the wall thickness test not available at the rig site.	Low
	Flare Line(s)	Flare line does not meet minimum pressure rating requirements for class of well	High
		Flare line does not have a minimum nominal diameter of 76.2 mm throughout.	High
		Fluid turns in flare line not made using right-angle connections constructed of tees and crosses blocked on fluid turns.	High
		Flare line connections not flanged, hammer union (metal to metal), or threaded.	High
		Flare line improperly connected (e.g., loose unions, bolts).	Low
		Flare line not connected to the choke manifold.	High
		Flare line does not terminate in a flare pit or flare tank.	Low
		End of flare line does not terminate 50 m from the wellbore.	Low
		Flare line not adequately secured.	Low
		Fluid turn installed at end of flare line (flare pit in use).	Low
		Flare line not self-draining and no means incorporated to ensure that fluid can be drained (winter operations only).	High
		Visual inspection of flare line not conducted and/or recorded.	Low
		Two flare lines (minimum) not installed (well classes V and VI and critical sour wells).	High
	Flare Pits	Flare pit not constructed to contain a minimum of 8 m ³ of fluid.	Low
		Flare pit not constructed with side and back walls 2 m above ground level.	Low
		Flare pit not constructed to resist erosion of a high-pressure flow of gas or liquid.	Low
		Flare pit not located a minimum distance of 50 m from the wellbore.	Low
	Flare Tanks	Flare tank not constructed of steel.	High
		Flare tank does not have an impingement plate.	Low
		Flare tank does not have a minimum of 8 m ³ capacity.	Low
		Flare tank not open to atmosphere.	High
		Flare tank not the minimum required distance from the wellbore.	Low
		Flare tank does not have a minimum 50.8 mm liquid loading steel line that is connected at all times extending a minimum of 9 m from the tank.	Low
		Liquid in flare tank cannot be isolated from the vent line.	Low
Kill System			
	Well Classes II-IV and Critical Sour Wells	Kill system does not meet minimum design requirements (e.g., size, number of lines, valves, and minimum pressure rating).	High
		Flanged check valve(s) not installed in the kill system (critical sour well).	High
		Fluid turns and/or pipe extensions between the drilling spool/BOP outlet and the first manual valve.	Low
		Valve next to the drilling spool/BOP outlet in the open position.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Valve(s) in the kill system not operable and/or valve handle(s) not installed.	Low
		Isolation valve not installed on the mud line/standpipe.	Low
		Improper connections used in kill line (from the last valve on the drilling spool/BOP outlet to the mud line/standpipe).	Low
		Threaded fittings, hammer unions, flange, or clamp-type connections used in the kill system not properly installed and/or made up (this includes all studs, bolts, and nuts, etc.).	Low
		Kill line disconnected in more than one place.	Low
		The portion of the kill system from the drilling spools/BOP outlets up to and including the check valves does not meet NACE MR0175 standards (critical sour wells).	Low
Well Classes V and VI and Critical Sour Wells		Kill system does not meet minimum design requirements (e.g., size, number of lines, valves, and minimum pressure rating).	High
		Isolation valve(s) not installed on the mud line/standpipe.	Low
		Fluid turns and/or pipe extensions between the drilling spool/BOP outlet and the first manual valve.	Low
		Valve next to the drilling spool in the open position.	Low
		Valve(s) in the kill system not operable and/or valve handle(s) not installed.	Low
		Threaded fittings, hammer unions, flange, or clamp-type connections used in the kill system not properly installed and/or made up (this includes all studs, bolts, nuts, etc.).	Low
		Improper connections used in kill line (from the last valve on the drilling spool/BOP outlet to the mud line/standpipe).	Low
		Kill line disconnected in more than one place.	Low
		The portion of the kill system from the drilling spools/BOP outlets up to and including the check valves does not meet NACE MR0175 standards (critical sour wells).	Low
Flexible Hoses			
Bleed-off, Kill, or Diverter Line(s)		Flexible hose used in bleed-off, kill, or diverter line(s) does not meet the minimum required size and/or working pressure.	High
		Flexible hose used in bleed-off, kill, or diverter line(s) does not have factory-installed connections.	High
		Flexible hose used in bleed-off, kill, or diverter line(s) (within 7 m of wellbore) does not have adequate fire sheathing.	High
		Flexible hose used in bleed-off, kill, or diverter line(s) does not maintain its original shape and/or contains bends that exceed the manufacturer's specified minimum bending radius.	Low
		Flexible hose used in bleed-off, kill, or diverter line(s) is not supported to prevent stresses on connecting valves and piping and/or not protected from mechanical damage.	Low
		Non-flanged flexible hose used in bleed-off, kill, or diverter line(s) is not secured.	Low
		Flexible hose used in the diverter line(s) within 9 m of the flare pit or flare tank.	Low
		Metallic components of flexible hose(s) used in the bleed-off line(s) do not meet NACE MR0175 standards (critical sour wells).	High
		Elastomeric components of flexible hose(s) used in the bleed-off or kill line(s) not suitable for sour service (critical sour wells).	High
		Three-year shop servicing and testing of flexible hose used in bleed-off, kill, or diverter line(s) does not meet minimum requirements or certification has expired.	Low
Flare and Emergency Flare Line(s)		Flexible hose used in flare and emergency flare line(s) does not meet the minimum required size and/or working pressure.	High
		Flexible hose used in flare or emergency flare line(s) does not have factory-installed connections.	High
		Flexible hose used in flare or emergency flare line(s) does not maintain its original shape and/or contains bends that exceed the manufacturer's specified minimum bending radius.	Low
		Flexible hose used in flare or emergency flare line(s) is not supported and/or not protected from mechanical damage.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Non-flanged flexible hose used in flare or emergency flare line(s) is not secured.	Low
		Flexible hose used in flare or emergency flare line(s) within 7 m of wellbore does not have adequate fire sheathing.	High
		Flexible hose used in the flare or emergency flare line(s) within 9 m of the flare pit or flare tank.	Low
Degasser Inlet Line(s)		Flexible hose used in the degasser inlet line(s) does not meet minimum pressure rating requirements for class of well.	High
		Flexible hose used in degasser inlet line(s) does not meet the minimum sizing requirements for well depth.	High
		Flexible hose used in degasser inlet line(s) does not have factory-installed connections.	High
		Flexible hose used in degasser inlet line(s) does not maintain its original shape and/or contains bends that exceed the manufacturer's specified minimum bending radius.	Low
		Flexible hose used in degasser inlet line(s) is not supported and/or not protected from mechanical damage.	Low
		Non-flanged flexible hose used in degasser inlet line(s) is not secured.	Low
Degasser Vent Line		Flexible hose used in degasser vent line(s) does not meet the minimum required size.	High
		Flexible hose used in degasser vent line(s) does not maintain its original shape throughout its entire length.	Low
		Flexible hose used in the degasser vent line(s) within 9 m of the flare pit or flare tank.	Low
Winterizing			
Winterizing BOP, Accumulator, Bleed-off, and Kill Systems		Insufficient heat provided to the BOP stack and/or all associated valves and/or choke manifold and/or accumulator system to maintain their effectiveness.	High
		Bleed-off and/or kill and/or diverter and/or flare and/or degasser inlet line(s) are not empty or filled with a nonfreezing fluid or heated during cold weather drilling operations.	High
BOP Control Systems			
Accumulator System		Accumulator pressure dropped below 8400 kPa after function test (of all required BOP components) with the recharge pump off.	High
		Accumulator specifications not available at the rig.	Low
		Accumulator hydraulic lines not equal to or greater than the working pressure of the accumulator system.	High
		Nonsteel hydraulic BOP hoses located within 7 m of the wellbore not equipped with adequate fire-resistant sheathing.	High
		Fire-resistant sheathing significantly damaged on nonsteel hydraulic BOP hoses located within 7 m of the wellbore.	High
		BOP hydraulic line end fittings located within 7 m of the wellbore not fire rated.	High
		Accumulator system not equipped with an automatic pressure-controlled primary recharge pump.	High
		Accumulator system not equipped with two separate automatic pressure-controlled recharge (primary and secondary) pumps for well classes V and VI and critical sour wells.	High
		Accumulator recharge pump (primary or secondary) failed to recharge the accumulator within 5 minutes.	Low
		Check valve not installed to allow for replacement of accumulator recharge pump.	High
		BOP component(s) failed to close within the required time.	Low
		Accumulator not equipped with an accurate gauge showing accumulator system pressure.	High
		Fittings and/or gauge not available to obtain accumulator bottle(s) precharge pressure.	Low
		Accumulator not readily accessible.	Low
		Accumulator not housed.	Low
		Accumulator not adequately heated to maintain its effectiveness.	Low
		Accumulator not located at least 15 m from the wellbore.	Low
		Accumulator vent not installed so that venting takes place outside the building (side or top of building).	Low
		Accumulator not connected to a backup nitrogen system.	High
Backup Nitrogen (N ₂) System		Backup N ₂ system improperly connected to accumulator system.	High
		Gauge not installed (or readily available for installation) to determine the backup N ₂ system pressure.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Backup N ₂ system not readily accessible.	Low
		Backup N ₂ system not housed.	Low
		Backup N ₂ system not adequately heated to maintain its effectiveness.	Low
		Backup N ₂ system not located at least 15 m from the wellbore.	Low
BOP Controls			
Floor Controls		BOP floor controls not provided for each BOP component and the HCR in the diverter/bleed-off line.	High
		BOP floor controls not located near the driller's position.	Low
		BOP floor controls not capable of opening and closing each BOP component and the HCR in the diverter/bleed-off line.	High
		BOP floor control not properly installed and/or correctly identified, and/or function operations (i.e., open and close) not	Low
		BOP floor controls not equipped with an accurate gauge indicating the accumulator system pressure.	Low
Remote Controls		BOP remote controls not provided for each BOP component and the HCR in the diverter/bleed-off line.	High
		BOP remote controls not capable of opening and closing each BOP component and the HCR in the diverter/bleed-off line.	High
		BOP remote control not properly installed and/or correctly identified, and/or function operations (i.e., open and close) not identified.	Low
		BOP remote controls not equipped with an accurate gauge indicating the accumulator system pressure.	Low
		BOP remote controls not located a minimum of 15 m from the well.	Low
		BOP remote controls not readily accessible.	Low
		BOP remote controls not housed.	Low
		BOP remote controls not adequately heated to maintain their effectiveness.	Low
Master Hydraulic Control Manifold Location		Master hydraulic control manifold not located at the remote position (critical sour wells).	Low
BOP Function Test		BOP(s) or HCR on the diverter/bleed-off line failed to operate from the floor position.	High
		BOP(s) or HCR on the diverter/bleed-off line failed to operate from the remote position.	High
Daily and Weekly		Required BOP/HCR function tests not conducted.	Low
Recording		Required BOP/HCR function tests not recorded in the drilling logbook.	Low
Accumulator Sizing Calculations		Accumulator has insufficient usable fluid available to operate the required BOP components and retain on the accumulator system a minimum pressure of 8400 kPa (sizing calculations performed).	High
		Accumulator has insufficient usable fluid available to operate the required BOP components, shear the drill pipe/coiled tubing and retain on the accumulator system a minimum pressure of 8400 kPa, or the minimum pressure required to shear the drill pipe/co	High
Backup Nitrogen Sizing Calculations		Backup N ₂ system has insufficient equivalent litres of N ₂ available (at a minimum pressure of 8400 kPa) to operate the required BOP components (sizing calculations performed).	High
		Backup N ₂ system has insufficient equivalent litres of N ₂ available to operate the required BOP components, shear the drill pipe/coiled tubing and retain on the backup N ₂ system a minimum pressure of 8400 kPa, or the minimum pressure required to shear the drill pipe/coiled tubing, whichever is greater (sizing calculations performed).	High
Pressure Testing			
Classes II to VI and Critical Sour Wells		Low-pressure and/or high-pressure test(s) not conducted on all required components and/or casing strings.	High
		Pressure tests not conducted using low-viscosity fluid.	Low
		Low-pressure test not conducted before the high-pressure test.	Low
		Stabbing valve and/or lower kelly cock not pressure tested from the bottom.	Low
		Stabilized pressure (of at least 90 per cent of the required test pressure over a minimum 10-minute interval) not attained.	Low
		Pressure test(s) not recorded in the drilling logbook.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Third-party pressure test documentation not available at the rig.	Low
		Casing hanger plug not run to isolate the casing (test pressure exceeded 67 per cent of the bottomhole pressure at the casing setting depth).	Low
		Minimum 10-minute pressure test not conducted on all required components and/or casing string(s).	Low
		Inadequate test pressure used for low-pressure and/or high-pressure test on all required components and/or casing string(s).	Low
Engines>Shutoff Devices			
Diesel Engine(s)		Drilling rig diesel engine(s) operating within 25 m of the well not equipped with an approved diesel engine shutoff device(s) or not equipped with an air intake that is located 25 m from the well.	Low
		Drilling rig diesel engine(s) shutoff device does not have a remote control readily accessible from the driller's position to shut down the engine(s).	Low
		Other diesel engines (power tongs, cementing units, etc.) operating within 25 m of the well not equipped with proper engine shutoff devices and/or not readily accessible from the truck operator's working position.	Low
Gasoline Engine(s)		Gasoline (including propane) engine(s) operating within 25 m of the well not equipped with an engine shutoff device(s).	Low
		Gasoline (including propane) engine(s) shutoff device is not readily accessible to shut down the engine(s).	Low
Testing and Recording		Internal combustion engine shutoff device(s) not tested as required.	Low
		Internal combustion engine shutoff device(s) test results not recorded in the drilling logbook.	Low
Conducting Engine Shutoff Test(s)		Internal combustion engine shutoff device(s) failed to operate.	Low
Engine Exhaust		Engine exhaust(s) do not meet minimum requirements.	Low
Mud Tanks and Fluid Volume Monitoring Systems			
Mud Tanks		Mud tanks not provided.	High
			High
Mud Tank Fluid Volume Monitoring System		Fluid volume monitoring system not provided.	
Nonautomated (Nonelectronic) Fluid Level Monitors		Fluid level monitoring system not capable of measuring a change of $\pm 2 \text{ m}^3$ (maximum) in total tank volume.	High
		Fluid level monitoring system's float/sensor not located in the appropriate mud tank compartment.	High
		Monitoring indicator does not have readable and/or accurate increments.	High
		Driller does not know the volume of fluid per increment.	High
		Monitoring indicator is not readable from and/or located near the driller's position.	High
		Driller does not know the normal fluid level in the mud tanks.	High
		The fluid volume monitoring system not operating properly.	High
Automated (Electronic) Mud Tank Fluid Volume Monitoring Systems		Automated mud tank fluid volume monitoring system that is electronically operated not used (well classes V and VI, critical sour wells, and all wells drilled with oil-based drilling fluids).	High
		Monitoring system not equipped with mud tank fluid volume sensors in each active mud tank compartment.	High
		Monitoring system does not provide accurate and/or continuous mud tank fluid volume readings (that are reported on an electronic monitoring station).	High
		Electronic monitoring station not readable from and/or located near the driller's position.	High
			High
		Monitoring system not capable of detecting a change of $\pm 2 \text{ m}^3$ ($\pm 1 \text{ m}^3$ for critical sour wells) in total tank fluid volume.	High
		Monitoring system not equipped with an alarm set to detect a change of $\pm 2 \text{ m}^3$ in total tank fluid volume.	High
		The electronic monitoring station not equipped with chart recorders (critical sour wells).	High
		Visual indicator (i.e., flashing light) does not come on automatically whenever the alarm system is shut off (critical sour wells).	High
		Driller does not understand the monitoring system in use.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
Automated (Electronic) Mud Tank Fluid Volume Monitoring Systems—Surface Casing Reductions		Monitoring system does not meet minimum requirements for surface casing reduction (<i>Directive 8: Surface Casing Depth Minimum Requirements</i>).	High
Trip Tank—Design and Fluid Level Monitoring		Trip tank with a fluid level-monitoring system not provided, not in use, or not operating properly.	High
		Monitoring indicator does not have readable and/or accurate increments.	High
		Suction and/or return lines not connected to the trip tank while tripping.	High
		Monitoring indicator is not readable from and/or located near the driller's position.	High
		Driller does not know the volume of fluid per increment.	High
		Isolated circulating system with an electronic fluid volume monitoring system not being used and drill string is being circulated while tripping tubulars (coiled tubing units or top drives).	High
Well Classes I, II, and III		Nonautomated fluid monitoring system not capable of detecting a change of 0.08 m ³ or less (where trip tank surface area less than or equal to 3.0 m ²).	High
		Nonautomated fluid monitoring system in use and trip tank surface area is greater than 3.0 m ² .	High
		Automated fluid monitoring system in use and not capable of detecting a change of 0.04 m ³ or less and/or the readout on the monitoring display is not to a minimum of 2 decimal places.	High
		Well being circulated during tripping operations (coiled tubing units or top drives) and automated fluid volume monitoring system not capable of measuring volume changes of 0.04 m ³ or less and/or the readout on the monitoring display is not to a minimum of 2 decimal places.	High
Well Classes IV, V, and VI		Nonautomated fluid monitoring system not capable of detecting a change of 0.15 m ³ or less (where trip tank surface area less than or equal to 6.0 m ²).	High
		Nonautomated fluid monitoring system in use and trip tank surface area is greater than 6.0 m ² .	High
		Automated fluid monitoring system in use and not capable of detecting a change of 0.08 m ³ or less and/or the readout on the monitoring display is not to a minimum of 2 decimal places.	High
		Well being circulated during tripping operations (coiled tubing units or top drives) and automated fluid volume monitoring system not capable of measuring volume changes of 0.08 m ³ or less and/or the readout on the monitoring display is not to a minimum of 2 decimal places.	High
Critical Sour Wells		Trip tank surface area is greater than 3.0 m ² (critical sour wells).	High
		Usable trip tank volume is less than 3.0 m ³ (critical sour wells).	High
		Nonautomated fluid monitoring system is in use and the volume increments on the monitoring board are greater than 0.08 m ³ (critical sour well).	High
		Automated fluid monitoring system in use and not capable of detecting a change of 0.04 m ³ or less and/or the readout on the monitoring display is not to a minimum of 2 decimal places.	High
Well-Site Supervision and Certification			
Well-Site Supervision		Licensee did not provide an on-site representative who is responsible for and restricted to this drilling operation.	High
		Licensee did not provide an on-site rig manager who is responsible for the supervision of the drilling rig and restricted to this drilling operation.	High
		Licensee well-site representative and/or rig manager not readily available.	High
		Two well-site licensee representatives (working shifts no longer than 12 hours) not provided (critical sour well drilling in the critical zone).	High
Tripping and Well Control Situations		Licensee representative or rig manager not present on lease during tripping in or out of the well (potential hydrocarbon-bearing zones have been penetrated).	High
		Licensee representative and rig manager not present on lease during well control situation.	High
Blowout Prevention Certificates—Enform (formerly the Petroleum Industry Training Service (PITS))			
First-Line Supervisor's Certificate		Driller does not possess a valid First-Line Supervisor's Blowout Prevention Certificate.	High
Second-Line Supervisor's Well Control Certificate		Licensee well-site representative and/or rig manager does not possess a valid Second-Line Supervisor's Well Control Certificate.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
Well Control, Crew Training, and Tripping			
Well Control		Insufficient drilling fluid density to control formation pressure.	High
		Well control data not provided.	High
		Failure to effectively control any oil, gas or water encountered during drilling, testing, completion, or reconditioning operations at the well.	High
Maximum Allowable Casing Pressure (MACP)		MACP improperly calculated.	High
		MACP not posted in the manifold shack and/or at the remote choke location.	High
Reduced Speed Pump Pressure (RSPP)		The reduced pump speed and/or reduced pump pressure not recorded in the daily drilling report at least once per tour (hydrocarbon-bearing zones have been penetrated).	Low
Blowout Prevention and Well Control Procedures		Well control procedures not posted in doghouse.	Low
STICK Diagram		STICK diagram not posted in doghouse and/or on-site personnel have not reviewed or do not understand stick diagram information	High
		STICK diagram does not contain all the required information.	High
Crew Training			
BOP Drills		Required BOP drills not conducted.	High
Crew Alert Method		Crew alert device not provided and/or not operable.	High
Crew Assessment and Procedures		Crew did not respond to alert.	High
		Crew training inadequate in the operation of the BOP equipment and/or well control procedures (crew unable to properly shut in well).	High
		Crew training inadequate in the operation of the BOP equipment and/or well control procedures (well properly shut in, but crew not familiar with all BOP equipment and/or well control procedures).	Low
Recording BOP Drills		Required BOP drills not recorded in the drilling logbook.	Low
Tripping		Trip margin not sufficient to exert an adequate overbalance of the expected formation pressures.	High
		Bottoms-up circulation not conducted and/or weighted pill not pumped prior to tripping pipe from the well.	Low
Flow Checks		Ten-minute flow checks not conducted at the required intervals.	High
		Flow checks not recorded in the drilling logbook.	Low
		Wellbore not filled to surface prior to conducting flow checks.	High
Hole Filling		Fluid level in the wellbore dropped more than 30 m from surface while tripping.	High
Trip Records		Trip records not being accurately completed.	High
		Trip records not available at the rig.	Low
		Total calculated and actual volumes not recorded in the drilling logbook for each trip.	Low
		Trip record(s) not signed and dated by the licensee and the contractor representatives (critical zone penetrated).	Low
Electrical and Flame-Type Equipment			
Electrical Appliances and Electrical Devices		Electrical appliance(s) and/or electrical device(s) that are potential sources of ignition being used within a hazardous location (wellbore not shut in).	Low
		Electrical appliance(s) and/or electrical device(s) that are potential sources of ignition being used within a hazardous location where no on-site safety assessment has been conducted and/or not reviewed with crew and/or not documented in the tour reports	Low
Electrical Motors and Electrical Generators		Electrical motors and/or electrical generators (where arcing is produced) being used within a hazardous location not purged with an air intake located outside the hazardous location.	Low
Flame-Type Equipment		Flame-type equipment used within 25 m of the wellbore (wellbore not shut in).	Low
		Flame-type equipment used within 25 m of a separator, oil storage tank, or other source of ignitable vapour.	Low
Incinerators and Burn Pits		Incinerators and/or burn pits located within 50 m of the wellbore, separator, oil storage tank, or other source of ignitable vapour.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
	Smoking	Smoking within 25 m of the wellbore, rig, derrick, separator, oil storage tank, or other source of ignitable vapour.	Low
Casing Inspection			
	30-Day Casing Inspection	Required casing integrity tests not performed and/or inadequate.	Low
Drillstem Testing			
	Drillstem Testing (DST)	Reverse-circulating sub not installed in the drill string.	High
		Remote-controlled master valve not installed on the testing head.	High
		Separate DST line(s) not installed, and/or the end of the line(s) does not terminate at least 50 m from the well.	Low
		DST line does not meet minimum pressure rating requirements for class of well.	High
		DST line does not have a minimum nominal diameter of 50.8 mm throughout.	Low
		DST line connections not flanged, hammer union, or threaded.	Low
		DST line(s) not secured at 10 m intervals.	Low
		DST manifold does not have (as a minimum) the same pressure rating as the required BOP system.	High
		DST manifold not secured to restrict it from movement.	Low
		Liquids produced during DST not separated.	Low
		Liquids produced during DST directed to an earthen pit.	Low
High-Hazard Area and Surface Casing Reductions			
	Surface Casing	Surface casing not set to a minimum depth of 180 m.	High
		Failure to contact area office & discuss remedial action (Directive 009)	High
	Drilling Fluid Density	Drilling fluid density not adequate to exert a minimum of 1400 kPa overbalance (Mannville Group penetrated).	High
	Emergency Flare Line	Emergency flare line not installed.	High
		Emergency flare line does not meet minimum design requirements (e.g., size, valves, working pressure).	High
		Fluid turns and/or pipe extensions between drilling spool and the innermost valve.	High
		Fluid turns and/or piping extensions installed between the valves and the innermost valve is not in the closed position.	High
		More than one valve on emergency bleed-off line in the closed position.	Low
		Emergency flare line valves not operable.	High
		Emergency flare line valve handles not installed.	Low
		Flare line connection to the two valves not flanged and/or remaining connections (downstream of flanged connection) not flanged, hammer union, or threaded.	High
		Emergency flare line improperly connected (e.g., loose unions, bolts).	Low
		Right-angle fluid turns not used for directional changes in emergency flare line.	Low
		Fluid turn installed at end of emergency flare line (flare pit in use).	Low
		Emergency flare line not adequately secured.	Low
		Emergency flare line is not self-draining and no means incorporated to ensure that fluid can be drained (winter operations only).	High
		End of emergency flare line does not terminate 50 m from the wellbore.	Low
		Emergency flare line does not terminate in a flare pit or flare tank.	Low
		Visual inspection of emergency flare line not conducted and/or recorded in the drilling logbook.	Low
	Surface Casing Reductions	Deficiencies are classified as set out above in Section 15.1.3 (Emergency Flare Line).	Low
Sour and Critical Sour Wells			
	Emergency Response Plan (ERP)	No approved specific ERP where required.	High
		Copy of ERP not on location.	High
		Licensee did not conduct review of the ERP with on-site personnel (required to implement the plan) within 96 hours prior to conducting operations in the sour zone.	High

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		Licensee on-site representative not familiar with ERP.	High
		All equipment specified in ERP not installed and/or on location prior to entering the critical or sour zone.	High
ERP Notification		Licensee did not notify all residents prior to entering the first sour zone.	Low
		Licensee did not notify the ERCB and all residents after all drilling operations were completed (rig release).	Low
Warning Sign in H2S Area		H ₂ S warning sign not posted as required.	Low
		H ₂ S warning sign posted but not required (sweet well).	Low
Critical Sour Well			
Drilling Plan		Copy of drilling plan not on location.	High
Intermediate Casing		Intermediate casing not set as required.	High
		Intermediate casing waiver not on location.	Low
BOP System and Choke Manifold		BOP stack configuration does not conform to one of the three BOP stack configurations.	High
		Ram blanking tool not on location (Configuration 2 or 3 in use).	High
		BOP stack Configuration 3 in use and insufficient surface or intermediate casing set to contain the maximum anticipated reservoir pressure.	High
		The choke manifold does not meet the minimum pressure rating for the class of well being drilled and/or conform to the required critical sour well choke manifold configuration (valves, chokes, piping, etc.).	High
		The remote choke is not a nonrubber sleeved choke.	Low
Shear Blind Rams		Shear blind rams not installed (where required).	High
		Shear blind rams waiver not on location.	Low
Drill Pipe		Drill pipe used not premium class or better grade.	High
Indicators and Recording Devices		Indicators for pump pressure, pump strokes per minute, hook load, and/or table torque not installed, and/or operational, and/or visible from the driller's position.	High
		Continuous recording device(s) not provided to record the rate of penetration, pump pressure, pump strokes per minute, hook load, rotary table revolutions per minute (rpm), and rotary torque.	High
		Continuous recording device(s) records not available.	Low
H2S Monitoring			High
		Drilling fluid pH continuous monitoring system not installed (water-based drilling fluid and drilling in the critical zone).	Low
		Drilling fluid pH continuous monitoring system does not have an alarm to indicate a drop in pH (water-based drilling fluid and drilling in the critical zone).	Low
		Drilling fluid pH not maintained above 10.5 (water-based drilling fluid and drilling in the critical zone).	Low
		Ambient H ₂ S detector not located at the shale shaker (during drilling in the critical zone).	High
		Ambient H ₂ S monitoring system does not have audible and visible alarms located near the driller's position (during drilling in the critical zone).	Low
		Portable ambient H ₂ S concentration detection device not on location (during drilling in the critical zone).	High
Sulphide Monitoring			
		Drilling fluid sulphide content not monitored as required.	High
		Records of the sulphide content in the mud not maintained while drilling in the critical zone.	Low
Drilling Fluid Volumes		The usable surface drilling fluid volume is less than 100% of the calculated volume of a gauge hole minus the drill string displacement.	Low
Testing and Coring		Drillstem test conducted on critical sour zone(s).	High
		No ability to circulate above the core barrel (when required).	High
Underbalanced Drilling			
		Underbalanced drilling not conducted in accordance with requirements.	High
		Underbalanced drilling conducted where residents reside in the calculated EPZ (within critical zone).	High
Personnel			
		Licensee and/or contractor representative(s) do not have a current Enform H ₂ S Alive certification.	Low
		Drilling rig crew member(s) does not have a current Enform H ₂ S Alive certification.	Low

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		Five-man drilling rig crew not provided.	Low
		On-site personnel not trained in H ₂ S safety.	Low
		Safety personnel and adequate safety equipment for all workers not on site.	Low
Ignition Criteria		Licensee does not have clear and specific plans in place to ignite an uncontrolled flow.	High
		Dual ignition system not installed as required.	High
Well-Site Records and Reporting			
Notification of Commencement of Drilling (Spud)		Licensee did not notify the appropriate Field Centre within 12 hours of the commencement of the drilling of a well.	Low
Drilling and Completion Data Recording		Daily record of operations not recorded in the drilling logbook.	Low
Loss of Circulation, Kicks and Blowouts			
Loss of Circulation—Recording and Reporting		Loss of circulation not recorded in the drilling logbook.	Low
		Loss of circulation not reported to the ERCB (well requires an ERCB-approved ERP).	High
Kick—Recording and Reporting		Kick not recorded in the drilling logbook.	Low
		Kick not reported to the ERCB (well requires an ERCB-approved ERP).	High
Blowout—Recording and Reporting		Blowout not recorded in the drilling logbook.	Low
		Blowout not reported to the ERCB Field Centre immediately.	High
Deviation Surveys		Deviation surveys not conducted as required.	Low
		Records of deviation surveys not available.	Low
Directional Surveys—Critical Sour Wells		Directional surveys not conducted as required.	Low
		Records of directional surveys not available.	Low
Well Licence Posting		Well being drilled without a valid ERCB well licence.	High
		Well licence not posted.	Low
Licensee and Contractor Inspections			
Daily Inspections		Daily inspections not conducted.	Low
Recording Inspections		Daily inspections not recorded.	Low
Detailed Inspections		Detailed inspections not conducted as required.	Low
		ERCB Field Centre not contacted 48 hours prior to conducting detailed inspection (prior to penetrating the critical zone).	Low
Recording Inspections		Detailed inspections not recorded.	Low
Well-Site Fluids and Environment			
Invert Mud Systems		Make-up reserve for invert mud system located within 25 m of the wellbore.	Low
		Make-up reserve for invert mud system located within 50 m of a flare pit/tank, and/or incinerator, and/or burn pit.	Low
		Use of oil-based drilling fluids (or any other potentially toxic drilling additive) when drilling above the “base of groundwater protection” depth.	High
Crude Oil Used to Release Stuck Pipe (Spotting)		On-site safety not addressed before commencing crude oil spotting operations.	Low
		Crude oil used for spotting not dead oil and/or contains H ₂ S.	Low
		Subsurface pressures not maintained at all times during the spotting and circulation of the crude oil.	Low
Oil Storage Tanks		Oil storage tank not located 50 m from the wellbore, and/or flare pit/tank, and/or incinerator, and/or burn pit.	Low
Temporary Aboveground Storage Tank Diking Requirements		Temporary aboveground storage of fluids produced or stored does not meet requirements.	Low
Sump Construction and Operation		Sump not excavated from impervious undisturbed subsoil or constructed in permeable soil and not sealed with clay, a synthetic liner, or any other approved technique.	High
		Sump not sized for anticipated volume of drilling fluid.	Low
		Sump not located and/or constructed to prevent collection of natural run-off water.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
Containment of Fluids and Spills		Fluids not properly contained (spilled off lease).	High
		Fluids not properly contained (spilled on lease).	Low
		Spill on lease (in excess of 2 m ³) and/or any spill off lease not reported to the ERCB.	High
		Late notification to the ERCB of a reportable spill (licensee has taken appropriate measures to contain/clean-up prior to ERCB notification)	Low
Noise Emissions		Landowner not advised of spill off lease or significant (in excess of 2 m ³) spill on lease.	Low
		Drilling operations exceed permissible sound levels.	Low
Odour Emissions		H ₂ S emissions off lease.	High
		Other odour emissions off lease.	Low
Waste Management			
Characterization		Information not readily available to show proper characterization and/or volume of waste generated on site.	Low
Storage		Waste generated on site not properly stored.	Low
		All waste not removed after the completion of drilling operations.	Low
Disposal		Information not readily available to show proper storage, handling, and volume of all waste generated on site.	Low
		Waste material generated on site not disposed of in an approved manner.	Low
Accounting and Documentation		Records not readily available to show the source, volume, and final disposition of all waste generated on site.	Low
Underbalanced Drilling		Underbalanced drilling operation does not meet the minimum requirements set out in <i>ID 94-3: Underbalanced Drilling</i> .	Low
Oil Sands Core Holes and Evaluation Wells			
Surface Mineable Areas		Conductor pipe not set into a competent formation.	High
		Diverter system not installed or not operable.	High
		Sufficient heat not provided to ensure proper operation of diverter system.	Low
		Diverter system not mechanically tested daily.	Low
		Diverter line does not terminate a minimum of 15 m away from the wellbore.	Low
		Diverter line not adequately secured.	Low
		The mud tank or pit not located a minimum of 2 m from the wellbore.	Low
		Stabbing valve (or similar device) not provided.	High
		Stabbing valve and associated tools not operable and/or readily accessible.	High
		Stabbing valve in closed position.	Low
		Crossover subs (if required for the stabbing valve) not provided.	High
		Equipment inadequate to shut off any flow through the inside of the drill string (wireline coring operations).	High
		Hole not kept full of drilling mud during coring or tripping operations.	High
		Engine shut off devices not provided or not operable (within 15 m of the wellbore).	Low
		Core shacks, doghouses, etc., do not have two doors and/or one of the doors does not open facing away from the wellbore (within 15 m of the wellbore).	Low
		Open flame and/or other sources of ignition located within 15 m of the wellbore.	Low
		Winter shrouding surrounding the wellbore not open at the top and/or bottom.	Low
		Crew training inadequate.	High
		Licensee well-site representative does not possess a valid Enform Second-Line Supervisor's Certificate and/or not readily available.	High
		Other ERCB Requirements	
Directive 037 Service Rig Inspection Manual		Noncompliance with other ERCB regulations and requirements.	Low
Well Servicing			
BOP Type, Ram Size, & Pressure Rating		Using inadequate preventer	High
		Improper pipe ram sizing	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		BOP pressure rating low	High
		BOP stack arrangement does not conform to requirements (annular not provided)	High
		Spool improper pressure rating	High
		Tubing stripper not installed or not operating properly (Class I gas wells only)	High
		Tubing plug or other suitable shut-off device not installed in tubing string during tripping operations (Class I gas wells only)	High
		Wire line annular preventer not in use (conventional annular preventer not in service)	High
		Three-year shop servicing not conducted	Low
		BOP stack arrangement does not confirm to requirements (however, all components are present)	Low
		BOP pressure rating not detectable	Low
Bleed-Off & kill Lines		Pressure gauge at manifold inaccurate (e.g. out of calibration or range too large too large and no suitable back-up)	High
		Check valve in kill line in backwards	High
		Kill line or bleed-off line or manifold improper pressure rating	High
		Shock hose in kill line or bleed-off line improper pressure rating	High
		Kill line and/or bleed-off line not properly secured	High
		Casing gauge inaccurate (e.g. out of calibration or range too large and no suitable back-up)	High
		Manifold valves difficult to operate, need lubrication / repair, or washed out.	Low
		Valve handles missing on kill line or bleed-off line or manifold (no alternate handle provided)	Low
		Manifold design improper - check valve or valves location incorrect	Low
		Kill line or bleed-off line improperly positioned within BOP stack	Low
		Kill line or bleed-off line or manifold improper size	Low
		Bolts missing from bleed-off line or kill line flanges	Low
		End of flare line does not terminate in flare pit (Class I)	Low
		Bleed-off line disconnected from wellhead	Low
		Kill line and/or bleed-off line not connected to rig tank or manifold	Low
		Spool or flanged BOP port not used for bleed-off or kill line connection (Class II, IIA and III)	Low
		Improper spool used for bleed-off or kill line connection on Class II or III well (spool has threaded outlets whereas wellhead has flanged equipment)	Low
Non-Steel Hydraulic Lines Fire Sheathed Drill-String Valves Readily Accessible		Hydraulic hoses inadequately fire sheathed or fire sheathing damaged	High
		Stabbing valve not accessible or not operable	High
		Stabbing valve closing handle not on location or inaccessible	High
		Work string cross-over sub not available or accessible	High
		Stabbing valve in closed position	High
		Stabbing valve not full opening	High
		Poor maintenance of valve threads on stabbing valve or work string cross-over sub	Low
		Hanger cap on stabbing valve not full opening	Low
		Carrying handles/hanger cap not provided	Low
Equipment Adequately Heated		BOP's inadequately heated	High
		Bleed-off and/or kill-line valves iced up	High
		Ice plug in bleed-off and/or kill line	High
		Stabbing valve not kept in ice-free environment during cold weather conditions	Low
BOP Equipment & Controls Workable & Properly Connected		Accumulator has insufficient usable fluid available, at a minimum pressure of 8400 kPa, to close all BOP components (sizing calculations performed)	High
		Accumulator not connected to hydraulic system	High
		Accumulator gauge inaccurate or unavailable	High
		Full BOP controls not provided at or near Driller's station	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Remote BOP controls inadequate or controls not provided	High
		Nitrogen bottles not provided	High
		Nitrogen bottles not connected or improperly connected	High
		Gauge and/or fitting not available for taking pressure of nitrogen bottles	Low
		Nitrogen bottle gauge inaccurate	Low
		Nitrogen bottle volume low (insufficient usable fluid available - sizing calculations performed)	High
		Accumulator pump failed to recharge accumulator	High
		Annular or ram preventer seals leaking	High
		Hydraulic hoses improper pressure rating	High
		BOP control functions not clearly marked	High
		Fluid leak in hydraulic system (BOP's will not function)	High
		Fluid by-pass through BOP controls (BOP's will not function) or pressure dropped below 8400 kPa after function test with pump off. Bypass allows loss of pressure.	High
		Closing devices (cranks) not available for rod preventer	High
		BOP's failed to operate from remote position	High
		BOP's failed to operate from Driller's position	High
		BOP's not installed on well	High
		Manual BOP closing device not available or incorrectly sized	Low
		Accumulator pump failed to recharge accumulator within 5 minutes	Low
		Fitting not available to obtain accumulator precharge	Low
		Accumulator improperly connected (check valve location does not allow for accumulator recharge pump change)	Low
		Hydraulic hoses not protected from damage (outer protective coating either damaged or missing)	Low
		Remote controls located within 7m of well bore (Classes I, II, IIA) or within 25m (Class III)	Low
		Fluid leak in hydraulic system (BOP's still function)	Low
		Fluid by-passing through BOP controls (BOP's still function) and no pressure loss occurring on system	Low
		Annular or ram preventers failed to close within flange during operations	Low
		Bolts missing from BOP or wellhead to the wellhead flange during operations	Low
		Accumulator bottles cannot be isolated to prevent back-up nitrogen loss into system	Low
Crew BOP Training		Crew training inadequate	High
		Crew drills not being performed	High
		Rig horn inoperable or not in place for sounding crew alert (crew did not respond to alternative alert)	High
		Crew BOP drills not recorded in tour reports (prior to commencement of operations or after BOP's installed)	Low
		Rig horn inoperable or not in place for sounding crew alert (crew responded to alternative alert)	Low
Fluid Measurements & Hole-Filling Procedures		Rig pump and/or tank not on location where required	High
Driller Has P.I.T.S. Well Servicing Certificate		Drill has never held valid certificate (regulation requiring Driller's certification is forthcoming)	High
		Driller's certificate has expired	High
Well To Flame-Type Equipment Smoking Rules Being Observed		Flame-type equipment operating within 25m of well bore (welder, steamer)	Low
		Member of rig crew or other individual observed smoking within 25m of well bore	Low
		Evidence of smoking within 25m of well bore	Low
DST Equipment		Remote controlled master valve on testing head not provided	High
		Remote controlled master valve on testing head not operating	High
		Reverse circulating sub not installed in test string	High
Warning Signs Posted In H2S Areas		Warning sign not posted	Low
		Warning sign illegible	Low
		Warning sign posted on known sweet well	Low
BOP Pressure Test Recorded & Test Procedures		BOP Components not pressure tested	High
		Stabbing valve would not pressure test (after operations in progress)	High
		Pressure test not recorded in tour reports	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Incomplete pressure test data recorded in tour reports	Low
		Low-pressure test not conduct	Low
		Low-pressure test not conducted prior to high-pressure test	Low
		Improper test pressure used	Low
		Pressure testing medium not low viscosity fluid	Low
		Well control equipment testing times less than 10 minutes	Low
Daily Mechanical Test Recorded		Daily BOP mechanical tests not completed	Low
		Daily mechanical tests not recorded	Low
		Description of mechanical tests conducted incomplete	Low
Weekly Diesel Engine Tests Recorded		Diesel engine shut-off test not conducted prior to commencing operations	Low
		Diesel engine shut-off test, conducted prior to commencing operations, not recorded	Low
		Weekly diesel engine shut-off test not conducted	Low
		Weekly diesel engine shut-off test not recorded	Low
Diesel Engine Shut-Offs		Diesel engine shut-off did not operate	Low
		Air supply not connected to diesel engine shut-off	Low
		Diesel engine not equipped with shut-off	Low
Engine Exhausts		Engine exhausts in need of repair	Low
		Engine exhausts not directed away from well bore	Low
End Of Flare Line		Flare line not 50m from well bore	Low
		Flare pit improperly constructed	Low
Rubbish Burn Pile		Camp and rig combustible debris not being disposed of properly as required by Appendix 1100	Low
		Information not readily available to show proper characterization of wastes generated on site (Dangerous / Non-dangerous) (e.g. CAODC wall chart)	Low
		Waste generated on site not properly stored (i.e. Secondary containment)	Low
		Waste material generated on site disposed of at a facility not approved to handle that specific waste	Low
		Records not available showing source, volume and final disposition of waste	Low
Crude Oil Storage Tank		Crude oil storage tank located within 50m of well bore	Low
		Service rig tank located within 7m of rig pump	Low
Condensate Rules Being Observed		Open tank used for storing or gauging or measuring the pumping rate	High
		Minimum distance of 50m not maintained between the wellhead and storage tank	High
		Positive shut-off valve not installed between pump and wellhead	High
		Check valve not installed between pump and wellhead	High
		Surface lines not pressure tested or test pressure inadequate	High
		Approval to use condensate for fracturing not obtained from Calgary office	Low
Fluids Properly Contained		Workover or well bore fluids spilled on or off lease and not reported. (Greater than 2m3 on lease, any volume off lease.)	High
		Late notification to the ERCB of a reportable spill (licensee has taken appropriate measures to contain/clean-up prior to ERCB notification)	Low
		Chemicals, mud additives, fuel, or other material spilled on or off lease	High
Licence Posted		Well license not at lease (well re-entry/not original licensee)	Low
		Well license not posted (well re-entry / not original licensee)	Low
		Contractor and operator inspections not recorded	Low
		Contractor and operator detailed inspections not conducted	Low
		Contractor and operator daily inspections not conducted	Low
Directive 033		Failure to produce documented practices at the well site for the safe management of the potential for explosive mixtures and ignition in wells and associated surface equipment.	High
		Failure to ensure that all well site staff responsible for well control and blowout prevention understand the documented practices and know how to apply them.	High
OGCR		Failure to effectively control any oil, gas or water encountered during drilling, testing, completion, or reconditioning operations at the well	High

[Directive 070 Drilling Waste Disposal Inspection Manual \(Latest release: February 2002\)](#)

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
	Drilling Waste		
Routine Site Assessment			
Well site information		Unique well or surface location is incorrect on notification form.	Low
		Sump is not on well site and off-site location is not reported on notification form.	Low
		Sump location is incorrect on notification form.	Low
Disposal method		Disposal method other than what was reported on the notification form was used.	Low
		Site is unsuitable for the disposal option.	High
		Sump located in porous/coarse soil.	High
		There is unauthorized disposal on roads.	High
		There is landspreading on topsoil.	High
Waste material and mud type		Mud type other than what was reported on notification form was used.	Low
		There is disposal of toxic material.	High
		Hydrocarbons are present in drilling wastes and oil content was not tested or reported.	High
		A nonapproved mud system for landspray while drilling is used.	High
Waste volume		Waste volume is significantly different from that reported on the notification form.	Low
		Volume is too large to be managed by the planned disposal option.	Low
Signage and security		Sump site has no signage identifying the well licensee or location.	Low
		Sump is not fenced to prevent public or animals from entering it. May escalate if site poses a public hazard.	Low
Compliance with other EUB requirements		Other oilfield wastes or materials of unknown origin are being disposed of with drilling waste.	High
		Storage requirements are not being met (<i>Guide 55</i>).	High
Sampling			
Waste sampling procedures		Adequate mud samples are not taken during landspray while drilling disposal.	Low
		Samples taken are not representative of the waste material.	High
		Sampling is incomplete or improper.	High
Soil sampling procedures		Samples of receiving soils are not taken prior to waste disposal.	High
		Number of samples taken is inadequate for off-lease disposal area.	Low
		Sampling of receiving soils is incomplete or improper.	High
Storage and transportation		Samples are collected in containers that are not clean and may contain other contamination.	Low
		Inappropriate containers are used for waste type or intended tests.	Low
		Samples are not kept cool during storage and transportation.	Low
		Samples are stored an unacceptable length of time prior to testing.	Low
Sample documentation		Samples are not appropriately labeled.	Low
		Sampling procedures are not documented.	Low
		Sample locations are not documented.	Low
Analytical procedures		Analytical procedures are incomplete or improper.	High
		QA/QC testing is incomplete or improper.	Low
On-site disposal (mix-bury-cover, landspread)			
Waste containment		Wastes are not contained by pits or berms and there is potential for off-lease migration.	High
		Wastes have migrated off the intended disposal site. May escalate if migration was known and no steps were taken to prevent it.	High
Mix ratio and application rate		Failure to incorporate landspread wastes into the soil at three parts subsoil to one part waste.	High
		Exceeds landspread maximum application rate as determined by waste characterization.	High
		Fails to mix-bury-cover at ratio of three parts subsoil to one part waste or minimum mix as determined by waste and soil characterization, if greater than 3/1.	High
Total loading and receiving soil limits		Lifetime loading limits for chlorides or nitrogen are exceeded.	High
		Receiving soils exceed EC (≤ 4 dS/m) and SAR (≥ 8) limits for a landspread disposal.	High
Soil cap and base for mix-bury-cover		Soil cap placed on mixed waste is less than 1 m.	Low
		Final waste mix is not 1 m above the water table or permeable material.	High
Notification and time requirements		Disposal is conducted within 48 hours of notification to the appropriate regulatory agency.	Low
Off-site disposal (landspray while drilling, landspray, pump-off)			
Waste control and containment		Disposal is closer than allowable limits to surface water.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Disposal site has a slope greater than 5 per cent.	High
		There is migration of drilling waste off of the disposal site.	High
Receiving soils		Receiving soils exceed EC of 2 dS/m or SAR of 6. (The "one unit" allowable increase for saline/sodic soils may not be considered, as it applies to landspreading on site only.)	High
Disposal procedures		Solids or fluids containing solids are pumped off.	High
		Disposal practices result in pooling, clumping, or erosion.	High
		Cement returns are not isolated from the drilling waste during landspray while drilling.	High
Management of hydrocarbons and toxicity		Wastes containing hydrocarbons are disposed of by landspray while drilling or pump-off.	High
		Hydrocarbons are not properly addressed in landspray.	High
		Fluids pumped off have not passed toxicity test. May escalate if has adversely impacted the environment.	High
Off-site disposal location accuracy		Off-site spread area information is incomplete, inaccurate, or nonexistent.	Low
		There are discrepancies between actual and reported disposal area in regard to location and/or size.	Low
Solids loading and application rates		Application rates for landspray or landspray while drilling as outlined in <i>Guide 50</i> are exceeded.	High
		Solids loading rate on vegetation is exceeded. (Solids on vegetated land must be ≤ 6 tonnes/ha.)	High
		Application rates for pump-off as outlined in <i>Guide 50</i> are exceeded.	High
Landowner consent		Failure to obtain landowner approval for off-site drilling waste disposal.	High
Notification and time requirements		Disposal by landspray while drilling conducted more than 48 hours after drilling completed.	Low
		Failure to inform the appropriate regulatory agency of landspray while drilling prior to drilling.	Low
		Disposal by pump-off or landspray conducted within 48 hours of notification to the regulatory agency.	Low
Records review (no field inspection conducted)			
Notification procedures		Failure to submit notification form to the appropriate regulatory agency.	Low
		Failure to inform the regulatory agency of landspray while drilling operations prior to drilling the well(s).	Low
		The disposal was completed within 48 hours of notification to the appropriate regulatory agency.	Low
Notification forms and support data		Post-disposal notification not submitted upon completion of landspray while drilling.	Low
		Information required in Parts 1 and 2 of the notification form is incomplete or inaccurate.	Low
		Information required under the selected disposal option is incomplete or inaccurate.	Low
		Information is not submitted to the Drilling Waste Database.	Low
		Mud additives are not reported.	Low
		List of mud additives is incomplete.	Low
		Off-site spread area information (spread area map and site coordinates) is incomplete, inaccurate, or nonexistent.	Low
		Well-related criteria are not completed.	Low
		Disposal in area not agreed to by landowner.	High
Disposal calculations		Calculation errors made in calculations based on formulas outlined in <i>Guide 50</i> . May escalate if errors caused	Low
Analytical data		Analytical data required by <i>Guide 50</i> are incomplete, improper, or nonexistent.	High
		QA/QC testing is incomplete or improper.	High
		Inadequate testing of wastes for landspray while drilling disposal.	Low
Nonroutine Site Inspection Results			
Runoff control		There is no runoff control.	High
Fluid disposal		Excess fluids on the treatment site; the site is under water.	Low
		Evidence of fluid migration causing adverse impact to vegetation/environment. May escalate based on impact and/or well licensee's disposal management.	High
Overall material storage		Stored directly on surface or in unlined pit.	High
		Material stored for over six months when access and weather have permitted treatment. Treatment must commence within six months of rig release date.	High
Evidence of treatment		There is no evidence of treatment activity during the season (April-October) or no evidence of work completed since the previous site visit.	Low
		No site analysis conducted for over one year.	Low
Hydrocarbon odour		Significant hydrocarbon odour is present. Confirm level of hydrocarbon content.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
Visible hydrocarbon		Visible hydrocarbon is evident.	Low
Site security		There is a potential hazard for people or animals.	Low
Signage		No signage is present.	Low
Foreign materials		Garbage, cement returns, sump liners, or other foreign (inert) wastes are incorporated into treatment area.	Low
		Weeds are not controlled.	Low
Vegetation/regrowth		Limited or no growth has occurred and closure has been applied for.	Low
Manual 001: Facility and Well Site Inspections (Effective January 1, 2011)			
	Waste Facilities		
For a list of the noncompliant events for the requirements that have been risk assessed in the Waste Facilities Compliance Category please refer to Manual 001: Facility and Well Site Inspections.			
Manual 001: Facility and Well Site Inspections (Effective January 1, 2011)			
	Oil Facilities/Gas Facilities		
For a list of the noncompliant events for the requirements that have been risk assessed in the Oil Facilities/Gas Facilities Compliance Category please refer to Manual 001: Facility and Well Site Inspections.			
Manual 001: Facility and Well Site Inspections (Effective January 1, 2011)			
	Well Site Inspections		
For a list of the noncompliant events for the requirements that have been risk assessed in the Well Site Inspection Compliance Category please refer to Manual 001: Facility and Well Site Inspections.			
Directive 066 Requirements and Procedures for Pipelines (Released: December 2005)			
	Pipelines		
Pipelines Specifications		Substance is different from that stated on licence and the line is operating.	High
		H2S content is higher than that stated on licence and the line is operating.	High
		Pressure design does not meet CSA Standard Z662, Clause 4.3.3, or Pipeline Regulation, Section 13.	High
		Outside diameter differs from that stated on the licence but meets the pressure design of <i>CSA Standard Z662</i> , Clause 4.3.3, or Pipeline Regulation, Section 13.	Low
		Pressure design does not meet CSA Standard Z662, Clause 4.3.3, or Pipeline Regulation, Section 13.	High
		Wall thickness differs from that stated on the license but meets the pressure design of CSA Standard Z662, Clause 4.3.3, or Pipeline Regulation, Section 13.	Low
		Materials used: Pipe material is not as stated on the licences.	High
		Pressure design does not meet CSA Standard Z662, Clause 4.3.3, or Pipeline Regulation, Section 13.	High
		Type and grade differ from that stated on the licence but meet the pressure design of CSA Standard Z662, Clause 4.3.3, or Pipeline Regulation, Section 13.	Low
Joint type		Joint type is different from that stated on licence but allowed by CSA Standard Z662 and Directive 56, Table 3.7.	Low
		Joint type is different from that stated on licence and is not allowed by CSA Standard Z662.	High
		Threaded steel is used and buried below ground.	High
		Internal coating is not as approved.	Low
		From or To location is different from that stated on licence.	Low
		From or To facilities code is different from that stated on licence.	Low
		Length of pipeline/route: Route is different from that stated on licence.	Low
		Environment code is different from that stated on licence.	High
MOP		MOP is greater than that stated on licence but does not exceed the manufacturer's rating of the pipe, valves, flanges, or fittings or the limitations for sour natural gas as applicable.	Low
		MOP is greater than that stated on licence and exceeds the manufacturer's rating of the pipe, valves, flanges, or fittings and connecting pipelines.	High
Construction		There is no approval to construct.	High
		No construction notice is given to appropriate ERCB Field Centre.	Low
		Conditions stated on licence are not met.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Valves, fittings, or flanges do not meet the requirements of the licence for the pipeline.	High
		Road crossings are unsatisfactory.	High
		Railway crossings are unsatisfactory.	High
		Depth of cover is unsatisfactory.	High
		Ditch preparation is unsatisfactory.	High
		Joining/radiograph is unsatisfactory.	High
		Bored crossings are unsatisfactory.	High
		Pipe coating/handling conditions are unsatisfactory.	High
		Backfill procedures are unsatisfactory.	High
		Lease piping is unsatisfactory.	High
		Safety precautions are unsatisfactory.	High
Ground Disturbance		The status of crossing agreements is unsatisfactory.	High
		Marking of existing pipelines inside a controlled area is unsatisfactory.	High
		Total disregard for the requirements for marking of pipelines inside a controlled area.	High
		Hand excavation: Mechanical excavation takes place within 5 m of existing pipeline prior to hand exposure.	High
		Total disregard for the hand excavation requirements.	High
		Machine working within 60 cm without authorization from the owner of the existing crossing.	High
		Notification to the owner of the existing pipeline prior to ground disturbance was unsatisfactory.	High
		Notification to the owner of the existing pipeline prior to backfill was unsatisfactory.	High
		A licensee is charging a fee to locate a pipeline or mark a pipeline or perform inspections or supervise a ground disturbance as required under Part 5 of the Pipeline Regulation.	High
Pressure Testing		No test notice is given to the appropriate ERCB Field Centre.	Low
		Test medium/disposal unsatisfactory.	High
		Test piping unsatisfactory.	High
		Not tested under operating conditions.	High
		Safety precautions unsatisfactory.	High
		Pressure test recorded unsatisfactory.	Low
		Test pressure not between 25 and 90 per cent of the pressure recorder range.	Low
		Test pressure/duration does not conform to requirements.	High
Discontinued Pipeline		Not physically isolated/disconnected.	Low
		Not left in safe condition.	High
		Corrosion control unsatisfactory.	Low
Abandoned Pipeline		Not physically isolated/disconnected.	High
		Not cleaned/purged and left in a safe condition.	High
		Not plugged/capped.	Low
Operations Review		Operations and maintenance procedures manual incomplete.	Low
		No operations and maintenance procedures manual, or not followed.	High
		Emergency procedures manual unsatisfactory.	High
		No approved site-specific emergency response plan (ERP) where required.	High
		Safety equipment specified in ERP not installed.	High
		Copy of ERP not readily available.	High
		ERP manual not updated yearly, and exercises not held or details not documented.	High
		Operator on-site representative not familiar with ERP.	High
		Operator not communicating with residents in emergency planning zone (EPZ).	Low
		Pressure test data records unsatisfactory.	Low
		Internal corrosion control—no records in corrosive environment.	High
		Internal corrosion control—no records in noncorrosive environment.	Low
		Internal corrosion control—no monitoring and mitigation in corrosive environment.	High
		External corrosion control/cathodic surveys—no records of survey results.	High
		Cathodic protection system—not operational or not installed.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure/repair records unsatisfactory.	Low
		Failure to notify appropriate ERCB Field Centre.	High
		No crossing approval in place.	High
		Crossing inspection record unsatisfactory.	Low
		Leak detection unsatisfactory.	High
		Pipe has been discontinued or abandoned but is still shown as operating on ERCB records.	Low
		Pipe is operating but is shown as discontinued or abandoned on ERCB records.	High
		Pipeline sign missing or defaced on one side of crossing.	Low
		Pipeline sign missing or defaced on both sides of a crossing.	High
		Aboveground facility identification unsatisfactory.	Low
		Compressor/oil pump station identification unsatisfactory.	Low
		Facility exceeding permissible sound levels.	High
		Right-of-way maintenance and patrols not being performed and/or documented.	Low
		Right-of-way maintenance and patrols not being performed and/or documented in Class 2, 3, or 4 area.	High
		Pressure control devices or pressure relief device installations unsatisfactory (i.e., not installed where required or does not function).	High
		Required function tests not conducted or recorded.	High
		Surface pipeline unsatisfactory.	Low
Directive 055 Storage Requirements (references are to Directive 055 sections)			
General storage practices (Section 3)		Materials not consumed within two years.	Low
		Oilfield wastes/empty barrels stored more than one year.	Low
		All temporary single-walled aboveground tanks not diked (unless operation qualifies for it to be optional).	High
		Temporary tank (not diked) not emptied or removed from site within 72 hours of completing the operation (drilling, completions, testing, or servicing operations).	Low
		Contaminated material stored directly on the ground.	High
Siting of storage areas/facilities (Section 3.6)		Not readily accessible for fire fighting and other emergency procedures.	Low
		Located on a floodplain.	Low
		Located within 100 m of normal high-water mark of a body of water, permanent stream, or water well used for domestic purposes.	Low
Aboveground storage tank(s) with an internal volume less than 5 m ³ (Section 5.1)		Not externally coated or made from weather and corrosion-resistant material.	Low
Aboveground storage tank(s) with internal volume equal to or greater than 5 m ³ (Section 5.3)		Steel tank(s) not externally coated.	Low
		Spill control device(s) not installed/inadequate.	Low
		No measures in place to prevent overfilling of tanks.	Low
		No tank dike where required.	High
		Liner not installed where required/insufficient liner.	Low
		Tank loading/unloading areas not designed to contain spills or leaks.	Low
		Tank dike(s) deteriorating, developing leaks, or unable to withstand hydrostatic head.	Low
		Insufficient tank dike capacity.	Low
		Tank dike(s) contain openings (e.g., open dike drains).	Low
		Impervious liner does not cover the dike and the area within the dike not keyed into dike walls	Low
		Aboveground tank not tested at the required five-year frequency; operator cannot demonstrate tank integrity	Low
		Inadequate leak detection methods.	Low
		Indoor aboveground storage tanks not surrounded by containment device and/or drain and collection tank with sufficient capacity.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
Double-walled tanks with internal volume >4 m3 (Section 5.33)		No measures in place to prevent overfilling of tank(s) (alarms/automatic shutoffs).	Low
		Spill control device(s) not installed/inadequate.	Low
		No system to monitor interstitial space.	Low
		No barriers to protect tank from vehicular damage.	Low
		Automatic shutdown system not checked on a monthly basis.	Low
Underground storage tank(s) including associated piping (Section 6.0)		No leak detection and secondary containment where required.	High
		Underground storage tank(s) not double walled (tanks installed after October 31, 2001).	High
		Newly installed tank(s) and associated piping not tested prior to service.	High
		Steel tank(s) not cathodically protected or externally coated.	Low
		Tank loading/unloading areas not designed to contain spills or leaks.	Low
		Spill control devices not installed/inadequate.	Low
		Tank breathing vents not designed to prevent fluid overflow.	Low
		No measures in place to prevent overfilling of tanks.	Low
		Underground tank(s) not tested at the required three-year frequency; operator cannot demonstrate tank integrity.	Low
Storage containers with combined volume >1 m3 on site (Section 7)		Insufficient or no secondary containment (dikes, curbs, and collection trays).	Low
		No weather protection where required.	Low
Bulk pads for the storage of solid materials (Section 9)		Using concrete as primary containment where there is potential for stored materials to leach (bulk pads constructed after October 31, 2001).	Low
		Not constructed of compacted clay, synthetic liner, concrete, or asphalt.	Low
		No continuous curb on three sides and/or curb height not minimum 15 cm.	Low
		No leachate collection or leak detection system where required.	High
Inspection, monitoring, and record keeping (Section 10)		Inventory records for last two years not available.	Low
		Records of inspection and corrosion monitoring programs not available.	Low
		Other records not available where required.	Low
		Applicable approvals, licences, or permits not on site or at field/plant offices.	Low
Withdrawal of storage tanks from service (Section 12)		Aboveground/underground tanks out of service do not meet the requirements.	Low
Incident Cause			
Failure/Hit		CD CONSTRUCTION DAMAGE	
		Poor construction practices resulting in Failure after one year's service/operation.	Low
		Poor construction practices resulting in Failure within one year's service/operation.	High
		Total disregard for CSA requirements and ERCB acts and regulations.	High
		MD MECHANICAL DAMAGE	
		Includes dents, scrapes, and gouges to pipe body that were not repaired or replaced at time of contact; the system has been allowed into service and failed due to stress or corrosion.	High
		JF MECHANICAL JOINT Failure	
		Includes gasket, screwed couplings, "O" ring leakage, mechanical interference joints, bell, and spigot overinsertion, damaging internal coating.	Low
		CX CORROSION EXTERNAL	
		Cathodic potential is less than nominal -0.85 volts on an operating or discontinued system.	High
		Cathodic protection not installed within one year of service/ operation.	High
		Failure to follow the investigative procedures detailed in Corrosion Guide, Section 1.3 (Appendix 3).	Low
		Failure to follow the investigative procedures detailed in Corrosion Guide, Sections 2 and 4 (Appendix 3).	High
		CI CORROSION INTERNAL	
		There is no documented monitoring or mitigation program in place and/or company is not following program.	High
		There is no monitoring or mitigation program in place for pipelines with major potential public and environmental consequences, as referenced in Appendix 3, Section 4.	High
		Failure to follow the investigative procedures detailed in Corrosion Guide, Sections 2, 3, and 4 (Appendix 3).	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to follow the investigation procedures detailed in Corrosion Guide, Sections 1.1, 1.2, and 3 (Appendix 3).	Low
		DO DAMAGE BY OTHERS	
		Proper procedures were not followed.	High
		Complete disregard for the acts and regulations.	High
		EM EARTH MOVEMENT—includes river changes, frost heaves, and slope movement	
		Right-of-way surveillance was conducted and documented but no action was taken.	High
		No right-of-way surveillance was conducted.	High
		GW GIRTH WELD Failure—includes metal Failure in the heat-affected zone of weld or weld imperfections; not corrosion related	
		Mandatory nondestructive inspections requirements were not followed.	High
		IF INSTALLATION Failure—Failures at a compressor station, pumping station, meter station, etc., that are all part of pipeline surface installation	
		Designed for full range of operating conditions, but emergency shutdown and safety protection devices do not meet requirements.	High
		Not designed for full range of operating conditions.	High
		MJ MISCELLANEOUS JOINT Failure—includes plastic butt fusion, socket fusion, plastic butt and fibreglass threaded or bonded joining, welding or explosion welding of aluminum, mechanical interference fit, or thermal joining	
		Manufacturer's techniques and specifications not followed.	High
		MS MISCELLANEOUS—includes erosion from external jetting action, vandalism, lightning strikes, flooding from rivers	
		OE OPERATOR ERROR	
		Operating and maintenance procedures manual not followed.	High
		WF OTHER WELD Failure—includes weldolet branch connections	
		Caused by preventable external forces (e.g., wildlife rubbing against riser on line pipe).	Low
		Proper installation procedures were not used or followed.	High
		OP OVERPRESSURE Failure—includes frozen lines, waxed-off lines, pig stuck in line, hydrate plugs, switch Failure, thermal overpressure	
		Inappropriate construction or design, or documented operating procedures not followed.	High
		PF PIPE Failure—includes pipe body Failures, stress corrosion cracking, hydrogen-induced cracking, brittle cracks, running cracks, Failure of plastic pipes, Failure due to fatigue and lamination separations (metallurgical report must follow)	
		Operator is aware of pipe body issues but has not implemented mitigative measures.	High
		SR SEAM RUPTURE—includes those caused by electric resistance welding (ERW) mill defects, but not Failures due to overpressurization or corrosion	
		The operator is aware that the line has integrity issues but has not implemented mitigative measures.	High
		VF VALVE OR FITTING Failure—includes gasket blowouts, pig trap Failures	
		Pressures do not comply with manufacturer's rating, or maintenance and testing frequency are not followed.	High
			High
	Spill	Release reporting (Pipeline Act 36(1); IL 98-1)—Operator is aware of a reportable release but neglects to report it. The ERCB may discover the spill during an inspection, receive a report from a third party, or receive a complaint.	
	Release detail accuracy	Spill reported as contained on lease when it is off lease.	Low
		Actual affected area significantly different from or larger than reported.	Low
		Actual volume of release significantly larger than reported.	Low
		Operator fails to report that spill has entered water.	High
		Operator advises that spill has been cleaned up when it has not. Cleanup refers to all free fluids being removed.	High
		The reported location of spill is incorrect.	Low
	Control and containment (Pipeline Regulation 54)	Operator does not take immediate steps to shut off source of liquid release (i.e., continues to produce well with leak while awaiting equipment and/or repairs).	High
		Unaddressed spill into water, operator aware, no action is being taken.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Operator does not take steps to contain spill as soon as possible and prevent spill from spreading (e.g., berms, dykes, booms if on water).	High
		Recovery and cleanup—Spill not adequately cleaned up. (Free fluids still remain.)	High
Waste disposal		Spill wastes taken to facility not authorized to accept/handle.	High
		A one-time treatment site is not limited to a single application of waste, as per Directive 058, Section 16.2.	High
		Inappropriate material put into land treatment site (i.e., salt contaminated).	High
		Spill material moved off site for land treatment without meeting conditions in IL 98-2.	High
		Spill material (waste) not properly stored.	High
Area security		Area is unsafe and steps not taken to restrict public access.	High
		Steps not taken to restrict animal access.	Low
		Landowner notification—Release has affected off-lease area and landowner/resident not contacted.	High
Siting of storage areas/facilities (Section 3.6)		Not readily accessible for fire fighting and other emergency procedures.	Low
		Located on a floodplain.	Low
		Located within 100 m of normal high-water mark of a body of water, permanent stream, or water well used for domestic purposes.	Low
Aboveground storage tank(s) with an internal volume less than 5 m ³ (Section 5.1)		Not externally coated or made from weather and corrosion-resistant material.	Low
Aboveground storage tank(s) with internal volume equal to or greater than 5 m ³ (Section 5.3)		Steel tank(s) not externally coated.	Low
		Spill control device(s) not installed/inadequate.	Low
		No measures in place to prevent overfilling of tanks.	Low
		No tank dike where required.	High
		Liner not installed where required/insufficient liner.	Low
		Tank loading/unloading areas not designed to contain spills or leaks.	Low
		Tank dike(s) deteriorating, developing leaks, or unable to withstand hydrostatic head.	Low
		Insufficient tank dike capacity.	Low
		Tank dike(s) contain openings (e.g., open dike drains).	Low
		Impervious liner does not cover the dike and the area within the dike not keyed into dike walls	Low
		Aboveground tank not tested at the required five-year frequency; operator cannot demonstrate tank integrity	Low
		Inadequate leak detection methods.	Low
		Indoor aboveground storage tanks not surrounded by containment device and/or drain and collection tank with sufficient capacity.	Low
Double-walled tanks with internal volume >4 m ³ (Section 5.33)		No measures in place to prevent overfilling of tank(s) (alarms/automatic shutoffs).	Low
		Spill control device(s) not installed/inadequate.	Low
		No system to monitor interstitial space.	Low
		No barriers to protect tank from vehicular damage.	Low
		Automatic shutdown system not checked on a monthly basis.	Low
Underground storage tank(s) including associated piping (Section 6.0)		No leak detection and secondary containment where required.	High
		Underground storage tank(s) not double walled (tanks installed after October 31, 2001).	High
		Newly installed tank(s) and associated piping not tested prior to service.	High
		Steel tank(s) not cathodically protected or externally coated.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Tank loading/unloading areas not designed to contain spills or leaks.	Low
		Spill control devices not installed/inadequate.	Low
		Tank breathing vents not designed to prevent fluid overflow.	Low
		No measures in place to prevent overfilling of tanks.	Low
		Underground tank(s) not tested at the required three-year frequency; operator cannot demonstrate tank integrity.	Low
Storage containers with combined volume >1 m3 on site (Section 7)		Insufficient or no secondary containment (dikes, curbs, and collection trays).	Low
		No weather protection where required.	Low
Bulk pads for the storage of solid materials (Section 9)		Using concrete as primary containment where there is potential for stored materials to leach (bulk pads constructed after October 31, 2001).	Low
		Not constructed of compacted clay, synthetic liner, concrete, or asphalt.	Low
		No continuous curb on three sides and/or curb height not minimum 15 cm.	Low
		No leachate collection or leak detection system where required.	High
Inspection, monitoring, and record keeping (Section 10)		Inventory records for last two years not available.	Low
		Records of inspection and corrosion monitoring programs not available.	Low
		Other records not available where required.	Low
		Applicable approvals, licences, or permits not on site or at field/plant offices.	Low
Withdrawal of storage tanks from service (Section 12)		Aboveground/underground tanks out of service do not meet the requirements.	Low

Oil Sands and Coal Branch / Oil Sands and Coal Mining Group

Oil Sands Conservation Act

AR 76/1988 Oil Sands Conservation Regulation (consolidated to AR 158/2009)

	Mineable Oil Sands		
		Failure to meet the requirements set out in the guide published by the board for the applications made under section 10, 11, 12 or 13 of the Act	Low
		Failure to obtain approval from the Board prior to commencing, suspending or abandoning an oil sands site, an experimental scheme, an in situ operation, a mining operation or a processing plant	High
		Failure to obtain approval from the Board prior to commencing any substantial modification at an oil sands site, an experimental scheme, an in situ operation, a mining operation or a processing plant	High
		Failure to obtain approval to produce gas from a well completed in the oil sands strata, unless the Board has exempted the well from the application of this subsection	High
		Failure to make an application by the well licensee in accordance with subsection 3(3) and Failure to include the documentation required by the Board	High
		Failure to apply for and obtain a license prior to drilling a well or undertaking any operations preparatory or incidental to drilling except surveying for: (a) evaluation wells & (d) any water supply well of a depth of more than 150 m	High
		Failure to carry out any operations incidental to the drilling of a well or continuing any drilling operations, servicing operations, producing operations or injection operations for a well in accordance with the requirements of Parts 3, 6, 8 and 11 of the OGCR	Low
		Failure to apply for and obtain a license before suspending normal drilling operations, abandoning the well, plugging back or abandoning a formation in the well, removing a casing from the well or resuming drilling operations after a previous suspension or abandonment of the well in accordance with Part 3 of the OGCR.	High
		Failure to utilize conductor pipe and a diverter system if there is any indication that gas may be encountered during drilling of any oil sands evaluation well within an approved mine site, notwithstanding subsection (5) of the OSCR.	High
		Failure to submit to the Board all well data, analyses, tests, surveys and logs in accordance with Part 11 of the OGCR.	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		Failure to comply with Parts 6,7 and 8 of the OGCR with regards to drilling, completion, servicing and production operations.	Low
		Failure by the operator to burn gas with a hydrogen sulphide content of greater than 10 moles per kilomole using an incinerator or through a flare line, as detailed in the OSCR if: (a) a flare line is installed for routine flaring or burning of gas during normal operations, (b) a pressure relief valve, rupture disk or burst plate is installed on a separator or other pressure vessel & (c) gas is discharged during any test, cleaning or servicing operation.	High
		Failure to erect signs, as specified by the Board, at the entrance to the site warning of the presence of poisonous gas at an oil sands site that is handling gas with a hydrogen sulphide content that exceeds 10 moles per kilomole.	Low
		Discharge to the atmosphere stock tank vapours or any other gas produced from the well, other than steam vapours, unless they are burned ensuring that the average concentration of hydrogen sulphide and sulphur dioxide in the ambient air does not exceed the maximum permissible concentrations as determined by the Department of Environment at an oil sands site that is handling gas with a hydrogen sulphide content that exceeds 10 moles per kilomole.	Low
		Gas discharged pursuant to subsection (1)(b) has not been burned in accordance with section 6 of the OSCR.	High
		Failure to file an emergency response plan to the Board, when requested, that will be followed when (a) when handling a gas with a hydrogen sulphide content greater than 10 moles per kilomole or (b) in the event of an uncontrolled emission of contaminants.	Low
		Failure by the operator to prevent loss, injury, damage and fire at an oil sands site in accordance with the requirements of Part 8 of the OGCR	Low
		Written approval not obtained to cause or permit the burning of crude bitumen, gas, oily waste or discard or other material	Low
		Failure to immediately report to the Board effluent being burned under emergency conditions	Low
		Venting, flaring or wasting of any significant amount of gaseous or liquid hydrocarbon without the permission of the Board except in case of an emergency.	High
		Failure to report to the Board any liquid spill, break in a vessel or fire that occurs on an oil sands site	High
		Failure to provide the details that occurred during an incident as required in the OSCR.	Low
		Failure to keep records and file with the Board any other reports that may be required.	Low
		Inaccurate measurement, recording or reporting made to the Board.	High
		Failure to retain records at the place and by the person specified by this Regulation for a period of 18 months from the time the record is made or any other period specified by the Board.	Low
		Failure to use the units and methods prescribed whenever the measurement of oil sands, crude bitumen, derivatives of crude bitumen or oil sands products is required by the provision of (a) an Act, (b) a regulation, (c) an order, direction, term or condition	High
		Failure by an operator to measure oil sands, crude bitumen, derivatives of crude bitumen or oil sands products, and all significant process streams that have a bearing on the calculation of material balances of hydrocarbons or sulphur, in a manner satisfactory to the Board.	High
		Failure to convert volumes at standard temperature and pressure conditions	Low
		Failure to comply with the measurement requirements as set out in Part 14 of the OGCR and any other requirements specified by the Board	High
		Failure to apply for and obtain approval of the Board for the storage or disposal of any oil sands or discard accumulated during mining or overburden removal.	High
		Failure to apply and obtain approval of the Board for the management of tailings, and manage tailings in accordance with Directive 074.	High
		Failure to obtain approval for a mine site plan and for any changes to an approved annual mine plan that would reduce the amount of oil sands recovered.	High
		Mining operation carried out that makes the recovery of other oil sands more difficult	Low
		Mining operation that does not maximize the recovery of all oil sands within the mine site	High
		Mining operation that does not ensure public safety.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (<i>Noncompliance with the requirement</i>)	Risk Ranking
		Failure to drill and core a minimum of 4, essentially uniformly spaced, evaluation wells per section over any area that would be affected by construction of surface facilities, such as sites for processing plant or discard disposal.	High
		Failure to log the wells referred to in subsection (1) with acceptable deep induction, natural gamma ray radiation and porosity measuring devices throughout the entire Wabiskaw-McMurray section unless the Board permits another type of log or parts thereof.	Low
		Failure to submit a dedicated disposal area (DDA) plan in accordance with Directive 074, and obtain approval of the Board for the DDA plan prior to construction.	High
		Failure to keep the daily record of operations accessible at the field office or other place of business	Low
		Failure to supply to the Board on or before the 22nd day of the month, on Form S-23, the quality and quantity of oil sands mined and the crude bitumen recovered during the preceding calendar month and the disposition thereof	Low
		Failure to submit to the Board by Sept.30 each year, details of its annual mine plan for the next calendar year of operation, which shall include details as stated in the OSCR	Low
		Failure to submit to the Board for its approval, by September 30 each year, details of its annual mine plan for the next calendar year of operation which shall include a tailings management plan prepared in accordance with Directive 074.	High
		Failure to submit to the Board, on or before February 28 in each year, a report on the mining operations, overburden removal and discard site for the previous calendar year.	Low
		Failure to submit to the Board within 60 days of the end of each calendar year when requested, a summary report of geotechnical stability investigations.	High
		Failure to inform the Board of any collapse or instability within the mine site resulting in (a) a change in the annual mine plan, (b) an interruption in the operator's ability to continue mining operations, (c) a possibility of a permanent loss of recoverable oil sands.	Low
		Failure to submit as requested by the Board, a geotechnical analysis of the collapse or instability and a description of any remedial action taken.	High
		Failure to submit to the Board, reports in accordance with Directive 074, which includes; annual status report respecting fluid tailings ponds, annual compliance report respecting DDA's, annual status and quarterly progress reports respecting fines capture.	High
		Failure to apply for and obtain approval for the storage or disposal of any oil sands, coke, sulphur, precipitator ash or other hydrocarbon effluent or discard associated with the processing plant in the interest of energy resource conservation	High
		The operator has failed to maximize the processing of all oil sands and crude bitumen	High
		The operator is not maximizing the yield of oil sands products	Low
		Failure to minimize the discard of coke, sulphur or other by-products	High
		The operator has failed to maximize the gathering and utilization of gas produced	Low
		The operator has failed to maximize the gathering of gaseous mixtures containing hydrogen sulphide for delivery to the sulphur recovery plant	High
		The operator has failed to maximize the recovery of sulphur contained in the hydrogen sulphide delivered to the sulphur recovery plant	High
		The operator has failed to minimize the use of fresh make-up water and the disposal of waste water	Low
		The operator has failed to maximize the recycle of produced water	Low
		The operator of a processing plant discharges any gas containing hydrogen sulphide, unless it is burned so that essentially all of the sulphur is converted to sulphur dioxide.	Low
		Failure to file, 6 months after commencement of operations or after any modifications that required an amendment to the approval, the design and operating parameters as specified in the OSCR	Low
		Failure to provide the Board or an authorized employee access at its plant site to piping and measurement drawings, operating procedures and equipment specifications.	Low
		Failure to keep at the plant site, or other place of business a daily record of all oil sands, crude bitumen or oil sand products received into the processing plant with details as indicated in the OSCR	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to file on or before the 22nd of each month, monthly statements on Form S-23 of the oil sands, crude bitumen, oil sands products, marketable gas and the condensate received at the plant, and the quantity and quality of oil sands products derived, stored and delivered for the preceding month.	Low
		An operator producing hydrogen sulphide or other sulphur compounds fails to file on or before the 22nd day of each month, statements of monthly and if required daily totals of plant input and output for the preceding calendar month in the form of a processing plant sulphur balance and a sulphur plant sulphur balance including the details as indicated in the OSCR.	Low
		Failure to submit daily reports as stated in 57(1) as required on a temporary basis by the Board.	Low
		Failure to submit on or before the 28th day of February of each year, a report of operations conducted during the preceding calendar year including the details as specified in the OSCR.	Low
		Failure to meet CT performance requirement.	High
		The alteration, removal or destruction of a record or measurement required to be kept by the OSCA or OSCR.	Low
		Meter run and measurement device not installed and operated as specified and approved within S-23 Production Accounting Manual	Low
		Stock tank vapours not estimated as specified and approved within the S-23 Production Accounting Manual.	Low
		Bullplugs not installed on hydrocarbon process piping drains	Low
		Late notification of a reportable spill to ERCB	Low
ID 2001-07 Operating Criteria: Resource Recovery Requirements for Oil Sands Mine and Processing Plant Sites			
		Failure to meet bitumen recovery requirements as stated	High
		Failure to minimize the sterilization of oil sands	High
ID 2001-03 Sulphur Recovery Guidelines for the Province of Alberta			
		Failure to meet the approved calendar quarter-year sulphur recovery efficiency	High
		Exceeding approved maximum daily sulphur inlet rate	Low
		Exceeding 125% baseline sulphur inlet	Low
		Failure to maintain credit balance	Low
		Monthly sulphur balance out more than 5%	Low
		Acid gas flaring plant exceeding maximum grandfathered capacity	Low
CCA & CCR	Coal Mines	Failure to post the required abandonment security for a mining operation	High
		Failure to provide the ERCB with acceptable report at the conclusion of an exploration program	Low
		Failure to recover the resource in a manner that is acceptable to the ERCB and consistent with good conservation practices	Low
		Failure to submit an accurate reclamation plan when submitting an application for a mine permit or licence	Low
		Failure to apply to drill for coal to a depth in excess of 150 meters, or develop an adit, tunnel, or excavation of coal	Low
		Failure to submit environmental assessments in a timely manner.	Low
		Failure to plan and submit infrastructure plans in a timely manner.	Low
		Failure to meet consultation and notification requirement of approval.	High
		Failure to meet exploration programs in approval	Low
		Operator fails to construct discard site to ensure stability.	High
		Disposal of discard material in a manner that did not reduce the potential for spontaneous combustion.	High
		Operator fails to meet technical requirements of approval conditions.	High
		Failure to submit a report as required by approval conditions.	Low
		Failure to monitor the performance of the portal pad, highwall and roof control programs and submit a report.	High
		Operator failure to seal and abandon all entrances to the underground mine within 6 months of completion of mining operations.	High
		Failure to mine and operate in accordance with the application.	High
		Failure to advise the Board and provide a preliminary assessment of any incident or accident affecting, or having potential for affecting, safety or environment and being attributable to design features or operational methods which are the subject of the Board.	High
		Failure to reclaim all disturbed areas in a manner satisfactory to the Board and Alberta Environment upon completion of excavation activities.	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to notify the board of commencement of excavation activities	Low
		Failure to notify the Board of change of ownership of a mine.	Low
		Operator materially alters the program of operations on which the holder's permit or licence was granted without Board approval.	High
		Measurement of coal is not satisfactory to the Board	Low
		Mining within 400 m of infrastructure, other mining operation or oil or gas well without approval.	High
		Mining or processing of coal within 400 m of corporate limits without approval.	High
		Drilling for coal within 400 m of underground mine workings without written permission.	High
		Failure to provide monthly production reports or 1st and 3rd quarter reports	Low
		Failure to keep at the mine office full and complete record of the operation, in a form satisfactory to the Board.	Low
		Fails to provide to the Board hole particulars, other than for preproduction drillholes, as soon as possible after the suspension of field operations, but in any event not later than one year after an exploratory hole has been completed.	Low
		Operator does not conduct the operations in a manner that any flow of oil, gas, or water encountered during exploration or mining can be controlled, and if required by the Board contained.	High
		Failure to institute and carry out a program of environmental management within a mine site in a manner satisfactory to the Board.	High
		Failure to apply for consent to suspend or abandon normal underground mine operations	High
		Failure to apply to amend licence to extend or substantially modify a mining operation	High
		Failure to submit application to construct an external mine discard dump	High
		Failure to submit application to amend permit.	High
		Failure to submit permit application	High
		Failure to submit exploration application, which includes drillholes deeper than 150 m, adit, bulk sample pit.	Low
		Failure to submit an application to commence mining at an abandoned mine or resume mining at a suspended mine.	High
CCA & CCR	Coal Preparation Plants	Failure to submit a report as required by approval conditions.	Low
		Operator fails to operate the coal plant in a manner that results in the maximum practical recovery of marketable coal from all raw coal mined and processed.	High
		Failure to advise the Board and provide a preliminary assessment of any incident or accident affecting, or having potential for affecting, safety or environment and being attributable to design features or operational methods which are the subject of the Board.	High
		Measurement of coal is not satisfactory to the Board	Low
		Mining or processing of coal within 400 m of corporate limits without approval.	High
		Failure to design a storage site for coal in a manner satisfactory to the Board to prevent the uncontrolled loss of coal and to prevent fire hazards.	High
		Failure to apply to suspend operations at coal processing plant	Low
		Failure to apply for approval to resume operations at a previously shut-in or abandoned plant	High
Oil Sands and Coal Branch / In Situ Oil Sands Group			
OSCA & OSCR	Oil Sands Processing Plants	Construction of and/or operating a bitumen upgrader without approval	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit reporting requirements	Low
OSCA & OSCR	Commercial In Situ Oil Sands Schemes	Failure to monitor/report progress of construction/site development	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to meet logging/coring requirements	High
		Wasteful Operations	High
		Failure to comply with specified DSU	High
		Failure to comply with specified target areas	High
		Failure to comply with specified interwell buffers	High
		Failure to comply with specified boundary buffers	High
		Failure to commence injection	High
		Approved injector not injecting	High
		Injection of fluid without approval	High
		Improper fluid content	High
		Injection prior to meeting <i>Directive 051</i> requirements	High
		Injection prior to meeting reporting requirements	High
		Failure to measure/report volume/characteristics - fluids injected/produced	High
		Inadequate measurement/reporting of fluid volume/characteristics	High
		Exceeding specified crude bitumen production rates	High
		Failure to meet MOP/comply with MOP requirements	High
		Inadequate VRR	High
		Altering/modifying scheme design or equipment without notification/approval	High
		Altering design or equipment incompatible with/detrimental to scheme	High
		Failure to evaluate the use of brackish water as required	High
		Failure to monitor/report water use/water balance issues	High
		Failure to monitor/report energy balances	High
		Failure to conduct/report noise survey	High
		Failure to monitor/report scheme performance	High
		Failure to monitor/report pressures	High
		Failure to monitor/report cap rock temperatures	High
		Failure to meet testing, sampling, and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to comply with Order in Council requirements	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements (content)	Low
		Failure to submit electronic copy of performance presentation 5 days prior to meeting	High
OSCA & OSCR	Experimental In Situ Oil Sands Schemes	Wasteful Operations	High
		Failure to comply with specified DSU	High
		Failure to comply with specified target areas	High
		Failure to comply with specified interwell buffers	High
		Failure to comply with specified boundary buffers	High
		Failure to commence injection	High
		Approved injector not injecting	High
		Injection of fluid without approval	High
		Improper fluid content	High
		Injection prior to meeting <i>Directive 051</i> requirements	High
		Injection prior to meeting reporting requirements	High
		Failure to meet MOP/comply with MOP requirements	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Inadequate VRR	High
		Altering design or equipment incompatible with/detrimental to scheme	High
		Failure to evaluate the use of brackish water as required	High
		Failure to monitor/report scheme performance	High
		Failure to monitor/report pressures	High
		Failure to monitor/report cap rock temperatures	High
		Failure to meet testing, sampling, and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to comply with Order in Council requirements	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements (content)	Low
		Failure to measure/report volume/characteristics - fluids injected/produced	High
		Failure to submit electronic copy of performance presentation 5 days prior to meeting	High
ID 99-01	Gas Production in the Defined Oil Sands Strata	Gas production in the oil sands strata without approval (Section 3 of the OSCR and 3.011 of the OSCR)	High
		Gas production in contravention of a shut-in order	High
		Failure to comply with commingling requirements of shut-in order	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval or shut-in order	High
		Failure to meet conditions of approval or shut-in order	Low
		Failure to submit Resource Management Report (no existing scheme)	Low
Directive 025	Industrial Development Permits	Use of gas, oil, or oil sands for industrial purpose without approval	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit reporting requirements	Low
		Failure to apply to use coal produced in Alberta, or any product derived from it, as a raw material, reductant or fuel in any industrial or manufacturing operation.	Low
OSCA & OSCR	In Situ Waterflood Schemes	Wasteful Operations	High
		Failure to comply with specified DSU	High
		Failure to comply with specified target areas	High
		Failure to comply with specified interwell buffers	High
		Failure to comply with specified boundary buffers	High
		Failure to commence injection	High
		Approved injector not injecting	High
		Injection prior to meeting reporting requirements	High
		Failure to meet MOP/comply with MOP requirements	High
		Inadequate VRR	High
		Altering design or equipment incompatible with/detrimental to scheme	High

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Failure to evaluate the use of brackish water as required	High
		Failure to monitor/report scheme performance	High
		Failure to monitor/report pressures	High
		Failure to meet testing, sampling, and analysis requirements	High
		Failure to report any detrimental effects of scheme operations	High
		Failure to comply with Order in Council requirements	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements	Low
OSCA & OSCR	Primary In Situ Oil Sands Schemes	Infill drilling without a primary scheme approval (IL 85-12)	High
		Failure to comply with specified DSU	High
		Failure to comply with specified target areas	High
		Failure to comply with specified interwell buffers	High
		Failure to comply with specified boundary buffers	High
		Failure to comply with Order in Council requirements	High
		Failure to respond to the need to address unclear situations	High
		Failure to resolve issues or notify the ERCB of unresolved issues	High
		Misrepresentation of data in an application	High
		Failure to meet conditions of approval	High
		Failure to meet conditions of approval	Low
		Failure to apply for a name change or approval transfer	Low
		Failure to submit progress report	Low
		Failure to meet performance presentation requirements (content)	Low
		Failure to measure/report	High
		Failure to submit electronic copy of performance presentation 5 days prior to meeting	High

Geology, Environmental Science and Economics Branch / Environmental Monitoring and Regulation Group

Environmental Operations Section

Directive 035 Baseline Water Well Testing Requirement for Coalbed Methane Wells Completed (Latest release: May 8, 2006)

Compliance Category	Noncompliance Event	Risk Ranking
Baseline Water Well Testing (Recompletions/Completions)	Failure to offer to test water wells prior to recompletion/completion.	High
	Failure to test water wells prior to recompletion/completion of CBM well.	High
	Failure to provide test results to landowner and AENV.	High
	Failure to provide survey or map showing active water well or observations well locations (GPS coordinates in decimal degrees to six places required on maps).	Low

Geology, Environmental Science and Economics Branch / Market Intelligence and Analysis Group

Bulletin 2003-36 Upgrade of Gas Removal Data (GRD) System and Reporting Compliance (Released: Nov 24, 2003)

Bulletin 2004-04 Revision to Gas Removal Data (GRD) Volumetric Data Deadline Announced in Bulletin 2003-36 (Released: Jan 15, 2004)

Compliance Category	Noncompliance Event	Risk Ranking
Gas Removal Permits	Failure to report monthly gas removal permit volumes, Bulletin 2003-36, Bulletin 2004-04	Low
	Permit does not have adequate remaining authorized volume	Low

Branch Group Section Regulatory Authority	Compliance Category	Noncompliance Event (Noncompliance with the requirement)	Risk Ranking
		Permit does not have adequate remaining permit term	Low
Geology, Environmental Science and Economics Branch / Reserves and Pore Space Management Group			
Directive 007-1 Allowables Handbook			
	Oil Overproduction	Failure to retire oil overproduction (OGCR 10.280)	High
Information and Systems Services Branch / Information Collection and Dissemination Group			
Well Test Data Section			
	Pressure, Deliverability and Fluid Analysis Testing and Reporting	Failure to conduct and/or submit to the ERCB tests for all gas and oil wells in accordance with Directive 040 including initial pressure, deliverability, drill stem, fluid sampling, coalbed methane, and shale gas control tests	Low
		Annual Field and Pool Test not submitted	Low
Directive 040		Failure to conduct and/or submit to the ERCB tests for all gas and oil wells in accordance with Directive 040 including initial pressure, deliverability, drill stem, fluid sampling, coalbed methane, and shale gas control tests.	Low
Directive 021: Standards for the Submission of Digital Log Data to the ERCB			
Directive 043: Well Logging Requirements-Surface Casing Interval			
Oil and Gas Conservation Regulations Section 11.140			
Well Log Section			
	Well Drilling Log Reporting	Failure to take an acceptable log to measure the natural gamma ray response through casing from the base of surface casing to surface; and neutron response through casing from the base of surface casing to 25 metres below the surface.	High
		Failure to take a log as prescribed by the Board either before the completion, abandonment, or suspension of drilling operations at a well to measure the resistivity and spontaneous potential of the strata from the total depth of the well to the base of surface casing and record all pertinent data.	High
		Failure to submit a well log, survey or chart as prescribed by the Board within one month of the finished or suspended drilling date of the well.	Low
		Failure to submit a well log as prescribed by the Board within one month of the run date of the log.	Low
Production/Well Data Section			
Directive 059 Well Drilling and Completion Data Filing Requirements			
Directive 020 Well Abandonment Guide			
	Well Drilling Data Requirements	Failure to submit Drilling Summary data electronically within 30-days of completing operations	Low
		Failure to submit Completion Summary data electronically within 30-days of completing operations	Low
		Failure to submit Downhole Abandonment Summary data electronically within 30-days of completing operations	Low
	Well Completion Data Requirements		
	Directional Surveys	Failure to submit directional survey data	Low
OGCR Sections 12.030, 12.056, 12.060, 17.010	Monthly Volumetric Reporting	Failure to move facilities to an active operator in the PRA by the Amalgamation Established Date	Low
		Volumetric data submitted to the ERCB through the Petroleum Registry by an Amalgamated operator for a period during which the operator was inactive.	Low
		(VME0001) Facility is missing for current month	Low
		(VME0002) Amendment is missing for a prior month due to change to a disposition volume	Low

