

Rule 020 – Rules Respecting Gas Utility Pipelines

Section No.	Stakeholder Comments	AUC Response
Part 2 – Flaring, Incinerating and Venting of Gas Utility Pipelines (Replaces ERCB Directive 60)		
	<p>ATCO – General. Directive 60 referenced responsibility to the “licensee” or “operator” for various requirements. Rule 20 references the “licensee” almost without exception. There may be cases where the responsibility for a given requirement should be placed with the “operator”. For example, with a leased pipeline, notification could be completed by the “operator” rather than the “licensee”.</p>	<p>Acknowledged. However, the licensee must take ultimate responsibility. The wording will remain in effect.</p>
	<p>ATCO – The majority of utility flaring is conducted in remote areas on right of ways for gas utility pipelines with gas volumes no larger than 10 m²</p>	
	<p>ATCO – Directive 60 rules are for primarily permanent installations. Most utility applications are portable personal flares or trailer mounted flare units. An additional section addressing portable flare units, drafted with stakeholder input, is recommended.</p>	
9 – Flaring, Incinerating and Venting Requirements	<p>ATCO – Section 9 (2). Please explain the basis of “100 m³ per month”.</p>	<p>This is also used in Directive 60. Petroleum registry does not accept reporting volumes less than 100 m³ per month.</p>

<p>– Flaring, Incinerating and Venting Requirements (cont’d)</p>	<p>ATCO – Section 9(4)a. Alternatives to flaring are conventionally considered during design; non-routine and emergency outages are documented and alternatives to flaring considered.</p>	
	<p>ATCO – Point 9 (7). The requirement to “discuss with the ERCB field center the measures to be taken to minimize emissions” may not be practical in all cases. The words “as appropriate” could be added to provide some room for judgment.</p>	<p>Notification is required to allow the field centres to deal with inquiries in an efficient manner and to discuss the feasibility of conservation of large volumes of gas. Setting practical limits will require further study and consultation</p>
<p>10 – Performance Requirements</p>	<p>ATCO - 10(5),(6): Field testing of flaring devices is integral to research and development and is required as commercial products may not be generally available for small capacities.</p>	<p>This issue may be dealt with in another reiteration.</p>
	<p>ATCO - Upset conditions present in the upstream industry are not present to the same degree in Utility systems.</p>	<p>They are rare but do have to be addressed.</p>
	<p>ATCO - 10.2: Section on heating value is not relevant. Refer to AUC approved Transportation Service Regulations – Article 3 Quality of Gas.</p>	<p>This section will be made applicable to process upsets.</p>
	<p>ATCO - 10.2(4),10.3,10.3(11a),11.2: The majority of gas transported by utilities is sweet gas; residence time requirements are not required, EUBflare.xls and EUBincin.xls provide dispersion modeling for sour gas.</p>	<p>These sections will be made applicable to process upsets.</p>

<p>10 – Performance Requirements (cont’d)</p>	<p>ATCO - 10.6(2c): Utilities do not generally have a safe work permit system due to the diverse locations of facilities throughout the province. Safe work permits are generally more applicable to permanent plant sites associated with the upstream oil and gas industry.</p>	<p>10.6 (2c) states “necessary procedures such as a safe-work permit system” must be in place. This leaves the utility the latitude to come up with an alternate suitable procedure.</p>
	<p>ATCO - 10.7: Liquids separation on portable flares are generally not applicable for gas utility pipeline systems. No automated shutdown systems are present as the task is manual and operators are present at all times.</p>	<p>The words “This section applies in cases where liquids may be present in the pipeline:” will be added to section 10.7.</p>
	<p>ATCO - Section 10.7. The detailed requirements for liquid separation during flaring, incinerating, and venting requirements are not typically applicable for gas utility pipelines transporting dry “pipeline spec” natural gas. It would be extremely rare that liquid separation would be required. Suggest that this section be dropped and reference be made to Directive 55 in the event that liquid separation is required.</p>	
	<p>ATCO - Section 10.8. This section, which outlines Backflash Control, is more appropriate for permanent flare systems normally associated with upstream oil and gas facilities. The requirements of this section do not generally apply to the portable equipment used with gas utility pipeline applications and should be removed.</p>	<p>Purge velocities (a form of backflash control) still have to be maintained for portable systems.</p>
	<p>ATCO - 10.9: Spacing requirements are not practical for portable flare and incinerator usage. Utility usage of flares is typically in the context of temporarily de-classifying the area to control or otherwise mitigates the existence of uncontrolled ignition sources, conducting the combustion process and returning the facility to normal operation.</p>	<p>This section will be made applicable to permanent flaring systems and incinerators.</p>

<p>10 – Performance Requirements (cont’d)</p>	<p>ATCO 10.10: AUC Rule 012 does not address temporary flaring installations.</p>	<p>See section 2 – class B adjustments and section 2.2 (exceptional situations) of AUC Rule 012</p>
<p>11 – Venting and Fugitive Emissions Management Requirements</p>	<p>ATCO - 11.1(2): Many control devices use natural gas in utility facilities; combusting all non-conserved gas is impractical.</p>	<p>This is acknowledged in 11.1 (2) since it applies only to sources that support stable combustion.</p>
	<p>ATCO - 11.1(8): Many gas utility pipelines are closer than 500 m from a residence and temporary venting may be required for routine maintenance.</p>	<p>This will be adjusted to apply to situations where the volume to be vented will exceed 500 m³. The paragraph will now read: “Temporary venting is permitted within 500m of a residence if the volume vented does not exceed 500m³. Venting volumes in excess of 500m³ requires the approval of the local ERCB field centre.”</p>
	<p>ATCO - 11.1(9): A 25m setback may not be practical; area classification and ignition source identification could be utilized to ensure gas is vented safely.</p>	<p>This will be explored at a later date.</p>
	<p>ATCO – Section 11.2. The reference to H2S is not applicable to gas utility pipelines and should be removed.</p>	<p>This will apply to upstream process upsets</p>

<p>12 – Records</p>	<p>ATCO – Points (1) through (4). Are more appropriate for permanent flare systems normally associated with upstream oil and gas facilities. The requirements of these points do not generally apply to the portable equipment used with gas utility pipeline applications and should be removed.</p> <p>ATCO – Suggested modifications to above sections may adjust record requirements.</p>	<p>These points are applicable in a few rare situations and must be kept in the rule.</p>
<p>14 – General Storage Requirements</p>	<p>ATCO – Section 14.4. Is not applicable to gas utility pipelines.</p>	<p>This is applicable to larger pipeline installations</p>
<p>Part 3 – Storage Requirements For Gas Utility Pipelines and Pipeline Installations (Replaces ERCB Directive 55)</p>		
<p>13 – Definitions</p>	<p>ATCO – Alberta Boiler Safety Association has authority and manages this jurisdiction through the Owner User Program for registered and non-registered pressure vessels.</p>	<p>Agreed. Definitions are in place to provide clarity to Rule 020.</p>
	<p>ERCB – How does definition (e) apply to ‘spill-control devices’ that you refer to in Sections 15 and 16.</p>	<p>Spill Control device is defined on page 83 (Appendix 1).</p>
	<p>ERCB – Does definition (f) define ‘impervious’ or ‘impervious liner’?</p>	<p>This will be changed to “Impervious”.</p>
	<p>ERCB – Part (4). I recommend you review the Directive 055 Discussion Document (Section 2) on this issue.</p>	<p>The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.</p>

14 – General Storage Requirements	ATCO – 14.3, Figure 1: Equipment spacing is not representative of utility pipeline facilities.	This will be reviewed at a later date.
	ATCO – 14.6: The majority of utility pipeline facilities do not have surface water collection or tornado systems.	The pipeline installations that have these systems have to be addressed.
	ATCO – 14.4: Not applicable to gas utility pipelines.	This will be reviewed at a later date.
	ERCB – (2). How would a storage system be alternative if it meets the requirements. As per Directive 055, it should state, ‘meets the objectives and intent....’.	Any entity using an alternate system still must meet to objectives of the requirements set out in Rule 020.
	ERCB – (4) (d). The way this is changed from Directive 055 makes this very confusing. Are you saying that “materials released should not....”?	Change 14 (4 (d) from “...and materials do not ” to “...so that materials do not ...”
	ERCB – 14.2. What do parts (4) and (5) have to do with duration?	A “Temporary Storage” will be created under Section 14 and 14.2 (4) and (5) will be moved to the new Section (14.3).
	ERCB – 14.2 (4). See Directive 055 discussion document (Section 5)	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 14.2 (5). This should state that it is specific to ‘temporary’ storage applications.	Agreed. Wording will be changed to reflect this in the new Section 14.3 (4) and (5).

14 – General Storage Requirements (cont’d)	ERCB – 14.4. What is your reasoning for the spacing numbers presented here? In Directive 055 they refer to the OGCR regs, which have been updated, making this diagram out of date (but the references are still current). You should have some back-up for these numbers or at the least harmonize with OGCR requirements. You should also provide some definitions of the terms used in the drawing (eg. surface improvement).	A new spacing diagram is being drafted with new Equipment spacing descriptions (14.5 (2)). References to the OGCR regs will be left off since Gas utility pipeline installations do not fall under the Oil and Gas Conservation Act.
	ERCB – 14.6 (1) (a) + (b). See Directive 055 discussion document (section 17).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 14.6 (2). Should read “...may release the water back into....”	Agreed. Wording in the section (now 14.7 (2)) will reflect this.
	ERCB – 14.6 (2). I recommend that you make the ‘controlled manner’, ‘landowner consent’, ‘records’ parts all ‘must’ statements. As it reads now, they are ‘may statements.	In 14.6 (2) (now 14.7 (2)) “may” is conditional on the tests showing the waters not to be contaminated ect. Changing may to must would change the meaning to state that the have to release the water. The licensee may want to haul it to a more suitable location. 14.6 (2) can be changed to make the conditions more clear.
	ERCB – 14.6 (4). What is an ‘approved facility’ in AUC requirements?	This is currently under review.

15 – Requirements for Aboveground Storage Tanks	ERCB – 15(1). The licensee never constructs the tanks. I recommend you change the wording to “Licensees must ensure that ASTs are constructed from...”	Agreed. Wording has been changed to reflect this.
	ERCB – 15 (2). Add reference to Section 17.	Agreed. The reference has been added.
	ERCB – 15(3) – Wording doesn’t make sense, change to ‘Tornado system or other positive pressure systems used as a ...’	Agreed. Wording has been changed to reflect this.
	ERCB – 15.1 (1) (a). Visually inspect what? (the tank, the ground, or what?)	This will be changed to say “visually inspect the tank.”
	ERCB – 15.1 (2). Reword so that it states the licensee may have a total storage capacity of 5 m ³ in small tanks and not 5 m ³ of fluids (or they could have 10 m ³ and all be half full). See Directive 055 discussion document (Section 9).	Agreed. Wording has been changed to reflect this.
	ERCB – 15.2 (1). Change wording so that “ the tank must:” and not the licensee must. This is a significant difference that we should discuss.	Section 15.2 (1) is in place to ensure that licensees have the final responsibility to ensure that the conditions are met.
	ERCB – 15.2 (1). See Directive 055 discussion document (Section 11 and 12)	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 15.2 (1) (d). Should be specific to steel tanks.	Agreed. Wording has been changed to reflect this.

15 – Requirements for Aboveground Storage Tanks (cont'd)	ERCB – 15.2 (1) (h). “such as a tank farm” should follow the word ‘system’ in this sentence.	Agreed. Wording has been changed to reflect this.
	ERCB – 15.3 (3). Reference section 14.6	Agreed. A reference has been added to the section (now 14.7)
	ERCB – 15.4. There are a lot of references to storage devices that are not ASTs in this section that make absolutely no sense being here.	Agreed. Section 15.4 will be moved to Section 14.
	ERCB – 15.4 (1) (c). See Directive 055 discussion document (Section 4).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 15.5 (2). See Directive 055 discussion document (Section 7).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 15.6 (b). Refer to appropriate sections.	Agreed. The reference has been corrected.
	ERCB – 15.6 (3). I’m curious why you don’t keep the liners as a separate section since you refer to them in other sections as well.	Agreed. A new section (section 21) will be created for liners.
	ERCB – 15.6.1 (2). How can a liner in a tank farm be primary containment?	See above response.
	ERCB – 15.6.3. I recommend you add another point stating that the liners should be physically and chemically resistant to the materials that it might be exposed to.	Agreed. Wording will be added to the section (now 21.3) to reflect this.

15 – Requirements for Aboveground Storage Tanks (cont’d)	ERCB – 15.7 (3). Should read ‘When a leak is identified, the tank ...’	Agreed. Wording will be added to reflect this.
	ERCB – 15.7. Should add a point about record keeping and reporting requirements’	These are in Section 20.
	ERCB – 15.8. Why did you remove the Fire Code comment here?	Qualified persons should know to adhere to the Fire Code.
	ERCB – 15.9. See the Directive 055 Discussion Document (Section 13).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 15.9. Should add a point about record keeping and reporting requirements	This is in Section 20.
16 – Requirements for Underground Storage Tanks	ERCB – 16.1. See Directive 055 discussion document (Section 14).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
17 – Storage Requirements for Containers	ERCB – 17 (2) (b). First word should be “for”, not “if”	Agreed. Wording has been changed to reflect this.
	ERCB – 17 (3). Is weather protection required? There is a definition provided, but no indication it is required.	See Section 17.2 (1).

18 – Requirements for Lined Earthen Excavations	ATCO – Generally not applicable to gas utility pipelines.	Section 18 will be removed from Rule 20 since upon further consultation with Gas Utility Companies regulated by the AUC it was determined that these companies do not use lined earthen excavations.
	ERCB – 18 (1) . Used lube oil can only be stored in lined earthen excavations? This would not be an acceptable practice under Directive 055. Used lube oil is typically stored in barrels or small tanks. Can anything else be stored in lined earthen excavations?	
19 – Requirements for Bulk Pads	ERCB – 19 (5) . In Directive 055 this is only required in situations where the stored material may potentially generate a leachate. Is this still the case here? If so, (4) and (5) should be combined to make one point.	Agreed. The two sections have been combined.
	ERCB – 19 (7) . Should reference the requirements of Section 15.6.3 as well. Note: the requirements for synthetic liners as primary containment and as secondary containment are different under Directive 055.	A qualified designer should know this. Section on liners will be referenced.
20 – Inspection, Monitoring and Record Keeping Requirements	ERCB – See Directive 055 Discussion Document (Section 15).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.
	ERCB – 20 (2) (b) . For how long?	For a minimum of 5 years but preferably for the lifetime of the tank.
21 – Withdrawal of Storage Tanks from Service	ERCB – 21 (3) (d) . Should read refer to ‘Appendix 3’.	Agreed. The reference has been added.

21 – Withdrawal of Storage Tanks from Service (cont’d)	ERCB – 21.1 (1) (b). What about USTs?	UST disposal requirement will be added to section 21.1(1).
APPENDICIES		
Appendix 1 – Rule 020 Definitions	ATCO – The definitions for “sulphur conversion efficiency”, “sulphur emissions”, and “sulphur recovery efficiency” do not appear to apply to the requirements of Rule 20.	There are applicable to upstream process upsets only.
	ATCO – Condensate definition could be tailored to pipelines.	This will be reviewed at a later date.
	ATCO – Utility pipelines do not handle solution gas.	They may if there is an upstream process upset.
	ATCO – In utility pipeline applications, a line heater is used primarily to control/increase gas temperature.	Agreed. The definition has been changed to reflect this.
	ATCO – Remove references to sour gas throughout	They may be applicable to upstream process upsets.
Appendix 3 – Storage Requirements for Existing Pipeline Installations	ATCO – A reference to the applicable section of Directive 55 may be more appropriate than listing and maintaining these detailed requirements for a very specialized application.	
	ATCO – Update document to reflect change from upstream petroleum industry to utility pipeline industry (e.g. Section 1.1).	

Appendix 3 – Storage Requirements for Existing Pipeline Installations (cont’d)	ERCB – This appendix was taken word for word from Directive 055 and still includes all of the references to Directive 055, which does not make sense within this document.	Wording will be adjusted where appropriate.
	ERCB – How does this appendix apply to AUC sites. In Directive 055, this appendix was created to account for sites that existed prior to 1996 and did not meet current standards. Will this now apply to all sites pre-2010?	For tanks constructed prior to 1996, the same rules apply with changes to integrity testing suggested in Directive 055 Discussion Document.
	ERCB – See Directive 055 Discussion Document (Section 6 and 8).	The Directive 055 discussion document may be incorporated into Rule 020 when it becomes finalized.