

Draft *Directive 020: Well Abandonment* (released June 2023) What We Heard – And Our Response



We would like to thank all those who provided comments. We reviewed each one and consolidated comments covering similar issues. What follows is a summary of the issues raised and our responses.

Comments on grammar, punctuation, and cross-referencing have not been summarized, but changes were made where needed.

A list of the respondents is provided at the end of this document.

Stakeholder Feedback – Issue	AER Response
1. Section 4.1, All zones above Mannville Group cement coverage	
Please explain why all zones (porous or not) must be covered with cement above the Mannville Group. This requirement makes no sense and will add unnecessary costs to abandonment operations.	We have noted this feedback concerning requirement 22 in section 4.1, Open-Hole Abandonment of Non-Oil Sands Wells. This requirement addresses groundwater protection and zonal isolation to prevent hydraulic communication between all the zones above the top of the Mannville Group or equivalent. We will evaluate this issue as part of a future <i>Directive 020</i> regulatory change project and determine if changes are needed.
2. Section 5, Commingled Abandonments	
The draft <i>Directive 020</i> does not address the long-standing issue of certain wells permitted to exist in a commingled state, both producing and standing for decades. There is a need to make an informed, risk-based decision to expand the use of routine commingled abandonment.	We are working on this issue of commingled well abandonment. In July 2020, we conducted a second scientific investigation to review additional geological strata and hydrocarbon pools for routine commingled abandonment. This evaluation used the same methodologies and approaches as the first study that adopted a risk-based determination of whether commingled abandonment can occur in select regions of Alberta. We have engaged industry and provided updates on our progress and the investigation results. We are finalizing a report that would inform operators about which regions are eligible or ineligible for commingled abandonment.

Stakeholder Feedback – Issue	AER Response
3. Section 5.8.4, Well Penetrating Oil Sands Zones with Low Thermal Potential	
<p>Section 5.4.8 of the draft directive allows for a nonthermal abandonment of wells that penetrate oil sands zones if they meet any of the three criteria. This change is positive and long overdue.</p> <p>However, after the listed criteria, it states, “All wells within the boundary shown in figure 1 must be abandoned using thermal cement in accordance with section 5.4.1.” This sentence should be removed as it contradicts the statement about needing to meet only the listed criteria.</p> <p>Also, it is recommended that the sentence immediately following the listed conditions be amended to indicate that licensees need only meet “at least one of the conditions” to qualify a well with low thermal potential for abandonment following section 5.3 or 5.4 requirements.</p>	<p>We agree with the comments and have changed section 5.4.8. We removed the contradictory sentence concerning figure 1. We revised the sentence immediately following the listed criteria to indicate that if a licensee has wells that penetrate oil sands zones and meet at least one of the three conditions for low thermal potential, it may use nonthermal abandonment.</p>
4. Section 8, Surface Abandonment Procedures	
<p><i>Directive 020</i> should indicate that once the wellbore is downhole abandoned, the wellhead master valve should be shut in for a minimum of seven days to observe any pressure buildup. This recommendation is based on observed casing failures identified seven or more days after the wellbore was downhole abandoned, even though the abandonment operation passed the pressure test. It is not uncommon for the follow-up cut and cap crew to find pressure at the wellhead after running casing integrity logs and casing issues identified, resulting in a cement plug abandonment.</p>	<p>We have noted the comments and the recommended changes to <i>Directive 020</i> for shut-in wells for a duration of time after pressure testing and cement dump. We will evaluate the issue as part of a future <i>Directive 020</i> regulatory change project and determine if changes are needed.</p>

Stakeholders Who Submitted Feedback

Athabasca Oil Corporation

Canadian Association of Petroleum Producers

City of Medicine Hat

Peyto Exploration & Development Corp