CMW's response to the Article 6.4 Supervisory Body consultation on removal activities and broader methodological rules

Call for public input – Template for input	**A6.4-SB009-A01 (methodologies) or A6.4-SB009-A02 (removals)**

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Legend for Columns
0 = A6.4-SB009-A01 (methodologies) or A6.4-SB009-A02 (removals)
1 = Section Number in the document
2= Paragraph number
3 = Comment – the actual feedback or observation, including justification for what needs changing
4 = Proposed change – suggest the text if possible

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Meths	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
Meths	4.2	22	It is important for the "should" to be changed to "shall", to ensure that up-to-date scientific information and reliable data are always used to estimate emission reductions or removals. Currently stating this as a "should" weakens this provision, and could lead to situations where the latest science and reliable data are not used which could lead to estimation errors.	"Such estimation ~~should~~ shall be based on up-to-date scientific information and reliable data, excluding extraneous cofactors affecting emission reductions or removals."
Meths	4.2	23	Paragraph 23 is an important paragraph. It should be further strengthened by also requiring the underlying data and assumptions to be disclosed, rather than just descriptions of the data and assumptions. This information should be disclosed in the project design document, for example in an annex, which will be made publicly available.	"Mechanism methodologies shall contain provisions to require transparent descriptions of the source of the data used, the assumptions made, the references used and the steps followed in the estimation of the results of Article 6.4 activities, including equations where necessary. Mechanism methodologies shall also contain provisions to require transparent disclosure of the underlying data, assumptions made, and references used, in the publicly available project design document."
Meths	4.7	48	The language around "economic viability of crucial mitigation activities" in relation to the application of a downward adjustment is not entirely clear, and could potentially lead to exemptions depending on how this is interpreted. If this language is retained, then there should be a clarification made to the end of the paragraph, whereby "informed by the need of activities to contribute to achieving the long-term temperature goal of the Paris Agreement" is strengthened, as proposed in the cell to the right.	"The downward adjustment shall be undertaken in a manner that considers economic viability of critical mitigation activities, large-scale transformation and decarbonisation technologies, negative emission approaches, ~~and informed by the need of~~ while ensuring that all activities ~~to~~ contribute to achieving the long-term temperature goal of the Paris Agreement and do not lead to locking in levels of emissions, technologies or carbon-intensive practices incompatible with paragraph 33 of the RMP."
Meths	4.7	49	It should also be possible for the Supervisory Body to develop factors or quantitative methods on its own initiative, which is currently not an option. At the moment, factors or quantitative methods can be: a) proposed by activity participants/stakeholders or host Parties for consideration by the SB; b) developed jointly by the SB and the host Party, but which must be first initiated by a request from the host Party; c) developed by host Party for SB consideration. Therefore, the SB cannot directly propose factors or quantitative methods, which could be accommodated by adding a new option d), as proposed in the cell to the right.	49. The downward adjustment to the baseline referred to above may be operationalised through: [...] (d) Development of factors or quantitative methods by the Supervisory Body.

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Meths	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
Meths	4.8	54(a)	Stringency should not be traded-off or sacrificed for the sake of maximum participation, which is what the language currently says. Moreover, paragraph 33 of the RMPs refers to encouraging "broad participation" - not "maximum participation". It is also inappropriate to refer to "avoiding complexity" for the sake of maximizing participation. Carbon crediting is inherently highly complex and making exceptions to rules for the purpose of maximizing participation is not necessarily appropriate, especially when vague language around national circumstances is invoked which may be interpreted broadly. While activity participant and host Parties should not be penalized for lacking scientific infrastructure or financial resources, there are other means and efforts that can be conducted to boost these (e.g. Article 6 capacity building programmes/efforts, RCCs) without watering down methodological rules with references to "maximizing participation" and "avoiding complexity". In fact, lowering stringency could lead to lower participation as it risks creating less rigorous methodologies that are criticised by the public and hence reputational and integrity concerns might lead to lower participation.	54. Mechanism methodologies shall: a) Where relevant for the sectoral and/or geographical coverage of the methodology, contain provisions that ~~balance~~ uphold stringency and encourage broad ~~maximum~~ participation by being accurate, simple, and clear~~, and avoiding complexity~~ such that a wide range of activity participants and host Parties can apply the methodology requirements irrespective of the scientific infrastructure, financial resources available to them, and their national circumstances

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Meths	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
Meths	5	80(b)	While paragraph 80 is generally sound, paragraph 80(b) would benefit from a clarification. The chapeau of paragraph 80 indicates that all of the subparagraphs – (a) through (d) – are required to demonstrate additionality since it is phrased as "Mechanism methodologies **shall** contain provisions to require demonstration of additionality **through the following elements**" (emphasis added). This is good and should not be changed. However, while the chapeau of para 80 indicates that (a) through (d) are all required, paragraph 80(b) introduces potential confusion: • Para 80(b) says that a barrier assessment "**may** be undertaken to **complement**" (emphasis added) the investment analysis test detailed in para 80(a). This indicates that an investment analysis is still required, but that a barrier assessment may be optionally undertaken to complement the investment analysis. Para 80(b) further indicates a barrier assessment is optional by stating "**If** activity participants **want** to use barriers to demonstrate additionality …" (emphasis added) • The optionality of conducting a barrier assessment clashes with the chapeau of paragraph 80 which calls for all of a) through d) to be applied. In any case, 80b still makes it clear that an investment analysis is always required. • However, subparagraph 80(b)(i) is phrased in a way that may be interpreted as meaning that a barrier assessment can replace an investment analysis: "(i) Describe the barriers, including the **reasons why investment analysis is not suitable**". Given that such an interpretation (that barrier assessment can replace investment analysis) is not what was intended in the chapeau to paragraph 80 or in paragraph 80b, the text should be clarified to confirm that a barrier assessment cannot replace the investment analysis. We have suggested revisions in the cell to the right.	80. Mechanism methodologies shall contain provisions to require demonstration of additionality through the following elements: (a) Demonstration that the proposed activity would not have occurred in the absence of the incentives from the mechanism through an investment analysis (default approach); (b) An assessment of barriers to the implementation of the activity, such as the financial, technological, institutional barriers, taking into account all relevant national policies, including legislation and current practices within the activity sector and geographic area of the host Party, ~~may~~ shall be undertaken to complement the investment analysis referred above. ~~If a~~Activity participants ~~want to use barriers to demonstrate additionality for their activity, they~~ shall: (i) Describe the barriers~~, including the reasons why investment analysis is not suitable~~; (ii) Provide evidence of the barriers and how the mechanism will help overcome the barriers; (iii) Include parameters in the monitoring plan to demonstrate how the barriers are overcome.

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Meths	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
Meths	5	80	It would also be beneficial to add a new subparagraph, 80(e), regarding the need to demonstrate the proposed activity considered the benefits from the Article 6.4 mechanism as being a necessary factor in the decision to implement the activity. Given that this is already detailed in paragraphs 12-15 of A6.4-SB008-A06, it would be suitable to make a short cross-reference.	80. Mechanism methodologies shall contain provisions to require demonstration of additionality through the following elements: [...] (e) Demonstration that the proposed activity considered the benefits from the Article 6.4 mechanism as necessary in the decision to implement the activity, in accordance with paragraphs 12-15 of A6.4-SB008-A06. If activity participants submit notification of prior consideration after the start date of the activity, they shall demonstrate evidence that the benefits from the Article 6.4 mechanism were considered prior to the start date. The time period between the prior consideration of 6.4ERs, as evidenced through clear public documentation, and registration of the activity shall not exceed 3 years.

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Removals	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
Removals	3	7	There should be stronger cross-references throughout the document clearly indicating that many aspects of the recommendations also apply to emission reduction activities that face a reversal risk: e.g. reversal risk, remediation, MRV, and other relevant points also apply to emission reduction activities that face a reversal risk. Section 3, paragraph 7, is one important place where this can be clarified, but it could also be stressed in other instances to ensure there is no ambiguity. For the time being, we have kept our proposal in the cell to the right simple, but it could be adapted to ensure that only the relevant requirements for removal activities apply to emission reduction activities that face reversal risks: e.g. baseline-setting will be different for removal activities and so the same requirements would not always be applicable for reduction activities and mixed reduction-removal activities.	7. Activities involving removals as well as emission reduction activities that face reversals risks and activities involving a combination of removals and emission reductions that face reversal risks, under the Article 6.4 mechanism shall meet the requirements contained in the sections below and in any further requirements developed and approved by the Supervisory Body for activities involving removals based on the requirements contained in the RMP and any further relevant decisions of the CMA, and all relevant Article 6.4 mechanism standards and procedures including the requirements for the development and assessment of article 6.4 mechanism methodologies.

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Removals	**Section no.**	**Para. no.**	**Comment**	**Proposed change (Include proposed text)**
Removals	3.2	16	While it is good that paragraph 16 calls for monitoring to be conducted after the end of the last active crediting period of the activity, no minimum timeframe is provided. This is problematic, especially considering the provision in paragraph 18 to potentially cease MRV entirely after the crediting period (further discussed in the below cell). Therefore, the SB should clarify that monitoring must be conducted for a minimum of 100 years after the end of the last active crediting period of the activity. As detailed in our submission on removals in July 2023, even 100 years does not truly match permanence requirements but it is a minimum starting point. Moreover, it is worth noting that 100 years of MRV is already required in compliance and voluntary market settings: > California's Compliance Offset Programme requires a 100-year monitoring period after final issuance: "The Offset Project Operator or Authorized Project Designee must conduct monitoring activities in accordance with the Regulation and this protocol. (a) Monitoring is required for a period of 100 years following the final issuance of any ARB offset credits to an offset project" (p.76, California Air Resources Board, Compliance Offset Protocol U.S. Forest Projects, 25 June, 2015). > Climate Action Reserve also has the same requirement: "Project Owners must monitor and verify projects for a period of 100 years following the issuance of any CRT for GHG reductions or removals achieved by the project that are considered reversible. For example, if CRTs are issued to a project in year 99 following its start date, monitoring and verification activities must be maintained until year 199. Project owners are required to monitor onsite carbon stocks, submit regular third-party verification of those reports (along with periodic site visit verifications) per the reporting cycle as defined in the protocol for the project life. If Project Owners fail to meet the monitoring, reporting, and verification requirements as defined in the protocol, it would be considered an avoidable reversal that would need to be compensated by the Project Owner" (pp. 22-23, Climate Action Reserve, Reserve Offset Program Manual, v 9.1). > Verra is also currently developing a long-term monitoring system. In further cells below we provide a proposal for how liability for MRV and reversals should be split more equitably with the buyer of the ER.	16. Monitoring shall also be conducted after the end of the last active[5] crediting period of the activity, for a minimum of 100 years, to ensure that the residual risk of reversals of removals for which 6.4ERs were issued is negligible and/or that potential future reversals are remediated.

Removals	3.2	18	Paragraph 18 should be cut from the text. The conditions to allow the activity participant to make a request to entirely conclude MRV after the crediting period are currently far too open-ended. Regarding the first condition, there is not enough information or framing about the type of "evidence" that will be accepted to determine what constitutes a non-negligible risk. Any such evidence would need to be based on peer-reviewed scientific literature as well as other layers of third-party independent assessment free from conflicts of interest, which still risk to inaccurately account for the nature and scope of possible future reversals which may not yet be well understood. In addition, if "evidence" can be supplied directly by the project developer, or on behalf of a government agency in the Party, this could pose risks around conflicts of interest and more. More framing is thus needed on who can submit evidence as well as the type of evidence. Regarding the second condition to remediate reversals ahead of time based on the current risk rating, the appropriateness of this option depends heavily on the yet-to-be-developed risk assessment tool and is unlikely to be able to appropriate factor in future risks over an appropriate timeframe of centuries to begin to approach what is needed in terms of durability. If the risk assessment tool ends up not being robust and is not informed by science, then this will lead to low reversal risk assessments. Activity participants would then be strongly incentivised to seek out option ii), since it will likely be preferable to remediate reversals based on a low risk rating than to do MRV for decades. However, this poses a significant risk that reversals are neither detected nor addressed, or that this liability may fall to the host Party down the line. Moreover, it is also worth stressing that risk assessments are commonly very low on the voluntary carbon market, which poses significant permanence challenges that risk being carried over to Article 6.4 unless extreme care is taken in designing the risk assessment tool. For example, UC Berkeley's analysis in 2023 of nearly 100 REDD+ projects on the voluntary carbon market, which Carbon Market Watch funded, found that the majority had a total risk rating at or below 10% (i.e. 10% for *all* natural, external, and internal risks). Natural risks in particular were estimated as being very low:	~~18. Activity participants may submit requests to conclude post-crediting monitoring, by demonstrating for the consideration and approval of the Supervisory Body, evidence that the removals will be stored with negligible risk of reversal and/or that potential future reversals of removals for which 6.4ERs have been issued have been remediated as though a reversal has occurred as per section 3.6.3 Addressing reversal risk and reversals of this guidance, taking into account the residual reversal risk of the activity based on its current reversal risk assessment.~~

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			"For the 57 REDD+ projects for which we were able to find matching remote sensing data in the published literature, we found the mean 100-year risk of a stand-clearing natural disturbance to be 28%. In other words, if past disturbance rates continue unchanged, around 28% of preserved forest carbon will be released into the atmosphere by a major natural disturbance event over the next 100 years. This is likely an undercount of actual risk for two reasons: first, our estimate only took into account a portion of the disturbance (stand-clearing disturbance), and second, our calculated risks did not account for the expected increases in risk with climate change. **Nonetheless, the average REDD+ project estimated its risk from all natural disturbance to be just 2% of credited carbon reductions, less than a tenth of our estimates**. Furthermore, more than half of all projects contributed the minimum allowed deduction, 10%, into the buffer pool to cover both natural and human risks" (emphasis added). *Source: Haya, B. K., Alford-Jones, K., Anderegg, W. R. L., Beymer-Farris, B., Blanchard, L., Bomfim, B., Chin, D., Evans, S., Hogan, M., Holm, J. A., McAfee, K., So, I. S., West, T. A. P., & Withey, L. (2023, September 15). Quality assessment of REDD+ carbon credit projects. Berkeley Carbon Trading Project. https://gspp.berkeley.edu/research-and-impact/centers/cepp/projects/berkeley-carbon-trading-project/redd*	

Removals	3.6.1	37	As commented in the above cell, the design of the reversal risk assessment tool is critical, since it bears strong implications for how permanence is intended to be upheld. An activity participant will need to have an activity-level risk assessment tool undertaken (¶34), which will determine the risk rating for the contribution to the buffer pool (¶52-53). The robustness of the reversal risk assessment tool is critical for many reasons including because if an activity is deemed to have a negligible risk of reversals then: i) it can make a request to cease post-crediting MRV without any pre-emptive remediation (para 18); ii) any reversals it experiences can only be remediated via direct cancellation with an "additional insurance policy or guarantee product" (¶57-59), the details of which have not yet been provided (issues around direct cancellation and insurance policies are addressed in more detail a few cells below). Since the reversal risk assessment tool will determine the buffer pool composition, how reversals are remediated, and whether post-crediting MRV will even be required, getting the details right is essential. The SB must at a minimum clarify that the reversal risk tool: • Shall be based on the latest peer-reviewed scientific research and thus regularly updated to account for new scientific findings (e.g. every 5 years) • Shall reflect geographical context, historical risk record, and projections for future risk development, including those related to the impacts of climate change • Shall define a minimum default risk rating for activities facing a reversal risk, potentially defined by activity type. An activity-level assessment shall also be conducted, which shall not lead to an overall rating that is lower than the default risk rating. The activity-level assessment may result in the overall rating being higher than the default risk rating. Embedding these requirements in the removals recommendation is essential to ground the future work on the reversal risk assessment tool in robust principles. This is needed because current practice on the VCM and compliance programmes (California) to determine reversal risks does not appear to be firmly grounded in science. For example, in Verra's AFOLU non-permanence risk tool (v4.2), the point scoring system attributed to determine risk, as well as the mitigating factors used to reduce a risk rating, don't appear to have a clear methodology informed by scientific data to determine the points and weighting. While Verra's tool importantly calls for data to be used to determine likelihood of risk – "the frequency and significance of events shall be estimated based on historical records, probabilities, remote sensing data, peer-reviewed scientific literature, survey data or documented local knowledge." – the actual underlying point scoring distribution for risks and mitigation factors is neither justified nor seemingly backed-up by scientific data.	37. The Supervisory Body will develop a reversal risk assessment tool. The tool shall incorporate the latest peer-reviewed scientific research and shall be regularly updated, at least every 5 years, to account for new scientific findings. The tool shall require activity participants to incorporate geographical context, historical risk record, and projections for future risk development, including those related to the impacts of climate change. The tool shall also define a minimum default risk rating for activities facing a reversal risk, potentially distinguished by broader activity type. The activity-level assessment described in paragraph 34, shall complement the default risk rating, and shall not lead to an overall rating that is lower than the default risk rating. The activity-level assessment may result in the overall rating being higher than the default risk rating. DOEs shall review the results of the activity-level assessment, including by assessing the appropriateness of the underlying data as well as the risk rating, and provide recommendations to the activity participant and SB as appropriate. Methodologies may include additional guidance on the application of the tool.

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			This may partly explain why current practice for risk assessment leads to large underestimation of likely risk. For example, as detailed in the above cell, last year researchers from UC Berkeley found that the average REDD+ project they assessed had estimated its risk from all natural disturbance to be just 2% of credited carbon reductions, less than a tenth of their conservative estimates of probable risk. In addition, a pre-print article by Anderegg et al. that has not yet been peer-reviewed (ongoing) also suggests there is no scientific grounding that underpins the reversal risk points/weights in Verra's non-permanence assessment framework and that Verra's buffer is likely to be highly under-capitalized relative to probable disturbances.	

Removals	3.6.3.3; 3.6.2.1; 3.6.1	60, 40, 33	The SB needs to define an avoidable reversal and an unavoidable reversal. The definitions used in Verra's VCS (v 4.4) clarify the difference between avoidable and unavoidable reversals, whereby the former refers to reversals under the influence or control of the activity participant. These definitions are proposed with minor modifications in the cell to the right. Gold Standard's performance shortfall guidelines (v 2.0) also makes a similar distinction of three categories: i) force majeure (e.g. act of war, natural disaster); ii) non-force majeure (e.g. poor project management, overestimation of the ex-ante CO_2-fixation model); iii) de-certification / de-registration (e.g. non-conformity, bankruptcy) which is considered a full reversal of all issued units. While we have focused on Verra's definitions in our proposal, the SB could consider also incorporating elements from Gold Standard's or other definitions, so long as it is clearly clarified that an avoidable reversals is that which is under the influence/control of the activity participant. In addition, in paragraph 40 or potentially following either paragraph 33 or paragraph 60, additional provisions should be added detailing further consequences of causing avoidable reversals. This is important to ensure that there are consequences for causing avoidable reversals.	60. ~~The Supervisory Body will develop further guidance on avoidable and unavoidable reversals, including how they are distinguished and demonstrated.~~ An avoidable reversal is a reversal over which the activity participant has influence or control. This includes poor project management, removal or redefinition of a portion of the activity area, harvesting and tillage. 61. An unavoidable reversal is a reversal over which the activity participant has no influence or control. This includes hurricanes, earthquakes, flooding, drought, fires, tornados and winter storms, and human-induced events such as acts of terrorism, crime, or war. Encroachment by outside actors (e.g., logging, mining, or fuelwood collection) are considered unavoidable when demonstrably unforeseeable and out of the activity participant's control. *[… The below three paragraphs could be incorporated in paragraph 40, or potentially after either para 33 or 60]* [XX.] The Article 6.4 mechanism registry shall publicly tag activities that have experienced reversals, distinguishing if these were avoidable or unavoidable. The Article 6.4 mechanism registry shall also publicly tag any activity participant having ever caused an avoidable reversal. [YY.] Any reversal presumed or proven to be avoidable shall be investigated by a DOE and by the Supervisory Body, in order to determine additional corrective measures, which may include discounting issuance for the activity participant's activity or even banning the activity participant from participating in the 6.4 mechanism, depending on factors such as the severity of the avoidable reversal and whether the activity participant has caused other avoidable reversals, including in other activities. [ZZ.] The Supervisory Body will develop further guidance on avoidable and unavoidable reversals, including on corrective measures to be taken in the event of avoidable reversals.

Removals	3.6.3; 3.6.3.1	49, 55	Paragraph 49 implies that the two envisaged means of addressing reversals, buffer pools and direct cancellation, can be used on "on a standalone basis or in combination", but in paragraph 55 it is stated that the buffer pool cannot be used for avoidable reversals. Paragraph 55 should be cut. Paragraphs 57-58 also need to be reworked (addressed in below cell). As noted in our previous submissions to the SB about removals in July and October 2023, in the event of any reversal, the corresponding amount of ERs must always be drawn from the buffer pool. The manner in which the buffer pool is replenished depends on whether the reversal was avoidable or unavoidable: • for unavoidable reversals, the activity participant must replenish the buffer pool equivalent to any reversals in excess of the ERs that the activity contributed to the buffer pool; • for avoidable reversals, the activity participant must fully replenish the buffer pool equivalent to all reversals: first, from its own issuance of this activity; if there are not enough ERs from its own issuance from this activity, then it will source the ERs from other activities it has registered (if applicable) or from activities of other activity participants of the same or greater durability. Such replenishment shall be undertaken at the activity participant's own expense. For example, a project with a risk rating of 20% had contributed 2,000 ERs to the buffer out of a total issuance of 10,000 ERs. Subsequently, it experiences a reversal of 3,000 tonnes: • If it is an unavoidable reversal, the activity participant replenishes the buffer with 1,000 ERs; • If it is an avoidable reversal, the activity participant fully replenishes the buffer pool equivalent to all reversals, i.e. 3,000 ERs.	54. Following the Supervisory Body's review of a full monitoring report that reflects reversals, the Supervisory Body will notify the registry administrator of the results of its review, after which the registry administrator shall effect a cancellation of Buffer 6.4 ERs equal to the amount of ~~unavoidable~~ reversals requiring remediation. Where possible, reversals should be remediated with 6.4 ERs from the same vintages and shall be remediated with 6.4 ERs from an activity of the same or higher durability as determined by the activity's reversal risk assessment. ~~55. Buffer ERs shall not be cancelled to remediate avoidable reversals.~~ 55. Regarding the cancellation of Buffer 6.4 ERs as per paragraph 54, if the reversals were unavoidable and exceed the activity's aggregate contribution of Buffer 6.4 ERs such that full remediation of reversals cannot occur, the registry administrator shall forward 6.4 ERs from the activity to the Reversal Risk Buffer Pool equal to the amount of remaining reversals requiring remediation. 56. Regarding the cancellation of Buffer 6.4 ERs as per paragraph 54, if the reversals were avoidable, the registry administrator shall forward 6.4 ERs from the activity to the Reversal RIsk Buffer equal to the full amount of reversals requiring remediation. If there are not enough 6.4 ERs from the activity to remediate the reversals, the mechanism registry administrator shall forward 6.4 ERs from another activity registered to the activity participant of equal or higher durability as determined by the activity's reversal risk assessment. If there are still insufficient 6.4 ERs to fully remediate the reversals, the activity participant shall forward 6.4 ERs, at its own expense, from other activities of equal or higher durability to the activity participant's activity as determined by the other activities' reversal risk assessments, to the Reversal Risk Buffer equal to the amount of remaining reversals requiring remediation.

Removals	3.6.3.2	57-59	"Direct replacement" must be better defined and clearer requirements for its use must be indicated if it is to remain a standalone option for remediation. We do not believe that direct replacement of 6.4 ERs should be proposed as an alternative to use of the buffer pool for reversals, as detailed in the cell above. Overall we have doubts regarding direct replacement, as expressed in our submission in July 2023. There would need to be further discussion by the SB regarding the parameters for direct credit replacement, e.g. whether ERs selected to remediate reversals are decided by the activity proponent and/or the provider of the guarantee/insurance product, or whether there would be clear principles framing the selection of replacement ERs, such as a requirement for like-for-like replacement such that only ERs of the same or higher durability are eligible, or elaborating a system so that only the mechanism registry administrator or another impartial third-party selects which ERs are eligible for remediation. There also may need to be provisions requiring replacement credits to be acquired from a different Party/jurisdiction in case the two projects are both of the same activity type and/or region (i.e. to mitigate risks that the reversal event impacting the first activity does not similarly impact the second activity providing the replacement ERs). In addition, given that direct credit replacement is currently the only envisaged remediation option for activities with negligible reversal risk, which must also have an "additional insurance policy or guarantee product" (¶57-59), it is worth noting that such insurance/guarantees are not clearly described and may be unfit for the task. Insurance products are nascent in carbon crediting contexts, with only a few companies having emerged on the VCM in the last years. There are significant questions regarding the appropriateness of private insurance products given the multi-century time frames required for remediation, the seeming lack of experience of major insurance providers regarding reversals and remediation in a carbon crediting context, as well as the fact that many reversal risks are likely to increase in the future due to climate change, consequently threatening underwriters' long-term financial resilience. For example, regarding this last point, in May 2023, State Farm, the largest car and home insurer by premium volume in the US, halted the sale of new home insurance policies in California due in part to "rapidly growing catastrophe exposure" as a result of wildfires. At the minimum, the SB must conduct a robust assessment of insurance products in a carbon crediting context, the considerable risks they face for certain project types, and the fall-back in case underwriters go bankrupt or cease operations while reversal risks persist. For example, if an activity that had been deemed to have a negligible reversal risk ends up experiencing a large-scale reversal which puts the activity proponent out of business and if the underwriter is incapable of fulfilling their obligations to remediate the reversals, then it's unclear what additional safety measure would be in place to guarantee remediation.	*No direct text to propose at the moment, since these issues warrant further discussion by the SB that may then lead to a basis for text that can be elaborated.*

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Removals	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
			All these issues are complex to answer and would have significant repercussions for the potential viability of direct credit replacement and associated insurance products. Considerably more work from the SB around direct replacement and long-term liability as well as equity considerations in the event the host Party ends up assuming liability. At the current stage, it does not seem appropriate to propose direct replacement ERs as a standalone alternative to the buffer pool, unless these and other elements are clarified in discussions by the SB and in subsequent versions of the text.	

Removals	3.3	26	Currently, there are no consequences if an activity participant ceases MRV without communicating to the SB, or fails to submit a monitoring report, or submits an incomplete or late report. While the current text calls on the SB to develop further guidance on these topics (¶26), no further framing is given to guide minimum rules, which can already be established. If an activity participant fails to submit a monitoring report without communicating about this to the SB within a fixed time period, it is reasonable to assume the activity may have ceased its activities and that any of its issued credits are at risk of reversal. Similarly, if an activity participant is delayed in submitting a report without communicating within a fixed time period, or submits an incomplete report and is unresponsive to requests to clarify errors or submit a complete report, then the same assumption should be made. The exact duration of the time period for the activity participant to communicate with the SB or respond to a request from the SB can still be further discussed, but for the time being we suggest: • 15 calendar days, following the deadline for submission of the monitoring report, for the activity participant to communicate to the SB regarding either failure to submit a report or a delay in submitting a report; • 15 calendar days to satisfactorily respond to a request from the SB for clarification regarding an incomplete report that has been submitted. In the event of no monitoring report being submitted, or the monitoring report being delayed or incomplete, the SB should first freeze the registry account of the project developer such that no issuances or transfers can occur, including from any other projects they are associated with. If the 15 calendar day period mentioned above elapses without satisfactory communication and/or justification, then the SB should deem all of the activity's issued credits to be avoidable reversals that need to be remediated by the project developer accordingly. These provisions are already practiced on the voluntary carbon market by the four main standards. While the details vary, it's typical that if no MRV has happened, or if there's a failure to communicate from the activity participant, that the presumption is of an avoidable reversal and that the standard can freeze the activity participant's account and take other remedial actions depending on the nature of the situation. For more information on the practices of the standards, see: Climate Action Reserve's manual (pp. 22-24); ACR's Buffer terms (pp.1-4); Gold Standard's GHG Emissions Reductions & Sequestration Product Requirements (section 3), Performance Shortfall Guidelines (section 11.4), Principles & Requirements (section 7); Verra's VCS Standard (p.13) and registration process (pp.30-35).	[XX.] Late, incomplete, or missing monitoring report submissions, remedial measures shall be taken. This also applies to situations where either monitoring or the activity has stopped prematurely, for instance prior to the conclusion of the crediting period(s) and fulfilment of requirements for post-crediting period monitoring. [YY.] If an activity participant fails to submit a monitoring report on time or submits an incomplete monitoring report, the activity participant shall be unable to issue, transfer, or cancel ERs from the activity for which the monitoring report is due as well as any other activity in which they are a participant. If an activity participant provides a justification within 15 calendar days following the deadline for the submission of the monitoring report that is deemed acceptable by the Supervisory Body, then they shall be able to resume transfer or cancellation of ERs from the activity for which the monitoring report is due as well as from any other activity in which they are a participant. If an activity participant fails to provide a justification within 15 calendar days following the deadline for the submission of the monitoring report, or if this justification is deemed unacceptable by the Supervisory Body, all previously issued ERs to the activity shall be deemed avoidable reversals and shall be remediated by the activity participant accordingly. 26. The Supervisory Body may ~~will~~ develop further guidance to operationalise the remedial measures described in paragraphs [XX] and [YY] ~~on and procedures for addressing late, incomplete, or missing monitoring report submissions including remedial measures to address situations where monitoring is stopped prematurely, i.e., prior to the conclusion of the crediting period(s) and fulfilment of requirements for post-crediting period monitoring. The guidance will address options for giving effect to the remediation of reversals of removals for which 6.4ERs have been issued in such circumstances~~.

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Removals	**Section no.**	**Para. no.**	**Comment**	**Proposed change (Include proposed text)**
Removals	3.4	27a	Paragraph 27a indicates that emissions within the activity boundary (e.g. due to the implementation of the activity or due to a reversal) as well as leakage emissions will be estimated and deducted from the calculation of removals. While this is positive, the reference to leakage emissions remains somewhat ambiguous. Leakage emissions should reasonably be interpreted as any GHG emissions occurring outside of the activity boundary that are related to the implementation of the activity (e.g. construction materials to build structures, energy-related emissions from the grid), but the general reference to leakage might also be interpreted to exclude some, or all, out-of-boundary GHGs, which would be inappropriate. To resolve this, the SB should clarify that all GHGs beyond the activity boundary that are related to the design, implementation, or overall functioning of the activity (including energy supply and MRV) are fully accounted for and deducted from the calculation of removals.	27. Removals eligible for crediting shall exceed the applicable baseline determined in accordance with requirements for the development and assessment of Article 6.4 mechanism methodologies and are calculated for each year in the crediting period. In each given monitoring report, such calculations are done in accordance with the following: (a) by calculating net removals, which involves the estimation and deduction of emissions within the activity boundary that result from the implementation of the activity and/or from an event that could potentially lead to a reversal of removals, ~~and~~any leakage emissions, as well as any emissions occurring outside the activity boundary that are related to the implementation of the activity, including but not limited to construction materials and supply of energy, electricity, heat, or cooling, in accordance with the applicable provisions of the Activity Standard, requirements for the development and assessment of Article 6.4 mechanism methodologies, and the applicable methodology; and

Removals	3.9	64	Paragraph 64 allows for a provision whereby the host Party can take over post-crediting monitoring period from the activity participant by providing "a sovereign guarantee to apply corresponding adjustments in respect of any amount of reversals incurred". This provision raises several challenges and questions, namely from an equity perspective. As noted in our submission in July 2023, it is unjust for the buying entity of an ER to be able to claim carbon neutrality, meet emission reduction/removal targets, or offset its emissions, on the basis of mitigation outcomes facing a risk of reversal without bearing any costs or liability for future MRV and for remediation of potential future reversals. This is particularly an issue given that many host Parties are also developing countries, while buyers are typically developed Parties or highly profitable companies that have heavily emitted in the past and continue to do so. This provision may also push host Parties to compete with one another to take on liability for future reversals since prospective activity participants may be more likely to undertake an activity in a host Party that has committed to apply this guarantee compared to a host Party that has not made such a guarantee. Refusing to apply a sovereign guarantee for corresponding adjustments may thus indirectly penalise host Parties that do not wish to take on this liability from activity participants. There is also a risk that this provision may not in fact be an adequate way of addressing reversals in some cases. For Parties with a NDC that is business-as-usual or even less ambitious, applying corresponding adjustments only puts them slightly closer to a BAU pathway, meaning that it does not put much pressure to undertake extra abatement that would be required in normal circumstances to address a reversal. In addition, Parties may be incentivised to authorise activities with high reversal risks (and potentially negative impacts): e.g. large-scale non-native monoculture afforestation. One way to more equitably spread costs and liability for future MRV and reversals would be to ensure that buying entities take on responsibility. The SB could require the following: ● When ERs are authorised for NDC use, the acquiring Party should bear the cost of future MRV and remediation rather than the host Party. It is inappropriate for an acquiring Party to use an ITMO towards its NDC, and then never have to bear any responsibility for the underlying mitigation going forward, which it would have to do if it were undertaking actual domestic mitigation. Requiring the acquiring Party to bear liability will either incentivise the purchase of ITMOs from activities with a lower reversal risk or will require the acquiring Party to reflect the truer cost of purchasing ITMOs from activities with a higher reversal risk. ● When ERs are authorised for IMP/OP, the acquiring entity should also bear some or the full cost of MRV and remediation for the same reason detailed above.	*No direct text to propose at the moment, since these issues warrant further discussion by the SB that may then lead to a basis for text that can be elaborated.*

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Removals	**Section no.**	**Para. no.**	**Comment**	**Proposed change (Include proposed text)**
			In order to operationalise this further, the SB could apply a share of proceeds for MRV and remediation, or an MRV and remediation fee applied at issuance, which could be linked to the reversal risk rating of the activity. The resulting funds could then be channeled either to the Party hosting the activity or to a fund dedicated to establishing a long-term monitoring system that could be run by the UNFCCC (this is not to suggest the UNFCCC would need to develop a long-term monitoring system itself – however, the UNFCCC could conduct a procurement process to establish such a system that could be made available to all Parties participating in Article 6). We would recommend the SB or Secretariat to produce an assessment of the potential SOP/issuance fee for MRV and how these funds could be used to ensure a more equitable outcome for long-term monitoring and remediation of reversals.	
Removals	3.8	62	The language in paragraph 62 concerning safeguards is too general and needs to be reinforced.	62. Activity participants shall apply robust social and environmental safeguards not only to ~~minimize and, where possible,~~ avoid negative environmental and social impacts of the activity but also to demonstrate positive outcomes of the activity for biodiversity, ecosystem restoration, Indigenous Peoples as well as local communities where relevant for the activity: (a) In accordance with requirements contained in Article 6.4 mechanism activity standard[6], including the application of the Article 6.4 mechanism sustainable development tool[7], guidance on local and global stakeholder consultation and where applicable, the Appeals and Grievance Procedure[8]; and (b) Any other applicable provisions developed by the Supervisory Body to avoid negative environmental and social impacts of an activity involving removals; (c) For an activity involving the use of land or biomass, activity participants shall demonstrate that the activity does no harm to the environment and generates a positive outcome for biodiversity and ecosystem restoration, in accordance with provisions to be developed by the Supervisory Body.

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Removals	**Section no.**	**Para. no.**	**Comment**	**Proposed change** (Include proposed text)
Removals	N/A	N/A	As briefly touched on 2 cells above, we would suggest the SB to apply a SOP/issuance fee for MRV to help ensure long-term monitoring and to minimise risks of costs/liability falling entirely to the Host party without support. Applying a fee for MRV could be linked to the reversal risk rating of the activity. Such a fee could either go directly to the Host Party to support its MRV efforts, or it could go towards establishing and maintaining a long-term monitoring system available to Parties involved in Article 6 which could be overseen by the UNFCCC. Such a long-term monitoring system could be developed externally, after a procurement process, and could for instance operate on the basis of satellite technology (and/or other methods tailored to activity types). We would recommend the SB to request the secretariat to conduct further analysis on appropriate MRV fees to apply upon issuance as well as how the proceeds from such a fee might best support long-term monitoring (e.g. whether directly to the host Party, towards a common system, or something else entirely).	[XX.] Upon issuance, a fee for conducting MRV shall be applied [a share of proceeds for MRV shall be levied], at a rate commensurate with the reversal risk of the activity. The Supervisory Body shall set the rate of the fee, which shall build on the reversal risk assessment tool to be developed as per paragraph 37. The fee shall support the long-term monitoring of activities according to further guidance that the SB shall develop.
Removals	N/A	N/A	A provision should be added to the text to allow the SB to permanently ban an activity participant from engaging in the Article 6.4 mechanism and take other corrective actions, for example in cases where an activity participant violates the rights of Indigenous Peoples or repeatedly causes avoidable reversals. Additional corrective actions for such cases could include cancelling any unused credits of the activity participant, including from any other activities they are involved in. We have proposed indicative text in the cell to the right as a starting point, which the SB could further discuss and elaborate on.	[XX.] Where an activity participant has been found to cause harm to Indigenous Peoples, to violate the rights of Indigenous Peoples, or to cause any land or human rights violations, the Supervisory Body shall permanently ban the activity participant and any associated entities from participating in the Article 6.4 mechanism. The same measure shall apply for an activity participant having caused an avoidable reversal without proper justification on more than one occasion. The registry administrator shall issue a public notification on the 6.4 mechanism registry regarding the ban of any activity participants and associated entities. The SB will develop further guidance on the topics described in this paragraph.
Removals	N/A	N/A	The text should include a provision requiring public tags on the Article 6.4 mechanism registry of the expected durability of the removals associated with each activity, as well as the reversal risk that has been attributed to the activity.	[XX.] The registry administrator shall publicly tag activities with a reversal risk by disclosing the reversal risk rating of the activity. This disclosure shall include the total reversal risk rating as well as the underlying individual risk ratings making up the total, which shall be displayed in a machine-readable format on the public interface of the registry.

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