



**Verified Carbon
Standard**

METHODOLOGY FOR CONSERVATION PROJECTS THAT AVOID PLANNED LAND USE CONVERSION IN PEAT SWAMP FORESTS ASSESSMENT REPORT



Document Prepared by Aster Global Environmental Solutions, Inc.

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Summary

Aster Global Environmental Solutions, Inc. (Aster Global) was commissioned by Infinite Earth Limited to perform the assessment of revisions to the existing *VM0004 Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests* in accordance with the VCS Methodology Approval Process, the VCS Program Guide, the VCS Standard, and the Guidance for Standardized Methods.

The Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests methodology is an existing project method used to quantify the net greenhouse gas emissions resulting from project activities designed to stop land use conversion in tropical peatlands. At the time of the initial methodology validation, Wetlands, Restoration and Conservation (WRC) project category had not been included in the VCS program. The modifications incorporated within this assessment included changes to meet all applicable WRC requirements in line with the VCS standard and additional template and clarification changes that were warranted due to VCS program and template requirement updates.

The purpose and scope of the first methodology revision assessment was to evaluate whether the methodology updates were prepared in line with the updated VCS program requirements. Aster Global's assessment included a detailed review in accordance with the VCS Methodology Approval

Process, the VCS Program Guide, and the VCS Standard with regard to eligibility criteria, baseline approach, additionality, project boundary, emissions, leakage, monitoring, data and parameters, and adherence to the project level principles of the VCS rules and requirements (relevance, completeness, consistency, accuracy, transparency and conservativeness). Aster Global's assessment also included a detailed analysis of the methodology, literature reviews, technical reviews and responses to all non-conformance reports (NCRs) and clarifications (CLs) based on the VCS rules and requirements.

The Aster Global assessment team identified 101 findings (NCRs and CLs). All were addressed satisfactorily in accordance with the VCS program. Of note, a large number of parameters were added in line with template requirement changes from the previously validated methodology. The assessments of these additional parameters were confirmed to meet the requirements of the current template, however further review was limited due to the scope of this assessment. The responses to all NCRs and CLs provided necessary clarity to ensure that the methodology module was in compliance with the VCS rules and requirements. These findings are depicted in Appendix A.

Aster Global confirms all methodology assessment activities, including objectives, scope and criteria, level of assurance and the methodology adherence to the VCS Program and VCS Standard, as documented in this report, are complete. Aster Global concludes that the changes made to incorporate WRC elements and modifications to the template for the VM0004 Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests, V1.33 meets the requirements of Verra.

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1 INTRODUCTION

1.1 Objective

This methodology revision assessment was performed to evaluate the likelihood that implementation of the methodology would result in accurate calculations and appropriate eligibility criteria for GHG emission reductions/removals (ISO 14064-3:2006). This report summarizes the findings of the methodology revision assessment of the Verified Carbon Standard (VCS). Infinite-Earth Limited, referred to as the “Methodology Developer”, has commissioned Aster Global Environmental Solutions, Inc. (Aster Global), referred to as the “Assessment Team,” to perform an assessment of the REDD/WRC *VM0004* Methodology.

This report presents the findings of a qualified assessment team of auditors and experts in methodologies for GHG emissions or who have assessed the methodology and modules for compliance under the applicable rules of the VCS. Section 2.5 presents summary findings of the methodology module assessment, Section 3 below provides the assessment methods and criteria, and Appendix A provides details of individual findings.

1.2 Summary Description of the Methodology

The *VM0004 Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests* is an existing methodology providing an approach to quantify the net greenhouse gas emissions resulting from project activities designed to stop land use conversion in tropical peatlands. The methodology is applicable only in Southeast Asia. The methodology was developed to work within the framework of the for the purpose of quantifying GHG emission reductions and removals and apply to Reduced Emissions from Deforestation and Degradation (REDD) and Wetlands, Restoration and Conservation (WRC).

The additionality and crediting method for this module is the project method, and the GHGs included in this module are described in Section 3.6 below.

2 ASSESSMENT APPROACH

2.1 Method and Criteria

This assessment is based upon standard auditing techniques in line with VCS Requirements to assess the correctness of the information provided. In accordance with the VCS rules, a methodology assessment encompasses applicability conditions, project boundary, procedure for demonstrating additionality, procedure for determining baseline scenario, baseline emissions, leakage, quantification of net GHG emission reduction and/or removals, monitoring and data and parameters. Per Section 7.3 of the Methodology Approval Process, this methodology assessment included the scope of the added WRC requirements, adopted by VCS following the initial validation of the methodology, and its adherence to the latest VCS Methodology Template.

The guidance documents used to assess the methodology revision were the:

- VCS Program Guide (v4.0, 19 September 2019)
- VCS Standard (v4.0, 19 September 2019)
- Program Definitions (v4.0, 19 September 2019)
- Validation and Verification Manual (v3.2, 19 October 2016)
- AFOLU Non-Permanence Risk Tool (v4.0, 19 September 2019)
- Methodology Approval Process (v4.0, 19 September 2019)
- Guidance for Standardized Methods (v3.3, 8 October 2013)

2.2 Document Review

A list of documents reviewed can be found below:

Document File Name	Date Received
VM0004 Methodology Based on VCSv4 v1.17.docx	2/2/2021
VM0004 Methodology Based on VCSv4 v1.17.pdf	2/2/2021
17-07-18-asian-agri-suport-national-oil-palm-replanting-program.pdf	2/26/2021
Changes in soil CH ₄ fluxes from the conversion of tropical peat swamp forest a meta analysis.pdf	2/26/2021
couwenberg_2009a.pdf	2/26/2021
DommainEtAl_2018_a radiative forcing analysis of tropical peatlands before and after their conversion to agricultural plantations.pdf	2/26/2021
Emissions Factor Memo v1.1.docx	2/26/2021
Emissions Factor Memo.docx	2/26/2021
Emissions Factors from literature.xlsx	2/26/2021

English_Blue_Carbon_LR.pdf	2/26/2021
Kadlecwallace2009TreatmentWetlands2ndEdition_0.pdf	2/26/2021
KFCP Hyrdology and Peat Monitoring Methodology_ Ichsan et al_ 2013.pdf	2/26/2021
Least Suare Adjustment of Estimating Tropical Peat Depth.pdf	2/26/2021
Memo on peat drainage.v1.0.docx	2/26/2021
Memo on peat drainage.v1.1.docx	2/26/2021
Memo on peat drainage.v1.2.docx	2/26/2021
News Sources for Oil Palm Replanting on Plantations.docx	2/26/2021
Notes on Literature.docx	2/26/2021
Notes.xlsx	2/26/2021
Oil Palm Production and Carbon Footprint.pdf	2/26/2021
Rates and Spacial Variability of Peat Subsidence in Acacia plantation and forest landscapes.pdf	2/26/2021
VM0004 Methodology Notes and Gaps_v1.0.docx	2/26/2021
VM0004 Methodology Notes and Gaps_v1.1.docx	2/26/2021
Widespread subsidence and carbon emissions.pdf	2/26/2021
Notes on Dissolved Organic Carbon Pool.docx	2/26/2021
am-tool-11-v3.0.1.pdf	2/26/2021
ar-am-tool-03-v2.1.0.pdf	2/26/2021
ar-am-tool-03-v2.pdf	2/26/2021
bn9_peatland_inventory_e.pdf	2/26/2021
CA8200EN FAO Peatland mapping and monitoring.pdf	2/26/2021
Citations indes.xlsx	2/26/2021
eb50_repan23.pdf	2/26/2021
GPG_LULUCF_FULLEN.pdf	2/26/2021
Hooijer et al_ 2012_ subsidence and carbon loss.pdf	2/26/2021
Konecny et al_ 2016_ Variable carbon losses from repeat fires.pdf	2/26/2021
s13021-020-00139-2 - Mapping deep peat carbon stock.pdf	2/26/2021
VMD0009-LK-ASP-v1.2.pdf	2/26/2021
VMD0011-LK-ME-v1.1.pdf	2/26/2021
VT0001v3.0.pdf	2/26/2021
AG21025_VM0004_MethRev_REDDWRC_Round1Findings_v1.1.xlsx	4/30/2021
VM0004 Methodology Based on VCSv4 v1.21	4/30/2021
VM0004 Methodology Based on VCSv4 v1.21.docx	5/3/2021
VM0004 Methodology Based on VCSv4 v1.21_compare_to_v1.17_Round 1 Findings Updates.docx	5/3/2021
AG21025_VM0004_MethRev_REDDWRC_Round1Findings_v1.2.xlsx	5/7/2021
VM0004 Methodology Based on VCSv4 v1.24.docx	5/7/2021
VM0004 Methodology Based on VCSv4 v1.24.pdf	5/7/2021
VM0004 Methodology Based on VCSv4 v1.24_compare_to_v1.21_Round 1 Findings Updates.docx	5/7/2021
AG21025_VM0004_MethRev_REDDWRC_Round2Findings (v1.1 EP Responses).xlsx	6/2/2021

VM0004 Methodology Based on VCSv4 v1.26.docx	6/2/2021
VM0004 Methodology Based on VCSv4 v1.26.pdf	6/2/2021
VM0004 Methodology Based on VCSv4 v1.26_compare_to_v1.24_Round 2 Findings Updates.docx	6/2/2021
AG21025_VM0004_MethRev_REDDWRC_Round3Findings_epresponses_v1.1.xlsx	7/23/2021
VM0004 Methodology Based on VCSv4 v1.30.docx	7/23/2021
VM0004 Methodology Based on VCSv4 v1.30.pdf	7/23/2021
VM0004 Methodology Based on VCSv4 v1.30_tracked changes.docx	7/23/2021
AG21025_VM0004_MethRev_REDDWRC_Round4Findings_responses.xlsx	8/5/2021
VM0004 Methodology Based on VCSv4 v1.31.docx	8/5/2021
VM0004 Methodology Based on VCSv4 v1.31.pdf	8/5/2021
VM0004 Methodology Based on VCSv4 v1.31_tracked changes.docx	8/5/2021
AG21025_VM0004_MethRev_REDDWRC_Round5Findings_responses.xlsx	8/6/2021
VM0004 Methodology Based on VCSv4 v1.32.docx	8/6/2021
VM0004 Methodology Based on VCSv4 v1.32.pdf	8/6/2021
VM0004 Methodology Based on VCSv4 v1.32_tracked changes.docx	8/6/2021
AG21025_VM0004_MethRev_REDDWRC_Round6Findings_ep_responses.xlsx	8/9/2021
VM0004 Methodology Based on VCSv4 v1.33.docx	8/9/2021
VM0004 Methodology Based on VCSv4 v1.33.pdf	8/9/2021
VM0004 Methodology Based on VCSv4 v1.33_tracked changes.docx	8/9/2021

2.3 Interviews

The Assessment Team conducted interviews via its typical assessment channels of the opening meeting, methodology walkthrough, meetings to discuss findings, email exchanges, phone calls, and the closing meeting. During these meetings, the methodology development team was interviewed, including Todd Lemons, of Infinite-Earth Limited, and Sam Frankel, project manager from EP Carbon. The interviews consisted of descriptions of the content changes to the methodology and discussions of findings throughout the audit.

2.4 Assessment Team

The names, roles, and summary of qualifications/expertise/experience relevant to the methodology of all members of the assessment team follows:

Shawn McMahon – Lead Assessor and Verra-approved IFM Expert (Aster Global, smcmahon@asterglobal.com): Vice-President, Lead Assessor, VCS WRC Non-Peatlands Expert. Approved to conduct third-party carbon sequestration validations and verifications under VCS (WRC, REDD, IFM and ARR expert). Specializes in third-party carbon offset validations and verifications, carbon sequestration project development, development and

implementation of management plans for enhancement of carbon stocks, development of carbon and environmental asset tracking programs, and team management.

Richard Scharf – Assessment Team Member (Aster Global, rscharf@asterglobal.com): Senior Soil Scientist, NCLSS, SC Soil Classifier. Over twenty-two years of experience in a variety of soils-related projects. Duties include managing and conducting soils work for wastewater projects, stormwater projects and wetland delineation. Provides expertise and experience on carbon offset projects/methodologies associated with agricultural land management and/or soil carbon pools.

Matthew Perkowski – Assessment Team Member (Aster Global, mperkowski@asterglobal.com): Project Forester and Forest Biometrician. Responsibilities include meeting the internal and external client objectives in the fields of forest inventory and sampling, growth and yield modeling, and directly in support of offset validation/verification projects. In addition, he is focusing on streamlining and developing quantitative tools for the GHG group to increase product service value for clients.

Eric Jaeschke – Assessment Team Member (Aster Global, ejaeschke@asterglobal.com): Project Forester and Remote Sensing Specialist. Duties include technical GIS and remote sensing support for carbon offsetting projects through validations/verifications under various rule sets, data analysis and field validations.

Barbara Toole O'Neil - VCS-Standardized Methods Expert/Assessment Team Member (Aster Global, btooleoneil@asterglobal.com): Since 2012, Ms. Toole O'Neil has focused on climate services, corporate responsibility and energy efficiency projects from the industrial manufacturing to ecosystems services sectors. Her work responsibilities have addressed a wide range of environmental issues from preparing inventories or offset project documents to assessing methodologies submitted to the Verified Carbon Standard (VCS) (forestry to energy efficiency); supporting the development of the ARB Mine Methane Capture Protocol as part of the working group, managing energy efficiency surveys and measurement projects on farms, validating/verifying inventories and carbon offset projects, corporate social responsibility auditing, developing governance for sustainability non-profits, to writing a social standard to assess the impact of environmental projects (carbon, water, forestry, agriculture) on the quality of life for women in emerging third world countries.

Taek Joo Kim – Assessment Team Member (Aster Global, tkim@asterglobal.com): Senior Forester and Forest Biometrician. Mr. Kim received a Ph.D. in Forest Biometrics from North Carolina State University with a Ph.D. Minor in Statistics & a Graduate Certificate for Geographic Information Systems (GIS) in 2015. He was previously a postdoctoral research fellow at the U.S. Forest Service Southern Research Station until 2016. Mr. Kim has been in forestry sector for a long time and has gained an extensive knowledge and multiple research experiences in a variety of areas in forestry, which includes ecology, physiology, silviculture, management, policy, economics, and modeling. In particular, as a broadly trained forest

biometrician, he has expertise in forest modeling more specifically in spatial modeling and analysis.

Caitlin Sellers – Assessment Team Member (Aster Global, csellers@asterglobal.com): Senior Forester. Ms. Sellers has been involved in environmental, forest, wetland and wildlife projects for over 13 years and has specialized in forest carbon project auditing for 8 years. She is directly involved in validation and verification of forest carbon offsets and methodologies.

Mansfield Fisher – Assessment Team Member (Aster Global, mfisher@asterglobal.com): Project Forester. Mr. Fisher received his in MS in Forestry and MS in Economics from North Carolina State University in 2020. Previously, Mr. Fisher worked for The Nature Conservancy working on restoration of the longleaf pine habitats in coastal North Carolina. Mr. Fisher has extensive knowledge in econometric modeling related to land use conversion.

Janice McMahon – QA/QC (Aster Global, jmcMahon@asterglobal.com). President. Specializes in natural resource management projects including carbon sequestration feasibility assessments, development and implementation of management plans for enhancement of ecosystem services, assessment of GHG emissions and reductions, development of environmental asset tracking programs, GHG validations and verifications, endangered/ threatened species assessments, habitat management plans, and integrated ecosystem services plans. Responsible for leading the Forestry, Carbon, and GHG Services Division, which includes client and team coordination, proposal preparation and review, marketing presentations, maintenance of Aster Global's ANSI accreditation and management System, and quality assurance and quality control for projects in the United States as well as the international market.

2.5 Resolution of Findings

The process of methodology revision assessment involved multiple formal rounds of evaluation by the assessment team and resulted in a methodology version in conformance to VCS rules. Findings related to corrective action, clarification requests or other findings were resolved during communication between the assessment team and the methodology developer. More specifically, where noted by the assessment team, the methodology developer implemented corrective actions by amending the methodology and providing written clarification responses. Types of findings were characterized in the following manner:

Non-Conformance Reports (NCRs) were issued as a response to material discrepancies in a part of the methodology and generally fell into one of the following categories:

- Non-conformance to a VCS guiding document listed in Section 2.1
- Consistency to the original methodology was lacking
- Mathematical formulae in methodology were incorrect or inconsistent

- Additional information was required by the assessment team to confirm reasonable assurance for compliance

Clarifications (CL) were issued when language within the methodology needed extra clarification to avoid ambiguity.

Opportunities for Improvement (OFI) were issued to the methodology developer when an opportunity for improvement was identified.

During the course of the methodology revision assessment, 101 findings (5 NCRs and 96 CLs) were identified. All NCRs/CLs were satisfactorily addressed. The NCRs/CLs provided necessary clarity to ensure the project methodology was in compliance with the requirements of the VCS for GHG projects and the selected methodology. Detailed summaries of each finding, including the issue raised, responses and final conclusions are provided in Appendix A. A brief summary of the main findings and points of discussion from all components of the methodology assessment are presented below.

1. Clarification on peat stratification methods and language.

Resolution: The methodology module developer revised peat stratification methods and language to avoid confusion and ambiguity.

2. Clarification on consistencies with equation usage, and parameters, and default values within the equations.

Resolution: The noted sections of the methodology module containing inconsistencies were revised to clarify correct equation usage, parameters, and default values.

3. Issues with incorrect application of the required VCS template.

Resolution: The methodology module developer updated inconsistent elements in line with the most current VCS template dated 19 September 2019.

3 ASSESSMENT FINDINGS

The revisions to VM0004 were found to be in full compliance with the principles set out in the VCS Standard and other VCS rules and requirements. The updates to the methodology appropriately incorporate WRC elements. Baseline, leakage, uncertainty, and monitoring within the methodology are consistent with best practice and scientific consensus by following previously validated methods for determining emissions and approaches defined by the IPCC and other appropriate literature sources. The assessment team evaluated and confirmed adherence of the methodology to the VCS Standard. Applicable VCS approved tools are appropriately invoked for determining project significance, baseline, additionality,

and risk. The assessment addressed specific issues that arose in the methodology, which are pertinent to the principles set forth by the VCS Standard, including relevance, completeness, consistency, accuracy, transparency, and conservativeness.

3.1 Relationship to Approved or Pending Methodologies

The assessment of relationship to approved or pending methodologies was performed by the initial methodology validators. This element is outside of the scope for a methodology revision, as described in Section 7.2 of the Methodology Approval Process v4.0.

3.2 Stakeholder Comments

No public comments were received.

3.3 Structure and Clarity of Methodology

The *Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests*, was reviewed by the assessment team for clarity and logical consistency in accordance with VCS rules for methodology assessments (Methodology Approval Process v4.0, 19 September 2019). Methodology developers have followed the VCS templates closely and have included the specific criteria and procedures in the appropriate sections. The terminology used in the revised methodology element is consistent with the VCS Program, and GHG accounting and language chosen is precise. Definitions are located at the beginning of the methodology (Section 3) for the reader's reference. Specific key terms were used appropriately, "must," "should," and "may" to indicate a firm requirement and permissible or allowable options, respectively. Key words for outlining mandatory requirements are used consistently for permissible or allowable options. Criteria and procedures for the methodology were written by the methodology developers in a clear, concise, and coherent manner to allow the project to be unambiguously audited by the assessment team. The notation of the revisions to the methodology makes sufficient use of VCS rules and procedures. Overall, it is of the assessment team's opinion that the structure of the document meets the strict requirements of the VCS Program.

3.4 Definitions

The key terms defined in the methodology element modules are presented clearly and appropriately in a definition section at the beginning of the document (Section 3) for ease of use by methodology developers. The comprehensive list of terms relevant to the methodology is ordered alphabetically, and definitions for acronyms are provided. Definitions for terms defined under the VCS Program are not included within this section of the methodology. Definitions of key terms are presented concisely and assist the reader in comprehension for effective implementation of the methodology.

3.5 Applicability Conditions

The methodology includes the following project category level applicability conditions to ensure adherence to VCS rules and requirements and to address specific issues that arose in the methodology assessment process. This assessment determined that the applicability conditions contained within the methodology are appropriate, adequate and in compliance with the VCS rules. The following summarizes applicability conditions as written, changes made during the revision of the methodology, and the final evaluation of those changes during the assessment.

- A. The methodology was developed for (and is applicable to) preventing land use change on undrained tropical peat swamp forests in southeast Asia only; it is not applicable to peatlands in other regions or climatic zones (boreal peat bogs, etc.) or to previously drained peatlands. Forest shall be defined according to the host country's forest definition as agreed upon under UNFCCC participation or FAO definitions that includes minimum thresholds for area, height and crown cover. Peatland shall be similarly defined according to national definitions and include thresholds for carbon content and the thickness of the carbon rich layer.

Assessment: The methodology is an update to the existing *VM0004* methodology, written to bring the methodology in line with Wetland Restoration and Conservation methodology requirements that were developed since the first version of the methodology was created. Therefore, this applicability condition is appropriate for the project activities targeted by the methodology. It is clear and conformance can be demonstrated at the time of validation and it is not possible for this condition to change.

- B. The application of the procedure for determining the baseline scenario in Section 6 leads to the conclusion that the most appropriate baseline scenario is complete conversion of forest to another land use.

Assessment: The methodology is tailored to CIW projects under threat by a specific agent of deforestation/degradation with plans for complete conversion of the project area, as was the first version of the methodology. The condition is clear and conformance can be demonstrated at the time of validation and it is not possible for this condition to change.

- C. The methodology is applicable only for avoiding complete conversion of peat swamp forests to another known land use; it is not applicable for avoiding forest degradation. It is assumed that land preparation during the conversion of peat forest would have removed all existing aboveground biomass stocks through logging and burning.

Assessment: As mentioned above, the original methodology was created to protect intact peat swamp forests from planned, land use conversions, as is occurring in some nations of southeast Asia. One of the keys here is the expectation the land will be cleared and burned.

This applicability condition is clear and conformance can be demonstrated at the time of validation and it is not possible for this condition to change.

- D. The methodology is applicable only for preventing planned land use conversion in known, discrete parcel(s) of peatland, not for deforestation trends that follow a “frontier” approach. The land use conversion avoided must be in areas officially and legally designated for and under direct threat of such conversion, and the area and specific geographic location of all planned land use conversions in the baseline must be known and come from written documentation including land use conversion permits, government records, concession maps, etc. Planned deforestation must be projected to occur within ten years of the project start date.

Assessment: As mentioned above, the original methodology was created to protect intact peat swamp forests from exactly this form of land use conversion. Other existing methodologies can be employed for frontier deforestation conditions. This applicability condition is clear, conformance can be demonstrated at the time of validation and it is not possible for this condition to change.

- E. The methodology is applicable only for avoiding land use change that would be caused by corporate or governmental entities (plantation companies, national or provincial forestry departments, etc.) and not by community groups, community-based organizations, individuals or households.

Assessment: This applicability condition is identical to applicability condition E of the original methodology. It is unlikely for a community group to have the necessary resources to engage in the kind of land use conversion envisioned by the original methodology authors. This applicability condition further refines the scale of environmental change required to use the methodology. The applicability condition is clear and can be definitively established at project validation.

- F. Peat drainage emissions in the baseline scenario shall be calculated using a common practice peat drainage depth appropriate for project area by completing measurements within an appropriate proxy area. In cases where data on local common practice is difficult to acquire, peat drainage emissions in the baseline scenario shall be calculated using conservative peer-reviewed literature or IPCC default values.

Assessment: This applicability condition replaces applicability condition F of the original methodology, before WRC methodology requirements were created. This applicability condition brings the methodology in line with section 3.4.19 of VCS methodology requirements. It is clear and can be definitively established at project validation.

- G. Carbon stocks in dead wood and litter can be expected to further decrease (or increase less) in the absence of the project activity during the time frame that coincides with the crediting period of the project activity and can be conservatively excluded.

Assessment: This applicability condition is identical to applicability condition G of version 1 of the methodology. It seems it would be difficult for a land use conversion of the nature of the baseline scenario to fail this applicability condition. The applicability condition is clear and can be definitively established at project validation.

- H. The parcel(s) of peat swamp forest to be converted to another land use must not contain human settlements (towns, villages, etc.) or human activities that lead directly to deforestation, such as clearing for agriculture or grazing land. Activities that involve the utilization of natural resources within the project boundary that do not lead to deforestation are permitted (e.g., selective logging, collection of NTFPs, fuelwood collection, etc.) as this degradation is accounted for in the monitoring methodology.

Assessment: This is a further guard against the possibility of frontier deforestation, as the presence of settlements typically means the inhabitants are extracting resources and degrading the surrounding forest. This is clear and it can be established at the time of validation.

- I. The biomass of vegetation within the project boundary at the start of the project is at steady-state, or is increasing due to recovery from past disturbance, and so monitoring project GHG removals by vegetation can be conservatively excluded if desired.

Assessment: This is identical to applicability condition I of version 1 of the methodology. An intact, forested tropical peat wetland will be at or near climax vegetation. This reduces monitoring needs. This condition is clear and can be established at the time of validation.

- J. The volume of trees extracted as timber per hectare prior to land conversion in the baseline is conservatively assumed to be equivalent to the total volume (or biomass) of all trees of commercial value above the minimum size class sold in the local timber market.

Assessment: This is identical to applicability condition J of version 1 of the methodology. It is an assumption that is clear and can be established at the time of validation.

- K. There is no hydrological connectivity to adjacent (non-project) areas; or
- a. It is not possible for hydrologically connected areas to have a negative impact on the hydrology within the project area that could cause a significant increase in GHG emissions; or
 - b. Where projects are hydrologically connected to adjacent areas that may have a negative impact on the hydrology within the project area, projects shall demonstrate that such impacts will not result in a significant increase in GHG emissions through the establishment of a buffer zone as described in Section 5.2.1

Assessment: This replaces applicability condition K of version 1 of the methodology, which appears to have been written to deal with incursions from the agent of deforestation. However, it now also ensures there can be no ecological leakage. This condition is clear and

can be established at the time of validation, through the hydrological studies that would be necessary to commence such a project.

- L. Where a project activity to mitigate impacts from hydrological connectivity causes an increase in GHG emissions in the project area or buffer zone, such emissions shall be included in GHG accounting where above de minimis. The total land area allocated to the deforestation agent for planned deforestation must be shown not to have increased solely for the purpose of eliciting REDD credits.

Assessment: The second half of this applicability condition is identical to applicability condition L of version 1 of the methodology. This applicability condition is clear, provided the first part is determined ex ante and does not require monitoring.

- M. In order to demonstrate permanence of the peat carbon stock, the maximum quantity of GHG emissions reductions may not exceed the difference between baseline and project scenarios soil carbon stocks 100 years after the project start date. No GHG emission reductions may be claimed for a given area of peatland once the project year exceeds PDT. The procedure for determining the PDT shall conservatively consider peat depth and subsidence rate within the project boundary and may be estimated based on the relationship between subsidence and peat depth in the project area.

Assessment: This applicability condition brings the methodology into compliance with VCS Methodology requirement 3.6.26 1) a).

- N. Projects must account for sea level rise in their planned activities, emission reductions, and other protection strategies.

Assessment: This applicability condition covers the WRC requirement that coastal wetlands account for the effects of sea level rise. While tropical peat forests are not technically coastal wetlands, it is not inconceivable that some near-sea level peat swamps may eventually become encroached upon by sea level rise.

- O. Projects seeking to implement rewetting activities are not applicable under this methodology.

Assessment: This applicability condition confines projects to CIW projects. It is clear and can be definitively established at validation.

3.6 Project Boundary

The VCS Standard requires that the methodology establish criteria and procedures for describing the project boundary and identifying and selecting optional carbon pools, i.e., sources, sinks, and reservoirs relevant to the baseline and project scenarios. Procedures to quantify emissions are appropriately included in all new and revised methodologies for all relevant pools and sources.

The GHGs that are within the project boundaries of VM0004 projects include CO₂, CH₄ and N₂O, from the following sources:

- Above-ground tree biomass
- Above-ground non-tree biomass
- Peat

These are appropriate for the methodology.

Excluded sources of emissions are included in the listed sources, sinks and reservoirs. Soil organic carbon and below-ground biomass are included in emissions from peat loss from burning or other oxidation. Dead wood is conservatively excluded, as emissions due to dead wood are expected to remain the same or increase less under the project scenario. Litter is also conservatively excluded. Long-term wood products are included in the baseline scenario and conservatively excluded in the project scenario.

The project boundaries are clear and appropriate for the project activity, which is leaving an intact, tropical peat dome ecosystem undisturbed. In the baseline case, all valuable timber would be removed, and the rest of the area and trees would be burned, taking litter and some peat with it.

The table (table 1 in version 1.24) adequately explains emissions boundaries for projects developed under this methodology.

3.7 Baseline Scenario

The methodology uses a project method for the baseline scenario, determined using the VCS Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities (VT0001). VT0001 provides a clear, stepwise method for determining both additionality and the baseline scenario, examining all credible land use scenarios.

The analysis of the tool must find that the baseline scenario is the logging of the existing forest and remaining biomass burned, before conversion to a different land use or cover class.

VT0001 is an appropriate tool for determining the baseline scenario for the VM0004 methodology.

3.8 Additionality

The methodology uses the current version of the VCS “Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU)

Project Activities. No additional direction, augmentation or other change to the tool is suggested by the methodology.

The tool is appropriate for the project activities -- the protection of an intact peatland forest. All plausible land use scenarios must be considered. Investment, barriers and common practice analysis are included.

3.9 Quantification of GHG Emission Reductions and Removals

3.9.1 Baseline Emissions

The Baseline Scenario was adjusted from the initially validated methodology for the inclusion of WRC elements, required by Verra following the initial development of the methodology. All other baseline components were confirmed to remain unchanged from the initially validated equations and are still applied for the computation of other baseline sources, sinks and reservoirs.

The methodology presents appropriate procedures for determining the peat depth at project start and assessing peat loss in the baseline based on conservative factors for the lifespan of the project. Computational approaches were confirmed for the estimation of peat related emissions related to drainage, burning and dissolved organic carbon under the baseline scenario. Baseline emissions input into Net GHG reductions and removals equations were appropriately modified for the incorporation of required WRC elements.

Sea level rise and its effects on GHG emission reductions during the project lifetime is addressed.

The assessment determined that the procedures for calculating baseline emissions in the methodology are appropriate and adequate for estimating emissions. The equations and formulas are used without error and parameters for quantification of baseline emissions are used appropriately in calculating all significant baseline emissions.

3.9.2 Project Emissions

The Project Scenario was adjusted from the initially validated methodology for the inclusion of WRC elements, required by Verra following the initial development of the methodology. All other project components were confirmed to remain unchanged from the initially validated equations and are still applied for the computation of other project sources, sinks and reservoirs.

The methodology presents appropriate procedures for assessing peat loss in the project. Computational approaches were confirmed for the estimation of peat related emissions similar to those computed under the baseline scenario. Project emissions input into Net GHG reductions and removals equations were appropriately modified for the incorporation of required WRC elements.

Sea level rise and its effects on GHG emission reductions during the project lifetime is addressed and appropriately incorporated into Project Scenario monitoring and computation.

The assessment determined that the procedures for calculating Project Scenario emissions in the methodology are appropriate and adequate for estimating emissions. The equations and formulas are used without error and parameters for quantification of project emissions are used appropriately in calculating all significant Project Scenario emissions.

3.9.3 Leakage

The methodology was previously validated for the leakage calculations. The incorporation of WRC elements required by changes to the VCS Standard necessitated the addition of ecological leakage. The modifications to the methodology for ecological leakage are appropriate for calculating the related leakage for that element. Additionally, changes were made to simplify the computational understanding of market effects and activity displacing leakage. The modifications made were confirmed to result in consistent computation to the previously validated parameters.

3.9.4 Net GHG Emission Reductions and Removals

Net GHG emission reductions and removals are computed in the same manner as previously validated, as the difference between baseline stocks and emissions and project emissions and leakage. The algorithms, equations and formulas used in the determination of baseline and project inputs are described in sections 3.9.1 Baseline Emissions and 3.9.2 Project Emissions. Leakage inputs are described in Section 3.9.3 Leakage. All modifications to the the methodology for incorporation of WRC requirements are free of error and appropriate. Uncertainties were assessed in a manner similar to the originally validated approach, and appropriately modified for the incorporation of WRC elements.

3.10 Monitoring

Monitoring parameters were previously validated during the initial assessment of the methodology. For the current revisions, parameters were included to meet the requirements of equations for WRC related equations. Additionally, a large number of parameters were added in line with template requirement changes from the previously validated methodology. The assessments of these additional parameters were confirmed to meet the requirements of the current template, however further review was limited due to the scope of this assessment. WRC related parameters were determined to be appropriate, for project activities covered by the methodology for the depletion of peat. Related monitoring approaches were examined and determined to be appropriate for the reporting of GHG emissions reductions and removals.

4 ASSESSMENT CONCLUSION

Aster Global Environmental Solutions, Inc., completed the assessment of the revisions to the *VM0004 Methodology for Conservation Projects that Avoid Planned Land Use Conversion in Peat Swamp Forests, V1.33*. The assessment team confirms that the changes to the methodology adhere to the criteria established for this assessment. Aster Global approved revisions to the methodology for WRC elements, template changes and document clarity improvements and concludes the revised methodology meets the requirements of the: VCS Program Guide v4.0, VCS Standard v4.0, Program Definitions v4.0, Validation and Verification Manual v3.2, VCS Methodology Approval Process v4.0, and Guidance for Standardized Methods v3.3.

5 EVIDENCE OF FULFILMENT OF VVB ELIGIBILITY REQUIREMENTS

As set out in the VCS Methodology Approval Process for AFOLU:

- 1) Both validation/verification bodies shall be eligible under the VCS Program to perform validation for sectoral scope 14 (AFOLU); AND
- 2) At least one of the validation/verification bodies shall use an AFOLU expert in the assessment; AND
- 3) At least one of the validation/verification bodies shall have completed at least ten project validations in any sectoral scope. Project validations can be under the VCS Program or an approved GHG program, with the projects having been registered under the applicable program. A validation of a single project under more than one program (e.g., VCS and CDM) counts as one project validation. The validation/ verification body that meets this eligibility requirement may be the same validation/verification body that uses an AFOLU expert.

Aster Global fulfils the eligibility requirements in the following ways:

- 1) Aster Global is accredited by the American Standards Institute under ISO 14065:2007 for GHG Validation and Verification Bodied; including validation/verification of assertions related to GHG emission reductions and removals at the project level for Land Use and Forestry (Group 3). VCS accepts this accreditation.
- 2) Aster Global utilized Shawn McMahon, a WRC non-peatlands, IFM, REDD, and ARR expert who participated in all relevant meetings and completed a comprehensive technical review.

- 3) To date, Aster Global has completed greater than 25 VCS project validations under AFOLU.

6 SIGNATURE

Signed for and on behalf of:

Name of entity: _____

Signature: _____

Name of signatory: _____

Date: _____

7 APPENDIX: CL/NCR/OFI REQUESTS

Item #	1
VCS Standard Version 4.0 Requirements Document 19 September 2019, v4.0 (Description)	This document will be updated from time-to-time and readers shall ensure that they are using the most current version of the document. Where external documents are referenced, such as the <i>IPCC 2006 Guidelines for National GHG Inventories</i> , and such documents are updated, the most recent version of the document shall be used.
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the updated methodology and noted a number of instances where updated documents, such as IPCC default factors and updated reports, such as LULUCF, were not used in the methodology. It is unclear how this is in line with this requirement.
Round 1 NCR/CL/OFI	1 CL: Please address the audit team findings.
Round 1 Response from Project Proponent	After discussion with the audit team and Verra, the methodology has been updated in instances that use IPCC default factors and guidance documents to instead refer project developers to the latest version of these factors and documents. This is in line with guidance received from Verra requesting the methodology be updated in a way that allows for limited future updates.
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted updated to a majority of IPCC related references. It was noted that some older references still appear within the text. Please clarify how these references are still appropriate.
Round 2 NCR/CL/OFI	2 CL: Please address the audit team findings.
Round 2 Response from Project Proponent	Many IPCC references have been updated to refer to latest versions of the IPCC documentation when appropriate. For example, when referring to the use of default values, the methodology requires the latest IPCC default values be used. In some cases, the methodology refers to specific versions of IPCC documentation to provide examples of where these values may be found or what the data may look like. In other cases, however, it is not appropriate to update the references to older versions of IPCC documentation as the general accounting procedures have not changed and thus have not been updated and included in the latest revisions. For example, the 2019 Refinement to the 2006 IPCC Guidelines did not include any changes to accounting for biomass in forest land, thus it would not make sense to reference the latest version. The methodology developer believes the current references and uses of IPCC documentation throughout the document are appropriate.

Aster Global Findings - Round 3 (23 June 2021)	The audit team reviewed the response from the methodology developer. The response makes sense, however is in direct contrast to the requirement "Where external documents are referenced, such as the IPCC 2006 Guidelines for National GHG Inventories, and such documents are updated, the most recent version of the document shall be used." Where documents were updated, even though specific sections were not updated the newer reference is required per the standard, as the user will inherently be directed to the correct materials.
Round 3 NCR/CL/OFI	NCR: Please correct all external documents referenced which have been updated. In line with the requirements of the Standard.
Round 3 Response from Project Proponent	After discussion with the audit team, the methodology developer believes that it is appropriate to continue to refer to specific IPCC documentation when it is used as a reference, such as when an equation is based on an equation provided in the referenced IPCC document. The methodology developer also agrees that when default values are taken from IPCC documentation, a specific document should not be referenced, except to serve as an example of what sort of value is expected and where it was found. In these cases, the methodology has been updated to refer users of the methodology to the latest relevant IPCC documentation with the understanding it may change over time. However, references to previous documents are still provided as an example.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the updates and confirm that the changes are line with the expectations of the VCS program. The item has been addressed.

Item #	2
VCS Methodology Requirements 19 September 2019, v4.0 (Description)	2.2.2 Methodologies shall use a standardized method (i.e., performance method or activity method) or a project method to determine additionality and/or the crediting baseline, and shall state which type of method is used for each.
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 2 of the methodology, VT0001
Aster Global Initial Findings (2021 March 30)	The methodology does not state whether a standardized method or project method is used for either the baseline or additionality.
Round 1 NCR/CL/OFI	CL: Please fill out the additionality and crediting baseline table in section 2 of the methodology template, as required.
Round 1 Response from Project Proponent	The additionality and crediting baseline table has been added to section 2, as well as text explicitly stating that project methods are used for determining the baseline and additionality.
Aster Global Findings - Round 2 (18 May 2021)	Section 2 of V 1.24 of the methodology includes the described changes. Item closed.

Item #	3
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VCS Methodology Requirements 19 September 2019, v4.0 (Description)	3) ARR, IFM, REDD, ACoGS and WRC: Fossil fuel combustion from transport and machinery use in project activities. Where machinery use for selective harvesting activities may be significant in IFM project activities as compared to the baseline or where machinery use for earth moving activities may be significant in WRC project activities as compared to the baseline, emissions shall be accounted for if above de minimis, in accordance with this Section 3.3.6. Fossil fuel combustion from transport and machinery use in rewetting of drained peatland and conservation of peatland project activities need not be accounted for.
Applicability to Project (Y or N/A)	N/A
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	
Aster Global Initial Findings (2021 March 30)	No discussion of fossil fuel use in the project scenario could be found, nor an approach for demonstrating they are de minimis.
Round 1 NCR/CL/OFI	CL: Please clarify where in the methodology this requirement is addressed.
Round 1 Response from Project Proponent	The last requirement of this sentence is clear that fossil fuel combustion does not need to be accounted for in conservation of peatland project activities, which is an applicability condition of this methodology. As selective IFM harvesting is not a permitted project activity and any WRC project activities would be done in peatlands, the methodology developer does believe this requirement needs to be addressed.
Aster Global Findings - Round 2 (18 May 2021)	The methodology authors appear to be correct. Clarification request withdrawn.

Item #	4
VCS Methodology Requirements 19 September 2019, v4.0 (Description)	3.3.28 For project activities implemented on coastal wetlands, methodologies shall establish criteria and procedures for establishing the geographic boundary that considers projections of expected relative sea level rise. The procedures shall account for the potential effect of sea level rise on the lateral movement of wetlands during the project crediting period and the potential that the wetlands will migrate beyond the project boundary.
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 5.2.2, 6

Aster Global Initial Findings (2021 March 30)	The methodology states that project developers should consult government and peer-reviewed studies on how sea level rise will impact peat carbon stocks. This does not appear to "establish criteria and procedures for establishing the geographic boundary that considers projections of expected relative sea level rise. The procedures shall account for the potential effect of sea level rise on the lateral movement of wetlands during the project crediting period and the potential that the wetlands will migrate beyond the project boundary."
Round 1 NCR/CL/OFI	NCR: Please see the finding and address the criteria in the methodological requirements.
Round 1 Response from Project Proponent	Section 5.2.2 of the methodology has been updated to clarify how sea level rise will be considered in the baseline and project scenarios. The methodology is now clear that baseline emissions from sea level rise are conservatively excluded but that emissions in the project scenario must be monitored. Section 8.2.5 has been added to the methodology to provide accounting procedures for sea level rise.
Aster Global Findings - Round 2 (18 May 2021)	Information regarding sea level rise and coastal wetlands are alluded to in section 5.2.2 of version 1.24 of the methodology. However, the methodology further states that applicability conditions already constrain projects to tropical peat swamp forests, which are not coastal wetlands. It appears this methodology requirement is not applicable to the VM0004 methodology. This item is closed.

Item #	5
VCS Methodology Requirements 19 September 2019, v4.0 (Description)	3.4.20 The criteria and procedures for identifying fire in the baseline scenario shall demonstrate with fire maps and historical databases on fires that the project area is now and in the future would be under risk of anthropogenic fires. The procedure for identifying fire in the baseline scenario shall also consider any relevant current and planned land use conditions that may affect the occurrence of fire in order to establish the most plausible scenario for fire in the baseline.
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 4 and 8.1.2.2

Aster Global Initial Findings (2021 March 30)	<p>Applicability condition C states, "C. The methodology is applicable only for avoiding complete conversion of peat swamp forests to another known land use; it is not applicable for avoiding forest degradation. It is assumed that land preparation during the conversion of peat forest would have removed all existing aboveground biomass stocks through logging and/or burning."</p> <p>Further, section 8.1.2.2 states, "In the baseline scenario, a new land use is established after merchantable trees are harvested and the remaining biomass is cleared with fire. "</p> <p>The applicability condition states that burning may or may not occur. The statement in section 8.1.2.2, however, indicates that perhaps it was intended that this methodology requires clearing by fire after logging and the "or" of and/or was added in error.</p>
Round 1 NCR/CL/OFI	<p>CL: See findings.</p> <p>If fire is not a requirement, criteria and procedures for identifying fire in the baseline scenario must be included in the methodology.</p>
Round 1 Response from Project Proponent	<p>Applicability Condition C has been updated by removing the word 'or' from the end of the sentence stating 'logging and/or burning'. It should be clear that the methodology requires logging and burning in the baseline scenario.</p>
Aster Global Findings - Round 2 (18 May 2021)	<p>"Or" has been removed from applicability condition C. Item closed.</p>

Item #	6
VCS Methodology Requirements 19 September 2019, v4.0 (Description)	<p>3.4.21 Many land use activities on wetlands (e.g., aquaculture and agriculture) involve the exposure of wetland soils to aerobic decomposition through piling, dredging (expansion of existing channels) or channelization (cutting through wetland plains). Where relevant, the criteria and procedures for identifying WRC baseline scenarios shall account for such processes as they expose disturbed carbon stocks to aerobic decomposition thus increasing the rate of organic matter decomposition and GHG emissions that may continue for years from the stockpiles. Methodologies shall include credible methods for quantifying and forecasting GHG emissions from such degradation.</p>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 6, 8.1

Aster Global Initial Findings (2021 March 30)		This requirement addresses peat dredged from drainage canals in the baseline scenario and piled on the surface, exposed to aerobic respiration. The methodology, as written, does not address this additional source of GHG emissions in the baseline.
Round NCR/CL/OFI	1	NCR - See findings. Please provide a way to account for the additional emissions from peat oxidation caused when baseline operations pile peat on the surface, exposing it to aerobic respiration.
Round 1 Response from Project Proponent		The following text has been added to Section 8.1.2.1.1 of the methodology: "Emissions from peat exposed to aerobic decomposition through piling, dredging, or channelization can be included in the parameter $[[EF]]_{(B,drainage,jt, [[CO]]_2}$) by selecting an appropriate value from literature. However, these emissions can be conservatively omitted as they will be greater in the baseline scenario." This is similar to the language added to VM0007 module BL-PEAT due to a similar finding that was issued (see Finding #29 at https://verra.org/wp-content/uploads/2017/10/VM0007v1.5FirstAssessmentReport.pdf).
Aster Global Findings - Round 2 (18 May 2021)		The potential for including losses due to piled, dredged peat in the baseline were added. It is true that omitting these omissions is conservative, however they are part of the methodology requirements. Item closed

Item #	7
VCS Methodology Requirements 19 September 2019, v4.0 (Description)	3.4.22 Where relevant, the criteria and procedures for identifying WRC baseline scenarios shall take account of hydrological processes that lead to increased carbon burial and GHG reductions within the project area. Such processes include changes in the landscape form (i.e., construction of levees to constrain flow and flooding patterns or dams to hold water) and changes in land surface (i.e., forest clearing, and ditching or paving leading to intensified run-off).
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Sections 6, 8.1
Aster Global Initial Findings (2021 March 30)	Section 6 specifically states that buried carbon should be accounted for. However, Section 8.1 mentions no procedures for accounting for GHG reductions in the baseline due to carbon burial.
Round NCR/CL/OFI	1 NCR - See findings. The methodology requires project developers to account for buried carbon, but leaves the procedure for doing so up to the project developer, without guidance. Please provide some guidance for accounting for reductions in GHG emissions in the baseline due to burial.

Round 1 Response from Project Proponent	Section 8.1.2.3 of the methodology has been updated to include an equation on calculating an appropriate emissions factor for the dissolved organic carbon pool. This equation is based on Equation 2.5 of the 2013 IPCC Wetlands Supplement. A parameter in this equation, $\text{[Frac]}_{\text{(DOC_CO2)}}$, accounts for the proportion of DOC exported from site and converted to CO ₂ . The text in this section has been updated to clarify that all DOC not converted to CO ₂ is not included as an emissions source as it is assumed to be buried.
Aster Global Findings - Round 2 (18 May 2021)	The text in section 8.1.2.3 has been updated, as described. Item closed.

Item #	8
Non-Checklist Elements	Parameters at Validation Table Elements
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15; Section 9.1
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed parameters to be measured at validation, it was noted that the "Equations" section contained numerous erroneous references throughout.</p> <p>The audit team noted that the source of data provided is not always in line with the text in the document. Please address.</p> <p>The "value applied" section is not always included or in line with the text in the document. Please address.</p> <p>The section "Justification of choice of data or description of measurement methods and procedures applied" was left blank for all parameters. It is unclear how this is appropriate, as it is a required element and further provides the reader detail to correctly apply the parameter. Please address.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings and ensure parameters are in line with template requirements.
Round 1 Response from Project Proponent	The validation parameters tables have been reviewed and revised as needed. All tables are now completely filled out with the appropriate information.
Aster Global Findings - Round 2 (18 May 2021)	The audit team has noted a number of elements for parameters modeled as described elsewhere, for elements relating to WRC. This item will remain in pending until those items are addressed.
Aster Global Findings - Round 7 (10 August 2021)	Related items have been addressed. This item has been addressed.

Item #	9
Non-Checklist Elements	Parameter Table Elements
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15; Section 9.2
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed parameters to be monitored, it was noted that the "Equations" section contained numerous erroneous references throughout.</p> <p>The audit team noted that the source of data provided is not always in line with the text in the document. Please address.</p> <p>The "value applied" section is not always included or in line with the text in the document. Please address.</p> <p>The section "Description of measurement methods and procedures to be applied" was left blank for all parameters. It is unclear how this is appropriate, as it is a required element and further provides the reader detail to correctly monitor the parameter. Please address.</p> <p>The field "Frequency of Monitoring" was left blank for all parameters. It is unclear how this is appropriate, as it is a required element and further provides the reader detail to correctly know when to monitor the parameter. Please address.</p> <p>The field "QA/QC procedures to be applied" was left blank for all parameters. It is unclear how this is appropriate, as it is a required element and clarifies how QA/QC should be performed to ensure accurate monitored parameters. Please address.</p> <p>The "Calculation Method" was left blank for all parameters. It is unclear how this is appropriate. Please address.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings and ensure parameters are in line with template requirements.
Round 1 Response from Project Proponent	The monitoring parameters tables have been reviewed and revised as needed. All tables are now completely filled out with the appropriate information.
Aster Global Findings - Round 2 (18 May 2021)	The audit team has noted a number of elements for parameters modeled as described elsewhere, for elements relating to WRC. This item will remain in pending until those items are addressed.

Aster Global Findings - Round 7 (10 August 2021)	Related items have been addressed. This item has been addressed.
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Item #	10
Non-Checklist Elements	Missing Parameters
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the methodology and noted a number of parameters from the text are not located within the related parameters tables in Section 9.1 and/or 9.2, as appropriate.
Round 1 NCR/CL/OFI	CL: Please included missing parameters in section 9.1 and/or 9.2, as appropriate.
Round 1 Response from Project Proponent	Parameters tables have been updated to include all missing parameters that were identified.
Aster Global Findings - Round 2 (18 May 2021)	Additional items have been included in the parameter table. Detailed findings exist elsewhere at the parameter level and will address missing parameters that still remain. The item has been addressed.

Item #	11
Non-Checklist Elements	Equation References
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the methodology and noted a number of incorrect equation references within the text. These are likely due to changes in equation numbering, but need to be corrected for all instances.
Round 1 NCR/CL/OFI	CL: Please correct equation references within the text, in line with update equation numbering.
Round 1 Response from Project Proponent	Equations references throughout the methodology have been checked and updated as needed.

Aster Global Findings - Round 2 (18 May 2021)	<p>The audit team still noted incorrect equation references, not in line with the current text.</p> <p>Similarly, with changes to the document a number of section references throughout the text do not align with correct sections or sections appearing within the methodology.</p>
Round 2 NCR/CL/OFI	<p>CL: Please correct equation and section references within the text, in line with update equation numbers and current sections within the methodology.</p>
Round 2 Response from Project Proponent	<p>Equation and section references have been updated where erroneous to be in line with current sections and equation numbers in the text. Erroneous equation numbers have been re-linked to correct equations. Because of this update, equation numbers may have shifted from what they were labeled as in these findings.</p>
Aster Global Findings - Round 3 (23 June 2021)	<p>The audit team noted a number of instances where equation numbers references and sections references still remain incorrect.</p>
Round 3 NCR/CL/OFI	<p>CL: Please address audit team findings.</p>
Round 3 Response from Project Proponent	<p>The methodology has been reviewed and several incorrect section references have been identified and corrected. The methodology developer understands all references as now accurate.</p>
Aster Global Findings - Round 4 (04 August 2021)	<p>The audit team noted that most instances have been corrected. The audit team did notice an incorrect reference in the Equation 16 CB,AC,i,t to equation 6, which is a different parameter.</p>
Round 4 NCR/CL/OFI	<p>CL: Please correct incorrect equation reference as noted in audit team findings.</p>
Round 4 Response from Project Proponent	<p>After reviewing the discrepancy, the methodology developer noted that Equation 6 estimates the parameter CB,AG,i,t, which has the same definition as CB,AC,i,t used in Equation 16. CB,AG,i,t is the correct parameter to be used in Equation 16. The parameter CB,AC,i,t has been corrected to CB,AG,i,t in Equation 16.</p>
Aster Global Findings - Round 5 (06 August 2021)	<p>The audit team reviewed the response and changes to the document. It is unclear how equation can be an input into equation 16, as equation 16 is an input into equation 15 which in turn is an input into equation 6, resulting in a circular equation.</p>
Round 5 NCR/CL/OFI	<p>CL: Please clarify how the changes made are appropriate, as the resulting series of equations results in circular mathematics. Please clarify how the defined steps should be applied to solve for both equation 16 and 6.</p>
Round 5 Response from Project Proponent	<p>The audit team is correct that updating this parameter in Equation 16 led to circular mathematics. The initial parameter of CB,AC,i,t was correct, but it is estimated using Equation 17, not Equation 6. The methodology has been updated to revert the parameter back to CB,AC,i,t in Equation 16, as well as updating the reference in the where statement from Equation 6 to Equation 17. No changes were necessary to Equation 6.</p>

Aster Global Findings - Round 6 (09 August 2021)	The audit team reviewed the changes to equation 16 and note that the parameter $\Delta CB,AC,it$ has been adjusted to the corrections to refer to equation 17. While the audit team agrees that equation sources from Equation 17, it is noted that the parameter does not match any parameters named in Equation 17. Further, it is noted that the definition of the parameter does not align with any parameter in Equation 17.
Round 6 NCR/CL/OFI	CL: Please clarify how the changes to equation 16 are in line with equation 17. Please ensure consistency and appropriate definition of all parameters for the equations and related parameter elements in the parameter tables.
Round 6 Response from Project Proponent	The audit team is correct that the parameter $\Delta CB,AC,it$ in Equation 16 is named CB,AC,it in Equation 17. $\Delta CB,AC,it$ and its definition have been updated to CB,AC,it in Equation 16 in order to be consistent with Equation 17. A parameter table for CB,AC,it has been added to Section 9.1 as it was noted as missing, along with several other parameters related to these two equations.
Aster Global Findings - Round 7 (10 August 2021)	The audit team confirmed the changes and correction to equation 16. The audit team further confirmed the update to related parameters. The item has been addressed.

Item #	12
Non-Checklist Elements (Description)	Section 5.3.2.1
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15; Section 5.3.2.1

<p>Aster Global Initial Findings (2021 March 30)</p>	<p>The audit team reviewed the section and detail and noted a number of items that need additional clarity described below:</p> <p>a. "The peat depth map should have a spatial resolution of 30m x 30m or higher." It is unclear whether the word "should" is appropriate, as a higher resolution is requested in the text. Please clarify.</p> <p>b. "To ensure accuracy, all remote sensing based peat mapping approaches must have some form of on-the-ground verification." The prescribed activity implies ground truthing and should be corrected, to reduce reader confusion. Please address.</p> <p>c. " The section requires the generation of a peat map at start date, however, there are no requirements for timing of field plot activities or spatial imagery requirements that would ensure a start date peat map would be generated. Please add additional language or clarify.</p> <p>d. "... it should be stratified based on peat depth into an intermediate stratum k that will be used to calculate the depth of peat burned in the baseline scenario as well as the PDT stratum j." The described approach implies stratification is appropriate, but does not require it. No equations have been presented to account for if stratification is not applied. Please adjust computational methods or text to address this element. The text further states to stratify to a single stratum k, it is unclear how this is in agreement with the rest of the text or activities throughout this methodology. Please address.</p> <p>e. "... to the minimum peat depth threshold according to the national definition of peat." It is unclear how the developer is to determine the national definition of peat, as it is not defined or referenced.</p> <p>f. "Peat depth increments for additional strata should start at the national threshold for peat depth. The project developer should justify the depth increments of each stratum within the PD." It is unclear why this language uses the word should. Please justify or adjust this language. It is noted that changes should be made to the PD, however this is the term for Peat Depth in equation 1. Please clarify or adjust language.</p>
<p>Round 1 NCR/CL/OFI</p>	<p>CL: Please address verifier findings.</p>
<p>Round 1 Response from Project Proponent</p>	<p>a. This has been updated as "The peat depth map must have a minimum spatial resolution of 30m x 30m. "</p> <p>b. This has been updated to: "To ensure accuracy, all remote sensing based peat mapping approaches must check accuracy with some form of ground-truthing".</p> <p>c. The methodology has been updated to clarify when corrections to a peat depth map are necessary based on the collection date of the data used for the map.</p> <p>d. The text in this section has been updated to clarify that the methodology does require stratification.</p> <p>e. The methodology has been updated to clarify when a national definition of peat should be used. Otherwise, a default minimum threshold of 50 cm has been added to the methodology. This is consistent with VM0007.</p> <p>f. The text has been updated to make it clear that this must be explained in the Project Design Document. The use of PD in the text has been clarified.</p>

Aster Global Findings - Round 2 (18 May 2021)	<p>A. The audit team confirmed that peat depth has been now specified using the word "must" to specify a minimum spatial resolution. The item has been addressed.</p> <p>B. The audit team confirmed that ground truthing is now a required element. The item has been addressed.</p> <p>C. The audit team confirmed that additional language has been provided to state that adjustments must be made to imagery prior to the start date to ensure it is in line with conditions at the start date. Imagery taken following the start date does not require similar modification. It is unclear why no adjustment is needed to imagery taken after the start date in line with baseline generation. Please address and clarify its appropriateness and conservativeness.</p> <p>D. The audit team confirmed that additional language now requires stratification of peat depth. Due to this change, previous audit team questions for this item are no longer applicable. The item has been addressed.</p> <p>E. Additional language has been included to define that the national definition shall be derived from REDD Forest Reference Level Submission to the UNFCCC. In the absence of this, a default minimum depth of 50 cm can be applied. This is in line with VM0007, a validated VCS method. The item has been addressed.</p> <p>F. The audit team confirmed that language has been added to require developers to justify peat depth stratification within the PDD. The item has been addressed.</p>
Round 2 NCR/CL/OFI	CL: Please address the remaining open finding Item C.
Round 2 Response from Project Proponent	<p>A. Closed</p> <p>B. Closed</p> <p>C. Section 5.3.2.1 of the methodology has added clarification as to why it is conservative to not correct for peat depth in disturbed areas. Additionally, procedures for conservatively accounting for potential accumulation of peat have been added to this section. Please note that language in this paragraph referring to the project start date has been updated to refer to the beginning of the baseline crediting period. This is consistent with the application of this approach and following paragraphs.</p> <p>D. Closed</p> <p>E. Closed</p> <p>F. Closed</p>
Aster Global Findings - Round 3 (23 June 2021)	The audit team reviewed the changes to section 5.3.2.1, it was noted the use of the term baseline crediting period is now applied. This term is not defined by Verra as the crediting period refers to the project and the maximum period of crediting generation. Please clarify how this term is appropriate and why project start date is no longer used.
Round 3 NCR/CL/OFI	CL: Please address audit team findings.
Round 3 Response from Project Proponent	The methodology developer agrees that the project start date is more appropriate language for this section. Section 5.3.2 has been updated to replace language referring to the beginning of the baseline crediting period with the project start date.

Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the updated changes to the language in section 5.3.2.1 and confirm that the use of project start date is appropriate and appropriately applied within the text. The item has been addressed.
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Item #	13
Non-Checklist Elements	Applicability Condition M
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Section 4, part M
Aster Global Initial Findings (2021 March 30)	<p>Applicability condition M states, in part:</p> <p>M. Projects must demonstrate at least 100 year permanence by calculating peat depth and PDT. No GHG emission reductions may be claimed for a given area of peatland for longer than the PDT...</p> <p>Project permanence refers to the length of time the project benefits are expected to be maintained. It is not understood how this relates to peat depth.</p>
Round 1 NCR/CL/OFI	<p>CL: See findings. It is not clear how PDT relates to project permanence.</p> <p>Is it the intent of the methodology authors to exclude areas of peat domes where the PDT is less than 100 years?</p>
Round 1 Response from Project Proponent	<p>It is not the intent of the methodology to exclude areas where the PDT is less than 100 years. Applicability Condition M is meant to establish two things:</p> <ol style="list-style-type: none"> 1. Project crediting may not exceed the difference between baseline and project soil carbon stocks, as calculated in Section 8.4.3. 2. No baseline peat emissions will occur once peat is depleted, i.e. when the project year (t) exceeds PDT. <p>Applicability Condition M has been updated to clarify the relationship between PDT and 100 year permanence.</p>

Aster Global Findings - Round 2 (18 May 2021)	<p>The update and intent is understood. However, applicability condition M still begins:</p> <p>"M. Projects must demonstrate at least 100 year permanence by calculating peat depth and PDT."</p> <p>The rest of app. condition M is clear. This sentence is confusing, using the term "permanence." Is this related to risk analysis?</p> <p>The second sentence calls for project developers to calculate a difference without defining both a minuend and a subtrahend. It is assumed this sentence calls for the difference between carbon stocks at the project start date and those calculated for 100 years into the baseline scenario.</p>
Round 2 NCR/CL/OFI	<p>CL: See findings.</p> <p>1. Would applicability condition M lose meaning if the first sentence were deleted? If not, can it use less confusing terms?</p> <p>2. Please adjust the second sentence to fully define the difference.</p>
Round 2 Response from Project Proponent	<p>Applicability Condition M has been updated to more clearly fulfill the requirements of Section 3.2.11 of VCS Standard v4.0. Applicability Condition M now clearly states that permanence of the soil (peat) carbon stock is demonstrated by taking the difference between soil carbon stocks in the baseline and project scenarios 100 years after the project start date. This is addressed with Equation 130 in Section 8.4.3.</p>
Aster Global Findings - Round 3 (23 June 2021)	<p>Version 1.26 of the methodology has been updated as described. This item is closed.</p>

Item #	14
Non-Checklist Elements (Description)	Section 8.1.3.1.1.1
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed this section. It is unclear how the section applies to the methodology in the current state.
Round 1 NCR/CL/OFI	CL: Please clarify how/why this section relates to the current revisions to the methodology.
Round 1 Response from Project Proponent	The methodology developer has reviewed this section and agrees that it is no longer applicable to the updated methodology. This section has been removed from the methodology.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirms the section has been removed. The item has been addressed.

Item #	14.1
Non-Checklist Elements	Section 8.2.5
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.24
Aster Global Initial Findings (2021 March 30)	Previously did not exist
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The audit team reviewed the section for sea level rise. The approach uses the validated modules from VM0007, which are appropriate. It was noted that the text states "...In the scenario that sea level rise ends up impacting the project area within a monitoring year, the project should apply the accounting procedures established in the following VM0007 modules" It is unclear why this is an option and why the word "must" is not used in place of the word "should".
Round 2 NCR/CL/OFI	CL: Please clarify why the word "should" is used instead of the word "must", in line with audit team findings.
Round 2 Response from Project Proponent	The word "should" has been revised to "must" in order to establish firm accounting procedures. Previously, the word "should" had been erroneously used, as the use of the following accounting procedures are required unless proven that sea level rise does not impact the project.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the use of the word "must" is now applied. The item has been addressed.

Item #	15
Equations	EQ 1
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15; Section 5.3.2.2

Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the following equation it was noted that the computational approach defined does not accurately compute average peat depth in cm, as the weighting of area is not appropriately accounted.</p> <p>Further, the equation does not reference values for time $t=0$, however the result is for time $t=0$, please address.</p> <p>The computational terms in the equations are not in line with sound mathematical principles, for example PD has no subscripts and references no definition, please clarify.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	<p>This equation has been updated to accurately compute average peat depth using a weighted average.</p> <p>The appropriate parameters in this equation have been updated to clarify that this equation is to be used on the peat depth map at the project start date to calculate average peat depth in stratum k as of the project start.</p>
Aster Global Findings - Round 2 (18 May 2021)	<p>The audit team reviewed the updates to the equation and noted that the computational approach defined does not accurately compute weighted average peat depth in cm, as the weighting of area is still not appropriately computed. Please correct the computational methods.</p> <p>Further, it was noted that the term PD,d is used in the equation, however this term with subscript is undefined in the where statement. Similarly, the term $APD,k,t=0$, is applied however this term is underfined in the where statement. Please address.</p>
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	<p>Equation 1 has been updated to properly calculate the weighted average of peat depth within each stratum by removing the parameter $R_{(PD,k,t=0)}$.</p> <p>Additionally, the term PD,d has been clarified within the equation and where statements so that it is clear how it is to be applied. That is, for each strata k all peat depths (D) recorded within stratum k should be multiplied by the total area within stratum k at peat depth D. These are then summed for each stratum k and then divided by the total area of stratum k to calculate a weighted average peat depth for stratum k. The parameter $APD,D,k,t=0$ is now properly defined by updating the previously defined parameter APD,k to $APD,D,k,t=0$.</p>

Aster Global Findings - Round 3 (23 June 2021)	<p>The audit team confirmed that the application of equation 1 is now correct. The item has been addressed.</p> <p>The audit team confirmed that the term PD,d has now been appropriately defined in the where statement as has the term APD,k,t=0. The item has been addressed.</p> <p>This item is pending the related non-checklist item.</p>
Round 3 NCR/CL/OFI	
Round 3 Response from Project Proponent	
Aster Global Findings - Round 4 (04 August 2021)	The related item has been addressed. The item has been addressed.

Item #	16
Equations (Description)	EQ 2
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15; Section 5.3.2.2
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the equation.No source for the equations were provided. Please clarify.</p> <p>The equation specifies that Dpeatburn,B,k cannot exceed 34 cm., per Cowenberg et al. It is unclear where this value was sourced within the text. Please clarify explicitly in the text where this value was derived.</p> <p>The where statement for Dpeatburn,B,k states a default of 34 cm., however text below in part "a." describes when various values should be applied. It is unclear how 34 cm, could therefore be called a default. Rather, this language seems to confuse the below passage. Please address.</p>
Round 1 NCR/CL/OFI	CL: Please clarify equation source.

<p>Round 1 Response from Project Proponent</p>	<p>The audit team has requested a source for equation 2. However, this equation is arithmetically calculating the depth of peat following the initial fire event to clear the land by subtracting the depth of the peat burn from the depth of peat before the burn event. The project proponent believes this equation to be straightforward and sound without need for additional sources.</p> <p>The provided default value for Dpeatburn,B,k was 34 cm, which is the average depth of peat lost in an average tropical peat fire as reported in Table 2 and summary text of the Couwenberg source paper. However, the project proponent has reworked this section to no longer provide a default value and has instead clarified language as to how the value for Dpeatburnn,B,k should be selected, following the methods provided by the VM0007 module VMD0046.</p> <p>The project proponent agrees that the language deeming 34 cm as a default value for Dpeatburn,B,k is confusing as project developers are to determine and justify a parameter value at baseline validation. The language discussing 34 cm as a default value has been removed and this section has been clarified as to how Dpeatburn,B,k should be selected for each stratum k, using Section 5.6.8 of the VM0007 Module VMD0046.</p>
<p>Aster Global Findings - Round 2 (18 May 2021)</p>	<p>The audit team understands the sourcing of the equation. The approach defined for determining peat depth is largely in agreement with the approach defined in the validated module VMD0046. The audit team noted that remote sensing is included in the list of eligible activities, however no clear guidance is provided in how this is to be performed or references to best practices.</p>
<p>Round 2 NCR/CL/OFI</p>	<p>CL: Please add language to specify practices or guidance for remote sensing for determination of burn depth.</p>
<p>Round 2 Response from Project Proponent</p>	<p>This section refers readers to section 5.6.8 of the VMD0046 module, which refers methodology users to 'methods described in Ballhorn et al. 2009'. This same language has been added to this section for additional clarity.</p>
<p>Aster Global Findings - Round 3 (23 June 2021)</p>	<p>The audit team confirmed that the reference to Ballhorn et al. has been included. This is in keeping with the validated VMD0046. The item has been addressed.</p>

<p>Item #</p>	<p>17</p>
<p>Equations (Description)</p>	<p>EQ 3</p>
<p>Applicability to Project (Y or N/A)</p>	<p>Y</p>
<p>Evidence Used to Assess (Location in PD/MR or Supporting Documents)</p>	<p>Methodology 1.15; Section 5.3.2.2</p>

Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the following equation, it is unclear of the source of the equation. Please clarify the source.</p> <p>It was noted that the term $D_{peat,B,k}$ was not defined within the where statement. Please address.</p> <p>It was noted that for the parameter $D_{Peat,nb}$ that a value of 40 cm is derived. The audit team was unable to locate in the referenced text where this value was sourced for the critical threshold of peat above drainage that is not susceptible to burning due to capillary action. Please clarify explicitly in the text where this value was derived.</p> <p>The input of equation 2 in the where statement specifies a $D_{peatburn,B,k}$ of no more than 35 centimeters in depth, however the equation performed in equation 3 does mathematically get to that result, without accompanying text in item a. Please clarify the equation for readability or address.</p>
Round 1 NCR/CL/OFI	CL: Please clarify equation source.
Round 1 Response from Project Proponent	After reviewing Section 5.3.2.1 of the methodology and Finding 2 issued by the audit team, the project proponent has selected to remove Equation 3 and updated this section for clarify. With the removal of this equation, all other parts of this finding are believed to no longer be relevant.
Aster Global Findings - Round 2 (18 May 2021)	The equation has been removed. The item has been addressed.

Item #	18
Equations (Description)	EQ 4
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation and noted that that strata were inconsistently applied. Additionally, it was noted that no source for the equation was provided. Finally, it was noted that not all parameters were defined in the where statement below.
Round 1 NCR/CL/OFI	CL: Please clarify the equation source. Additionally, please ensure all variables are included and strata are consistently defined.

Round 1 Response from Project Proponent	<p>The audit team was correct that strata were inconsistently applied and these have been corrected by updating references to stratum i in the equation and relevant sections to the appropriate parameter l.</p> <p>The project proponent does not believe that a source is needed for Equation 3 (previously equation 4) as the arithmetic of this equation can be justifiably understood based on the information provided in the methodology. The value for stratum l is the depth of peat following the initial fire event. The parameter $S_{(y,l)}$ is the annual subsidence rate of peat. Dividing the parameter l by the parameter $S_{(y,l)}$ is justifiably understood as the number of years it would take for peat to be depleted in the baseline scenario.</p> <p>The where statement has been updated to include all relevant parameters by adding the parameter l to the statement.</p>
Aster Global Findings - Round 2 (18 May 2021)	<p>The audit team confirms that the strata are now consistently applied using strata l, post burned for all parts of the equation. The response states no source is needed for the equation however, given that no source is provided it is unclear how a default subsidence value of 4.5 cm/yr was determined and or its appropriateness. Section c. of the text states, "Literature figures suggest peat drainage/subsidence rates for areas with peat depth $\geq 50\text{cm}$ is 4.5cm yr^{-1}", however, given that equation a minimum depth for the first and subsequent strata could start below that level if specified by the REDD Forest Reference Emission Level, if that were the case it is unclear how the value of 4.5 cm/yr would still be appropriate.</p>
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	<p>The methodology developer agrees that providing a default value for subsidence rate is no longer appropriate in the current version of the methodology and it has been removed. This is consistent with the last sentence of the following paragraph, which states, "In these cases project developers should use available literature data or default data provided below. In all cases, the same subsidence rate should be used both for calculating PDT and for calculating drainage emissions (Section 8.1.2.1)."</p>
Aster Global Findings - Round 3 (23 June 2021)	<p>The audit team confirmed that the default value has been removed. The item has been addressed.</p>

Item #	19
Equations (Description)	EQ 5
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15

Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation, it was unclear the source of the equation. Additionally, it was noted that j was calculated as the number of years (t) after the project start date. It is unclear how this is appropriate that j is also defined elsewhere as the strata related to baseline PDT.
Round 1 NCR/CL/OFI	CL: Please clarify the equation source. Additionally please, justify how the use of j is appropriate, as noted in findings.
Round 1 Response from Project Proponent	<p>No source is available for Equation 4 (previously Equation 5) as it is the culmination of the previous steps and the project proponent believes the equation can be understood based from previous steps. The parameter j stratifies the project area based on the number of years following the project start date in which peat is depleted. This is calculated by adding the year in which an area is cleared and the number of years it takes for a stratum to be depleted following clearing.</p> <p>The project proponent believes that the usage of parameter j is appropriate, as this parameter represents the project year t in which a stratum would be depleted and no further oxidation or related peat emissions would continue to occur. Thus, the audit team's understanding that j is the stratification related to baseline PDT is correct. However, relevant dependent equations have been clarified with regards to equations that include parameter j to clarify when no further emissions should occur once project year t exceeds j.</p>
Aster Global Findings - Round 2 (18 May 2021)	<p>The audit team believes that the use of the value j for both the equation and the stratification leads to confusion in the understanding and implementation of the document. To that end, please adjust to ensure readability. If the methodology developer disagrees the audit team will be glad to follow up with Verra to ensure that the approach is in line with their desires.</p> <p>Further, it is noted that the parameter $PDT_{y,l}$ is not defined in the where statement. Please address.</p>
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The methodology developer believes the use of j is appropriate, as this equation is used to stratify into appropriate strata j to be used in baseline emissions calculations. The value for each baseline peat strata j is meant to represent 'the year in which peat is depleted and/or peat oxidation no longer continues' (see point 'd' under Equation 4). Thus, this equation and the baseline stratification are consistent with each other, and the methodology developer believes changing it would actually cause additional confusion.
Aster Global Findings - Round 3 (23 June 2021)	The audit team reviewed the methodology response. While it is understood that the two elements share commonalities, the actual use of the term j to represent both an area and a time period is confounding. The audit team is willing to have a discussion on this element for additional clarity or if that is not desired will reach out to Verra for clarity of this item.
Round 3 NCR/CL/OFI	CL: Please address audit team findings.

Round 3 Response from Project Proponent	Section 5.3.2 of the methodology has been clarified by distinguishing between the spatial stratification using the parameter j and the value for this stratification, which is now represented by a new parameter z . With this update, it should now be clear that the methodology stratifies the project area into a stratum j represented by a value z . The parameter z has been added to a table in Section 9.1
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the changes to the equation and confirm that the application of the parameter z in the time definition and the application of strata j are appropriate and clear. Further, the audit team reviewed the parameters and confirmed they are appropriately applied. The item has been addressed.

Item #	20
Equations (Description)	EQ 6
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the equation and noted that the equation where statement includes no reference to equations that are input into the equation.</p> <p>Similarly, it was noted $EB_{p,j,t}$ was used in the equation, however it is unclear where this originates. If $EB_{p,j,t}$ is supposed to be $EB_{p,t}$ then the equation incorrectly includes components for peatburn and peat DOC, however those are incorporated into the Equation $EB_{p,t}$. It is unclear how that would be appropriate.</p>
Round NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	Equation 5 (previously equation 6) has been updated for clarity to use the result of Equation 59 (this equation has also been revised, as discussed in response to Finding #22), which is $EB_{p,t}$. With this update the equation is now calculated correctly. References to appropriate equations have also been added to this equation.
Aster Global Findings - Round 2 (18 May 2021)	The audit team reviewed the updates to the equation and confirm that the the equation has been corrected to remove erroneous elements. A review of the where statement noted that the parameter j is defined, however it does not occur within the equation.
Round NCR/CL/OFI	2 CL: Please clarify the appropriateness for parameter j in equation 5.
Round 2 Response from Project Proponent	The parameter " j " has been removed from the where statement, as it does not appear in equation 6 (now equation 5).

Aster Global Findings - Round 3 (23 June 2021)	<p>The audit team noted the removal of parameter j. The item has been addressed.</p> <p>The audit team noted changes to the where statement "EB,p,t = total baseline GHG emissions from drained peat under the baseline scenario in stratum at time t; tCO₂-e", noting in stratum, but no definition to that term. Please address.</p>
Round 3 NCR/CL/OFI	CL: Please define stratum in the where statement for EB,p,t, as described in the audit team findings.
Round 3 Response from Project Proponent	As the parameter EB,p,t is estimated using equation 59, which is calculated as the sum of parameters that already sum across strata, the reference to a specific stratum has been removed from this parameter. The parameter is now defined as "total baseline GHG emissions from drained peat under the baseline scenario at time t".
Aster Global Findings - Round 4 (04 August 2021)	The audit team noted that for Equation 5 the text in the where statement for EB,p,t still includes reference to stratification, "EB,p,t = total baseline GHG emissions from drained peat under the baseline scenario in stratum at time t; tCO ₂ -e (Equation 59)". It appears as this element was not corrected in the equation where statement and is being re-issued.
Round 4 NCR/CL/OFI	CL: Please address the text in the where statement to accurately define EB,p,t.
Round 4 Response from Project Proponent	The methodology has been updated to remove the text 'in stratum' from the definition.
Aster Global Findings - Round 5 (06 August 2021)	The audit team reviewed the changes to the text related to equation 5 and confirm the language is now appropriate. The item has been addressed.

Item #	20.1
Equations (Description)	EQ 16
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.24
Aster Global Initial Findings (2021 March 30)	The equation is appropriate, pending further changes and open items.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted that text states IPCC default CE values should be used however, the equation specifies a value of 0.5. Please clarify that this is appropriate.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.

Round 2 Response from Project Proponent	The value of 0.5 has been removed from this equation because though it is likely the relevant IPCC default value for most projects that qualify under this methodology, it is not necessarily the correct default value for all projects. The IPCC default value table has been referenced to ensure projects can easily find the correct value for their specific project.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed the change to the default factor. Similarly the appropriate descriptive text was included to aid the user to determine the correct value. The item has been addressed.

Item #	21
Equations (Description)	EQ 34
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement for CF no longer includes a default CF value. It is unclear why this was changed.
Round 1 NCR/CL/OFI	1 CL: Please clarify why the default CF factor was removed from the where statement.
Round 1 Response from Project Proponent	The default value for CF was removed with the recognition that the IPCC has since updated and may continue to update the default value for CF. This is in line with a request from Verra that the methodology be updated so that it requires fewer updates even if IPCC or literature recommendations change over time. It has been clarified in the data and parameters tables that the value for CF should be selected from either literature or the latest IPCC default value.
Aster Global Findings - Round 2 (18 May 2021)	The audit team understands the reason for the change. The item has been addressed.

Item #	22
Equations (Description)	EQ 60
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15

Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the equation and noted that there are discrepancies between equation elements and their related parameters.</p> <p>Additionally, it was noted that the equation results in the total baseline emissions, however no summation statements are included, so it is unclear how that would be the case as the input parameters are at a stratum basis.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	Equation 59 (previously Equation 60) has been updated for both clarity and accuracy. All equation elements and related parameters should no longer have any discrepancies. Additionally, the equation has been updated to correctly sum across strata for year t. The result of this equation is now used as an input into Equation 5 (as discussed in Finding #20).
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted that the equation has been updated, however it is unclear how the inputs for the equation are appropriate as summations happen in their preceding equations to remove the stratification. As a result the inputs do not match the output of the other equations. Similarly, it is unclear how this equation is then fully correct. Please address.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	No response or changes made.
Aster Global Findings - Round 3 (23 June 2021)	No response or changes made. The previous finding remains open.
Round 3 NCR/CL/OFI	CL: Please address the previous finding.
Round 3 Response from Project Proponent	Equation 59 has been updated to no longer sum across strata and parameters have been updated to properly reflect these updates. No supporting equations required updates. However, parameters for equations 60, 61, 62, 63, 64, 65, 66, 67, and 68 have undergone minor revisions to properly reflect the summation across strata in these supporting equations. These revised parameters have also been updated in Section 9.1.
Aster Global Findings - Round 4 (04 August 2021)	The equation has been appropriately modified in line with the inputs. The item has been addressed.

Item #	23
Equations (Description)	EQ 62
Applicability to Project (Y or N/A)	Y

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the equation and noted a summation of the area, however no summation term is applied, it is unclear what is being summed.</p> <p>The source of the equation was not identified. Please clarify the equation source.</p> <p>The audit team noted parameters missing from the where table below the equation and discrepancies between parameters and their related where terms, please address.</p> <p>It is unclear how EFB, drainage, jt default factor of 11tC/ha/yr is appropriate to apply noting it has different units than the equation requires. Please clarify its appropriateness</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	<p>The audit team is correct that Equation 61 (previously Equation 62) was improperly summing across strata. This issue has been corrected by adding the correct strata to the sum, as well as adding parantheses clarifying the equation. Additional clarification has been added regarding the relationship between PDT and an emissions factor of 0 tCO₂/ha.</p> <p>The source is Equation 2.3 of the 2013 IPCC Wetlands Supplement, which has been added to the descriptive text.</p> <p>The where table has been updated to include all parameters following the updates to the equation.</p> <p>Following a discussion with Verra, the provided default value has been removed and replaced with the requirement that an appropriate value must be selected from the latest IPCC Report. This is done to limit future updates to the methodology. All emissions factor values will need to be converted to appropriate units for use in this equation, but the methodology developer believes that can be done at the project level.</p>
Aster Global Findings - Round 2 (18 May 2021)	The equation has been updated. The audit team confirmed where parameters have also been upated, however it appears that the where parameter for EBdrainage,CO ₂ ,t has not been included. Please address.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The parameter Ebdrainage,CO ₂ ,t and its definition have been added to the where statement in equation 62 (now marked as equation 61).
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed the term has now been defined. The item has been addressed.
Item #	24

Equations	EQ 63
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the equation and noted the subscript of jt. It is unclear how this is appropriate, as j was summed in the equation.</p> <p>The source of the equation was not identified. Please clarify the equation source.</p> <p>Additionally, it was noted that the equation factors are per year, however the values is for a given year t. Please clarify how those two instances are the same.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	<p>The methodology reviewer agrees with the audit team's assessment of the inclusion of stratum j in the parameter $E_{(B,CH_4,j,t)}$ and it has been updated to $E_{(B,CH_4,t)}$. Similarly, $A_{(B,drain,j,t)}$ has been updated to $A_{(B,drain,j)}$, removing the time component of the parameter as the stratification does not change over time.</p> <p>The equation has been adapted from Equation 2.6 of the 2013 IPCC Wetlands Supplement. This source has been added to the methodology's text.</p> <p>The emissions factor's units are annual as they are applied each year to all strata in which PDT exceeds project year t. The strata j has been added to each EF, clarifying that it is appropriate to apply an EF of 0 in strata in which project year t exceeds PDT, similar to the clarification described in Finding #23. Additional clarification has been added to the methodology's text regarding this point.</p>
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation has been updated. Further it was noted that the where table has been updated, noting that $E_{b,CH_4,j,t}$ is used in the where table where the equation uses $E_{B,CH_4,t}$. Please address.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The where table for equation 63 (now equation 62) has been updated to include the correct parameter ($E_{B,CH_4,t}$) that was used in the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed the term has now been corrected. The item has been addressed.

Item #	25
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Equations (Description)	EQ 64
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	<p>The audit team reviewed the equation and noted the subscript of jt. It is unclear how this is appropriate, as j was summed in the equation.</p> <p>The source of the equation was not identified. Please clarify the equation source.</p> <p>The audit team reviewed the equation and noted that the equation where statement includes missing references to equation parameters that are input into the equation.</p> <p>Additionally, it was noted that the equation factors are per year, however the values is for a given year t. Please clarify how those two instances are the same.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	<p>The methodology developer agrees that this equation (now Equation 63) had the same issues as the previous finding. It has been updated similarly by updating $E_{(B,drainage,N_2 O,jt)}$ to $E_{(B,drainage,N_2 O,t)}$ and $A_{(B,drain,jt)}$ has been updated to $A_{(B,drain,j)}$.</p> <p>The equation is based on Equation 2.7 of the 2013 IPCC Wetlands Supplement.</p> <p>The where section for this equation has been updated with the missing references to parameters by adding EB,drainage,N2 O,t and AB,drain,j.</p> <p>See similar response to Finding #24 above. The strata parameter j has been added to the EF parameter in order to clarify that it is appropriate to update the EF over time, especially in cases in which project year t exceeds PDT.</p>
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed sourcing of the equation and that changes were made appropriately. The item has been addressed.

Item #	26
Equations (Description)	EQ 69

Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The source of the equation was not identified. Please clarify the equation source.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	The equation is adapted from Equation 2.4 of the 2013 IPCC Wetlands Supplement. The source has been added to the methodology's text. Please note that the equation has been updated similar to the findings (#24 and #25) above in order to provide accuracy and consistency between equations.
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted that the equation was updated, in line with changes to above. The equation is appropriate, however the where parameter for EFB,DOC,jt does not exist instead it is written as EFB,DOC,t. Please address.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The parameter within the where statement for equation 69 has been updated to EFB,DOC,jt to reflect what is written within the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed the term has now been defined. The item has been addressed.

Item #	27
Equations (Description)	EQ 70
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	It is unclear how the equation is appropriate as it sums for i and k, however CP,t has neither i or k as subscripts. Please clarify how this is mathematically appropriate.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	After reviewing the preliminary equations that input into Equations 69 and 70, the methodology developer recognized that these input equations could be updated and simplified to sum across strata, making this equation unnecessary. It has been removed from the methodology. The following equation has been updated (discussed in Finding #28) along with the input equations.

Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation has been removed. The item has been addressed.
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Item #	28
Equations (Description)	EQ 71
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation and noted that the equation where statement includes missing references to equation parameters that are input into the equation.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	This equation has been updated following updates to the input equations and the removal of the preceding equation (see response to Finding #27). All parameters in this equation are now listed appropriately in the 'where' table.
Aster Global Findings - Round 2 (18 May 2021)	The audit team reviewed the changes to the equation. It is noted that the where parameter for EP,Sea_level,t has an error in the reference. Please address.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The error reference in equation 71 (now marked as equation 70) has been updated and re-linked to its proper reference, equation 106.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the reference has been fixed. The item has been addressed.

Item #	29
Equations (Description)	EQ 72
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters. It is unclear how this is appropriate or what is the correct naming convention.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.

Round 1 Response from Project Proponent	This equation has been updated to properly sum across all landcover strata. Additionally, the where table and equation have been updated so there is no disagreement in listed parameters.
Aster Global Findings - Round 2 (18 May 2021)	The audit team reviewed the changes, it is noted a discrepancy between the parameter Eflogging,it and the where table Eflogging,i exists. Please clarify which parameter is correct. Additionally make changes in the text of the where statement in line with the correct .
Round 2 NCR/CL/OFI	2
Round 2 Response from Project Proponent	It has been confirmed that Eflogging,I is the correct parameter. As such, the instance of Eflogging,it has been replaced with Eflogging,I in the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed the consistent use of Eflogging, i. The item has been addressed.

Item #	30
Equations (Description)	EQ 75
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation and noted that the equation where statement includes missing references to equation parameters that are input into the equation.
Round 1 NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	The where statement has been updated to include the missing reference to equation parameter V_(log,tr,ig). All other equation parameters are listed. Please note that the listed default value for CF was deleted in order to be consistent with previous uses of this parameter and guidance received from Verra.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the table has been appropriately updated. The item has been addressed.

Item #	31
Equations (Description)	EQ 82
Applicability to Project (Y or N/A)	Y

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation and noted no where statement is provided for the equation.
Round 1 NCR/CL/OFI	CL: Please include a where statement for the equation, in line with template requirements.
Round 1 Response from Project Proponent	This was an existing equation which required no changes or updates as part of the methodology revision and the previous version of the methodology did not repeat previously defined parameters. However, a where statement has been added for clarity.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the table has been appropriately updated. The item has been addressed.

Item #	32
Equations (Description)	EQ 88
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the equation presented differs from the previously presented equation, it is unclear why changes were made or how they are appropriate.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	The presented equation is necessary as the methodology now requires stratification by both landcover (i) and peat depth (k). The previous version of the methodology combined landcover and peat into one stratification that had led to confusion for project developers. The updates to this equation are not only appropriate but necessary in order to properly account for emissions from burning from all sources. Please note that the equation has been updated to sum across all strata in order to follow the procedures explained in the response to findings #27 and 28.
Aster Global Findings - Round 2 (18 May 2021)	The audit team reviewed the changes and the response and confirm that the applied approach is appropriate. The item has been addressed.

Item #	33
Equations (Description)	EQ 92

Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the equation presented differs from the previously presented equation, it is unclear why changes were made or how they are appropriate.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	The parameter $[(PBB)]_{(P,it)}$ had been unintentionally removed during updates to the methodology. It has been re-included in this equation and the following where statement.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirms that the inclusion of PBB,P,it occurred in line with the previously validated equation. It was noted that no parameter exists for CE in the where table. Please address.
Round 2 NCR/CL/OFI	
Round 2 Response from Project Proponent	The parameter "CE" and its definition have been added to the where table below equation 92 (now marked as equation 91).
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed the term has now been defined. The item has been addressed.

Item #	33.1
Equations (Description)	EQ 98 formerly EQ 99
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.24
Aster Global Initial Findings (2021 March 30)	The equation remains unchanged from previously validated equation.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted that the equation was updated to be in line with more appropriate computational methods. It was noted that the parameter $E,LCC,P,$ no longer matches its related where parameter. Please address.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The parameter in the where table has been adjusted to match equation 98.

Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the reference has been fixed. The item has been addressed.
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Item #	34
Equations (Description)	EQ 100
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation and related where statement. It was that noted not all of the equation components were defined in the where statement. Please address.
Round NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	The parameter EFP,LCC,AG,it was identified as missing from the where statement as the previous version of the methodology did not repeat previously defined parameters. The where statement has been updated to include this missing parameter.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the table has been appropriately updated. The item has been addressed.

Item #	35
Equations (Description)	EQ 101
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters. It is unclear how this is appropriate or what is the correct naming convention. It was noted that not all of the equation components were defined in the where statement. Please address.
Round NCR/CL/OFI	1 CL: Please address audit team findings.

Round 1 Response from Project Proponent	This equation has been updated by removing the stratification component of the input parameters. Instead, summing across strata is properly done within the relevant equations calculating these input parameters. As part of this update the equation parameters and where statement were updated to ensure they agree for all parameters and that all parameters are defined.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation and related where statement were appropriately addressed. The item has been addressed.

Item #	36
Equations (Description)	EQ 102
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The source of the equation was not identified. Please clarify the equation source. It was noted that not all of the equation components were defined in the where statement. Please address.
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	This equation is the monitoring equivalent to the baseline equation responded to in Finding #23 and has the same source, Equation 2.3 of the 2013 IPCC Wetlands Supplement. All equation components have been properly updated and defined in the where statement.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation and related where statement were appropriately addressed. The item has been addressed.

Item #	37
Equations (Description)	EQ 103 & 104
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters. It is unclear how this is appropriate or what is the correct naming convention.

Round NCR/CL/OFI	1	CL: Please address audit team findings.
Round 1 Response from Project Proponent		The where statement has been updated to agree with these two equations, specifically by updating the parameter $[[ME]]_{(dd,kt)}^{LCC}$ to the appropriate parameter $[[ME]]_{(dd,kt)}$.
Aster Global Findings - Round 2 (18 May 2021)		The audit team confirmed that the tables have been appropriately updated. The item has been addressed.
Round NCR/CL/OFI	2	
Round 2 Response from Project Proponent		
Aster Global Findings - Round 3 (23 June 2021)		
Round NCR/CL/OFI	3	
Round 3 Response from Project Proponent		
Aster Global Findings - Round 4 (04 August 2021)		The audit team noted changes to the where statement for equation 104. It was noted that the changes resulted in the removal of the unit descriptor for the parameter $E_{p,drainage,CH_4,t}$ in the where statement.
Round NCR/CL/OFI	4	CL: Please include a unit in the where statement for the parameter $E_{p,drainage,CH_4,t}$ in line with other parameters in the equation.
Round 4 Response from Project Proponent		The appropriate unit, tCO_2e , has been added to the where statement for this parameter.
Aster Global Findings - Round 5 (06 August 2021)		The audit team reviewed and confirmed the unit has been included for all parameters in equation 104. The item has been addressed.

Item #	38
Equations (Description)	EQ 105
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The source of the equation was not identified. Please clarify the equation source.
Round NCR/CL/OFI	1
Round 1 Response from Project Proponent	This equation is the project emissions equivalent to the equation responded to in Finding #25 and has been updated to be in compliance with the updates made for that equation. It has the same source equation, Equation 2.4 of the 2013 IPCC Wetlands Supplement.

Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation and related where statement were appropriately modified similarly, additional detail for equation origin has been provided. The item has been addressed.
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Item #	39
Equations (Description)	EQ 106
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	<p>The source of the equation was not identified. Please clarify the equation source.</p> <p>It was noted that not all of the equation components were defined in the where statement. Please address.</p>
Round NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	This equation is the project emissions equivalent to the equation responded to in Finding #26 and has been updated to be in compliance with the updates made for that equation. It has the same source equation, Equation 2.7 of the 2013 IPCC Wetlands Supplement.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation and related where statement were appropriately modified similarly, additional detail for equation origin has been provided. The item has been addressed.

Item #	40
Equations (Description)	EQ 112
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team reviewed the equation. It is unclear how the input parameters resulted in an output for stratum i at time t. Please clarify how this is correct as both strata i and j are sourced.
Round NCR/CL/OFI	1 CL: Please address audit team findings.

Round 1 Response from Project Proponent	The audit team is correct in that the output is not for stratum i, but is instead the sum across all landcover (i) and peat (k) strata. In other words, the output is total GHG emissions due to activity shifting leakage in year t. The output parameter has been updated in the equation and subsequent where table.
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted that the response states that peat strata k are used, however the equations use strata i and j. It is unclear how these concepts are in agreement. Additionally, as presented it is unclear how LKAD,t is appropriate as i has not been summed over in the current form of the equation. Please clarify.
Round NCR/CL/OFI 2	CL: Please address audit team findings.
Round 2 Response from Project Proponent	This equation was incorrectly referring to strata j, while the response is correct that strata k should be used. The equation has been corrected with the appropriate peat strata k. Additionally, it was noted that by summing up across strata in equation 112, equation 111 was now repetitive, so they were combined into an updated equation 111. The parameter LK_AD_t was removed, as it is already represented by $LK_{AD,t}$ (ActivityDisplacement,t).
Aster Global Findings - Round 3 (23 June 2021)	The audit team reviewed the updated equation 111. The summation is done in a singular step as noted in the round 2 response. The audit team noted that " ΔC_{it_init} = average initial carbon stock changes and greenhouse gas emissions in stratum k at time t (excluding timber emissions where applicable); t CO ₂ -e ha ⁻¹ ." It is unclear why stratum k is used. Please clarify.
Round NCR/CL/OFI 3	CL: Please address audit team findings.
Round 3 Response from Project Proponent	The definition for ΔC_{it_init} was incorrectly referring to stratum k. It has been updated to refer to the correct landcover stratum i.
Aster Global Findings - Round 4 (04 August 2021)	The audit team confirmed the changes described were made and appropriate for the equation. The item has been addressed.

Item #	41
Equations (Description)	EQ 118
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement for CF no longer includes a default CF value. It is unclear why this was changed.
Round NCR/CL/OFI 1	CL: Please clarify why the default CF factor was removed from the where statement.

Round 1 Response from Project Proponent	The default value for CF was removed with the recognition that the IPCC has since updated and may continue to update the default value for CF. This is in line with a request from Verra that the methodology be updated so that it requires fewer updates even if IPCC or literature recommendations change over time. It has been clarified in the data and parameters tables that the value for CF should be selected from either literature or the latest IPCC default value.
Aster Global Findings - Round 2 (18 May 2021)	The audit team understands the reason for the change. The item has been addressed.

Item #	42
Equations (Description)	EQ 120
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters. It is unclear how this is appropriate or what is the correct naming convention.
Round 1 NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	This equation has been updated with the appropriate parameter by updating $[[LKP]]_{(planned,it)}$ to $[[LKA]]_{(planned,it)}$, a parameter used elsewhere in the methodology.
Aster Global Findings - Round 2 (18 May 2021)	The audit team reviewed the changes and the response and confirm that the applied approach is appropriate. The item has been addressed.

Item #	43
Equations (Description)	EQ 126
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters and related definitions. It is unclear how this is appropriate or what is the correct naming convention.
Round 1 NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	The equation and where statement have been updated to properly calculate ex-ante net reductions in emissions for project year t.

Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation and related where statement were appropriately addressed. The item has been addressed.
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Item #	44
Equations (Description)	EQ 127
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters and related definitions. It is unclear how this is appropriate or what is the correct naming convention.
Round NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	The equation and where statement have been updated to properly calculate ex-post net reductions in emissions for project year t.
Aster Global Findings - Round 2 (18 May 2021)	The audit team noted that the where statement and equation do not agree for all parameters and related definitions (Still equation 127). It is unclear how this is appropriate or what is the correct naming convention.
Round NCR/CL/OFI	2 CL: Please address audit team findings.
Round 2 Response from Project Proponent	The parameters in the where table have been updated to match those within equation 127.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the reference has been fixed. The item has been addressed.

Item #	45
Equations (Description)	EQ 129
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted that the where statement and equation do not agree for all parameters and related definitions. It is unclear how this is appropriate or what is the correct naming convention.
Round NCR/CL/OFI	1 CL: Please address audit team findings.
Round 1 Response from Project Proponent	The equation and where statement have been updated to properly calculate VCUs for project year t.

Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that the equation and related where statement were appropriately addressed. The item has been addressed.
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Item #	46
Equations (Description)	EQ 132 & 133
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	<p>The audit team noted that the where statement and equation do not agree for all parameters. It is unclear how this is appropriate or what is the correct naming convention.</p> <p>Additionally, it was noted that not all of the equation components were defined in the where statement. Please address.</p>
Round 1 NCR/CL/OFI	CL: Please address audit team findings.
Round 1 Response from Project Proponent	<p>This equation and where statement have been updated to include all parameters and definitions with the appropriate and correct information.</p> <p>Please note that upon review of this uncertainty section, the methodology developer noted that the methodology required updates to sum across strata correctly due to the stratification now distinguishing between landcover (i) and peat (j in the baseline scenario, k in the project scenario). Corrections required updating and adding new equations. The following equations were updated or added: 133, 134, 135, 136, 137, 138, 139, and 140.</p>
Aster Global Findings - Round 2 (18 May 2021)	<p>The audit team reviewed the updated uncertainty computations. Equation 135 has disagreement between the strata used - or k, it is unclear what is correct. Please address.</p> <p>It was noted that for equation 139 and 140 a number of elements were undefined in where statements. Please address.</p>
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	Equation 135 has been updated to clarify the appropriate baseline peat strata j should be used. Additionally, all elements for equations 139 and 140 have been defined in the where statement.
Aster Global Findings - Round 3 (23 June 2021)	<p>Equation 134, formerly 135 has been revised to state peat strata j, in line with the response. The item has been addressed.</p> <p>The audit team witnessed the updated where parameters for equations 138 and 139, previously 139 and 140. The item has been addressed.</p>

Item #	47
Method Template (Description)	VCS Header Page - Sectoral Scope
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The methodology defines the sectoral scope as 14. This is not in line with the required text presented in the methodology template.
Round 1 NCR/CL/OFI	CL: Please adjust the Sectoral Scope section to be in line with the requirements presented within the methodology template.
Round 1 Response from Project Proponent	The Sectoral Scope has been updated to fulfill are requirements of the methodology template.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed the sectoral scope is now defined on the header page in line with the requirements of the methodology template. The item has been addressed.

Item #	48
Method Template (Description)	Contents Page
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team notes there is an error in the Reference section of the table of contents. Likewise, no reference section exists in the methodology.
Round 1 NCR/CL/OFI	CL: Please correct the contents page. Additionally, please clarify where the reference section exists for this methodology.
Round 1 Response from Project Proponent	The table of contents has been updated and a reference section has been added as required by the methodology template.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed the addition of the references and related update to the table of contents. The item has been addressed.

Item #	49
Method Template (Description)	2 SUMMARY DESCRIPTION OF THE METHODOLOGY- Additionality and Crediting Method Table

Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team was unable to locate the required table, in line with the requirements.
Round 1 NCR/CL/OFI	NCR: Please include the required table to be in line with the requirements presented within the methodology template.
Round 1 Response from Project Proponent	This table has been added. See response to finding #2.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirms the inclusion of the Additionality and Crediting Method in line with the template.

Item #	50
Method Template (Description)	Definitions
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team noted the use of a couple of definitions already defined by the VCS program documents. This is not allowed within the methodology template.
Round 1 NCR/CL/OFI	CL: Please remove definitions already defined by VCS program documents from the definitions section, to be in line with the requirements presented within the methodology template.
Round 1 Response from Project Proponent	The definitions table has been updated and all definitions defined by the VCS program documents have been removed.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that VCS program defined definitions have been removed from the methodology. The item has been addressed.

Item #	51
Method Template (Description)	8.4 Net GHG Emission Reductions and Removals: Net GHG emission reductions and removals are calculated as follows:
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15

Aster Global Initial Findings (2021 March 30)	The emission reduction equation presented does not include a related where statement and definition of inputs.
Round 1 NCR/CL/OFI	CL: Please adjust the Net GHG Emission Reductions and Removals, in line with requirements presented in the methodology template.
Round 1 Response from Project Proponent	This equation (124) has been updated in the methodology with an appropriate where statement.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed that Net GHG emissions is now included in equation 125 of the methodology. The item has been addressed.

Item #	52
Method Template (Description)	10 REFERENCES: Include any references relevant to the methodology.
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology 1.15
Aster Global Initial Findings (2021 March 30)	The audit team was unable to locate the references section, in line with the template.
Round 1 NCR/CL/OFI	NCR: Please include the reference section, in line with template requirements.
Round 1 Response from Project Proponent	A reference section has been added to the methodology as required by the methodology template.
Aster Global Findings - Round 2 (18 May 2021)	The audit team confirmed the addition of the references. The item has been addressed.

Item #	53
Parameter (Description)	$APD, k, t=0$
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	

Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been added to section 9.1 and is located in one of the first tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. The audit team notes the inclusion of the term baseline crediting period. This item is pending the related non-checklist item.
Round 3 NCR/CL/OFI	
Round 3 Response from Project Proponent	
Aster Global Findings - Round 4 (04 August 2021)	The language has been updated in line with the change to the related item. The item has been addressed.

Item #	54
Parameter (Description)	<i>PDD</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been added to section 9.1 and is located in one of the first tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. The item has been addressed.

Item #	55
Parameter (Description)	<i>Ak</i>

Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been added to section 9.1 and is located in one of the first tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. The item has been addressed.

Item #	56
Parameter (Description)	$RPD_{k,t=0}$
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been removed from equation 1 (see Round 2 response to Item #15) and has not been included in the parameters tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been removed and therefore is no longer applicable. The item has been addressed.

Item #	57
Parameter (Description)	$PDD_{max,k}$
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been added to section 9.1 and is located in one of the first tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that a parameter has been added however the depth D is omitted from the parameter and definition. It is unclear how the presented parameter is representative and appropriate for definition of the term in equation 1.
Round 3 NCR/CL/OFI	CL: Please clarify how the presented parameter is appropriate for definition of the term in equation 1.
Round 3 Response from Project Proponent	The definition has been updated to "Minimum bound of peat depth D within stratum k", consistent with the definition used in equation 1.
Aster Global Findings - Round 4 (04 August 2021)	The audit team confirmed that the depth D has been appropriately added to the parameter description. The audit team noted that the data/parameter name is still incorrect, when compared to the presented parameter name in the equation.
Round 4 NCR/CL/OFI	CL: Please clarify how the presented parameter is appropriate for equation 1, noting verifier findings.
Round 4 Response from Project Proponent	The parameter has been updated in Section 9.1 to $PD_{D,min,k}$ in order to be consistent with Equation 1.
Aster Global Findings - Round 5 (06 August 2021)	The audit team confirmed the correction to the parameter name to align with equation 1. The item has been addressed.

Item #	58
Parameter (Description)	$PDD_{min,k}$

Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been added to section 9.1 and is located in one of the first tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that a parameter has been added however the depth D is omitted from the parameter and definition. It is unclear how the presented parameter is representative and appropriate for definition of the term in equation 1.
Round 3 NCR/CL/OFI	CL: Please clarify how the presented parameter is appropriate for definition of the term in equation 1.
Round 3 Response from Project Proponent	The definition has been updated to "Maximum bound of peat depth D within stratum k", consistent with the definition used in equation 1.
Aster Global Findings - Round 4 (04 August 2021)	The audit team confirmed that the depth D has been appropriately added to the parameter description. The audit team noted that the data/parameter name is still incorrect, when compared to the presented parameter name in the equation.
Round 4 NCR/CL/OFI	CL: Please clarify how the presented parameter is appropriate for equation 1, noting verifier findings.
Round 4 Response from Project Proponent	The parameter has been updated in Section 9.1 to PD,D,max,k in order to be consistent with Equation 1.
Aster Global Findings - Round 5 (06 August 2021)	The audit team confirmed the correction to the parameter name to align with equation 1. The item has been addressed.

Item #	59
Parameter (Description)	<i>k</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in)	Methodology - Section 9.1 Data and Parameters Available at Validation

PD/MR or Supporting Documents)	
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	This parameter has been added to section 9.1 and is located in one of the first tables.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. The item has been addressed.

Item #	60
Parameter (Description)	Dpeatburn,B,k
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter has a default value not in line with the value applied within the equation.
Round 2 NCR/CL/OFI	CL: Please ensure that the value is in line with equation. Please clarify the appropriateness of the default value.
Round 2 Response from Project Proponent	The value within the parameters table has been updated to conform with the variability between different projects, as the listed default value is not always appropriate.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the valued applied is no variable. The audit team noted that the source of data "Current, relevant, and local literature" is not in line the determination of the value is section 5.3.2.2.
Round 3 NCR/CL/OFI	CL: Please clarify how the presented source is appropriate for the parameter, given the language presented in Section 5.3.2.2.

Round 3 Response from Project Proponent	The source of data has been updated to Section 5.3.2.2, consistent with the sources provided for other parameters and the appropriate section which provides details on estimating this parameter.
Aster Global Findings - Round 4 (04 August 2021)	The audit team confirmed the changes to the parameter description. The item has been addressed.

Item #	61
Parameter (Description)	$PDT_{y,l}$
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is appropriately defined, however does not include all equations it applies to.
Round 2 NCR/CL/OFI	CL: Please ensure all related equations are included in the equation section.
Round 2 Response from Project Proponent	The table has been updated to include Equation 4, the only other equation this parameter applies to.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	62
Parameter (Description)	$S_{y,l}$
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	

Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter states, "Subsidence rate in stratum i at y years", however stratum I is used instead. Please address.
Round 2 NCR/CL/OFI	CL: Please ensure that the description is in line with equation.
Round 2 Response from Project Proponent	The description has been updated to include "I" rather than "i"
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	63
Parameter (Description)	<i>l</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	The parameter has been added to a table in section 9.1.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. The item has been addressed.

Item #	64
Parameter (Description)	<i>EB,DOC,t</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation

Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the value in the parameter conflict.
Round 2 NCR/CL/OFI	CL: Please ensure the parameter is in line with the equation or adjust one or both for consistency.
Round 2 Response from Project Proponent	The equation has been updated to match the parameter in the table, "EB,DOC,jt"
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. The item has been addressed.

Item #	65
Parameter (Description)	<i>EB,drainage,CO2,jt</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.
Round 2 NCR/CL/OFI	CL: Please clarify the location for the parameter in section 9.2
Round 2 Response from Project Proponent	The parameter has been added to a table in section 9.1.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been added to Section 9.1. It was noted that the parameter is included for equation 60 and 61, but only appears within equation 60.
Round 3 NCR/CL/OFI	CL: Please clarify why the parameter is included for equation 61, as it is not included within that equation.
Round 3 Response from Project Proponent	With the updates to Section 8.1.2.1, the updated parameter is EB,drainage,CO2,t and is included in both Equations 60 and 61. This parameter is distinct from <i>EF,B,drainage,jt,CO2</i> , which is only included in Equation 61.

Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and agree it is appropriate. The item has been addressed.
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Item #	66
Parameter (Description)	A B,drain,j
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is AB,Drain,jt rather than AB,drain,j.
Round 2 NCR/CL/OFI	CL: Please ensure the parameter is in line with the equation or adjust one or both for consistency.
Round 2 Response from Project Proponent	The parameter has been updated to "AB,drain,j"
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. It was noted that the description of the parameter agrees with equation 61, however disagrees with equations 62 and 63, as the project year t clause is excluded.
Round 3 NCR/CL/OFI	CL: Please ensure consistent appropriate discription of the equation. Please correct where statements/descriptions as needed.
Round 3 Response from Project Proponent	The project year t clause has been removed from the where statement for equations 62 and 63. It is now consistent across the methodology.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	67
Parameter (Description)	<i>EB,CH4,jt</i>
Applicability to Project (Y or N/A)	Y

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is EB,CH4,jt rather than EB,CH4,t. Additionally, the description does not match the parameter in the related where table. The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please ensure the parameter is in line with the equation or adjust one or both for consistency.
Round 2 Response from Project Proponent	The parameter has been corrected to EB,CH4,t with the accurate description and section.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	68
Parameter (Description)	EFCH4, land, jt
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is EFCH4, land rather than EFCH4, land, jt. Additionally, the description does not match the parameter in the related where table. The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please ensure the parameter is in line with the equation or adjust one or both for consistency.
Round 2 Response from Project Proponent	The parameter has been corrected to EFCH4,land,jt and the section number and description have been corrected.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	69
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Parameter (Description)	EFCH4, ditch,jt
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is EFCH4, ditch rather than EFCH4, ditch, jt. Additionally, the description does not match the parameter in the related where table. The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please ensure the parameter is in line with the equation or adjust one or both for consistency.
Round 2 Response from Project Proponent	The parameter has been corrected to EFCH4,ditch,jt and the section number and description have been corrected.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. It was noted that the justification of the source refers to a section that does not occur within the methodology.
Round 3 NCR/CL/OFI	CL: Please correctly clarify the section or justify the source of the parameter.
Round 3 Response from Project Proponent	The previous version of the methodology incorrectly referred to Section 8.1.3.1.2. It has been updated to the correct section, 8.1.2.1.2.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	70
Parameter (Description)	Fracditch
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	

Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.1.2.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	71
Parameter (Description)	<i>EFN20,jt</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The data unit conflicts with the related equation and text. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The data unit has been updated to t N2O ha-1 yr-1.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	72
Parameter (Description)	GWPN2O
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation

Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.1.3.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	73
Parameter (Description)	E B,PeatBurn,bt
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	74
Parameter (Description)	E B,Pe atBurn,CO 2 ,bt
Applicability to Project (Y or N/A)	Y

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	75
Parameter (Description)	E B,PeatBurn,CH 4 ,bt
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not described rather refers to a section number. Please correct. The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter description has been updated with the correct description from its equation's where table.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	76
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Parameter (Description)	EF CO2
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	77
Parameter (Description)	EF CH4
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2

Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.
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Item #	78
Parameter (Description)	D B, burn, b t
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2
Aster Global Findings - Round 3 (23 June 2021)	The audit team noted that the justification of the source refers to a section that does not occur within the methodology.
Round 3 NCR/CL/OFI	CL: Please correctly clarify the section or justify the source of the parameter.
Round 3 Response from Project Proponent	The previous version of the methodology incorrectly referred to Section 8.1.3.2. It has been updated to the correct section, 8.1.2.2.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	79
Parameter (Description)	A B, burn, b t ,D
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation

Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2
Aster Global Findings - Round 3 (23 June 2021)	The audit team noted that the justification of the source refers to a section that does not occur within the methodology.
Round 3 NCR/CL/OFI	CL: Please correctly clarify the section or justify the source of the parameter.
Round 3 Response from Project Proponent	The previous version of the methodology incorrectly referred to Section 8.1.3.2. It has been updated to the correct section, 8.1.2.2.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	80
Parameter (Description)	<i>BDb</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The section number is incorrect. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The section number has been corrected to 8.1.2.2
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	81
Parameter (Description)	<i>EFB,DOC,jt</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The description and data units relate to a different parameter, rather than how it is defined in the equation. Please correct.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The description and data units have been updated to match the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	82
Parameter (Description)	EFB,DOC,t
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter does not exist in the equation listed. Please clarify its appropriateness.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.

Round 2 Response from Project Proponent	The correct parameter is $E_{(B,DOC,t)}$. The parameter has been corrected and the appropriate equation number has been confirmed.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	83
Parameter (Description)	ΔDOC_{drain}
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.1 Data and Parameters Available at Validation
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	1
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Please address.
Round 2 NCR/CL/OFI	2
Round 2 Response from Project Proponent	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter table has been updated to correctly include the delta.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. It was noted that the equation number is incorrect.
Round 3 NCR/CL/OFI	3
Round 3 Response from Project Proponent	CL: Please address audit team findings.
Round 3 Response from Project Proponent	The audit team is correct, the appropriate equation number for this parameter is 69 and it has been updated. The equation number has also been updated for the following parameter, $Frac,DOC_{CO2}$.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	84
Parameter (Description)	$C_{PRJ,t}$
Applicability to Project (Y or N/A)	Y

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter description contrasts with details in the text. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter description has been updated to align with the text.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	85
Parameter (Description)	EP,drainage,t
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter name in the table has been updated to EP,drainage,t
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	86
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Parameter (Description)	<i>EP,sea_level,t</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The equation contains a reference error. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The reference has been updated and the error has been resolved
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	87
Parameter (Description)	<i>EP,drainage,kt</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter does not exist in the equation listed. Please clarify its appropriateness.
Round 2 NCR/CL/OFI	CL: Please address audit team findings.
Round 2 Response from Project Proponent	This parameter has been corrected to E_P,drainage,t.

Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.
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Item #	88
Parameter (Description)	<i>EP,drainage,CO2,t</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Additionally the parameter description conflicts with the detail provided in the equation. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter has been updated to its correct name and its description has been updated to match the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	89
Parameter (Description)	<i>EP,drainage,CH4,t</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	

Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Additionally the parameter description conflicts with the detail provided in the equation. Please address.
Round NCR/CL/OFI 2	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter has been updated to its correct name and its description has been updated to match the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated with respect to equation 60, however this is in disagreement with equation 62 for the parameter name and description.
Round NCR/CL/OFI 3	CL: Please address audit team findings.
Round 3 Response from Project Proponent	Equation 62 has been updated to correctly refer to the parameter E_(B,drainage, [CH] _4,jt),and the definition is now consistent in Equations 60, 62, and the relevant parameter table in Section 9.1.. Additionally, the parameter E,B,CH4,t has been removed as a parameter in Section 9.1 as it has been renamed and is no longer used in the methodology. Finally, the definition of the corresponding project emissions parameter, E_(P,drainage, [CH] _4,t), has been updated in Equation 104 within Section 8.2.4 in order to be consistent with Equation 100.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	90
Parameter	<i>EP,drainage,N2O,t</i>
(Description)	
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round NCR/CL/OFI 1	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Additionally the parameter description conflicts with the detail provided in the equation. Please address.
Round NCR/CL/OFI 2	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter has been updated to its correct name and its description has been updated to match the equation.

Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated with respect to equation 60, however this is in disagreement with equation 63 for the parameter name and description.
Round NCR/CL/OFI 3	CL: Please address audit team findings.
Round 3 Response from Project Proponent	Equation 63 has been updated to correctly refer to the parameter E_(B,drainage,N_2 O,t and the definition is now consistent in Equations 60, 63, and the relevant parameter table in Section 9.1. Additionally, the definition of the corresponding project emissions parameter, E_(P,drainage,N2O,t), has been updated in Equation 105 within Section 8.2.4 in order to be consistent with Equation 100.
Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.

Item #	91
Parameter (Description)	AP,drain,k
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round NCR/CL/OFI 1	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Additionally the parameter description conflicts with the detail provided in the equation. The parameter does not include all equations used by the parameter. Please address.
Round NCR/CL/OFI 2	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter name has been updated to its correct name that matches the equations. Additionally, equations 104 and 105 have been added as references.
Aster Global Findings - Round 3 (23 June 2021)	The audit team reviewed the parameter it was noted that the description does not correlate with the where statement of the equation.
Round NCR/CL/OFI 3	CL: Please address audit team findings.
Round 3 Response from Project Proponent	This parameter has been updated by applying the same definition provided in Equations 101, 104, and 105. There is no longer a reference to the time t.

Aster Global Findings - Round 4 (04 August 2021)	The audit team reviewed the response and confirmed the appropriate changes. The item has been addressed.
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Item #	92
Parameter (Description)	<i>MEdd,kt</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Additionally the parameter description conflicts with the detail provided in the equation. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter has been updated to its correct name and its description has been updated to match the equation.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	93
Parameter (Description)	<i>EP,CH4,kt</i>
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	

Aster Global Findings - Round 2 (18 May 2021)	The parameter does not exist in the equation listed. Please clarify its appropriateness.
Round NCR/CL/OFI 2	CL: Please address audit team findings.
Round 2 Response from Project Proponent	This parameter has been removed, as this parameter is now named E_P,drainage,CH_4,kt and is listed in another table.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	94
Parameter (Description)	AP,drain,kt
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round NCR/CL/OFI 1	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter is the same as another parameter in this section with the exception of the equation. These should be consolidated for clarity.
Round NCR/CL/OFI 2	CL: Please address audit team findings.
Round 2 Response from Project Proponent	The parameters have been consolidated under the parameter A_P_drain,k
Aster Global Findings - Round 3 (23 June 2021)	The parameter has been removed and is not present elsewhere, the item is no longer applicable.

Item #	95
Parameter (Description)	EFCH4, land,kt
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.

Round NCR/CL/OFI	1	
Round 1 Response from Project Proponent		
Aster Global Findings - Round 2 (18 May 2021)		The parameter name and the name in the parameter table conflict. Additionally the parameter description conflicts with the detail provided in the equation. Please address.
Round NCR/CL/OFI	2	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent		The parameter has been updated to its correct name and its description has been updated to match the equation.
Aster Global Findings - Round 3 (23 June 2021)		The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	96	
Parameter (Description)	EFCH4, ditch,kt	
Applicability to Project (Y or N/A)	Y	
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored	
Aster Global Initial Findings (2021 March 30)	Pending other findings.	
Round NCR/CL/OFI	1	
Round 1 Response from Project Proponent		
Aster Global Findings - Round 2 (18 May 2021)	The parameter is not defined.	
Round NCR/CL/OFI	2	
Round 2 Response from Project Proponent	CL: Please clarify the location for the parameter in section 9.2	
Round 2 Response from Project Proponent	This parameter table has been added to section 9.2.1.	
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.	

Item #	97	
Parameter (Description)	EFN20,kt	
Applicability to Project (Y or N/A)	Y	

Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter has been updated to its correct name in the parameters table to <i>EF_N2O,kt</i>
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.

Item #	98
Parameter (Description)	LKMarketEffects,t
Applicability to Project (Y or N/A)	Y
Evidence Used to Assess (Location in PD/MR or Supporting Documents)	Methodology - Section 9.2.2 Data and Parameters Monitored
Aster Global Initial Findings (2021 March 30)	Pending other findings.
Round 1 NCR/CL/OFI	
Round 1 Response from Project Proponent	
Aster Global Findings - Round 2 (18 May 2021)	The parameter name and the name in the parameter table conflict. Please address.
Round 2 NCR/CL/OFI	CL: Please correct incorrect parameter elements.
Round 2 Response from Project Proponent	The parameter has been updated to its correct name in the parameters table to LKMarketEffects,t.
Aster Global Findings - Round 3 (23 June 2021)	The audit team confirmed that the parameter has been appropriately updated. The item has been addressed.