Appendix C

Verification and Validation for Tree Planting Projects

Version 9

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Note that Verification requirements for Tree Preservation projects are contained in the Tree Preservation Protocol.

1. Verification per ISO 14064-3

The Registry will accredit third-party verifiers who will verify compliance with this Tree Planting Protocol per International Standards Organization 14064-3. Specifically, the Registry adopts and utilizes the following standards from ISO 14064-3:

- Upon receiving a Project Report with updated data on eligibility, quantification of carbon and co-benefits, and a request for credits, the Registry or the Project Operator will retain a third-party verifier to verify compliance with this Protocol.

- The Registry requires a reasonable level of assurance in the accuracy the asserted GHG removals to a reasonable level.

- The verification items identified in Tables C.1, C.2, and C.3 are all material elements, and any asserted GHG removals must be free of errors, misstatements, or omissions regarding those elements.

- The Registry will record, store, and track all quantification and verification data and either display it for public review or make it available for public review upon request.

2. Validation

The Registry conducts validation activities at three times.

2.1 Pre-Application

Before reviewing an application, the Registry conducts a validation screening:

- Validate eligibility under the protocol eligibility requirements

- Validate the Project Operator's understanding of the commitments it must make if it proceeds with the project:

  o Complying with the Protocol

- o Submitting project documents, including a Project Implementation Agreement with CFC

- o Quantifying carbon dioxide and ecosystem co-benefits according to the appropriate methodology

- o Conducting monitoring and reporting for the Project Duration

2.2 Before Third-Party Verification

Upon receipt of a final Project Design Document (PDD) and before third-party verification, the Registry will:

- Review the PDD and its supporting documents for:

  - o Completeness per Protocol requirements

  - o Compliance with Protocol PDD requirements

  - o Demonstration that the project meets the Protocol eligibility requirements

2.3 After Receiving the Verification Report

When the third-party verifier produces its Verification Report, the Registry then reviews that Report to ensure the following:

The Verification Report accurately reflects the documentation contained in the PDD and supporting documents.

3. Verification for Issuance of Credits

Table C.1 displays the various verification requirements to be performed upon request by a Project Operator for credits under Section 9 of the Planting Protocol. Further guidance on elements in Table C.1 follows in Section 6.

Table C.1

Item	Elements to Verify	Protocol Section	How
1.	PO Identity	1.1	State/local records
2.	PIA	1.2	Signed/received
3.	Location	1.3	Mapping/location data
4.	Right to Receive Credits	1.4	Signed Decl. of Ownership or Transfer from Owner to PO

Item	Elements to Verify	Protocol Section	How
5.	Commencement	5	Project Documentation
6.	Project Documentation	4	Check
7.	Project Duration	3	Signed PIA
8.	Additionality		Registry Program
	Performance Standard Baseline	App. D	
	Legal requirements Test	4.1	Check PIA and Ords;
	Performance Guarantee Credits	3	Registry
9.	For Single Tree Credit Quant, after planting, Yr 4, and Yr 6; PO's Credit Mortality and Verif. Assessment:	9, App. B	
	1. After Planting:		
	Imaging, or PO Decl. of Planting and Decl. Of Peer Verifier		See Guidance in Section 5.6
	2. After Years 3 and 5:		
	3. Accuracy of Process and Documents:		Check approp. Quant Tool
	a. Sample Size Calculation		Same

	b. Randomization of Sample		
	c. Calculations		Same
	d. Integrity of Spreadsheet		Same
	4. Field Data and Inputs into Spreadsheets:		
	a. Data from sampled trees		Geo-coded Photos of Sample Trees
	b. Data Input accuracy		Check inputs
10.	For Canopy Credit Quant:		
	1. After Planting:		
	a. Imaging, or PO Decl. of Planting and Decl. Of Peer Verifier		See Guidance in Section 5.6
	2. After Year 3:		
	a. Imaging or geo-coded photos with PO Decl.		
	3. After Year 5:		
	a. Imaging or geo-coded photos with PO Decl.		
	PO's Report	App. A	Check
	Reversals	10	PIA, PO's Report, sample data

4. Verification for Issuance of Credits Using the Riparian or Canopy Methods

Table C.3 displays the various verification requirements to be performed upon request by a Project Operator for credits using the Riparian or Tree Canopy quantification methods under Appendix B on Quantification to this protocol. Further guidance on elements in Table C.3 follows in Section 6.

Table C.3

Item	Elements to Verify	Protocol Section	How
1.	PO Identity	1.1	State/local records
2.	PIA	1.2	Signed/received
3.	Location	1.3	Mapping/location data
4.	Right to Receive Credits	1.4	Signed Decl. of Ownership/Permiss.
5.	Commencement	7	Project Documentation
6.	Project Documentation	App. A	Check

Item	Elements to Verify	Protocol Section	How
7.	Project Duration	5	Signed PIA: for all above: Signed Decl. of Compliance
8.	Additionality		Registry Program
	Performance Standard Baseline	App. D	
	Legal Requirements Test	4.1	Check PIA and Ords
	Performance Guarantee Credits	3	Registry
9.	PO's Riparian Approach Calculation or Canopy Quant Tool Spreadsheet; see also Section 5.6 below	9 and App. B, C	
	1. Accuracy of Process and Documents:		Check approp. Quant Tool

	a. Calculations		Same
	b. Integrity of Spreadsheet		Same
			Same
	2. Field Data and Inputs into Spreadsheets:		
	3. iTree Canopy File, locations used to calculate canopy area		PO submits iTree Canopy file and Registry independently estimates canopy area for same project area, using subsample points to assess any interpreter error
	4. Data Input accuracy		
	PO's Report	App. A	Check
	Reversals	10	PIA, Decl. of Compliance, PO's Report, sample data

	Credit Hold-backs until Year 26 and Buffer Pool Contributions	9	Confirm Calcs in Tool and Transfer to Buffer
			Pool

5. Guidance on Specific Elements of Verification

Although the Registry reviews eligibility criteria upon initial application, this early review is not a verification review and does not suffice for issuance of credits. The following gives guidance for selected eligibility criteria.

5.1 Location

Projects must occur within the locations specified in Section 1.3 of the Protocol. Verification can include review the PO's designation of parcel numbers, addresses, or other indications of property location with reference to maps, KLM files, images from Google Earth or other reliable imaging sources.

5.2 Right to Receive Credits

Verification includes review of the Signed Declaration of Ownership and Right to Receive Credits, or, if the Project Operator does not own the land upon which project trees are planted, a written agreement transferring credits from the owner to the Project Operator. Verification entails a risk-based review that requires further review in any cases of lack of clarity or detail.

5.3 Project Commencement

Verification includes confirmation of the commencement date , and in the Registry's database, plus confirmation that the commencement date meets the requirements of Section 7 of the Protocol.

5.4 Additionality

Verification requires confirmation of performance guarantee credits if requested by a buyer. The Registry must have a stock of guarantee credits in its ACR or Verra account.
Verification also requires review of the Performance Standard Method applied at the Registry level, and review of the PIA for inclusion of attestation to compliance with the Protocol, which includes the Legal Requirements Test. Further review of local ordinances of laws may be required to give a reasonable assurance that this requirement has been met.

5.5 Spreadsheet Review

A critical component of verification includes review of the PO's spreadsheet document containing planting data and completion of other data required to complete the mortality assessment or quantification of CO_2.

Tables C.1, C.2, and C.3 set out the specific elements that must be reviewed to complete verification of those documents.

5.6 Verification of Riparian or Canopy Planting and Credit Progress

The following verification data is required within one year of planting.

Declaration of Planting: a statement by the Project Operator that includes the following, with any supporting documentation:

- Dates of planting

- Attendance and list of planters

- Number of trees planted by species

- Invoices for trees planted, or invoices or a statement from the party who funded the tree purchase or supplied the trees attesting to the number of trees purchased, or any other reliable estimate of trees planted

- Any reporting to the owner or public body re the planting, invoices, costs, or other data re the planting

- Geo-coded photos of the tree stock and planting event(s)

Declaration of Planting Affirmation on Riparian or Canopy Planting. Confirms that

- They have attended at least one planting event for the project and has verified from the planting schedule that any other scheduled planting events occurred

- They have reviewed the data from the Declaration of Planting and confirm that it accurately reflects their own observations of planting activities

Verification data required after Years 3 and 5

- Project provides images of the Project Area from any telemetry, imaging, remote sensing, or UAV service, such as Google Earth.

- Project uses i-Tree Canopy and point sampling to calculate canopy cover:

  o Using i-Tree Canopy, continue adding points until the standard error of the estimate for both the tree and non-tree cover is less than 5%. I-Tree Canopy will supply you with the standard errors.

Progress Requirements for riparian or canopy projects after Years 3 and 5:

- After Year 3, projects must show canopy coverage of at least 4% of the Project Area (average 2.4 foot diameter of canopy per tree of 400 trees per acre)

- After Year 5, projects must show canopy coverage of at least 11% of the Project Area (average 4 foot diameter of canopy per tress of 400 trees per acre)

Note: if projects exceed these Progress Requirements, they will not receive credits early or out of schedule. If projects fail to meet the Progress Requirements, they will not be eligible to request credits until they meet the Progress Requirements.

The above requirements reflect the following unique factors about riparian or canopy plantings that seek to create canopy quickly:

- Riparian or canopy plantings do not track tree loss because they are ecological projects seeking canopy. These plantings anticipate relatively high tree loss compared to single tree or street-tree type plantings.

- Canopy is generated by the recruitment of species on the site and by planting a variety of smaller and larger species that provide canopy quickly. Larger species that out-compete others provide longer-term canopy coverage.

- Because of the above, the precise number of trees planted is not the key to a successful canopy project. That success often relies on recruitment and the competition of species that enable the success of some trees at the expense of others.

6. Completing Verification

A verification report and statement must be completed in order for credits to be issued. That report and statement must include:

- Findings of the verifier as to each element in Table C.1, C.2, and C.3.
- A verification statement that supports the GHG assertion contained in the PO's appropriate spreadsheet and that states the number of credits that can be issued.