



Verification Report: Loru Forest Project

Monitoring Period: 16 January 2013 to 15 January 2015

Name of Reviewer: Dr Noim Uddin, Senior Consultant, Climate Policy and Markets Advisory (CPMA) International AB

Date of Review:

Initial desk review 16-22 Nov 2015; Field site visit 23-26 November 2015; Verification and Reporting 2-14 Dec 2015

Project Name: Loru Forest Project

An avoided deforestation project at Loru, Santo Vanuatu under the Nakau Program: An Indigenous Forest Conservation Program Through Payments for Ecosystem Services

Project Description:

The Loru Forest Project (with eligible forest area of 165.6 ha made up of 1 land parcels) in Luganville, Santo of Vanuatu employs the legal instrument of a Community Conservation Area to protect the tall coastal rainforest within the project boundary. The project seeks to manage the area through implementation of the Loru Area Management Plan, which includes the removal of cattle from the area and to reduce the impact of invasive weeds within Project Area. The project will establish a tree nursery with the clan to generate revenue and promote forest conservation and increases planting of productive tree species.

The project is divided into three management zones. Zone A – Avoided Deforestation where secondary forest to be rehabilitated through the removal of cattle and agreement not to clear the area for gardens or copra during project period. Zone B – Enhanced Forest Regeneration where thicket to be weeded of aggressive herbaceous vines and managed to enhance natural regeneration. Zone C – Agroforestry Non forest land currently infested with invasive vines.

However, no carbon revenues from Zone B and Zone C will be generated but income is generated from Zone C and rehabilitates degraded areas under Zone B.

The Loru Forest Project aims to protect the Loru coastal rainforest (one of the last stands of lowland rainforest on the East Coast of Espiritu Santo) and deforestation and forest degradation. The project also aims to provide livelihood benefits for the Serakar Clan (landowners). The project further aims to provide training in nut processing for women in the whole Khole community as an additional income sources that relies directly on forest protection.

List of Documents Reviewed:

1. Loru Forest Project – Project Description (PD) Part A: General Description (D3.2a v1.0, 20151009)

2. Loru Forest Project – Project Descriptions (PD) Part B: PES Accounting (D3.2b v1.0, 20151009)
3. Technical Specifications Module: (C) AD-DtPF: Avoided Deforestation – Deforestation to Protected Forest V.10 for the Nakau Program (D2.2.1 V1.0, 20150815)
4. Nakau Methodology Framework: General Methodology for the Nakau Program – An Indigenous Forest Conservation Program Through Payments for Ecosystem Services (D2.1 v1.0, 20140428)
5. Loru Forest Project – PES Agreement (D1.3 v1.0, 20151009)
6. Loru Forest Project – Project Coordinator License Agreement between Live & Learn Environmental Education Vanuatu and the Nakau Program Pty Ltd (D1.4 v1.0, 20151009)
7. Loru Forest Project – Program Agreement between the Nakau Program Operator and Serthiac Business (D1.2 v1.0, 20151009)
8. Project Development Agreement between Live & Learn Vanuatu and Serakar Family of Khole, Espiritu Santo (16 January 2013)
9. Certificate of Incorporation of Committee of a Charitable Association, Live & Learn Environmental Education Society Association, Vanuatu Financial Services Commission, Republic of Vanuatu, 17 April 2001
10. Community Conservation Area Registration (CCA) Notice – Loru Protected Area 16 Nov 2015 (via email notification)
11. Draft Sale and Purchase Agreement
12. Loru Protected Area Management Plan, 2015
13. Loru Conservation Area – Education Program Report
14. Loru Carbon Budget and Pricing
15. Loru Forest Inventory
16. Serthiac Business Plan
17. Loru PIN (D3.3 v1.0, 20140606)
18. Ser-Thiac Business Name Registration Certificate, Vanuatu Financial Services Commission (Registration No. 013450, dated 07 Aug 2014)
19. Live & Learn Environmental Education Finance Manual 2014
20. Live & Learn Environmental Education Good Practice Manual 2010
21. Live & Learn Environmental Education Recruitment Policy
22. Annual Audit Report, Live & Learn Environmental Education Society Committee (Inc) Vanuatu Finance Statement 30 June 2014
23. Memorandum of Understanding between Live & Learn Environmental Education (LLEE Vanuatu) and the Vanuatu Department of Forests (2012)
24. Memorandum of Understanding between Live & Learn Environmental Education (LLEE Vanuatu) and Sanma Provincial Government
25. Live & Learn Environmental Education Vanuatu, Field Trip Reports (July, Aug, Sept, Oct 2014)
26. Mandate for Management of Loru Protected Area, Custom Landowners of Loru Protected Area, 20 Sept 2015
27. Climate Change and REDD+ Education Manual 2012
28. Agreement for Serthiac Board to Sign Loru PES Agreement, Custom Landowners of Loru Protected Area, 13 Nov 2015
29. PES Agreement and Program Agreement Participation Report, 13 Nov 2015
30. Agreement for Serthiac Board to Sign Loru PES Agreement and Loru Program Agreement, 12 Nov 2015
31. Acceptance of Loru Forest Project PD Part A D3.2a v1.0 20151009 and Loru Forest Project Part B D3.2b v1.0 20151009, 13 Nov 2015
32. PD Summary Report Signed
33. Nakau Program Management Report 2013

34. Project Owner Entity Participation Report, Loru Forest Project, Nov 2014
35. Nakau Sales Register
36. National Forest Act 2001
37. Shareholder Agreement to Conduct a Social Enterprise, The Nakau Program Pty Ltd and the Shareholders (Live & Learn and Ekos), 2015
38. Donna Kalfatak, Loru Protected Area Rapid Biodiversity Assessment Report, 17-18 Nov 2014
39. Khole Agroforestry Plot Design, Live & Learn Community REDD+ Project (draft)
40. Philemon Ala, Loru Conservation Area Terrestrial Biodiversity Assessment Report for REDD Project of Live & Learn 16-19 Nov 2014
41. Loru Forest Project – Monitoring Report 1, 2015 (D3.3 (1) v1.0 20151009b)
42. Loru Livelihood Impact Monitoring Guide and Methodology for Socioeconomic Baseline
43. Loru Forest Project, Protected Area Boundary Coordinates
44. Plan Vivo Foundation, Validation of Methodology Elements of the Nakau Program 21 April 2015
45. VCS Monitoring Report Template
46. Director’s Certificate – Monitoring 12 Dec 2015
47. Memo dated 12 Aug 2015, Proposed Audi Procedure (from Sean Weaver and Robbie Henderson of Nakau Program to Eva Schoof and Chris Stephenson of Plan Vivo)
48. Loru Protected Area Boundary Marking 2014
49. Contract Amendment, Amendment to Loru Project PES Agreement D1.3 v0.1, 20151009, dated 25 Jan 2016
50. Loru Forest Project, QGIS File

Description of field visits (including list of sites visited and individuals/groups interviewed):

Verification of Loru Forest Project – Monitoring Report 1, 2015 was conducted in conjunction with validation of Loru Forest Project.

During 23 to 26 November 2015, Dr Noim Uddin conducted field site visit and inspection. Site visit inspection included field visit into eligible forest area and performing interview with Project Stakeholders including – Project Coordinator (Live & Learn Vanuatu), Program Operator (Nakau Program), and Project Owner (Ser Thiac), a number of stakeholders and communities.

Field visit was conducted as per on-site visit plan dated 17 Nov 2015. Field visit started with an inception meeting with Program Operator and Project Coordinator on 23 Nov 2015 in Port Villa. On 24 Nov 2015, an opening meeting was held with Project Coordinator at Live & Learn Vanuatu. On-site audit process, confidentiality and requirements as per Plan Vivo Terms of Reference for Project Validation (v.2013) were described. Followed by inception meeting, stakeholder consultation was carried out in Port Villa on 24 Nov 2015. Field visit at project site and community consultation was conducted in Santo, Vanuatu during 25 Nov 2015. Rests stakeholders were interviewed during 26 Nov 2015 in Port Vila (following table provides details of interview). A closing meeting was held with Program Operator and Project Coordinator on 26 Nov 2015. During the close-out meeting, findings from on-site visit were shared with Program Operator and Project Coordinator (as also listed in Table 1: Summary of major and minor corrective actions).

Following table provides details of interview.

| Date | Name | Position & Department | Topics |
|---------------|------------------|---|---|
| 23-26.11.2015 | Anjali Nelson | Co-Director, Nakau Program Operator | Effective and Transparent Project Governance, Administrative Capabilities, Technical Capabilities, Social capabilities, Monitoring and Reporting capabilities, Benefit sharing and equity, Sale agreements and payments, Socio-economic impact assessment and monitoring plan, Community-led planning |
| 24-26.11.2015 | Glarinda Andre | REDD+ Project Coordinator, Live & Learn Vanuatu | |
| 24-26.11.2015 | Serge Warakar | REDD+ Project Officer, Live & Learn Vanuatu | |
| 24.11.2015 | Ephraim D. Songi | VCS | National REDD+ Readiness Program, Ecosystem and Livelihood benefits, Forest Inventory, Traceability and double counting, |
| 24.11.2015 | Watson Lui | Deputy Director, Department of Forestry | |
| 24.11.2015 | Samson Lulu | REDD+ Ext. & Outreach Officer, Department of Forestry | |
| 24.11.2015 | Godfrey Bome | Senior Forest Officer, Department of Forestry | |
| 24.11.2015 | Dick Tomker | Regional Forest Officer North, Department of Forestry (Santo) | National REDD+ Readiness Program, Ecosystem and livelihood benefits, Forest Inventory |
| 24.11.2015 | Jude Tabi | Regional Forest Officer South, Department of Forestry (Vila) | |
| 24.11.2015 | Anaclet Philip | Sanma Environment Officer, Department Environmental Protection and Conservation, Sanma Province | Monitoring, Forest Management Plan, Community engagement, Biodiversity monitoring |
| 24.11.2015 | Dr Sean Weaver | Ekos NZ, Nakau Program (via Skype call) | Nakau Methodology Framework, Carbon benefits, Accounting methodology, Baseline, Additionality, Permanence, Leakage, Traceability and double-counting, Monitoring |
| 24.11.2015 | Robbie Henderson | Live & Learn International, Nakau Program (via Skype call) | Nakau Methodology Framework, Plan Vivo Requirements |
| 25.11.2015 | Sero Isaiah | Forest Officer, Santo – Sanma Province | Interpreter |
| 25.11.2015 | Peter Servet | Chief, Khole Village | Ecosystems and Livelihood benefits, Biodiversity, Forest Conservation |
| 25.11.2015 | John Vimoli | Pastor, Khole Village (Shark bay Session) | |
| 25.11.2015 | Jerry Iavro Boaz | Leading Elder, Khole Village (Shark bay Session) | |
| 25.11.2015 | Kaltapas Sam | Chief Council, Khole | |

| | | Village | |
|------------|------------------|--|---|
| 25.11.2015 | Clarence Ser Dan | Administration Officer, Serthiac Forest Project | Ecosystems and Livelihood benefits, Socio-economic impact assessment/monitoring plan, Community-led planning, Planting native and naturalised species, Ecological impacts, Plan vivos |
| 25.11.2015 | Kalsakau Ser | Chairman of the Land Management Committee, Serthiac Forest Project | |
| 25.11.2015 | George Kalorip | Board Member, Serthiac Forest Project | |
| 25.11.2015 | Steve Ser | Chairman of Board, Serthiac Forest Project | |
| 25.11.2015 | Rosito Moses | Member, Serakar Clan | |
| 25.11.2015 | Tonny Moses | Member, Serakar Clan | |
| 25.11.2015 | Kates Fred | Member, Serakar Clan | |
| 25.11.2015 | Samuel Dan | Member, Serakar Clan | |
| 25.11.2015 | Oli Fred | Board Member, Serthiac Forest Project | |
| 25.11.2015 | Riman Ser | Field Operator, Serthiac Forest Project | |
| 25.11.2015 | Rachel Ser | Member of Finance Committee, Serthiac Forest Project | |
| 25.11.2015 | Rosina Moses | Member of Finance Committee, Serthiac Forest Project | |

Certification Statement:

Verification of the emission reductions reported for the Loru Forest Project in 'Loru Forest Project – Monitoring Report 1, 2015' for the period during 16 January 2013 to 15 January 2015. In the opinion of the verifier the GHG emissions reductions for the project in the monitoring report are fairly stated. The GHG emission reductions were calculated correctly on the basis of the approved monitoring methodology and the monitoring plan contained in the PD. The Verifier is able to certify that the emission reductions from the Loru Forest Project during the period 16 January 2013 to 15 January 2015 amount to **4884 tCO₂** equivalent.

Table 1. Summary of major and minor Corrective Actions [Now all CLOSED]

| Theme | Major CARs | Minor CARs | Observations |
|------------------------|------------|--|--------------|
| Project Implementation | | | |
| Monitoring Plan | | Provide Review of Technical Specifications Module (C) 2.1 (AD-DtPF) by TAC as per Plan Vivo Project Cycle. Response: Review of the Technical Specifications Module | |

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| | | <p>will be completed by TAC (Technical Advisory Committee of Plan Vivo). Program Operator – the Nakau Program sent a Memo (dated 12 Aug 2015) /47/ to Plan Vivo and have had discussion with Plan Vivo to undertake a combined validation and verification audit process for the first verification. According to Plan Vivo this would be fine. Under the Plan Vivo system they do not normally separate out the methodology and have that audited separately ahead of validation of the PD. Instead the technical specification is normally incorporated into the PD somewhat like a methodology chapter, and both are validated at the same time. Normally also with Plan Vivo projects they are afforestation projects so a start date that is prior to validation is not generally compatible. But a REDD project is compatible with this timing.</p> <p>Assessment: The explanation provided by Plan Vivo is appropriate. At the time of validation of Loru Forest Project, the first validation of Technical Specification TS (c) 2.1 (AD-DtPF): Avoided Deforestation –</p> | |
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| | | <p>Deforestation to Protected Forest V1.0 for the Nakau Program has been completed /53/. The Validation of The TS concluded that Technical Specifications as described in the Technical Specifications documentation Version 1.0, dated 15 August 2015 meets all relevant requirements of Plan Vivo Standard (2013), ISO 14064-2, and IPCC guidelines and are technically sound for carbon accounting. All CARs and Clarification Requests have been adequately addressed /53/.</p> <p>The CAR is CLOSED.</p> <p>Recommendation:</p> <p>Details of monitoring approaches of Eligible Forest Area (EFA) and Total Activity Leakage (TAL) should be followed according to procedures and instructions as per Technical Specification Module (C) 2.1 (AD-DtPF) during periodic monitoring.</p> <p>Response:</p> <p>TS Module (p 16) states: <i>“There may be no leakage through activity shifting to other lands owned or managed by project participants outside the bounds of</i></p> | |
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| | | <p><i>the carbon project.”</i></p> <p>TS Module p53 states: <i>Where the project proponent controls multiple parcels of land within the country the project proponent must demonstrate that the management plans and/or land-use designations of other lands they control have not materially changed as a result of the planned project (designating new lands as timber concessions or increasing harvest rates in lands already managed for timber) because such changes could lead to reductions in carbon stocks or increases in GHG emissions.</i></p> <p>So my understanding of Activity Shifting Leakage under this methodology is that it applies to activities shifting within lands owned/controlled by the Project Owner.</p> <p>Because all indigenous forest owned by the Project Owner is contained within the Project Area, which in turn is protected as a Community Conservation Area, then no Activity Shifting can occur. At present, there is forest not included in crediting but included in the Community Conservation Area. This</p> | |
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| | | <p>area was not included in carbon crediting under this project because we omitted to undertake a carbon stock inventory within this area. As such we intend to provide an updated baseline at second verification that will include this area (Zone B as depicted in Figure 2.4e in the PD Part A – pg. 25).</p> <p>Assessment: Project Coordinator has provided appropriate responses that refers to monitoring approaches of Eligible Forest Area (EFA) and Total Activity Leakage (TAL) according to procedures and instructions as per Technical Specification Module (C) 2.1 (AD-DtPF). This explanation is now included in first monitoring report.</p> <p>This is CLOSED.</p> | |
| Parameters monitored | | | <p>Recommendation:</p> <p>Baseline activity for this project is deforestation. The biodiversity baseline survey therefore needs to be undertaken in a relevant reference area. Project Coordinator and Project Owner shall conduct baseline biodiversity survey in an appropriate reference area and project biodiversity survey before second</p> |

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| | | | <p>verification.</p> <p>Response: Interview with Project Coordinator and Project Owner reveals that biodiversity survey will be conducted in an appropriate reference area.</p> <p>Assessment: This is in the opinion of the verifier that planned biodiversity survey (in a reference area before next verification and a project biodiversity survey) is appropriate.</p> <p>This is CLOSED.</p> |
| Risk management and quality assurance | | | |

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| Theme | 1. Project Implementation Status |
| <i>Ensuring that the project is implemented in accordance with Project Description as per Plan Vivo Standard (2013) and meets requirements of 1, 2, 3, and 4 of Plan Vivo Standard (2013)</i> | |
| A. Requirement | 1.1 Project is implemented in accordance with Project Description |
| B. Findings (describe) | <p>The Loru Forest Project (with eligible forest area of 165.6 ha made up of 1 land parcels) in Luganville, Santo of Vanuatu employs the legal instrument of a Community Conservation Area to protect the tall coastal rainforest within the project boundary. Community Conservation Area notice was verified via email communication /10/. The project seeks to manage the area through implementation of the Loru Protected Area Management Plan /12/, which includes the removal of cattle from the area, to reduce the impact of invasive weeds within Project Area. The project has established a tree nursery with the clan to generate revenue and promote forest conservation and increases planting of productive tree species, which is verified during on-site inspection on 24 Nov 2015.</p> <p>The project is divided into three management zones. Zone A Avoided Deforestation where secondary forest to be rehabilitated through the removal of cattle and agreement not to clear the area for gardens or copra during</p> |

project period. Zone B Enhanced Forest Regeneration where thicket to be weeded of aggressive herbaceous vines and managed to enhance natural regeneration. Zone C Agroforestry Non forest land currently infested with invasive vines. Three management zones of the project are in accordance with PD /1/ and further on-site inspection during 24 Nov 2015.

Loru was surveyed and recognised as owned by the Serakar Clan through Vanuatu Department of Lands in 1994. The Chief of the family at the time of the court's decision, Chief Caleb Ser, has since passed and as local custom determines, his five children now manage the land. Customary law in this part of Vanuatu works through a patrilineal system. As such the male descendants of Chief Caleb Ser are the landowners of Loru Area.

A further boundary marking was undertaken in 2014 with Government representatives present to witness agreement between the Serakar and neighbouring landowners to confirm customary land ownership of Loru Project Area /48/. Ownership of the Loru Project Area by the Serakar Clan is not disputed. Statements were taken and witnessed to agree to the boundary of the Loru Project Area being within Serakar clan land /43/.

The constitution of Vanuatu places land in the hands of the customary owners of Vanuatu. Customary land is the dominant form of land tenure in Vanuatu with 90% being un-leased and 9% being leased. Loru Protected Area has been legally registered as a nationally recognised community conservation area under the subsection 37 (3) of the EPC Act /10/.

The Loru Forest Project generate ecosystem service benefits as the project falls under the 'carbon' Activity Class and is an Avoided Deforestation, Deforestation to Protected Forest (AD-DtPF) project. The Loru Forest Project also delivers co-benefits including maintaining biodiversity and others /1//2//3//4/.

Live & Learn Environmental Education Society Committee is a Legal Entity /49//9/ and will act as Project Coordinator of Loru Forest Project /6/. Live & Learn Vanuatu as coordinator of the Loru Forest Project ensured that individuals with resource user rights and people living or reliant on the project sites including customary landowner were appropriately informed about the project and were engaged in planning, maintaining and monitoring of the Loru Forest Project /8/.

Program Operator: the Nakau Program /4/.

Project Coordinator: Live & Learn Environmental Education Society Committee (Legal Entity) /49//9/

Project Owner: Ser-Thiac (Landowner Business Entity) /18//16//7/

Project's Sectoral Scope: AFOLU – Avoided Deforestation – Deforestation to

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|---|--|-----------------------------|------------------------------|
| | <p>Protected Forest (AD-DtPF)</p> <p>Project start date: 16 January 2013 /8/</p> <p>Project's crediting period: 30 years from 16 January 2013 to 15 January 2044</p> <p>Period verified in this verification: 16 January 2013 to 15 January 2015</p> <p>Adopted methodology: the Loru Forest Project has adopted two Nakau Program methodology elements</p> <ul style="list-style-type: none"> • Nakau Methodology Framework: General Methodology for the Nakau Program – An Indigenous Forest Conservation Program Through Payments for Ecosystem Services (D2.1 v1.0, 20140428) /4/ • Technical Specifications Module: (C) AD-DtPF: Avoided Deforestation – Deforestation to Protected Forest V.10 for the Nakau Program (D2.2.1 V1.0, 20150815) /3/ | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | | | |

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| Theme | 2. Monitoring plan and monitoring methodology |
| <i>Ensuring that the project meets requirements of monitoring methodology in accordance with Project Description as per Plan Vivo Standard (2013) and meets requirement of 5, 6 and 7 of Plan Vivo Standard (2013)</i> | |
| A. Requirement | <p>2.1 Compliance of monitoring plan with monitoring methodology</p> <p>Monitoring plan contained in the Project Description and in Technical Specification is in accordance with approved methodology as adopted by the project</p> |
| B. Findings (describe) | <p>This project applies two Nakau Programme methodology elements as demonstrated in the PD /1/:</p> <ol style="list-style-type: none"> 1. Nakau Methodology Framework D2.1 v1.1 20150513 /4/ 2. Technical Specifications Module (C) 2.1 (AD-DtPF): D2.2.1 v1.0, 20150815 /3/ <p>The Nakau Methodology Framework has been validated to the Plan Vivo Standard on 21 April 2015 /44/</p> <p>The Technical Specifications Module completed first independent validation</p> |

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| | <p>to the Plan Vivo Standard during current verification (5 Dec 2015).</p> <p>Review of the Technical Specifications Module will be completed by TAC (Technical Advisory Committee of Plan Vivo). Program Operator – the Nakau Program sent a Memo (dated 12 Aug 2015) /47/ to Plan Vivo and have had discussion with Matteo and Chris at Plan Vivo to undertake a combined validation and verification audit process for the first verification. According to Plan Vivo this would be fine. Under the Plan Vivo system they do not normally separate out the methodology and have that audited separately ahead of validation of the PD. Instead the technical specification is normally incorporated into the PD somewhat like a methodology chapter, and both are validated at the same time. Normally also with Plan Vivo projects they are afforestation projects so a start date that is prior to validation is not generally compatible. But a REDD project is compatible with this timing.</p> <p>PD Part A outlines how the project will be monitored. PD Part B specifies detailed monitoring plan and monitoring approaches (monitoring during first project monitoring and subsequent periodic monitoring). The monitoring plan and monitoring approaches appear to be appropriate and as required by the adopted methodology elements.</p> <p>This is the first Project Monitoring for Loru Forest Project. A simplified Project Monitoring has been adopted in accordance with section 8.1.5 of the Technical Specifications Module (C) 2.1 (AD-DtPF).</p> <p>According to the requirement of 8.1 of Technical Specifications Module (C) 2.1 (AD-DtPF) /3/ the simplified Project Monitoring Report has adopted appropriate components of the latest VCS monitoring Report Template /45/.</p> <p>This monitoring report covers period from 16 January 2013 to 15 January 2015 /41/.</p> | | |
| C. Conformance | Yes <input checked="checked" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | <p>Provide Review of Technical Specifications Module (C) 2.1 (AD-DtPF) by TAC as per Plan Vivo Project Cycle.</p> <p>Response: Review of the Technical Specifications Module will be completed by TAC (Technical Advisory Committee of Plan Vivo). Program Operator – the Nakau Program sent a Memo (dated 12 Aug 2015) /47/ to Plan Vivo and have had discussion with Plan Vivo to undertake a combined validation and verification audit process for the first verification. According to Plan Vivo this would be fine. Under the Plan Vivo system they do not normally separate out the methodology and have that audited separately ahead of validation of the PD. Instead the technical specification is normally incorporated into the PD somewhat like a methodology chapter, and both are validated at the same time. Normally also with Plan Vivo projects they are afforestation projects so a start date that is prior to validation is not generally compatible. But a REDD</p> | | |

| | <p>project is compatible with this timing.</p> <p>Assessment: The explanation provided by Plan Vivo is appropriate. At the time of validation of Loru Forest Project, the first validation of Technical Specification TS (c) 2.1 (AD-DtPF): Avoided Deforestation – Deforestation to Protected Forest V1.0 for the Nakau Program has been completed /53/. The Validation of The TS concluded that Technical Specifications as described in the Technical Specifications documentation Version 1.0, dated 15 August 2015 meets all relevant requirements of Plan Vivo Standard (2013), ISO 14064-2, and IPCC guidelines and are technically sound for carbon accounting. All CARs and Clarification Requests have been adequately addressed /53/.</p> <p>The CAR is CLOSED.</p> | | | | | | | | | | | | | | | | | | |
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| <p>A. Requirement</p> | <p>2.2 Compliance of monitoring with the monitoring plan</p> <p>Monitoring has been carried out in accordance with the monitoring plan in the Project Description</p> | | | | | | | | | | | | | | | | | | |
| <p>B. Findings (describe)</p> | <p>Loru Forest Project Monitoring Plan has been developed and demonstrated in PD Part B /2/. Roles and responsibilities in regard to project monitoring has been demonstrated in PD Part (B) Table 8.1.6 /2/ which is consistent with monitoring guideline as per Technical Specification Module (C) 2.1 (AD-DtPF) /3/. Responsibility and required resources availability were cross-checked with Project Coordinator, Project Owner and Program Operator during on-site inspection and appeared appropriate as required by adopted methodologies.</p> <p>This is the first Project Monitoring for Loru Forest Project. A simplified Project Monitoring has been adopted in accordance with section 8.1.5 of the Technical Specifications Module (C) 2.1 (AD-DtPF).</p> <p>According to the Nakau Methodology Framework (validated to the Plan Vivo Standard (2013)), all projects in the Nakau Program are required to prepare a Project Monitoring Plan as part of the Project Description in accordance with requirements of 5.4 of Nakau Methodology Framework and elements required in the relevant Technical Specifications Module/s applied. The adopted monitoring plan for Loru Forest Project is detailed in Part B of PD (section 8.1.5) and Technical Specification Module (C) 2.1 (AD-DtPF) (section 8.1.5).</p> <p>According to Table 8.1.1 of the adopted Technical Specifications Module (C) 2.1 (AD-DtPF), following parameters will be monitored:</p> <table border="1" data-bbox="475 1736 1412 2002"> <thead> <tr> <th>Notation</th> <th>Parameter</th> <th>Uni</th> <th>Equation</th> <th>Origin</th> <th>Monitored</th> </tr> </thead> <tbody> <tr> <td>EFA</td> <td>Eligible Forest Area</td> <td>ha</td> <td>-</td> <td>PD</td> <td>Monitored</td> </tr> <tr> <td>TAL</td> <td>Total Activity Leakage</td> <td>tCO₂e/yr</td> <td>5.2.1</td> <td>Derived from Activity Shifting Leakage</td> <td>Monitored</td> </tr> </tbody> </table> | Notation | Parameter | Uni | Equation | Origin | Monitored | EFA | Eligible Forest Area | ha | - | PD | Monitored | TAL | Total Activity Leakage | tCO ₂ e/yr | 5.2.1 | Derived from Activity Shifting Leakage | Monitored |
| Notation | Parameter | Uni | Equation | Origin | Monitored | | | | | | | | | | | | | | |
| EFA | Eligible Forest Area | ha | - | PD | Monitored | | | | | | | | | | | | | | |
| TAL | Total Activity Leakage | tCO ₂ e/yr | 5.2.1 | Derived from Activity Shifting Leakage | Monitored | | | | | | | | | | | | | | |

Director's Certificate dated 12 Dec 2015 /46/ confirms that the project started on 16 January 2013 and implemented according to the requirements of Nakau Methodology Framework and Technical Specification Module (C) 2.1 (AD-DtPF) as per requirement of 8.1.5 of Technical Specifications Module (C) 2.1 (AD-DtPF).

A simplified Standard Operating Procedure (SOP) has been developed in regard to Project Monitoring during first reporting period (from 16 January 2013 to 15 January 2015) as per 8.1.6 of Technical Specifications Module (C) 2.1 (AD-DtPF) during first monitoring period.

As per simplified Standard Operating Procedure (SOP), parameters are reported as per adopted monitoring procedures. Assessments of monitored parameters are given in the following table.

| Carbon | | |
|---------------------------|--|---|
| Parameter | Adopted monitoring procedure for First Monitoring Report | Assessment/Observation |
| Eligible Forest Area | Inspections undertaken during PD development and the forest inventory survey (2015); most recently available aerial imagery provided for PD | This approach is consistent with procedure as detailed in Validated Technical Specification /3/ and PD Part B /2/ Eligible Forest Area (EFA) equals to 165.6 ha has been verified from the project QGIS files /50/ |
| Activity Shifting Leakage | Inspections undertaken during PD development and the forest inventory survey. Activity Shifting Leakage not possible due to all forest land owned by landowners is contained within the Project Area and would amount to a reversal if reduced | This approach is verified from validated Technical Specification /3/, Forest Inventory /15/. Activity Shifting Leakage under this methodology refers activities shifting within lands owned/controlled by the Project Owner. Because all indigenous forest owned by the Project Owner is contained within the Project Area, which in turn is protected as a Community Conservation Area, then no Activity Shifting can occur. At present, there is some forest that is not included in crediting but included in the Community Conservation Area /10/. This area was not included in carbon crediting under this project at first verification because the |

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| | | | Project Coordinator omitted to undertake a carbon stock inventory within this area during project development. As such the Project Coordinator intends to provide an updated baseline at second verification that will include this area. This is verified by interviewing Project Coordinator and Program Operator. |
| | Community | | |
| | Parameters | Adopted monitoring procedure for First Monitoring Report | Assessment/Observation |
| | Food, consumption, agriculture | Community Impact Monitoring baseline survey undertaken in 2015 | This approach is consistent with Loru Livelihood Impact Monitoring Guide and Methodology for Socioeconomic Baseline /42/. Survey documents were verified during on-site inspection on 25 Nov 2015 at Project Coordinator Location (Live & Learn Vanuatu). Baseline survey results as presented in PD Part A /1/ was verified during on-site inspection at the project site by interviewing community representatives. |
| | Water accessibility | Community Impact Monitoring baseline survey undertaken in 2015 | This approach is consistent with Loru Livelihood Impact Monitoring Guide and Methodology for Socioeconomic Baseline /42/. Survey documents were verified during on-site inspection on 25 Nov 2015 at Project Coordinator Location (Live & Learn Vanuatu). Baseline survey results as presented in PD Part A /1/ was verified during on-site inspection at the project site by interviewing community representatives. |
| | Household income | Community Impact Monitoring baseline survey undertaken in 2015 | This approach is consistent with Loru Livelihood Impact Monitoring Guide and Methodology for Socioeconomic Baseline /42/. Survey documents were verified during on-site inspection on 25 Nov 2015 at Project Coordinator Location (Live & Learn Vanuatu). Baseline survey results as presented in PD Part A /1/ was verified during on- |

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| | | | site inspection at the project site by interviewing community representatives. |
| | Participation | Community Impact Monitoring baseline survey undertaken in 2015 | This approach is consistent with Loru Livelihood Impact Monitoring Guide and Methodology for Socioeconomic Baseline /42/. Survey documents were verified during on-site inspection on 25 Nov 2015 at Project Coordinator Location (Live & Learn Vanuatu). Baseline survey results as presented in PD Part A /1/ was verified during on-site inspection at the project site by interviewing community representatives. |
| | Biodiversity | | |
| | Parameter | Adopted monitoring procedure for First Monitoring Report | Assessment/Observation |
| | Presence of significant species | First Biodiversity Project Survey undertaken concurrently with Forest Inventory Survey in 2015. Forest Biodiversity Baseline Survey to be undertaken after first verification. | This approach is consistent with procedure as detailed in Validated Technical Specification /3/ and PD Part B /2/. Forest Inventory was completed in 2015 /15/. Biodiversity assessments were carried out accordingly /38//40/. |
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| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | <p>Recommendation:</p> <p>Details of monitoring approaches of Eligible Forest Area (EFA) and Total Activity Leakage (TAL) should be followed according to procedures and instructions as per Technical Specification Module (C) 2.1 (AD-DtPF) during periodic monitoring.</p> <p>Response:</p> <p>TS Module (p 16) states: <i>"There may be no leakage through activity shifting to other lands owned or managed by project participants outside the bounds of the carbon project."</i></p> <p>TS Module p53 states: <i>Where the project proponent controls multiple parcels of land within the</i></p> | | |

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| | <p><i>country the project proponent must demonstrate that the management plans and/or land-use designations of other lands they control have not materially changed as a result of the planned project (designating new lands as timber concessions or increasing harvest rates in lands already managed for timber) because such changes could lead to reductions in carbon stocks or increases in GHG emissions.</i></p> <p>So my understanding of Activity Shifting Leakage under this methodology is that it applies to activities shifting within lands owned/controlled by the Project Owner.</p> <p>Because all indigenous forest owned by the Project Owner is contained within the Project Area, which in turn is protected as a Community Conservation Area, then no Activity Shifting can occur. At present, there is forest not included in crediting but included in the Community Conservation Area. This area was not included in carbon crediting under this project because we omitted to undertake a carbon stock inventory within this area. As such we intend to provide an updated baseline at second verification that will include this area (Zone B as depicted in Figure 2.4e in the PD Part A – pg. 25).</p> <p>Assessment: Project Coordinator has provided appropriate responses that refers to monitoring approaches of Eligible Forest Area (EFA) and Total Activity Leakage (TAL) according to procedures and instructions as per Technical Specification Module (C) 2.1 (AD-DtPF). This explanation is now included in first monitoring report.</p> <p>This is CLOSED.</p> |
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| Theme | 3. Quantifying and monitoring ecosystem services |
| <i>Ensuring that the project meets requirements 5 of the Plan Vivo Standard (2013)</i> | |
| A. Requirement | 3.1 Quantification of GHG emission reductions and removals Quantification of baseline emissions, project emissions and leakage |
| B. Findings (describe) | <p>Emission reduction from Loru Forest Project (AD-DtPF) has been considered for the monitoring period during 16 January 2013 to 15 January 2015. These have been calculated in accordance with the adopted Nakau Methodology Framework and Technical Specification Module.</p> <p>Data and information presented in Loru Carbon Budget and Pricing /14/ were assessed and cross-checked by reviewing relevant references, interviewing with personnel and source documents. No significant reporting risks have been identified for the information and data reported. This has enabled the verifier to assess the accuracy and completeness of reported monitoring results and verify the correct application of the adopted methodology.</p> <p>Annual Baseline Emissions Avoided: 1726 tCO₂e. The first Monitoring Period is 16 January 2013 – 15 January 2015 (i.e. 2 years) (Appendix 1, Sheet ‘Loru Carbon’ Cell E9).</p> <p>Baseline Emissions for the first monitoring period are 3452 tCO₂e (i.e. 1726 x 2). Annual Baseline Removals: 34 tCO₂e. Baseline Removals for the first monitoring period are 68 tCO₂e (Appendix 1, Sheet ‘Loru Carbon’ Cell E10).</p> <p>Annual Net Baseline Emissions: 1726 tCO₂e (Appendix 1, Sheet ‘Loru Carbon’ Cell E11).</p> <p>Annual Buffer (Net Baseline Emission Avoided): 345 tCO₂e</p> <p>Annual Net Project Removals: 1326 tCO₂e (Appendix 1, Sheet ‘Loru Carbon’ Cell E15)</p> <p>Annual Buffer (Net Project Removals): 265 tCO₂e</p> <p>There has been no activity shifting leakage in this monitoring period. There has been no market leakage in this monitoring period (due to the insignificant volume of baseline timber harvesting in relation to the national domestic timber market). Leakage for this monitoring period is 0 tCO₂e (Appendix 1, Sheet ‘Loru Carbon’ Cell E12).</p> <p>Net Carbon Credits: 2442 tCO₂e during 16 January 2013 to 15 January 2014</p> <p>Net Carbon Credits: 2442 tCO₂e during 16 January 2014 to 15 January 2015</p> |

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| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | | | |
| A. Requirement | 3.2 Quantification of habitat hectare units Quantification of baseline habitat hectares, project habitat hectares, hectare leakage | | |
| B. Findings (describe) | <p>This project markets Habitat Hectare units that are mutually exclusive to carbon offsets. This is for purposes of marketing the rainforest protection project to buyers not interested in carbon offsetting but interested in supporting rainforest protection through the purchase of payment for ecosystem service units.</p> <p>When a buyer purchases a Habitat Hectare unit from this project, the equivalent volume of carbon offsets are retired in the registry. In this manner carbon offsets are used as a registered proxy of Habitat Hectare units.</p> <p>One Habitat Hectare unit equals one hectare of rainforest protected inside the eligible forest area for one year.</p> <p>Baseline hectares of rainforest protected inside the eligible forest area: 0ha (Appendix 1, Sheet 'Loru HH' Cell E4).</p> <p>Leakage for this monitoring period is 0 ha</p> <p>Buffer: 20%</p> <p>Coastal scrap: 36.6 ha</p> <p>The Gross Habitat Hectare: (Eligible Forest Area 165.6 ha – Coastal Scrap included in baseline 18.3 ha) 147.3 ha</p> <p>Project Habitat Hectares of rainforest protected inside the eligible forest area: EFA – 20% (Appendix 1, Sheet 'Loru HH' Cell E8) 118ha yr-1</p> <p>There has been no activity shifting leakage in this monitoring period. There has been no market leakage in this monitoring period (due to the insignificant volume of baseline timber harvesting in relation to the national domestic timber market).</p> <p>Net Carbon Credits per Habitat Hectares: (Net Carbon Credit Equivalent)/(Net Habitat Hectares): 20.72 tCO₂e</p> | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |

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| D. Corrective Actions (describe) | | | |
| A. Requirement | 3.3 Quantification of Community Impacts Quantification of baseline community impacts, project community impacts and net community impacts enhancement | | |
| B. Findings (describe) | <p>During the first verification the Loru Forest Project has undertaken baseline community impact monitoring /42/. This is because the Loru Forest Project has only completed socio-economic baseline survey of the community and that there is no contrasting data to enable estimating project's impacts on community. This is verified by interviewing communities. A community impact measurement framework was developed by Project Coordinator in consultation with Project Owner. A total 39 interviews was conducted using methodology as elaborated in Loru Livelihood Impact Monitoring Guide and Methodology for Socioeconomic Baseline /42/. Baseline data as presented in PD Part A was cross-checked with interview response form (stored in Project Coordinator's Office) and interviewing with communities and found to be consistent.</p> <p>The first occasion where project community impacts can be measured and reported for monitoring will be at the second verification event. Net community impact enhancements will become available for the first time at the second verification event.</p> | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | Project Coordinator and Project Owner continue monitoring of socio-economic impacts as per adopted methodology elements. | | |
| A. Requirement | 3.4 Quantification of Biodiversity Impacts Quantification of baseline biodiversity impacts and project biodiversity impacts | | |
| B. Findings (describe) | <p>Measuring the impact of Loru Forest Project on biodiversity requires a comparison between a biodiversity baseline survey and a biodiversity project survey.</p> <p>At first verification the Loru Forest Project has only undertaken the first Project Biodiversity Impact Monitoring survey.</p> <p>The Loru Forest Project has completed the first (project scenario) biodiversity impact monitoring survey recording significant species present inside the project boundary.</p> <p>During current verification, there is no information in regard to biodiversity impact in the Monitoring Report. This is because no biodiversity baseline survey was conducted. However, during interview Project Coordinator and Program Operator have confirmed that they aspire to undertake a baseline survey in a reference areas supporting baseline scenario before the second monitoring and verification.</p> | | |

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| | This is in the opinion of verifier that the proposed approach appears appropriate taking note on planned baseline survey (in a reference area before next verification and a project biodiversity survey). | | |
| C. Conformance | Yes <input checked="checked" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | <p>Recommendation:</p> <p>Baseline activity for this project is deforestation. The biodiversity baseline survey therefore needs to be undertaken in a relevant reference area. Project Coordinator and Project Owner shall conduct baseline biodiversity survey in an appropriate reference area and project biodiversity survey before second verification.</p> <p>Response:</p> <p>Interview with Project Coordinator and Project Owner reveals that biodiversity survey will be conducted in an appropriate reference area.</p> <p>Assessment:</p> <p>This is in the opinion of the verifier that planned biodiversity survey (in a reference area before next verification and a project biodiversity survey) is appropriate.</p> <p>This is CLOSED.</p> | | |

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| Theme | 4. Climate services, risks management and quality assurance | | |
| <i>Ensuring that the project meets requirements 6 and 7 of the Plan Vivo Standard (2013)</i> | | | |
| A. Requirement | 4.1 Calculation of emission reductions (climate services) and assessment of data | | |
| | Spreadsheet formulas, conversion, aggregations, consistent use of factors in line with the monitoring plan, transcription errors between datasets, sources of data | | |
| B. Findings (describe) | <p>Emission reduction from Loru Forest Project (AD-DtPF) has been considered for the monitoring period during 16 January 2013 to 15 January 2015. These have been calculated in accordance with the adopted Nakau Methodology Framework and Technical Specification Module.</p> <p>This is the first Project Monitoring for Loru Forest Project. A simplified Project Monitoring has been adopted in accordance with section 8.1.5 of the Technical Specifications Module (C) 2.1 (AD-DtPF).</p> <p>Data and information presented in Loru Carbon Budget and Pricing /14/ were assessed and cross-checked by reviewing relevant references, interviewing with personnel and source documents. No significant reporting risks have been identified for the information and data reported. This has enabled the verification team to assess the accuracy and completeness of reported monitoring results and verify the correct application of the adopted methodology.</p> <p>All relevant formulas and factors used to calculate the net anthropogenic GHG emissions and removals in the Baseline Scenario, and to calculate the net anthropogenic GHG emissions and removals in the Project Scenario are in accordance with Technical Specification (AD-DfPF) and as demonstrated in PD Part B.</p> <p>All the factors used and sources of data are appropriately cited in both PD Part B and Loru Carbon Budget and Pricing /14/.</p> <p>During current verification, all data transcription was performed by responsible monitoring personnel and was carried-out appropriately.</p> | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | | | |
| A. Requirement | 4.2 Assessment of buffer | | |

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| | Has the project has allocated a proportion of climate services in a risk buffer? | | |
| B. Findings (describe) | <p>The Project Buffer Rating (PBR) is used to calculate the Buffer for the baseline timeline.</p> <p>The Project Buffer Rating (PBR) is equal to 0.2 in this Technical Specifications Module. This is in accordance with Technical Specification and adopted methodology elements.</p> <p>20% buffer is higher than minimum buffer (10%) as recommended by Plan Vivo (2013).</p> | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | | | |
| A. Requirement | <p>4.3 Quality of evidence to determine emission reductions and climate services</p> <p>The discussion, findings and conclusion related to that the evidence is off sufficient quantity and appropriate quality, the reliability of evidence and nature of evidence</p> | | |
| B. Findings (describe) | <p>Data presented in the monitoring report and Loru Forest Carbon Inventory & Budget are assessed by reviewing in detail project documetation, interview with Porject Owner, Project Coordinator and Program Operator, observations of established monitoring and reporting practices during field visit inspection. This has enabled the verification team to assess the accurancy and completeness of the reported monitoring results and verify the correct application of adopted methodology elements and Technical Specifications. All necessary documentation is collected, referenced and agregated and is easy accessible in electronic format as well as hard copies.</p> <p>Monitoring and reporting of data is in accordance with the adopted methodology elements and Technical Specification and as demonstrated in PD Part B. Verifier has been able to confm that that compelte set of data is available for the purpose of calaculation of emission reduction units for the current monitoring period.</p> | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | | | |
| A. Requirement | <p>4.4 Management system and quality assurance</p> <p>The discussion, findings and conclusions in regard to the suitability of the</p> | | |

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| | management system for monitoring and reporting. | | |
| B. Findings (describe) | <p>Loru Forest Project has developed a Standard Operating Procedure (SOP) for Monitoring Carbon benefits as demonstrated in PD Part B and in the Monitoring Report. The demonstrated SOP is in accordance with adopted methodology elements and Technical Specification.</p> <p>Against each activity to be monitored (under carbon, community and biodiversity) relevant frequency, responsibility, human resources and financial resources have been demonstrated under SOP as detailed in the PD Part B.</p> <p>Verifier confirms that the responsibilities and authorities for monitoring and reporting are in accordance with the responsibilities and authorities as stated in the PD Part B.</p> <p>This is the first Project Monitoring for Loru Forest Project. A simplified Project Monitoring has been adopted in accordance with section 8.1.5 of the Technical Specifications Module (C) 2.1 (AD-DtPF) as such a simplified monitoring and reporting methodology has been adopted.</p> <p>Loru Forest Project’s monitoring management includes data management systems, Standard Operating Procedure (including monitoring and reporting tools, templates, appropriate training to monitoring personnel in the forest) and Quality Assurance (accessible of data by nominated personnel and storage of data in multiple sites). Nakau Program has developed an Information Management Systems where Loru Forest Project data are stored electronically. Hard copies of data are stored at Project Coordinator’s Office and Project Owner’s field office. Implementation of data management systems was verified during field visit inspection and interviewing Program Operator, Project Coordinator and Project Owner.</p> <p>Data presented in the monitoring report and Loru Forest Carbon Inventory & Budget as assessed by reviewing in detail project documentation, interview with Project Owner, Project Coordinator and Program Operator, observations of established monitoring and reporting practices during field visit inspection. This has enabled the verifier to assess the appropriate implementation of the data management systems and completeness of the reported monitoring results and verify the correct application of adopted methodology elements and Technical Specifications. All necessary documentation is collected, referenced and aggregated and is easy accessible in electronic format as well as hard copies.</p> | | |
| C. Conformance | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| D. Corrective Actions (describe) | | | |