



Global ERP Forestry & Legal Assurance & Trade





Forestry Management and Assurance, Harvesting and Logistics, Processing and Sales

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GHANA WOOD TRACKING SYSTEM

In December 2012, the Government of Ghana contracted the ATA MARIE GROUP GHANA LTD (AMGG) to design and develop the Ghana Wood Tracking System (GWTS).

The overall objectives of the Ghana Wood Tracking System (GWTS):

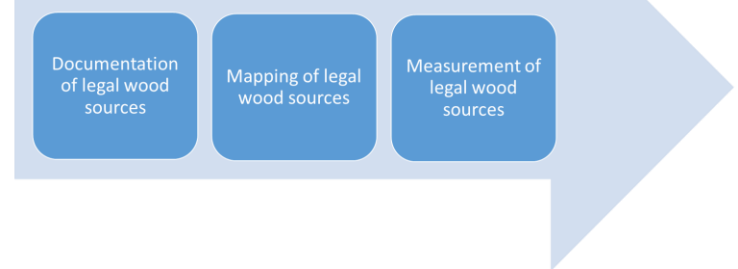
- To verify the legality of all sources of wood in Ghana
- To verify the legality of all forest production activities in Ghana
- Track legal wood supply from its origin to the final point of sale
- Certify compliance with the requirements of the Voluntary Partnership Agreement between the European Union and the Republic of Ghana.

GWTS – 3 Modules

Module 1 – Legality Assurance Administration



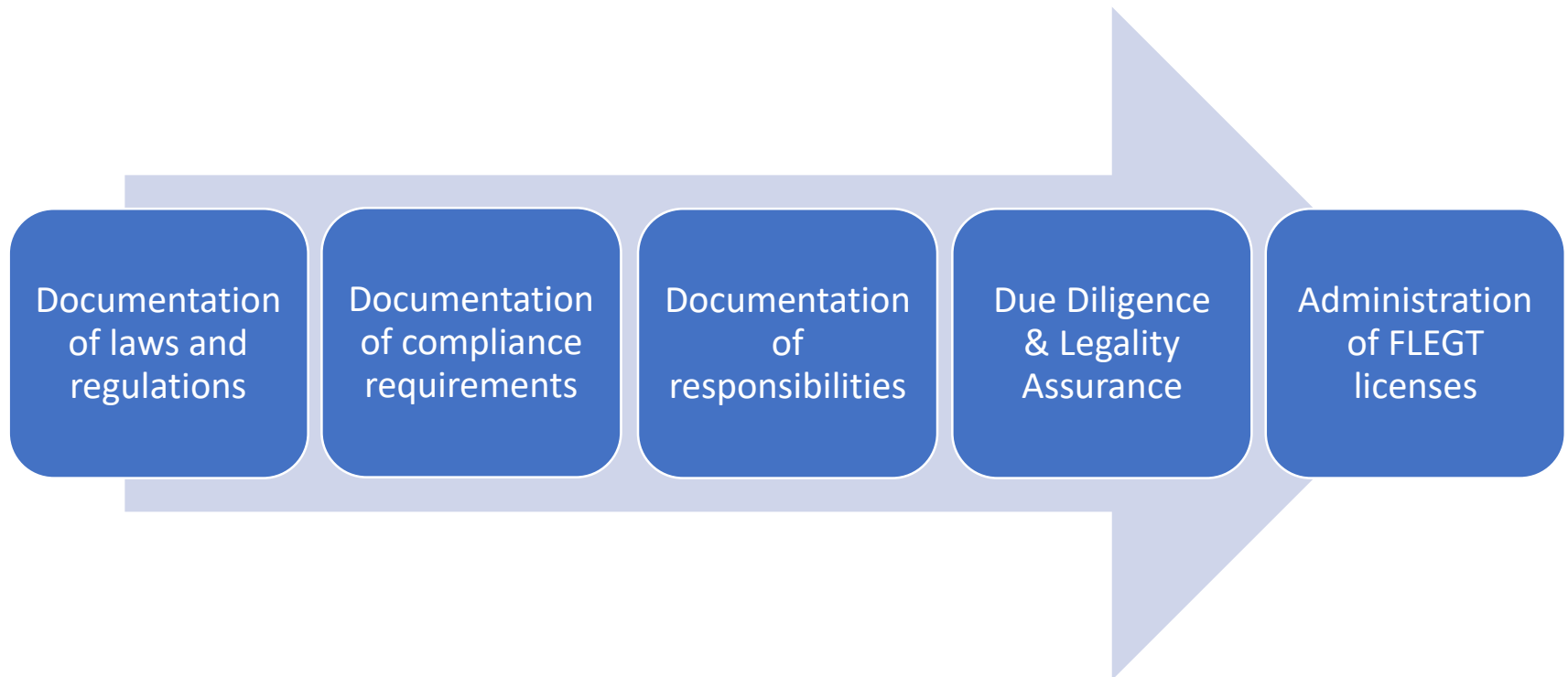
Module 2 – Legal Source Module



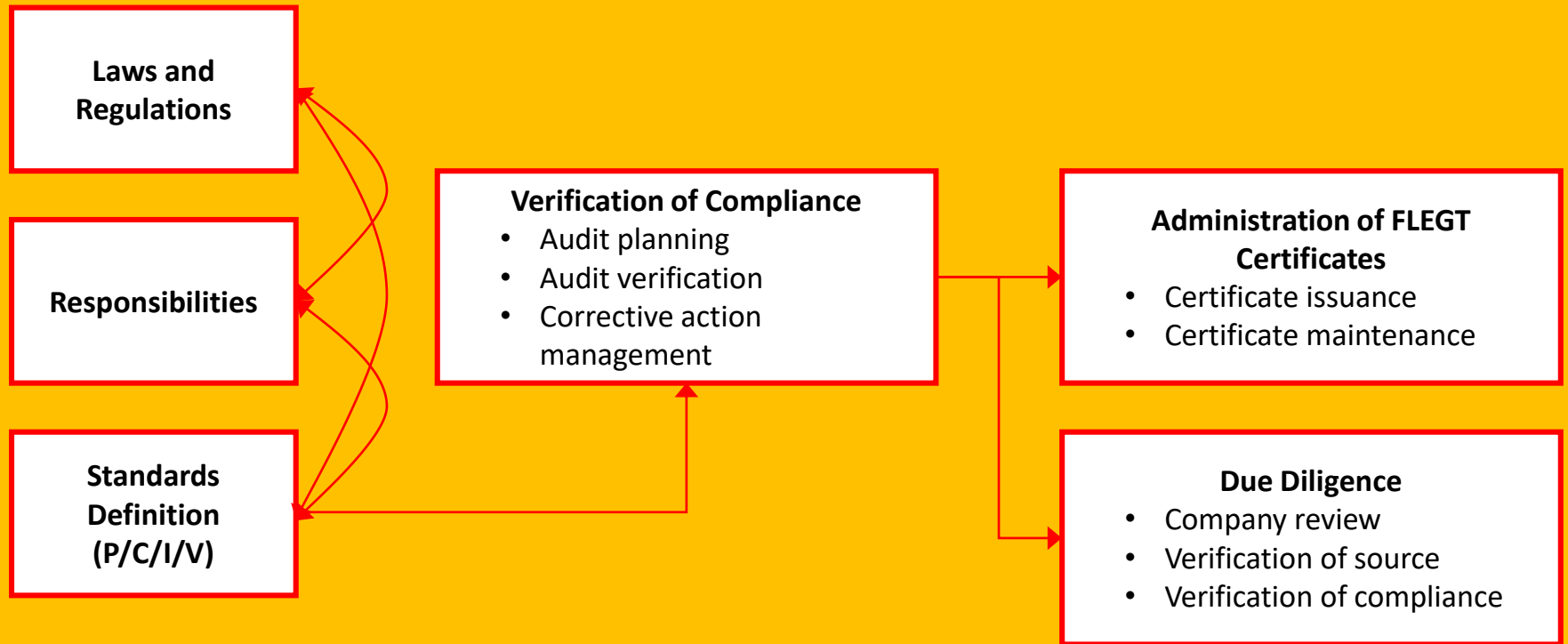
Module 3 – Chain of Custody



Module 1 – Legality Assurance Administration



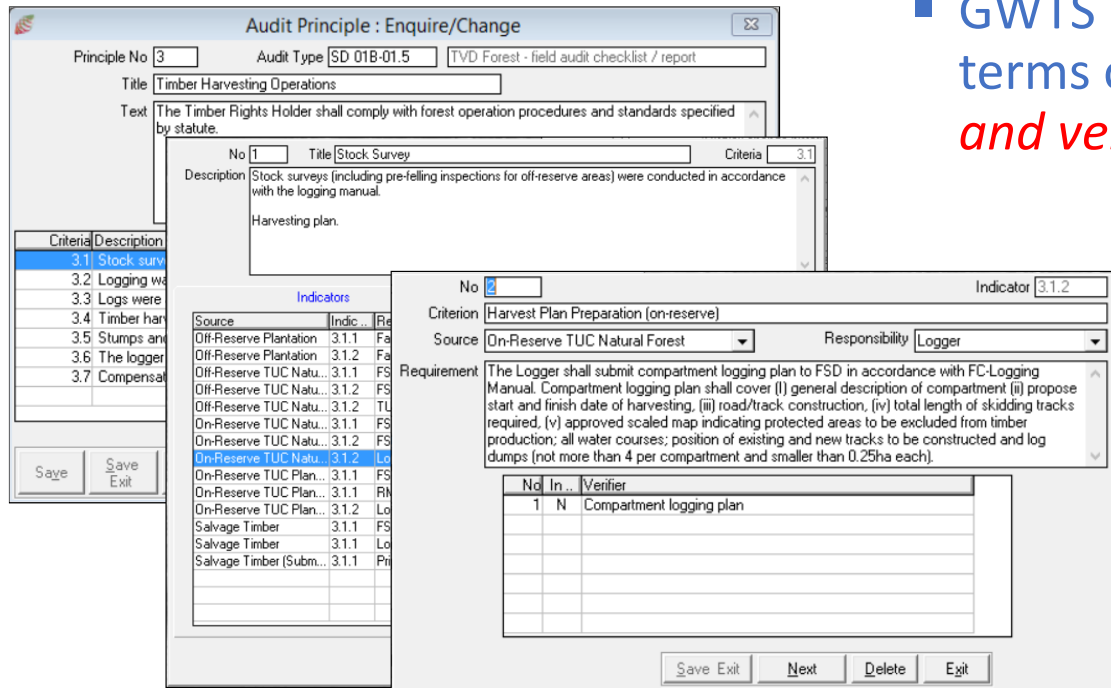
Ghana Wood Tracking System Verification Processes



ata marie

- GWTS records laws and regulations.
- Based on original VPA / LAS requirements but updated to 2016
- This provides a transparent and flexible tool for documentation of “the Law”.

Documentation of Compliance Requirements



Audit Principle : Enquire/Change

Principle No: 3 Audit Type: SD 01B-01.5 TVD Forest - field audit checklist / report

Title: Timber Harvesting Operations

Text: The Timber Rights Holder shall comply with forest operation procedures and standards specified by statute.

No: 1 Title: Stock Survey Criteria: 3.1

Description: Stock surveys (including pre-felling inspections for off-reserve areas) were conducted in accordance with the logging manual.

Harvesting plan.

Criteria

| Criteria | Description |
|------------------|-------------|
| 3.1 Stock survey | |
| 3.2 Logging was | |
| 3.3 Logs were | |
| 3.4 Timber har | |
| 3.5 Stumps and | |
| 3.6 The logger | |
| 3.7 Compensat | |

Indicators

| Source | Indic | Re |
|-------------------------|-------|----|
| Off-Reserve Plantation | 3.1.1 | Fa |
| Off-Reserve Plantation | 3.1.2 | Fa |
| Off-Reserve TUC Natu... | 3.1.1 | FS |
| Off-Reserve TUC Natu... | 3.1.2 | FS |
| Off-Reserve TUC Natu... | 3.1.2 | TU |
| On-Reserve TUC Natu... | 3.1.1 | FS |
| On-Reserve TUC Natu... | 3.1.2 | FS |
| On-Reserve TUC Natu... | 3.1.2 | FS |
| On-Reserve TUC Natu... | 3.1.2 | Lo |
| On-Reserve TUC Plan... | 3.1.1 | FS |
| On-Reserve TUC Plan... | 3.1.1 | RN |
| On-Reserve TUC Plan... | 3.1.2 | Lo |
| Salvage Timber | 3.1.1 | FS |
| Salvage Timber | 3.1.1 | Lo |
| Salvage Timber (Subm... | 3.1.1 | Pr |

Indicator 3.1.2

Criterion: Harvest Plan Preparation (on-reserve)

Source: On-Reserve TUC Natural Forest Responsibility: Logger

Requirement: The Logger shall submit compartment logging plan to FSD in accordance with FC-Logging Manual. Compartment logging plan shall cover (i) general description of compartment (ii) propose start and finish date of harvesting, (iii) road/track construction, (iv) total length of skidding tracks required, (v) approved scaled map indicating protected areas to be excluded from timber production; all water courses; position of existing and new tracks to be constructed and log dumps (not more than 4 per compartment and smaller than 0.25ha each).

| No | In... | Verifier |
|----|-------|--------------------------|
| 1 | N | Compartment logging plan |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Save Exit Next Delete Exit

- GWTS records LAS requirements in terms of *principles, criteria, indicators, and verifiers* (P/C/I/V).

- Interpretation and prioritization of laws, legal sources and responsibilities for FLEGT purposes.
- This provides a transparent and flexible tool for documentation of “*definition Applicable and Proper Law*”.

Documentation of Responsibilities

- GWTS records stakeholders and their specific responsibilities under the VPA.
- This provides a transparent and flexible tool for documentation of the “*implementation of the Law*”.

No Title Criteria

Description: For Timber Utilisation Contracts (TUC) in on-reserves, forest management plan preparation covers strategic plan;
Delineation of TUCs;
Conduction of an inventory before harvesting (on-reserve, off-reserve and plantation);
Written consent of concerned individual, group or owners.

Indicators Guidance by Source

| Source | Indicator | Responsibility | Requirement |
|-------------------------|-----------|----------------|---|
| Imported Timber | 1.1.1 | Importer | The importer shall implement the following: (i) declaration to... |
| Imported Timber | 1.1.1 | TIDD | For imported timber, TIDD shall conduct the required due d... |
| Off-Reserve TUC Natu... | 1.1.1 | FSD | Following from the preparation of TUC off-reserve, FSD sha... |
| Off-Reserve TUC Natu... | 1.1.1 | RMSC | RMSC shall be responsible for approval for restricted speci... |
| Off-Reserve TUC Natu... | 1.1.1 | TUC Hol... | |
| Off-Reserve TUC Natu... | 1.1.2 | FSD | |
| On-Reserve TUC Natu... | 1.1.1 | FSD | |
| On-Reserve TUC Natu... | 1.1.2 | FSD | |
| On-Reserve TUC Natu... | 1.1.3 | FSD | |
| On-Reserve TUC Natu... | 1.1.3 | RMSC | |
| On-Reserve TUC Natu... | 1.1.3 | TUC Hol... | |
| On-Reserve TUC Plan... | 1.1.1 | FSD | |
| On-Reserve TUC Plan... | 1.1.2 | FC-CE | |
| On-Reserve TUC Plan... | 1.1.2 | FSD | |
| On-Reserve TUC Plan... | 1.1.2 | RMSC | |
| On-Reserve TUC Plan... | 1.1.3 | FSD | |
| Salvage Timber | 1.1.1 | FSD | |

Save

No Indicator

Criterion

Source Responsibility

Requirement: For imported timber, TIDD shall conduct the required due diligence to ascertain that timber is legally sourced from the country of origin.
TIDD shall implement the following upon arrival of the imported timber: (i) TIDD shall notify GC Net of the process.
(ii) TIDD shall ensure that Customs carries out inspection of wood product in their presence.

| No | In WTS | Verifier |
|----|--------|---|
| 1 | N | Declaration to Customs of Imported Timber (GCNet report) |
| 2 | N | Notification to Customs of Imported Timber (GCNet report) |
| 3 | N | Customs product inspection |
| 4 | Y | Inventory of imported timber |

Save Exit Next Delete Exit

Due Diligence / Legality Assurance

Audit : File Access (No in List: 332)

| Entered | Reference | Scheduled | Completed | Code |
|-----------|-----------|-----------|-----------|------|
| 18-Nov-14 | 00000007 | 19-Nov-14 | N | |
| 18-Nov-14 | 00000008 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000009 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000010 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000011 | 21-Nov-14 | N | |
| 19-Nov-14 | 00000012 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000013 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000014 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000015 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000016 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000017 | 19-Nov-14 | N | |
| 19-Nov-14 | 00000018 | 19-Nov-14 | N | |
| 26-Nov-14 | 00000019 | 25-Nov-14 | N | |
| 26-Nov-14 | 00000020 | 25-Nov-14 | N | |
| 26-Nov-14 | 00000021 | 25-Nov-14 | N | |
| 26-Nov-14 | 00000022 | 25-Nov-14 | N | |
| 26-Nov-14 | 00000023 | 26-Nov-14 | N | |
| 26-Nov-14 | 00000024 | 26-Nov-14 | N | |

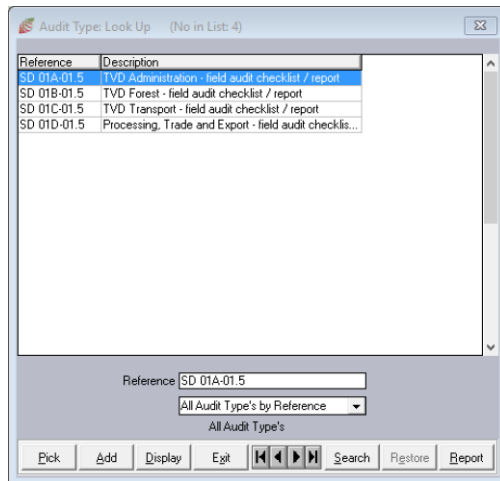
Entered: 26-Nov-14
All Audits by date
All Audit's

Pick Add Display Exit Search Restore Report

- GWTS allows users to create, implement and manage **legality audits**.
- **Verification** involves recording the results of audits and determination of compliance.
- GWTS allows creation and management of **corrective actions**.

Due Diligence / Legality Assurance

- The GWTS allows the design and generation of different types of audits.
- GWTS schedules, generates and implements verification audits
- GWTS links audits to relevant source and chain of custody documents



Audit Type: Look Up (No in List: 4)

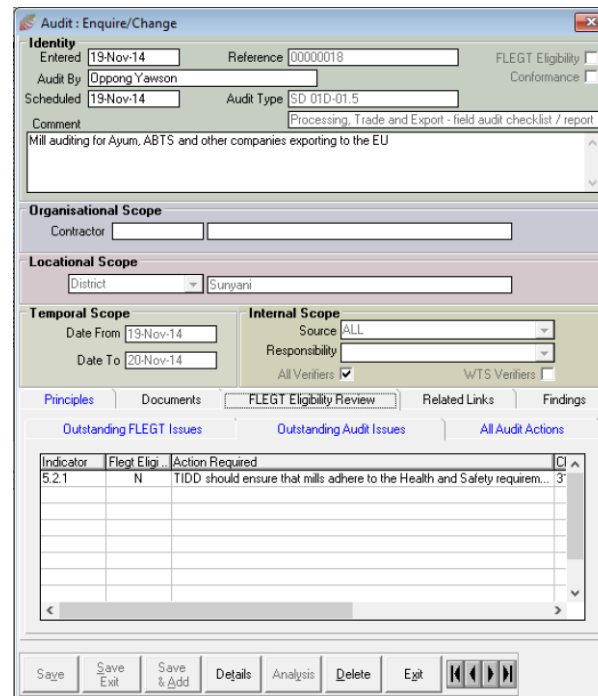
| Reference | Description |
|-------------|---|
| SD 01A-01.5 | TVD Administration - field audit checklist / report |
| SD 01B-01.5 | TVD Forest - field audit checklist / report |
| SD 01C-01.5 | TVD Transport - field audit checklist / report |
| SD 01D-01.5 | Processing, Trade and Export - field audit checklist / report |

Reference: SD 01A-01.5

All Audit Type's by Reference

All Audit Type's

Pick Add Display Exit Search Restore Report



Audit: Enquire/Change

Identity
 Entered: 19-Nov-14 Reference: 00000018 FLEGT Eligibility: ☐
 Audit By: Oppong Yawson Conformance: ☐
 Scheduled: 19-Nov-14 Audit Type: SD 01D-01.5
 Comment: Processing, Trade and Export - field audit checklist / report
 Mill auditing for Ayum, ABTS and other companies exporting to the EU

Organisational Scope
 Contractor:

Locational Scope
 District: Sunyani

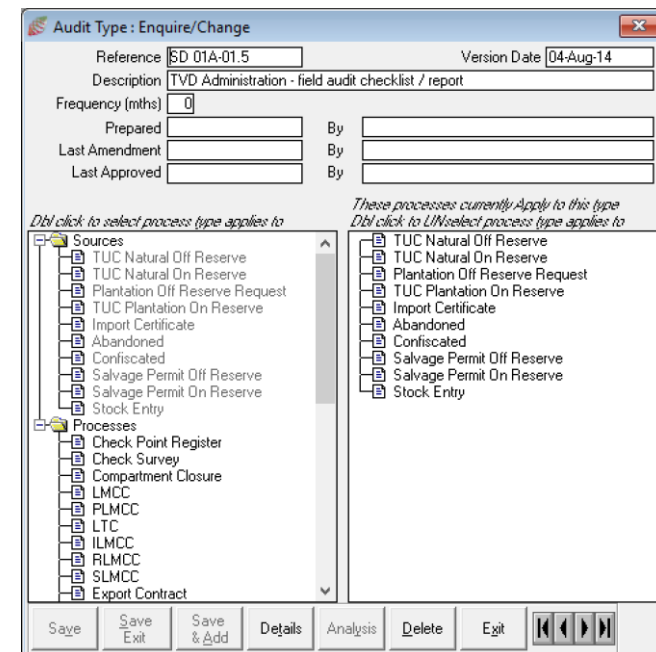
Temporal Scope
 Date From: 19-Nov-14 Date To: 20-Nov-14
 Internal Scope
 Source: ALL Responsibility:
 All Verifiers: ☒ WTS Verifiers: ☐

Principles Documents FLEGT Eligibility Review Related Links Findings

Outstanding FLEGT Issues Outstanding Audit Issues All Audit Actions

| Indicator | Flegt Eligi. | Action Required |
|-----------|--------------|---|
| 5.2.1 | N | TIDD should ensure that mills adhere to the Health and Safety requirem... |

Save Save Exit Save & Add Details Analysis Delete Exit



Audit Type: Enquire/Change

Reference: SD 01A-01.5 Version Date: 04-Aug-14
 Description: TVD Administration - field audit checklist / report
 Frequency (mths): 0
 Prepared: By:
 Last Amendment: By:
 Last Approved: By:

Click to select process type applies to

These processes currently Apply to this type

Click to UNselect process type applies to

Sources

- TUC Natural Off Reserve
- TUC Natural On Reserve
- Plantation Off Reserve Request
- TUC Plantation On Reserve
- Import Certificate
- Abandoned
- Confiscated
- Salvage Permit Off Reserve
- Salvage Permit On Reserve
- Stock Entry

Processes

- Check Point Register
- Check Survey
- Compartment Closure
- LMCC
- PLMCC
- LTC
- ILMCC
- RLMCC
- SLMCC
- Export Contract

Save Save Exit Save & Add Details Analysis Delete Exit

Due Diligence / Legality Assurance

| TVD Administration Audit Checklist | | Printed: 12-Oct-14 |
|--|--|--------------------|
| | | Page: 1 |
| Audit Checklist: | | |
| Prepared | by: | |
| Last Amendment | by: | |
| Last Approved | by: | |
| Comments | | |
| Reference | 00000009 | |
| Scheduled Date | 01-Oct-14 | |
| Audit By | GEORGE | |
| Locational Scope | Region: Central | |
| Source : | ALL | |
| Verifiers : | ALL | |
| Date From | 01-Mar-14 | |
| Date To | 30-Sep-14 | |
| Overall Findings | | |
| FLEG Certificate Eligibility | Yes / No | |
| Principle 2-Timber Rights Allocation of a TUC: The timber rights holder possesses a TUC issued by the minister and ratified by Parliament following the specified competitive process or timber rights holder possesses a salvage permit or certificate of purchase (in the case of confiscated / abandoned timber product) or other permit issued by the Forestry Commission. | | |
| Criteria 2.1 Qualification of loggers for grant of TUC by TREC. 1. LI 1721:Part II: Procedure for Competitive bidding for grant of timber right; 2. LI 1649: Terms and conditions of TUC (section 14) 3. Ad 547: Ratification by parliament (Section 9) | | |
| Indicator 2.1.1 Source: All TUC Natural Forest, Salvage Timber, On-Reserve TUC Plantation Responsibility : FSD | Copies of TUCs shall be available at FSD offices | |
| Verifier : TUC Copy | Yes / No | Ref: |
| Conformance : | Yes / No | |
| Findings / Observations / Recommendations | | |
| Action : 1 | | |
| Action : 2 | | |

- GWTS generates audit checklists for inspections.
- The results of the audit are recorded in GWTS.
- Non-compliances are noted along with observations, findings and recommendations
- Corrective Action Requests are recorded in the event of non-compliances.

Due Diligence / Legality Assurance

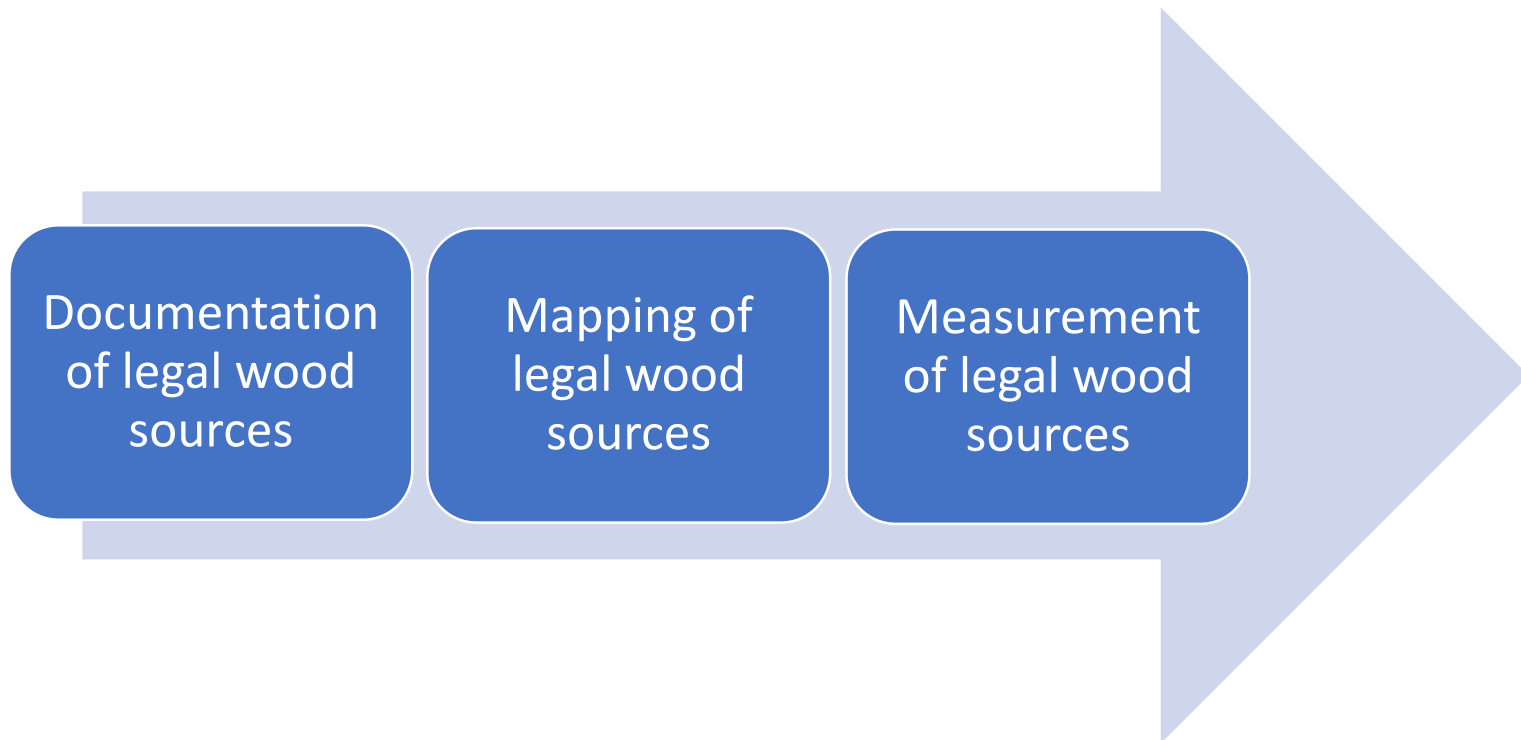
| | | |
|---|--|---|
| Action Required TIDD should ensure that mills adhere to the Health and Safety requirements through compliance reporting of millers operation. | Responsible Person TIDD Area Manager /Inspectoors | FLEGT Eligibility Review <input type="button" value="Reviewed - Affects FLEGT Eligibility"/> <input type="button" value="Reviewed - Does Not Affect Eligibility"/> Reviewed By <input type="checkbox"/> Does Not Affect FLEGT <input type="text"/> <input type="text"/> |
| | Required Close Out 31-Aug-15 Actual Close Out <input type="text"/> | |
| | Close Authorised By <input type="text"/> | |
| | <input type="button" value="Save Exit"/> <input type="button" value="Next"/> <input type="button" value="Delete"/> <input type="button" value="Exit"/> | |

- When there is a non-compliance in the audit, the user can create a Corrective Action Request (CAR).
- The CAR documents the ID of the source document requiring correction, the person responsible for implementation, the action required and the implementation status.
- Non-compliant audits are flagged **red**.

- FLEGT License Issuance is interactive with the LAS verification, legal source and COC reconciliation functions
- It certifies that wood sold on the market complies with Ghanaian law and the requirements of the VPA
- FLEGT License issued as hardcopy and/or electronic document

Module 2

Legal Source Module



Documentation of Legal Sources

| | Source Type | Forest Type |
|----|--------------------------------|-------------------------------|
| 1 | On Reserve TUC | Natural Forest |
| 2 | | Plantation |
| 3 | Off Reserve TUC | Natural Forest |
| 4 | | Plantation |
| 5 | Salvage Certificate | Natural and plantation forest |
| 6 | Import Certificate | N/A |
| 7. | Confiscated Timber Certificate | N/A |
| 8. | Abandoned | N/A |

- Eight legal sources of timber
- Records important features such as licenses, documents, and processes for each source

Documentation of Legal Sources

Legal source document ID

Legal owner of the permit

Description of legal source location

Supporting documents required for legal compliance

TUC Natural On Reserve : Enquire/Change

Certificate Information

Register Code: JCM-080
Description: Oboyow
Date Awarded: 01-Jan-12
Date of Expiry: 01-Jan-15
Duration: 3 Years 0 Mnth

Contractor

Contractor: JCM John Bitar & Company Limited
Mark: JCM Expires:

Forest Information

Forest code: OBOY Type: Nat.On
District: Oda
Locality: E5
Area: 0.000 Check: 0.000

TUC Map Ref.: Parliamentary Hansard
TREC PreQual.Rep.: Management Plan
TREC Tender Rep.: Soc.Resp.Agreement
Ministers Notice of Award: Cmppt.Logging plan
MLNR Apprvl Ref.: Surveved TUC Boundaries

Print Setup

Preview ☒ Export ☐
Print Summaries Print Details Print Reconciliations

Save Save Exit Save & Add Details Analysis Delete Exit

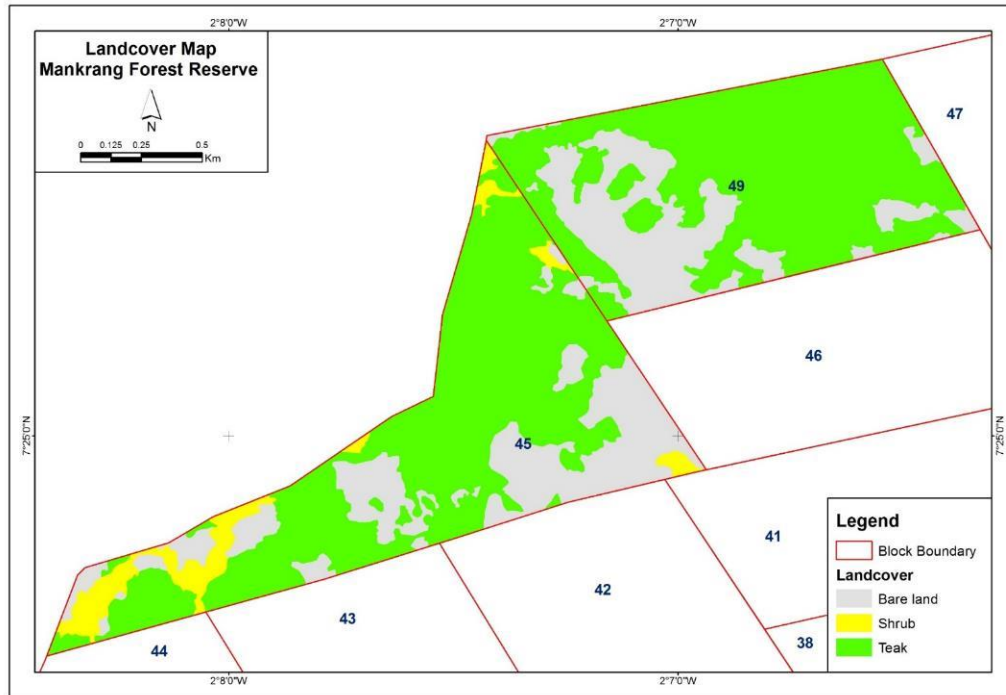
Forest locations, inventories and maps

Softcopies of documents

Compartment Documents Notes

| No | Coupe From | Coupe To | Status |
|----|------------|----------|---------|
| 9 | 0 | 0 | Survey |
| 10 | 0 | 0 | Harvest |
| 13 | 0 | 0 | Harvest |
| 14 | 0 | 0 | Harvest |
| 26 | 0 | 0 | Harvest |
| 27 | 0 | 0 | Harvest |

Mapping of Legal Sources




- Can record boundary maps in the field using GPS.
- Link the boundary maps to the forest source records in GWTS.
- Generate forest boundary maps in GWTS. However this feature is not deployed in Ghana.

Measurement of Legal Wood Sources



Measurement of Legal Wood Sources

GWTS Mobile

 Forestry Commission

Operation: Stock Survey

Forest: Suhuma



Stripline Items for...

Search for Items on this Stripline...

| | | |
|------------------------------------|------------|-------------------|
| Stock No. 1 (Left) Kotibe/Danta | Along : 6 | DBH 50 Offset 5 |
| Stock No. 2 (Left) Kotibe/Danta | Along : 8 | DBH 50 Offset 0 |
| Stock No. 3 (Left) Wawa | Along : 10 | DBH 110 Offset 30 |
| Stock No. 4 (Left) Celtis/Ohia | Along : 12 | DBH 70 Offset 30 |
| Stock No. 5 (Left) Kotibe/Danta | Along : 15 | |

Total Items



Edit Stripline Item

Species: NES - Kotibe/Danta

DBH: 50

☐ 150 Plus

Attributes:

- ☒ Seed Tree
- ☐ Access Issues
- ☐ Damaged Tree
- ☐ Canoe Tree

- Forest inventory data captured on paper or using mobile applications.
- 5 different mobile applications for forest inventory in different types of licenses

Measurement of Legal Wood Sources

Stock Survey On Reserve : Enquire/Change

Stock Survey On Reserve Reference No
No: FRHW61 Date: 01-Jan-12

Details

T.U.C: COMFRH
Contractor: John Bitar & Company Limited
Forest: FRHW
District: Asankragwa Locality: w5
Compartment: 61 Closed
Landowner(s): Assembly

Outputs

☒ Chart ☐ Summary ☐ Plot
☐ Yield Formula ☐ Stock Book
☐ Yield Qty Check
☐ Survey/TIF Check
Print
Shape File Edit List

Status

Base Line UTM easting: 0 UTM northing: 0 Bearing: 0 Base Line Length: 1863
Duration: 2 Team Leader:

Steps Completed

Pre Stock Survey ☒
Tie Line Survey ☒ Tie Line Ref:
Survey Completed ☒ Once checked the survey can no longer be changed. Mobile can get the Check Survey Data instead
Suitable for Harvest ☒ Date Completed: 15-May-14 Once completed the check survey data cannot be changed

Approved Yield Ltr: Yield Map:
PreStk Cpt Insp Report: RMSC QC Report:
Stock Map: Special Permit Restricted Species:

Strip Lines **Yield List** **Seed Trees** **Notes** **Check Survey** **Documents** **Authorizations**

Strip Lines

| Direction | Offset | Length |
|-----------|--------|--------|
| 1 A>B | 30 | 800 |
| 2 B>A | 90 | 800 |
| 3 A>B | 150 | 800 |
| 4 A>B | 270 | 795 |
| 5 A>B | 350 | 800 |
| 6 B>A | 450 | 800 |
| 7 A>B | 510 | 800 |
| 8 B>A | 570 | 800 |
| 9 A>B | 630 | 800 |
| 10 B>A | 690 | 800 |
| 11 A>B | 750 | 800 |
| 12 B>A | 810 | 800 |
| 13 A>B | 870 | 800 |
| 14 B>A | 930 | 800 |
| 15 A>B | 990 | 800 |

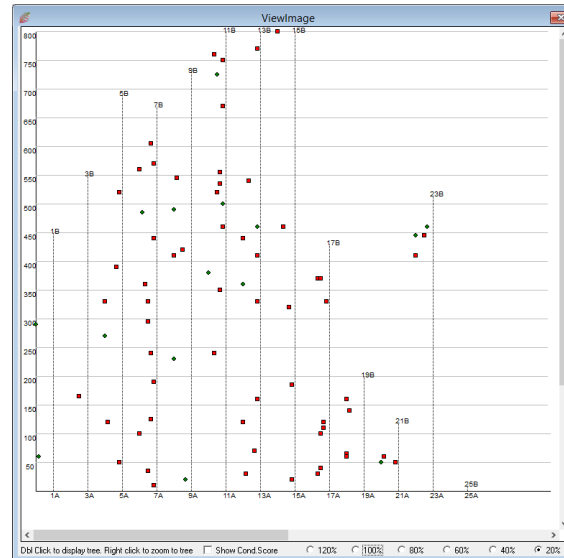
Statistics

Stock Units: 306.7
Yield Units: 1.353
Area (Ha): 0.000
Stock Units/Ha: 0.0
Condition Index %: 0.0
Condition Ratio 1-2%: 0.0
Condition Ratio 3%: 0.0

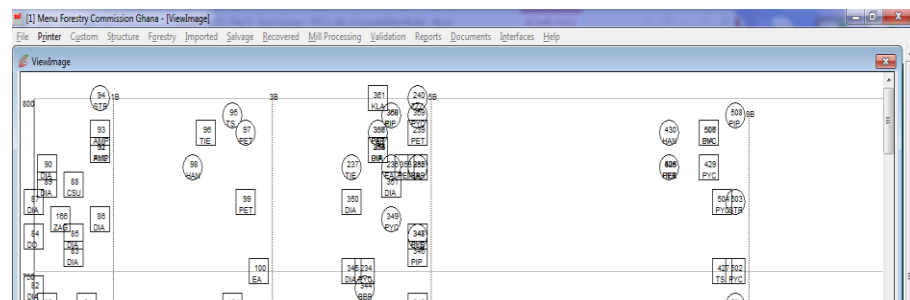
Boundary Coordinates

| Utm Northing | Utm Easting |
|--------------|-------------|
| | |
| | |
| | |
| | |
| | |

Line Flags



Data imported in GWTS for permanent storage of inventory data and tree mapping.



Yield Determination and Control

Data automatically processed and analyzed for yield determination

STOCK SUMMARY

Printed: 10/09/2014

Page: 1

| Species | Class | Yield | Name | 50-69 | 70-89 | 90-109 | 110-129 | 130-149 | 150+ | Total |
|---------|-------|---------|---------------|----------------------------|-----------------------------|-----------|---------|---------|------|-------|
| ZZZ | 0 | Reduced | Mixed Species | 56,68,112, 122,131,133, | 54,116,162, 171,218,229, | 3004, (1) | | | | 130 |

YIELD SUMMARY

Printed: 10/09/2014

Page: 1

| Species | Class | Yield | Name | 50-69 | 70-89 | 90-109 | 110-129 | 130-149 | 150+ | Total |
|---------|-------|---------|---------------|----------------------------|-----------------------------|-----------|---------|---------|------|-------|
| ZZZ | 0 | Reduced | Mixed Species | 56,68,112, 122,131,133, | 54,116,162, 171,218,229, | 3004, (1) | | | | 130 |



STOCK CHART

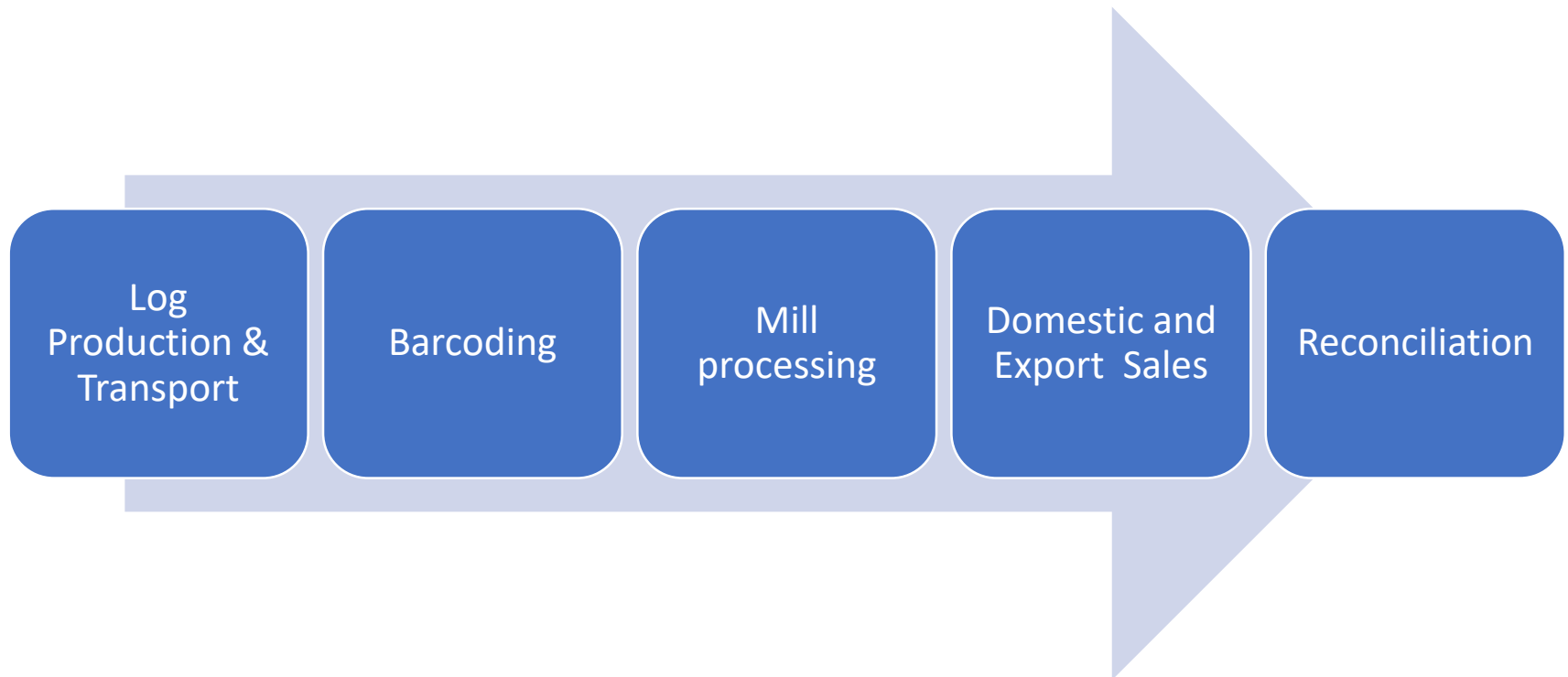
Printed: 23-Jan-16

Page: 1

| Species | Limit | Yield | Name | 30-49 | 50-69 | 70-89 | 90-109 | 110-129 | 130-149 | 150+ | Total |
|---------|-------|----------|------------|-------|-------|-------|--------|---------|---------|------|-------|
| ABL | 0 | Standard | AFRICAN | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| CED | 0 | Standard | CEDRELLA | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| CEZ | 0 | Standard | Eshoki | 0 | 137 | 118 | 7 | 0 | 0 | 0 | 262 |
| CFR | 0 | Standard | esakosua | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| EU | 0 | Standard | Eucalyptus | 0 | 4 | 3 | 2 | 5 | 0 | 0 | 14 |
| | | | | | | | | | | | 279 |
| STR | 20 | Standard | Alina | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |

Module 3

Chain of Custody



Documentation of Log Production & Transport & Processing

- Each legal source GWTS has its own set of log production and transportation documents – there are 19 separate documents in total.
- Each document records an event whereby wood products are either added into stock, moved between locations, or transformed into new products.

| Event | Document | Description |
|----------------------|----------------|---|
| Stock creation | TIF | Natural forest trees are felled and the stems measured |
| | LIF | Natural forest tree stems are cut into logs |
| | PPC | Plantation trees are felled and cut into logs |
| Stock movement | LMCC | Transfer of logs from forest to mills |
| | LTC | Transfer of logs between mills |
| | Export Permit | Transfer of processed wood from mill to export client |
| Stock transformation | Input / Output | Transformation of logs and wood products into other wood products |

Log Tracking

- In Ghana, the key activities
 - TIF - Tree Information Form
 - LIF - Log Information Form
 - LMCC – Log measurement & conveyance
 - Check point
- Manual and barcode labelling
- Paper-based and mobile data capture



< Back
Edit LMCC

Auto-Generate Reference ☒

Reference Number SUHM-147-150804-09:03

Compartment 147 ▼

Vehicle GW 7863 12

Driver Kwame Kwarteng

Destination A-LIST ENTERPRISE (GH) I ▼

Supervisor James Bond

Date 04/08/2015

Expire Date 08/05/2015

Comments

Save

Mill Processing / Sales

- The system uses “mass balance” method for traceability through mills using an Input / Output statement.
- Domestic sales are monitored on monthly reporting of total volumes.
- Export sales are monitored on a export consignment basis to ensure rigorous compliance with FLEGT.
- Export permits are electronically generated and made available to customs authorities.

Process Sheet : Enquire/Change

Identity No: AYUM-13.000001 Starts: 26/07/2013 Start Time: 01:00 End Date: 26/07/2013 End Time: 23:00

Summary
Location: AYUM Min Input Volume Logs: 88.34 Input Volume: 88.34 Efficiency: %
Seq No: 1 Input Volume Wood: 0.00 Output Volume: 49.96

Summary

| Source | Reference | Compas | Group | Contractor No | Log No | Log Suffix | Code | Volume | Date | L.M.C. |
|--------|-----------|--------|-------|---------------|--------|------------|------|--------|------------|------------|
| Forest | AYUM | 69 | | 104 | 1 | | TRI | 11.000 | 26/07/2013 | BR 0031091 |
| Forest | AYUM | 69 | | 104 | 2 | | TRI | 8.960 | 26/07/2013 | BR 0031091 |
| Forest | AYUM | 69 | | 105 | 1 | | PTM | 5.300 | 26/07/2013 | BR 0031091 |
| Forest | AYUM | 69 | | 105 | 2 | | PTM | 3.500 | 26/07/2013 | BR 0031091 |
| Forest | AYUM | 69 | | 44 | 1 | | TRI | 8.300 | 26/07/2013 | BR 0031093 |
| Forest | AYUM | 69 | | 44 | 2 | | TRI | 6.440 | 26/07/2013 | BR 0031093 |
| Forest | AYUM | 69 | | 43 | 1 | | CEZ | 3.780 | 26/07/2013 | BR 0031093 |
| Forest | AYUM | 69 | | 43 | 2 | | CEZ | 2.430 | 26/07/2013 | BR 0031093 |
| Forest | AYUM | 69 | | 45 | 1 | | TRI | 11.000 | 26/07/2013 | BR 0031093 |
| Forest | AYUM | 69 | | 45 | 2 | | TRI | 8.040 | 26/07/2013 | BR 0031093 |
| Forest | AYUM | 69 | | 151 | 1 | | TRI | 11.400 | 26/07/2013 | BR 0031094 |
| Forest | AYUM | 69 | | 151 | 2 | | TRI | 8.190 | 26/07/2013 | BR 0031094 |

Line Flags

Save Save Exit Save & Add Details Analysis Delete Exit Preview Export Print Details Lock

Export Permit : Enquire/Change

Identity No: 0004338 Date: 07 Mar 14 Contract No: JCM/4011/0F/14

Expiry/Reissue
Replaces: Expires: Reissue: Replaced By:

Details
Exporter: JCM JOHN BITAR & CO LTD EXPORTER Total Volume: 16.175
Producer: JCM John Bitar & Company Limited Invoice Volume: 16.175
Insp. Office: Total FOB Price: 12.61
Buyer: DVP OVERLACK AFRICA Currency: USD
From: Takoradi Exchange Rate: 1.0000
Destination: NHAVA SHEVA Total FOB Price (Local): 12.61
Country: India
Vessel: MSC LUCIA SHIP

FLEGT

Containers Documents Air Dried Lumber Export Levy Payments Endorsement/Final Approval

| Line No | Container No | Volume |
|---------|---------------|--------|
| 1 | Ughu 373636/5 | 16.175 |

Line Flags

Save Save Exit Save & Add Details Analysis Delete Exit Preview Export Print Details Lock

COC Through Production & Transport Docs

Stock Survey

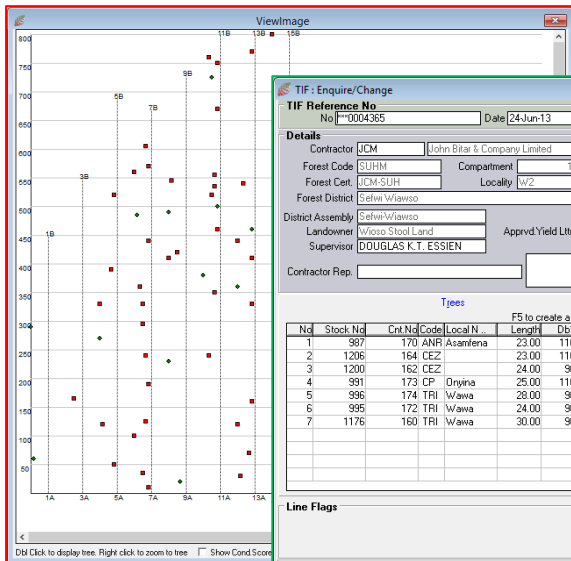
TIF – Tree
production

LIF – Log production

LMCC – Log
transport

Input / Output –
Mill processing

Sales – Domestic /
Exports



TIF: Enquire/Change

TIF Reference No: [0004365] Date: [24-Jun-13]

Details

Contractor: [JCM] [John Bita & Company Limited] Property Mark: [JCM]

Forest Code: [SUHM] Compartment: []

Forest Cert: [JCM-SUHM] Locality: [W2]

Forest District: [Sefwi Wiawso]

District Assembly: [Sefwi Wiawso]

Landowner: [Woro Stool Land]

Supervisor: [DOUGLAS K.T. ESSIEN]

Contractor Rep: []

Approved Yield Lit: []

Line Flags

| Nd | Stock No | Cnt No | Code | Local N | F5 to create a | DB |
|----|----------|--------|------|----------|----------------|-----|
| 1 | 987 | 170 | ANR | Azantena | 23.00 | 111 |
| 2 | 1206 | 164 | CEZ | | 24.00 | 90 |
| 3 | 1200 | 162 | CEZ | | 24.00 | 90 |
| 4 | 991 | 173 | CP | Oryina | 25.00 | 110 |
| 5 | 996 | 174 | TRI | Wawa | 28.00 | 90 |
| 6 | 995 | 172 | TRI | Wawa | 24.00 | 90 |
| 7 | 1176 | 160 | TRI | Wawa | 30.00 | 90 |

Save Save Exit Save & Add Details Analysis Delete

LIF: Enquire/Change

LIF Reference No: [00025596] Date: [28-Nov-13]

Details

Contractor: [JCM] [John Bita & Company Limited] Property Mark: [JCM]

Forest Code: [SUHM] Compartment: []

Forest Cert: [JCM-DBO] Locality: [W2]

Forest District: [Oda]

District Assembly: []

Company Rep: [JOSEPH AWUNI]

Line Flags

| Nd | TIFNo | Stock No | Cnt No | Log |
|----|---------|----------|--------|-----|
| 1 | 0005818 | 258 | 214 | |
| 2 | 0005818 | 258 | 214 | |
| 3 | 0005818 | 837 | 210 | |
| 4 | 0005818 | 1200 | 999 | |
| 5 | 0005818 | 1120 | 206 | |
| 6 | 0005818 | 116 | 201 | |

Save Save Exit Save & Add Details Analysis Delete

LMCC: Enquire/Change

LMCC Reference No: [0434123] Date: [03-Jan-70] Expires: []

Details

Contractor: [TAT] [TRANSPORT TIMBERS] Property Mark: [TAT]

Location: [W2] Compartment: []

Forest Cert: [T89ATWGYFR] Locality: [V3]

Forest District: [Ho]

Sign Off

Authorised FSD Officer: []

Property Mark Holder/Agent: []

Authorised TIDD Officer: []

Line Flags

| TIFNo | LIF No | Stock No | Cnt No | Log No | Code |
|---------|--------|----------|--------|--------|------|
| 233333 | 21 | 201 | 1 | MIL | Q |
| 1234467 | 31 | 200 | 1 | MIL | Q |
| 1235567 | 67 | 10 | 2 | TRI | V |

Save Save Exit Save & Add Details Analysis Delete

Input/Output Sheet: Enquire/Change

Input/Output Sheet Reference No: [JCM S-12-01SW] Starts: [1/01/2012] Start Time: [00:01] End Date: [5/03/2014] End Time: []

Summary

Location: [JCM Suhuma Mill]

Line No: [1] Sawmill Shift#: [0]

Log Barcode

| Source | Reference |
|--------|-----------|
| Forest | SUHM |
| Forest | SUHM |
| Forest | KRHI |
| Forest | SUHM |
| Forest | SUHM |
| Forest | KRHI |
| Forest | KRHI |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |
| Forest | SUHM |

Wood Product used exceeds production [44.43%

Save Save Exit Save & Add Details Analysis Delete

Inspection Certificate Export: Enquire/Change

Inspection Certificate Reference No: [0000810] Date: [16/04/2014]

Expiry/Reissue

Replaces: [] Expires: [07/05/2014]

Details

Transport Cont: [] Office: [TIDD Takor]

Location: [JCM Takoradi]

Product: [Finger Joint]

Type: [Shaped]

Container No: [TGHU 047628-9]

Seal No: []

Inspector: [SAMUEL ACKAH]

Remarks: [NO REMARK]

Product Volume Formula

Volume = (thickness * total width * length) / 1000000 [width in m]

| Source | Source Reference | Bundle No | Code | Thickness | Width |
|-----------|------------------|-----------|------|-----------|-------|
| This Mill | JCM T-14-04MO | 2 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 3 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 4 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 5 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 6 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 7 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 8 | TRI | 20.00 | 25 |
| This Mill | JCM T-14-04MO | 1 | TRI | 20.00 | 25 |

Final Inspection

Final Inspection By: [Matthew Appiah]

Container found sealed

Line Flags

COC Reconciliation

- At each stage along the supply chain, the production is reconciled with previous stages – using defined business rules.
- Flagging and reporting of individual COC anomalies
 - Unusual / missing measurements
 - Missing items on supply chain documents (gaps)
 - Comparisons of tree volumes verses log volumes
 - Comparisons of log volumes from forest to mill
 - Comparison of conversion rates in input / output statement
 - Comparison of mill production volumes against sales volumes
- General reconciliation reports
- Corrective Action Mechanism

Flagging / Warning System

TIF : File Access (No in List: 2549)

TIF : Enquire/Change

TIF Reference No [Dzat-1-151020-13:17] Date [20-Oct-15]

Details

Contractor [AG Timber Limited]

Forest Code [Dzata] Compartment [1]

Forest Cert [LASAGDZATAFR] Locality [Nkawie]

Forest District [Nkawie]

District Assembly [Atwima Mponua]

Landowner [Toase Stool Land]

Supervisor [aadjei]

Contractor Rep. []

Trees

| No | Stock No | Cnt.No | Stump Barcode | Co |
|----|----------|--------|---------------|----|
| 1 | 80 | 1 | | AB |
| 2 | 85 | 2 | | AF |
| 3 | 97 | 3 | | AB |
| 4 | 75 | 4 | | CE |
| 5 | 70 | 4 | | CA |
| 6 | 77 | 5 | | GE |
| 7 | 96 | 60 | | AL |

Process Errors

| Line | Errors |
|------|-------------------------------|
| 1 | Stock No not found in the ass |
| 2 | Stock No not found in the ass |
| 3 | Stock No not found in the ass |
| 5 | Stock No not found in the ass |
| 6 | Stock No found but species d |
| 7 | Stock No not found in the ass |

Process Flag Audit : Enquire/Change

Date [27-Sep-16] Entered By [Amgg]

Process

Date [20-Oct-15] Reference [Dzat-1-151020-13:17]

Type [TIF]

Contractor [AG Timber Limited]

Action Required

Responsible Person [M.doe]

The Dzata Chief Forest Ranger must inspect all these logs prior to transportation to the mill:

Forest: Dzata

Compartment: 1

Stock numbers: 70, 77, 80, 85, 96, 97

Corrective action...
Issued and completed

Completion

Completed ☒

Completed By [Amgg]

Completed Date [23-Nov-16]

UNcomplete

Save Save Exit Save & Add Details Analysis Delete Exit

Line Flags

Stock No found but species differs (Tree Species = CEM)

Description of issue

Manual Labelling and Barcoding

Dual Labelling

- GWTS incorporates both manual labelling and barcoding.
- Barcoding is optional

Barcode Symbology

- Product code – “S” = Stump “L” = Log
- Source code – “B09”
- 7 digit Item number.
- Check sum
- Encryption optional

Materials

- Rip-proof in a woven Polyester fabric with a matt plasticized PVC coating on both sides
- Strong, hard wearing, durable
- Low cost



GWTS – Other Functions

1. Processing of royalties and fees

- Royalty information exported to the finance system
- Export levies and commissions calculated and exported to the FC finance system

2. Customs functions

- Generation of Export Certificates and electronic declaration to Customs Department
- Processing third party Import Certificates

3. Statistics

- Generation of forestry statistics at district, provincial, and national level – aggregated by species, company, domestic sales source and export destination.

Critical Success Factors

- The GWTS is based on a comprehensive ERP which is deployed in North America, Europe, Middle East and Asia. Governance and chain of custody functions are in-built and completely integrated
- Chain of custody and governance processes configured to the specific requirements of Ghana VPA
- Experienced technical team with many years' experience in IT systems design and development, Governance, GIS, Forestry, Chain of Custody and traceability, project management, legality and certification.
- Experienced local partners who understand the local conditions and provided excellent project management
- The adoption of an interactive and consultative approach, resulting in a close and cordial working relationship between the client and the consultants.
- Adoption of a multi-stakeholder consultative approach to ensure the whole needs of the VPA are met.
- Readiness of the development team to incorporate several changes required by the client at no extra cost after User Acceptance Testing has been completed.
- Provision of intensive and comprehensive training to so the client can run the GWST independently without the assistance of the consultants and also train other FC staff.

In Summary

1. Ata Marie has been providing traceability and natural resource management systems since 1998.
2. A history of successful project implementation for both private sector and Government clients.
3. We specialize in building powerful solutions, built using proven ERP platform, and are deployed throughout the world.
4. GWTS is the most comprehensive suite of FLEGT tools available in the market.
5. Ata Marie offer to configure and deploy our systems for FLEGT projects throughout the world.