

**PUBLIC SUMMARY OF ASSESSMENT OF TERENGGANU FMU
FOR FOREST MANAGEMENT CERTIFICATION**

Date of Public Summary: December 2003

Certification Body

Malaysian Timber Certification Council (MTCC)
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Assessor

The assessment, re-assessment and verification of Terengganu FMU for forest management certification was conducted by an independent assessor registered with MTCC:

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Assessment Team

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Date of Assessment

Assessment: 30 July - 9 August 2000
Re-Assessment: 11 - 20 March 2002
Verification: 23 March & 20 - 24 April 2003

1. INTRODUCTION

To qualify for the award of the *Certificate for Forest Management* under the MTCC timber certification scheme, a forest management unit (FMU) must comply with the requirements of the *Malaysian Criteria, Indicators, Activities and Standards of Performance for Forest Management Certification [MC&I]* based on an assessment conducted by an independent assessor registered with MTCC. This Public Summary contains general information on the FMU, the assessment process and certification decision under the MTCC scheme, as well as information on the Corrective Action Request (CAR) raised during the assessment. Maintenance of the Certificate will be dependent upon the ability of the FMU to continue comply with the requirements of the *MC&I* to be verified through surveillance visits conducted once annually.

2. GENERAL INFORMATION

2.1 Name of the Forest Management Unit (FMU)

Terengganu FMU

2.2 Manager of the FMU

Tuan Hj. Zulkefli Mokhtar

2.3 Contact Address

Terengganu State Forestry Department
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2.4. Size of the FMU (Gazetted Permanent Reserved Forest)

535,929 ha

2.5 Forest Resource

About 649,130 ha or 50.1% of the total land area in the State of Terengganu is still under forest cover. Of this total, 535,929 ha were gazetted as Permanent Reserved Forest (PRF), 77,507 ha as reserves for wildlife and the remaining 33,000 ha categorized as Stateland Forest. The PRF comprises of 517,016 ha of Dry Inland Forest, 13,757 ha of Peat Swamp Forest, 1,295 ha of Mangrove Forest and 3,816 ha of forest plantation.

3. ASSESSMENT PROCESS AND CERTIFICATION DECISION

The assessment process used is as stipulated in the MTCC document entitled *Procedures in MTCC Timber Certification Scheme*.

Under the Malaysia-The Netherlands cooperation programme in timber certification, the forest management assessment of the Terengganu FMU was conducted by SGS against the *Malaysian Criteria, Indicators, Activities and Standards of Performance (MC&I) for Forest Management Certification (Forest Management Unit Level), Peninsular Malaysia (Malaysia-The Netherlands Ad-Hoc Working Group)* dated 23 December 1999 (referred to as the *MC&I*) from 30 July to 9 August 2000. The scope of the assessment was confined to the forests located in the PRF of the Terengganu FMU.

Based on the results of the forest management assessment, SGS recommended that the Terengganu FMU be eligible for an *SGS Certificate of Compliance* to the *MC&I* upon acceptance of the assessment report by the Keurhout Foundation in The Netherlands. The Assessment Report and the recommendation by SGS were subsequently forwarded to the Keurhout Foundation for its consideration and decision. However, the Keurhout Managing Board was of the view that certain aspects of forest management practices in the Terengganu FMU did not fully comply with the Keurhout requirements and hence did not award the Hallmark.

However, in order to encourage the process, the audited timber from the Terengganu FMU was allowed to enter the Dutch market as Keurhout 'declaration' timber for a period of six months from 1 October 2001 to 31 March 2002. Follow-up assessment would have to be conducted in the Terengganu FMU during the six-month period to evaluate its level of compliance to the *MC&I* and the additional aspects of forest management identified by the Keurhout Foundation in a Schedule of Conditions, for consideration of the award of the Keurhout Hallmark.

Based on SGS recommendation to issue a SGS Certificate of Compliance to the *MC&I*, the First Meeting of the MTCC Certification Committee held on 11 December 2001 approved the issuance of a *Certificate for Forest Management* bearing certificate No. **FMC 003** dated 14 December 2001 with a validity period of five years to the Terengganu FMU under the MTCC Timber Certification Scheme.

The re-assessment of the Terengganu FMU to evaluate its level of compliance to the *MC&I* and the *Keurhout Schedule of Conditions* was conducted by an assessment team comprising of three auditors from SGS on 11–13 March and 18-20 March 2002.

During the re-assessment, a total of seven Minor CARs which were issued during the previous assessment in 2000 were assessed. Five of these Minor CARs were closed-out with one Minor CAR (TER-005) remained outstanding and one Minor CAR (TER-010) raised to a Major CAR.

In addition, the auditors had also identified several aspects of forest management practices which were deemed not in full compliance to the *MC&I* and the *Keurhout Foundation Schedule of Conditions*, resulting in the issuance of seven new CARs, i.e. one Major and six Minor CARs.

The Terengganu FMU Re-assessment Report [Ref: F122_152 dated 22 August 2002] prepared by SGS, together with the Evaluation Report prepared by the MTCC management were tabled for the consideration and decision of MTCC's Certification Committee during its Third Meeting on 29 August 2002.

Based on the recommendations made by SGS as the independent assessor, and those by the MTCC management in its Evaluation Report, the Committee agreed that the Terengganu State FMU had not fully complied with the requirements of the *MC&I* and the *Keurhout Foundation Schedule of Conditions*, and therefore made a decision that the *Certificate for Forest Management* which was issued to the Terengganu FMU on 14 December 2001 be suspended until all the Major CARs raised are fully addressed by the Terengganu State Forestry Department and subsequently closed-out by the auditors. It was also agreed to allow a grace period until **1 November 2002**, as the date for suspending the Certificate.

The Terengganu State Forestry Department was requested to take the appropriate action to address the Major and Minor CARs raised and inform MTCC once action has been taken so that verification by the independent assessor to close out the Major CARs could be undertaken. In view that the corrective actions were not taken by the Terengganu State Forestry Department within the stipulated grace period, the *Certificate for Forest Management* issued to the Terengganu FMU was suspended with effect from 1 November 2002.

However, subsequent corrective actions were undertaken by the Terengganu State Forestry Department to address the Major and Minor CARs raised and the verification of these corrective actions was conducted by SGS on 21-24 April 2003.

Based on the Verification Report [Ref: F122_227 dated 15 September 2003], two Major and four Minor CARs were closed-out, three Minor CARs remained outstanding and two new Minor CARs issued. Though there were still five Minor CARs remaining, these Minor CARs do not prohibit the FMU from being recommended for certification.

Hence, the SGS recommended the lifting of the suspension of the *Certificate for Forest Management* [FMC003] imposed on the Terengganu FMU by MTCC.

Based on the verification carried out by SGS and SGS's recommendation to lift the suspension on the *Certificate for Forest Management* issued to the Terengganu FMU, the MTCC Certification Committee during its Fifth Meeting on 18 September 2003 decided that the suspension of the *Certificate for Forest Management* issued to Terengganu FMU be lifted with immediate effect, i.e. on 18 September 2003.

A summary of the CARs and their closed-out details is as shown in **Table 1**.

Table 1: Summary of Corrective Action Requests (CARs) and Closed-out Details

CAR No.	Criterion	Indicator	Status of CAR	Nature of CAR	Close-Out Details
TER-001	3: Flow of Forest Produce	3.1: Estimate of level of sustainable harvest for each main wood and non-wood forest product for each forest type	Minor	Mean Commercial Annual Increment (MCAI) for the Terengganu FMU is not formally documented.	Mean Commercial Annual Increment (MCAI) for the FMU is now adequately documented based on monitoring of sample plots in Terengganu. Minor CAR TER-001 was closed-out on 20 March 2002.
TER-002	3: Flow of Forest Produce	3.2 Quantity (volume) of wood and important non-wood forest products harvested for each forest type	Major	Lack of demonstration that annual volume removed is less than Mean Commercial Annual Increment (MCAI) stated to be based on national average.	Terengganu has demonstrated that their field measurements are reasonably accurate and that the Post-F data in 1999 consistently contained more than 32 residual trees/ha greater than 30-cm diameter of status 1 & 2. Field evaluation of the post F data obtained from Compt 61 Gunung Tebu FR conducted in year 2000 showed that records match actual data on the ground. Two methods of trial sampling conducted in Compt 36 Hulu Telemong FR also showed that the residual stands contained more than 32 trees/ha. Major CAR TER-002 was closed-out on 22 February 2001.
TER-003	3: Flow of Forest Produce	3.3: Existence and implementation of: (a) forest management plans, and (b) forest harvesting (operational) plans	Major	Field operation differed significantly from the harvest plan which lacks detail necessary to provide for implementation of reduced impact logging. The deviations	The observations made during the close out visit indicated that field operation adequately adhered to the pre-harvest plan. The new system also provides for pre-determination of skid trails prior to harvest operation. The licensee's performance is

	4: Biological Diversity	<p>3.7: Availability and implementation of guidelines for reduced/low impact logging to minimise damage to residual stand</p> <p>4.2: Existence and implementation of management guidelines to:</p> <ul style="list-style-type: none"> (a) keep undisturbed a part of each production forest, (b) protect endangered, rare and threatened species of forest flora and fauna, and (c) protect features of special biological interest, such as seed trees, nesting sites, niches and keystone species 		<p>observed were not recorded, monitored and no evidence of prior approval obtained. Failure to demonstrate that skid trails constructed are within the 300 m/ha requirement as well as determination of area loss are less than 30%.</p>	<p>monitored through preparation of progress report under the ISO 9002 system currently under trial implementation. Close out reports prepared for areas after harvest reflect actual ground condition that demonstrate skid trails are within 300 m/ha requirement and the overall area loss as defined by the Forestry Department after harvest are less than 30%.</p> <p>Major CAR TER-003 was closed-out on 22 February 2001.</p>
TER-004	4: Biological Diversity	4.1: Existence and implementation of procedures to identify endangered, rare and threatened species of forest flora and fauna	Minor	Lack of procedures and implementation to protect rare, endangered and threatened species in areas to be harvested.	<p>List of endangered and threatened fauna is available in the Protection of Wildlife Act, 1972 (Amended 1993), and pictured in wildlife posters that are posted in logging camps. Trees that are valuable for wildlife are identified during planning and protected during harvesting.</p> <p>Minor CAR TER-004 was closed-out on 20 March 2002.</p>
TER-005	4: Biological Diversity	4.3: Existence and implementation of procedures for assessing changes of biological diversity of the production forests, compared with areas in the same forest type kept free from human intervention	Minor	No evaluation on the changes of biodiversity in production forest as a result of human intervention.	<p>Evidence of trial analysis of pre-F and post-F data from Compt 374 Tembat FR. Terengganu State Forestry Department is planning to formulate projects for analyzing biodiversity changes in logged over forest.</p> <p>Minor CAR TER-005 remains</p>

					outstanding.
TER-006	5: Soil and Water	5.3: Percentage of length of edges of watercourses, waterbodies, mangroves and other wetlands protected by adequate buffer strips	Minor	Inconsistencies of mapping, demarcation and protection of buffer strips along river.	Professional surveyors/engineers were employed for preparation of pre-harvest plan resulting in adequate mapping of proposed infrastructures and bufferstrips on the pre-harvest plan. Bufferzones in areas visited were observed to be adequately protected and not violated. Minor CAR TER-006 was closed-out on 20 March 2002.
TER-007	5: Soil and Water	5.5: Availability and implementation of guidelines for forest road layout, including drainage requirements and conservation of buffer strips along streams and rivers 5.6: Availability and implementation of harvesting procedures: (a) to protect the soil from compaction by harvesting machinery, and (b) to protect the soil from erosion during harvesting operations	Major	Inadequate compliance to road specification for the construction of feeder and skid trails.	Terengganu State Forestry Department has demonstrated the implementation of a monitoring system to verify compliance to the road guidelines by Licensees and have suspended their operations when non-compliance is identified. In addition, all feeder roads and skid trails are pre-determined and approved prior to construction. Evidence of skid trails now being constructed without blading in accordance with the road guidelines was demonstrated in L1009/2000. Major CAR TER-007 was closed-out on 22 February 2001.
TER-008	3: Flow of Forest Produce	3.1: Estimate of level of sustainable harvest for each main wood and non-wood forest product for each forest type	Minor	Current procedures lack a monitoring system to ensure that 32 trees/ha greater than 30-cm diameter will be maintained through the harvesting operation and to allow remedial action prior to completion of harvesting, if necessary.	Sampling method is conducted at logging block during the harvesting operation which allows determination on the availability of residual trees prior to completion of harvest. Results of sampling done in 6 logging blocks showed that there were consistently more than 32 sound residual trees per hectare in each block.

					Minor CAR TER-008 was closed-out on 27 April 2002.
TER-009	3: Flow of Forest Produce	3.3: Existence and implementation of: (a) forest management plans, and (b) forest harvesting (operational) plans	Minor	The current system lacks formal procedures to pre-determine the skid trails as part of pre-harvest planning to reduce impact of logging.	Procedures to pre-determine skid trails are contained in the revised road specification and draft RIL guideline. Pre-harvest plans in Terengganu now include pre-determine skid trails. Minor CAR TER-009 was closed-out on 27 April 2002.
TER-010	5: Soil and Water	5.5: Availability and implementation of guidelines for forest road layout, including drainage requirements and conservation of buffer strips along streams and rivers 5.6: Availability and implementation of harvesting procedures: (a) to protect the soil from compaction by harvesting machinery, and (b) to protect the soil from erosion during harvesting operations	Minor	The current system lacks a formal commitment not to blade skid trails through out the FMU and a formal system to verify compliance with road guidelines in respect to earth works to reduce the impact of logging.	Minor CAR TER-010 was raised to Major CAR TER-016.
TER-011	3: Flow of Forest Produce	3.1: Estimate of level of sustainable harvest for each main wood and non-wood forest product for each forest type	Minor	Inconsistency in planning to limit timber extraction rate from regulated forests to 61 m ³ /ha.	Terengganu State Forestry Department has set up a new policy to limit extraction rate from regulated forest to 61 m ³ /ha which was included as an additional item in the logging license. Minor CAR TER-011 was closed-out on 24 April 2003.

TER-012	3: Flow of Forest Produce	3.1: Estimate of level of sustainable harvest for each main wood and non-wood forest product for each forest type	Major	Non-reliability of post-F data to demonstrate availability of 32 sound trees per hectare as part of compliance to sustainability requirement.	Post-F conducted in year 2002 consistently showed availability of residual trees of more than 32 trees/ha. Field verification of raw data obtained from 2 post-F areas were found to be reliable. Major CAR TER-012 was closed-out on 24 April 2003.
TER-013	3: Flow of Forest Produce	3.3: Existence and implementation of: (a) forest management plans, and (b) forest harvesting (operational) plans	Minor	Inconsistent pre-determination of skid trails on the ground prior to harvest.	Pre-harvest plans contain predetermined feeder road, skid trails and location of logyard. Construction of skid trails on the ground however was not consistent with the plan. Skid trails were mapped as they were being built. Inconsistent pegging of skid trail alignment on the ground. Minor CAR TER-013 remains outstanding.
TER-014	3: Flow of Forest Produce	3.3: Existence and implementation of: (a) forest management plans, and (b) forest harvesting (operational) plans	Minor	Inconsistent field implementation of pre-harvest planning and variation is inadequately recorded.	Map prepared for monthly monitoring and closed out reports were found to be not adequately reflective of actual practice on the ground particularly on skid trails constructed. Based on documentation, deviations made were approved by the Engineer and DFO, however no real evidence that they were pre-approved (e.g. in Compt 25, Cherul FR). Minor CAR TER-014 remains outstanding.
TER-015	3: Flow of Forest Produce	3.3: Existence and implementation of: (a) forest management plans, and (b) forest harvesting (operational) plans	Minor	Lack of measurement of slope and width of feeder roads and skid trails constructed after harvest to allow adequate calculation of area loss and demonstration of overall compliance to the road specification.	Monitoring and closed-out reports contained measurements of infrastructures constructed as well as calculation of area loss which was consistently below 30%. Minor CAR TER-015 was closed-out on 24 April 2003.

TER-016	5: Soil and Water	<p>5.5: Availability and implementation of guidelines for forest road layout, including drainage requirements and conservation of buffer strips along streams and rivers</p> <p>5.6: Availability and implementation of harvesting procedures: (a) to protect the soil from compaction by harvesting machinery, and (b) to protect the soil from erosion during harvesting operations</p>	Major (Upgraded from Minor CAR TER-010)	Inadequate compliance with road specification for the construction of feeder road and skid trails.	<p>‘L’ line alignment was surveyed and mapped by registered surveyor prior to approval by the engineer. Proper equipment such as excavator, back hoe etc were used in road construction and maintenance. Side drains and silt traps were evident.</p> <p>Major CAR TER-016 was closed-out on 24 April 2003.</p>
TER-017	3: Flow of Forest Produce	3.7: Availability and implementation of guidelines for reduced/low impact logging to minimise damage to residual stand	Minor	Lack of formalised RIL guidelines for effective implementation throughout the FMU.	<p>RIL guidelines have been formalised and its elements are adequately implemented throughout FMU. Modified excavators were used in at least two areas in Terengganu FMU.</p> <p>Minor CAR TER-017 was closed-out on 24 April 2003.</p>
TER-018	1: Enabling Conditions for Sustainable Forest Management	1.2: Degree of public participation in forest management, such as in planning, decision making, data collection, monitoring and assessment	Minor	Inadequate level of consultation with relevant NGOs to allow effective and acceptable decision making process during planning and implementation of forest management system.	<p>Evidence of dialogue and communication with local communities and NGOs in Terengganu through forum such as Client Day etc.</p> <p>Minor CAR TER-018 was closed-out on 24 April 2003.</p>
TER-019	5: Soil and Water	<p>5.5: Availability and implementation of guidelines for forest road layout, including drainage requirements and conservation of buffer strips along streams and rivers</p> <p>5.6: Availability and implementation</p>	Minor	Inconsistency in construction of cross-drains along feeder road to channel surfaces runoffs and maintains road stability.	<p>Inconsistency in construction of cross-drains along feeder road to channel surface runoffs and maintain road stability.</p> <p>New Minor CAR raised during Verification.</p>

		<p>of harvesting procedures:</p> <p>(a) to protect the soil from compaction by harvesting machinery, and</p> <p>(b) to protect the soil from erosion during harvesting operations</p>			
TER-020	3: Flow of Forest Produce	3.7: Availability and implementation of guidelines for reduced/low impact logging to minimise damage to residual stand	Minor	Inconsistency in construction of water bars on skid trails as part of measures to mitigate soil erosion after harvest.	<p>Inconsistency in construction of water bars on skid trails as part of measures to mitigate soil erosion after harvest.</p> <p>New Minor CAR raised during Verification.</p>