

**PUBLIC CERTIFICATION SUMMARY OF
KEDAH STATE FOREST MANAGEMENT UNIT**

Certificate No : FMC 003
Date of Certification : 9 June 2010
Date of Public Summary : 30 June 2010

Certification Body:

SIRIM QAS International Sdn Bhd
Block 4, SIRIM Complex
1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
40911 Shah Alam
Selangor, MALAYSIA

Tel : +60 3 5544 6400
+60 3 5544 6448
Fax : +60 3 5544 6763
E-Mail : radziah_mohd.daud@sirim.my

Definitions of Terms Used in the Summary

Term	Definition
Criterion (plural Criteria)	A means of judging whether or not a Principle (of forest stewardship) has been fulfilled.
Encroachment	The act or action of using forest land contrary to the provisions provided for in forestry laws and regulations with regard to forest land uses.
Exotic species	An introduced species not native or endemic to the area in question.
Forest Management Area	A forest management area refers to the clearly defined area which is under direct management of the company undertaking forest management assessment for the purpose of timber certification.
FMU	Forest Management Unit – a clearly defined forest area, managed to a set of explicit objectives and according to a long-term management plan.
HCVFs	<p>High Conservation Value Forests are those that possess one or more of the following attributes:</p> <ul style="list-style-type: none"> • forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance. • forest areas that are in or contain rare, threatened or endangered ecosystems • forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control) • forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health) and/or critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities)
<i>MC&I (2002)</i>	<i>Malaysian Criteria and Indicators for Forest Management Certification (2002)</i> is the standard used for auditing forest management practices at the forest management unit (FMU) level for the purpose of certification.
Indicator	A qualitative, quantitative or descriptive attribute that, when periodically measured or monitored, indicates the direction of change.
Verifier	Data or information that enhances the specificity or the ease of assessment of an indicator. Verifiers provide specific details that would indicate or reflect a desired condition of an indicator. They add meaning, precision and usually also site-specificity to an indicator. They may define the limits of a hypothetical zone from which recovery can still safely take place (performance threshold/target). On the other hand, they may also be defined as procedures needed to determine satisfaction of the conditions postulated in the indicator concerned (means of verification).
MTCS	Malaysian Timber Certification Scheme operated by the Malaysian Timber Certification Council.

Natural Forest	Forest areas where many of the principal characteristics and key elements of native ecosystem such as complexity, structure and diversity are present, as defined by FSC approved national and regional standards of forest management.
Non-Conformity Report (NCR)	Non compliance against the requirements of the <i>MC&I</i> (2002)
Opportunity for Improvement (OFI)	A finding which gives cause for concern, but without sufficient objective audit evidence to support a non-conformity.
Principle	An essential rule or element; in FSC's case, of forest stewardship.
Stakeholders	Individuals and organizations with a legitimate interest in the goods and services provided by an FMU; and those with an interest in the environmental and social effects of an FMU's activities, products and services. They include: those individuals and organisations which exercise statutory environmental control over the FMU; local people; employees; investors and insurers; customers and consumers; environmental interest and consumer groups and the general public. (Source: FSC Principles and Criteria).

1. INTRODUCTION

SIRIM QAS International Sdn Bhd (SIRIM QAS International) is the largest and oldest certification, inspection and testing body in Malaysia. The certification services provided conform to standards and other accreditation requirements established at the national and international levels.

SIRIM QAS International has been providing auditing services for forest management certification since 2001 through its involvement as a registered certification body under the Malaysian Timber Certification Scheme (MTCS) operated by the Malaysian Timber Certification Council (MTCC).

With effect from 1 July 2008, under the new institutional arrangement of the MTCS, SIRIM QAS International is one of the few notified certification bodies with the MTCC allowed to process application, conduct audit and make decision to award the Certificate for Forest Management to an applicant whose forest management system and practices complies with the *Malaysian Criteria and Indicators for Forest Management Certification* [MC&I (2002)].

This public certification summary contains general information on the Kedah State Forest Management Unit (Kedah State FMU), the audit process involved, the findings of the audit, non-conformity reports (NCRs) raised as well as the decision on certification of the FMU under the MTCS by the Certification Panel of SIRIM QAS International.

2. GENERAL SUMMARY

2.1 Name of FMU

Kedah State FMU

2.2 Contact Person and Address

Mr. Mohd. Rahim bin Ramli
Assistant Director of Forestry (Operations)
Level 8, Bangunan Sultan Abdul Halim
Jalan Sultan Badlishah
05000 Alor Setar
KEDAH
Tel : 04-733 3844
04-733 3901
Fax : 04-731 0610
E-mail : rahim@kedforestry.gov.my

2.3 General Background on the Kedah State FMU

The Kedah State FMU is managed by the Kedah State Forestry Department (KSFD). The FMU comprises of 307,046 hectares (ha) of Permanent Reserved Forest (PRF) of the state's total land area of 942,600 ha. The PRF comprises mainly inland *Dipterocarp* forests covering an area of 300,845 ha while the remaining 6,201 ha consist of mangrove forests. Another 35,567 ha is being proposed for gazettelement as PRF. The administration of the FMU is divided into three forest districts namely the North, Central and South Kedah Forest Districts. A map of the FMU showing the significant features of the forest is attached in **Annex 1**.

The FMU as specified under the National Forestry Act 1984 had been divided into 11 classes of forest uses as shown below:

Forest Classification	Area (ha)*
1. Production forest	184,831.50
2. Water catchment	121,904
3. Soil protection	23,291
4. Soil Reclamation	-
5. Flood control	-
6. Wildlife	-
7. Virgin Jungle Reserves	3,675.6
8. Recreational forest	2,274
9. Research forest	3,638
10. Educational forest	2,998.9
11. For federal government purposes	-

Note: *Some of the forest classes are also found in other classes

2.4 **Date First Certified**

9 June 2010

2.5 **Location of the Certified FMU (Latitude and Longitude)**

The FMU is located at 05' 05" N to 6 D 33' 44" N and 11' 01" E to 101D 07' 24" E

2.6 **Forest and Management System**

The FMU is managed under on a sustainable basis under a Selective Management System (SMS) on a 30-year rotation period. A Forest Management Plan covering the period from 2006 to 2015 had been prepared and presented during the audit.

2.7 **Annual Allowable Cut/ Annual Harvest Under the Forest Management Plan**

Under the Forest Management Plan (2006-2015), the annual allowable cut for the FMU is set at 2,340 ha. In 2008, a total of 756.96 ha of the PRF were harvested. For the period of from 2000 to 2006, the area of the PRF that was harvested amounted to only 8,995.3 ha.

2.8 **Environmental and Socioeconomic Context**

In terms of socio-economic contribution, the forest and wood-based industries in 2008 provided employment for about 3,500 people in the State. The total amount of income in the form of royalty, premium and cess collected from the logging industry amounted to RM34.07 million. Apart from being a major source of logs for the wood-based industry, the forests also provide areas for recreation and eco-tourism in the State.

The wood-based industry is the main user of forest resources in the State. The industry comprises the sawmilling, plywood and veneer, furniture, mouldings, parquet and rattan and

bamboo subsectors. The industry's focus in recent years has been on the production of higher value-added products to enhance this sector's economic contribution to the State.

3. THE CERTIFICATION AUDIT PROCESS

3.1 Audit Dates:

Stage 1 : 16 – 18 October 2009 (3 man-days)
(1 Auditor)

Stage 2 : 17 - 22 November 2009 (18 man-days)
(3 Auditors)

3.2 Audit Team

Stage 1 : Dr. Yap Son Kheong
Mr. Khairul Najwan Ahmad Jahari (Trainee Auditor)

Stage 2 : Dr. Yap Son Kheong (Audit Team Leader)
Mr Samsudin Musa (Auditor)
Dr. Lim Hin Fui (Sociologist)
Mr. Ismail Ibrahim (Trainee Auditor)
Mr. Khairul Najwan Ahmad Jahari (Trainee Auditor)

Peer Reviewers:

- (i) Prof. Dato' Dr Wan Razali Wan Ahmad (Universiti Putra Malaysia)
- (ii) Dr. Ismail Harun (Forest Research Institute Malaysia)

3.3 Standards Used

Malaysian Criteria and Indicators for Forest Management Certification [MC&I (2002)] using the verifiers stipulated for Peninsular Malaysia.

3.4 Audit Process

The scope of the audit is limited to the forest management system and practices of the natural forest within the Kedah State FMU. The audit involved the verification of documentations and field activities and consultations with the relevant stakeholders.

The stakeholder consultation was conducted in October 2009 for a period of one month. Comments by stakeholders and responses from the audit team are attached in **Annex 2**. The coverage of the audit on the FMU is depicted in the Stage 2 Audit Plan which is attached in **Annex 3**.

The audit was conducted against the requirements of the *MC&I (2002)*, the standard used for forest management certification under the MTCS, using the verifiers stipulated for Peninsular Malaysia.

Following the audit, a total of seven (7) minor NCRs and seven (7) OFIs had been raised. The details of the NCRs and OFIs are attached in **Annex 4**. The KSFD had submitted corrective action plans on the NCRs, through a letter dated 28 January 2010 which was accepted by the audit team leader.

A draft Stage 2 Audit Report was prepared by the audit team leader. The draft Audit Report was then sent to the Client for comment and then submitted to two (2) peer reviewers for independent

reviewing. Both peer reviewers had commented on the draft Stage 2 Audit Report and the audit team had responded to the comments made.

A final audit report dated 12 May 2010 was tabled to the Certification Panel (CP) Meeting on 9 June 2010 for a certification decision.

4. **RESULTS, CONCLUSIONS AND RECOMMENDATIONS**

4.1 General findings of audit are as follows:

PRINCIPLE	STRENGTHS	WEAKNESSES
<p><u>Principle 1</u></p> <p>Compliance with laws and FSC Principles.</p>	<ul style="list-style-type: none"> • <i>Copies of all the relevant laws and regulations related to forest management were kept and they were made accessible to all staff at the headquarters as well as the district offices of the KSFD.</i> • <i>Officers of the KSFD at the rank of District Forest Officers and above had demonstrated an understanding of the national and local laws and regulatory framework.</i> • <i>Record on incidences of violations of local and national laws and regulations and action taken to address them for the years 2008 and 2009 were made available.</i> • <i>KSFD has listed all applicable and legally prescribed fees, royalty, taxes and other charges.</i> • <i>Original copies of receipts of all payments made by logging contractors to the KSFD were being kept.</i> • <i>Officers of the KSFD were aware of all binding international agreements which Malaysia is a signatory. Copies of these agreements were made available at the KSFD's headquarters.</i> 	<ul style="list-style-type: none"> • <i>The incidence of encroachment in the FMU was high as has been highlighted in the Auditor General Report 2008. In addition to the action being taken by the KSFD, greater efforts would be needed to monitor and control encroachment in the FMU. Annual monitoring could be enhanced by utilizing a GIS System to monitor boundaries and potential encroachment.</i>

	<ul style="list-style-type: none"> • <i>There were no documented conflicts between the FSC Principles and Criteria with the local laws.</i> • <i>A list of gazettelement for the establishment of the PRF was made available.</i> • <i>Cases of encroachment were well documented. Follow-up actions had been taken, police reports been lodged and more regular monitoring had been conducted.</i> • <i>KSFD has a clear policy statement of commitment to manage the forest resources on a sustainable basis as indicated in its mission and vision statements in the Forest Management Plan (2006-2015) which were intended to comply with the practice of good forest management consistent with the FSC Principles & Criteria.</i> • <i>Policies or statements of commitment to manage the forest resources have been communicated throughout the KSFD and the contractors.</i> 	
<p><u>Principle 2</u></p> <p>Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.</p>	<ul style="list-style-type: none"> • <i>All the forests in the state have been gazetted as PRFs under the National Forestry Act 1984 and their legal status was therefore protected.</i> • <i>The tenure and use rights to the PRFs were spelt out in the concession agreements, forest harvesting licenses, entry permits, road permits and use permits issued by the KSFD.</i> • <i>The forestry officers were willing to</i> 	<p><i>None noted.</i></p>

	<p><i>collaborate with holders of duly recognized legal and customary tenure on use rights within the national legal frameworks.</i></p> <ul style="list-style-type: none"> • <i>There were mechanisms in place for resolving disputes at the various levels.</i> 	
<p><u>Principle 3</u></p> <p>The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.</p>	<ul style="list-style-type: none"> • <i>The customary rights of the Orang Asli within the PRFs were respected in forest management planning and implementation even though these rights have not been formally recognised.</i> • <i>The forest management practices of the KSFD have not threatened or diminished either directly or indirectly the resources or tenure rights of the Orang Asli over their reserves as they are not within the PRFs of the FMU.</i> • <i>There were appropriate procedures for identifying and protecting sites of special cultural, ecological, economic or religious significance to the Orang Asli.</i> • <i>Formal and informal consultations were held between the KSFD and the local communities from time to time to resolve land use conflicts.</i> 	<ul style="list-style-type: none"> • <i>As there was no commercial utilization of traditional forest-related knowledge and practices of Orang Asli within the FMU, there had not been any legislation ensuring compensation for their commercial utilization.</i>
<p><u>Principle 4</u></p> <p>Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.</p>	<ul style="list-style-type: none"> • <i>Whenever possible, the forestry officers of the KSFD had supported training or retraining opportunities to the local communities to increase their opportunities for employment in the forestry industry.</i> 	<ul style="list-style-type: none"> • <i>It was observed that training could be further enhanced by having additional programmes for the contract forest workers on Reduced Impact Logging (RIL) system. Annual training courses could be prepared.</i> • <i>Health and safety records of workers had not</i>

	<ul style="list-style-type: none"> • <i>In terms of social programme, the harvesting contractors had contributed to the development of local communities in Kg. Ulu Tawar/Padang Belon by supplying sawn timber and construction of a wooden bridge.</i> • <i>Qualified local villagers had been employed as forest workers. Records of local Malay employment in forest harvesting activities were documented in the 'Borang Hutan 11/86: Kaedah-Kaedah Hutan 1986 Borang K Sub-Lesen Di Bawah Lesen/Lesen Kecil/Permit Penggunaan' kept at the district forest offices.</i> • <i>Information on health and safety was observed to have been disseminated to workers as observed at the Department's offices, workers' quarters or work place and nurseries.</i> • <i>The KSFD had established a management policy on the safety and health of its workers as outlined in the 'Dasar Keselamatan dan Kesihatan Pekerjaan Jabatan Perhutanan Negeri Kedah'. During the audit, it was observed that this policy was on display at the state, district and ranger offices,</i> • <i>The KSFD had established a Safety and Health Committee.</i> • <i>Logging contractors have been instructed by the KSFD to maintain safety and health records of their employees.</i> • <i>There were guidelines for storage and handling of hazardous materials and the requirement for putting up a signage</i> 	<p><i>been comprehensively maintained. The existing form being used only recorded the attendance of the workers. The existing form on the safety records could be improved with the maintenance of a monthly record on occurrences or absence of accident.</i></p> <ul style="list-style-type: none"> • <i>Information to be captured on the social impact assessments was inadequate. The completed survey forms used did not contain information on population, economic activities, dependency on non-timber forest produce and services.</i>
--	--	---

	<p><i>demarcating hazardous sites.</i></p> <ul style="list-style-type: none"> • <i>Collective bargaining for the employees of the KSFD was made through the union of government employees, CUEPACS. The employees of the contractors did not have union but their welfare was protected under the Employment Act 1955.</i> • <i>The contract workers of the harvesting contractors were covered by the Employment Act and their grievances were addressed to the employers.</i> • <i>The KSFD has conducted a social impact assessment before commencing forest harvesting operations.</i> • <i>The KSFD had incorporated the findings of the social impact study in the planning and management of the State FMU.</i> • <i>There were provisions within national legal frameworks to prevent loss or damage affecting the local people as provided for in Articles 8 and 13 of the Federal Constitution of Malaysia.</i> • <i>There was no evidence to indicate that the local people's legal and customary rights, property, resources or livelihoods had been threatened.</i> • <i>Appropriate compensations would be made by logging contractors to local communities when their properties suffered damages or losses during forestry activities.</i> 	
<p>Principle 5</p> <p>Forest management</p>	<ul style="list-style-type: none"> • <i>Records of investment and reinvestment</i> 	<ul style="list-style-type: none"> • <i>In Compartment 52, Pedu FR, it had been</i>

<p>operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.</p>	<p><i>made in forest management were available in the 5-year Forest Development Budget, Annual Operating Budget and Development Budget.</i></p> <ul style="list-style-type: none"> • <i>The Forest Management Plan (FMP) (2006-2015) for the FMU had been implemented. The annual coupe for the FMU had been approved based on the recommendation of the National Forestry Council amounting to 2,460 ha a year.</i> • <i>Records of pre-felling and post-felling inventories as well as enrichment planting were available.</i> • <i>Skid trails and log landings were replanted once logging activities had been completed.</i> • <i>Guidelines on Reduced Impact Logging (RIL) were made available and being implemented in the active logging sites.</i> • <i>Sufficient regeneration was observed and mother trees were tagged and marked for protection.</i> • <i>The forest had been managed based on the prescriptions of the Selective Management System (SMS) where trees above a prescribed cutting limit were selected for felling while ensuring sufficient advanced regeneration are left in the residual stand to make for future crop in the next 30 years. Felling of trees had followed the RIL principles thus minimizing disturbance.</i> • <i>Efforts had been taken by the KSFD on promoting the production of higher value-added products to enhance the forest</i> 	<p><i>observed that some trees had two tags with different serial numbers on them. The auditors were informed that some of the trees had been tagged earlier but the field staff had forgotten to remove the old tags.</i></p> <ul style="list-style-type: none"> • <i>During the inspection of Compartment 5, Sg. Badak FR and Compartment 52 of the Pedu FR in North Kedah Forest District, 10 trees that were not tagged were found to have been felled and removed. Two of these trees in the Pedu FR were located within the riparian buffers. There were also four other logs that were found to have been left behind in the temporary log yard (Matau 4) in the Pedu FR without tags.</i>
--	---	--

	<p><i>sector's economic contribution to the State. This was reflected in the diverse sub-sectors of the industries such as sawmilling, plywood and veneer, furniture, mouldings, parquet and rattan and bamboo.</i></p> <ul style="list-style-type: none"> • <i>The 'Guidelines of Reduced Impact Logging in Peninsular Malaysia 2003' was available in all districts and forest managers had been aware of the requirements of the guidelines.</i> • <i>The KSFD had imposed fines on the subcontractors for trees that were felled but not extracted.</i> • <i>Directional felling was being implemented and only good quality trees were tagged for felling to prevent wastage.</i> • <i>Legal provisions were provided for collecting non-timber forest products.</i> • <i>Procedures had been established for the identification and demarcation of sensitive areas for the protection of soil and water resources. All areas 1,000 meter above the sea level or with slopes of more than 40 degrees have been excluded from logging. Such areas had been demarcated on maps as protection forests.</i> • <i>Riparian buffers had also been demarcated on harvesting plans and marked on the ground for protection.</i> • <i>The management of the FMU was guided by a FMP (2006 –2015). The Plan contains all the necessary elements to promote and enhance the value of forest services and resources. The FMP also has management</i> 	
--	--	--

	<p><i>prescriptions on maintenance of forest services. Silvicultural treatments were being conducted in harvested areas to enhance productivity.</i></p> <ul style="list-style-type: none"> • <i>The FMP also has management prescriptions on maintenance of forest services. Forest harvesting has only been conducted in production forests based on the Selective Management System (SMS). Forest harvesting was controlled based on the annual allowable cut determined for the FMU amounting to 2,340 ha annually.</i> • <i>Post-felling inventories had been conducted to ascertain silvicultural treatment</i> • <i>The FMU had also imposed a cutting limit, with a lower regime for Non-Dipterocarps and required that the proportion of Dipterocarps and Non-Dipterocarp be maintained after harvesting.</i> • <i>Tree tagging operations had been carried out in all harvesting blocks.</i> • <i>The FMP had specified that the sustainable annual allowable cut (AAC) within the FMU to be 2,340 ha a year or a total of 11,700 ha for the duration of the Ninth Malaysia Plan and the FMP. The FMU has currently adopted the guideline from the Forestry Department Peninsular Malaysia Headquarters that all extractions should not exceed 61 m³/ha from regulated forests and 85 m³/ha from virgin forest. This is the national average being adopted for all FMUs in Peninsular Malaysia, calculated based on growth and yield plots.</i> • <i>Records on the quantity of timber harvested</i> 	
--	--	--

	<p>were available and were being collected through shuttle returns sent periodically from all the districts to the State Department's head office in Alor Setar and subsequently to the Forestry Department Peninsular Malaysia Headquarters in Kuala Lumpur.</p>	
<p>Principle 6</p> <p>Forest management shall conserve biological diversity and its associated values, water resources, soils and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest</p>	<ul style="list-style-type: none"> • A report 'Macro Environmental Impact Assessment (MEIA) of Proposed Forest Operations in Kedah' was completed in 2009 and made available during the audit. • A listing of endemic and rare flora species had been included in the FMP. A list of protected fauna is also available. • Potential impacts of logging activities on the biodiversity had been included in the Macro EIA report. • The KSFD had followed the established procedures for protection of biological diversity especially rare, threatened and endangered species as stipulated by the Guidelines in the Forest Manual 2003. • The KSFD had also identified 32 species of fruit trees that would be protected in all production forests as food sources of animals. • The KSFD had adhered to the 'Guidelines for Reduced Impact Logging in Peninsular Malaysia' on the establishment of conservation and protection areas within the FMU. • The FMU had cooperated with other 	<ul style="list-style-type: none"> • Efforts made by the KSFD to consult and cooperate with PERHILITAN to identify and protect wildlife as well their nesting and feeding areas within the FMU had been inadequate. The auditors had been informed that the relevant data on wildlife in the state was available at PERHILITAN and could be provided for to the KSFD. • Earthworks were found to be excessive during road construction and maintenance mainly due to repeated blading. Along steep areas of the roads, there were insufficient sumps and cross drains constructed to control erosion. • Excess soil was also pushed to the sides without being compacted and some log culverts were not properly constructed and maintained. • The implementation of guidelines for forest road lay-out and construction, including log landings and drainage requirements had been inadequate and had not fully adhered to the harvesting plan or 'Rancangan Pengusahaan Hutan (RPH). • The construction of skid trails did not adhere to that specified on the harvesting plans. It was also observed that one log landing

	<p>government agencies especially the Department of Wildlife and National Park Peninsular Malaysia (PERHILITAN), Department of Aboriginal Affairs Malaysia (JHEOA), Department of Occupational Safety and Health (DOSH) and Forest Research Institute Malaysia (FRIM) as well as local universities in the implementation of conservation and management activities.</p> <ul style="list-style-type: none"> • Hunting and other collecting activities were prohibited within the FMU as only authorized people with permits were allowed to enter the PRFs. Sign boards indicating forest reserves had been erected at boundaries of the PRFs. • Post-felling inventories to assess regeneration of residual trees 2 to 5 years after completion of harvesting were carried out. • Where necessary, enrichment planting was implemented to supplement natural regeneration. • Management procedures were in place and being implemented to conserve species diversity. Cutting limits for the removal of trees were determined based on an assessment of the growing stock thus ensuring that a sufficient advanced regeneration remains in the residual stand and that the proportion of species mix was being maintained. • Fruit trees were protected to provide food sources to fauna and riparian buffers being protected to maintain water quality. • Harvesting is selectively carried on marked 	<p>(matau) in Compartment 52 of the Pedu FR and another in Compartment 55B of the Rimba Teloi FR had not been marked on the plan.</p> <ul style="list-style-type: none"> • Inspections of active logging sites in Compartment 5, Sg. Badak FR, Compartment 52, Pedu FR and Compartment 31, Ulu Muda FR indicated that the implementation of buffer strips conservation along streams and rivers had not been adequate. • It was observed that riparian buffers had been damaged by fallen trees. Untagged trees from the buffer zones in the Sg Badak and Pedu FRs had been removed while tagged trees had been felled into the riparian buffers in the Ulu Muda FR. Excess soil from road construction had also been pushed into the riparian buffers in the Pedu FR. • two tanks of diesel fuel were kept without containment in the Ulu Muda FR. Fuel and oil storage had to be stored in a storage area which was contained to avoid spillage in accordance to the Environmental Quality Act.
--	---	--

	<p><i>trees above specified diameter while retaining sufficient residual vegetation in the forest. The system of limiting harvesting to a block of a limited size further assisted in preventing fragmentation of the forest thus allowing animals to move to adjacent unlogged forest sequentially and able to return when logging has been completed.</i></p> <ul style="list-style-type: none"> • <i>Connectivity among forest vegetation was achieved mainly through proper planning of the harvesting sequence.</i> • <i>VJRs were established to ensure that representative areas of existing forest ecosystems could be protected in their natural states for the conservation of part of the ecosystem diversity. A total of 3,676 ha of VJRs had been established in the FMU.</i> • <i>The KSFD has adopted the 'Guidelines for Reduced Impact Logging in Peninsular Malaysia' and 'Forest Road Specifications (Feeder Road and Skid Trails) for Peninsular Malaysia 1999' to reduce soil compaction and erosion during harvesting.</i> • <i>The intensity of feeder roads and skid trails were found to be within the specified limit.</i> • <i>The use of approved chemicals by forest workers had been controlled and followed accepted procedures.</i> • <i>There was a policy on recycling.</i> • <i>Containers, liquid and solid non-organic wastes including fuel and oil were being disposed of in an environmentally appropriate and legal manner.</i> 	
--	---	--

	<ul style="list-style-type: none"> • <i>There was no application of biological control agents in the FMU.</i> • <i>No exotic species were introduced in any silvicultural treatment. The guidelines for enrichment planting did not encourage the planting of exotic species. Only a small number of exotic species was tested in experimental plots.</i> • <i>Only a limited area of the FMU had been allocated for plantation. The total area allocated for plantation was 2,950 ha. A total of 617 ha had been planted with rubber clones.</i> • <i>Conversion of PRFs to non-forest areas had been occurring since 2005 and was in accordance to the legal provisions. However, an additional 35,567 ha had been proposed to be gazetted as PRF.</i> • <i>There was no indication to show that a trend of more areas within the FMU being converted to forest plantations.</i> 	
<p><u>Principle 7</u></p> <p>A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated</p>	<ul style="list-style-type: none"> • <i>The FMP (2006-2015) had incorporated all the items listed from a) to i) in Criterion 7.1.</i> • <i>The need for revision has been specified in the FMP itself. The revision would incorporate changes in policy and socio-economic as well as environmental conditions and recalculated AAC based on the current status of the growing stock. All data obtained from monitoring and research activities within the FMU would be</i> 	<ul style="list-style-type: none"> • <i>Information on pre-felling and post-felling inventories was made available but there was no comparison being made between pre-felling and post-felling inventory data or environmental monitoring to assess the extent of ecological changes on the residual stand.</i>

	<p><i>incorporated in the revision of the FMP.</i></p> <ul style="list-style-type: none"> • <i>Records of pertinent new scientific and technical information from scientific expeditions were maintained. Incorporation of this new scientific information based on research results and findings would be made through mechanisms established within the KSFD.</i> • <i>The KSFD has its own training facility in Jeniang. All staff training was conducted in this training facility.</i> • <i>A summary of the major elements of the FMP (2006-2015) was included in the public summary which was made available in the web page of the KSFD at kedforestry.gov.my for public information.</i> 	
<p><u>Principle 8</u></p> <p>Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts</p>	<ul style="list-style-type: none"> • <i>The Director General’s Directive on the use of monitoring forms A-D was strictly adhered to.</i> • <i>There were procedures to monitor ecological, environmental and economic impacts through the use of monitoring forms A (Infrastructure), B (Forest Harvesting), C (Environment and Protection) and D (Timber Output) as specified under the Director General’s circulars have been prepared to monitor these elements in the FMU.</i> • <i>Growth plots had been established in the FMU and were enumerated on a regular</i> 	<ul style="list-style-type: none"> • <i>Information on pre-felling and post-felling inventories was made available but there was no comparison being made between pre-felling and post-felling inventory data or environmental monitoring to assess the extent of ecological changes on the residual stand.</i>

	<p><i>basis by the Forestry Department Peninsular Malaysia HQ with the assistance of the KSFD. The monitoring of water quality would be initiated in 2010 when logging operations is conducted through Monitoring Form C while monitoring after logging would be done through 'Laporan Isi Kandungan Hutan' and Closing Reports.</i></p> <ul style="list-style-type: none"> • <i>The establishment of a one-ha plot immediately after harvesting to assess the stocking status of the residual stand had been maintained.</i> • <i>Social impact study had been included in the EIA.</i> • <i>All logs transported out of the forest in the FMU will be issued with a delivery order prepared by the logging contractor where the tree number, species, log production number, log length, diameter, and net volume are documented. On the same form, the block number, coupe/licence number, stumping point, name of recorder, date and vehicle number are recorded. This delivery order will accompany the logs to the nearest forest checking station of the KSFD where a designated forester will measure the logs and check the species, tag number and compare them with the information in the "Record of Tree Tagging" based on 100% tree enumeration above the prescribed cutting limit and marking conducted by the State Forestry Department prior to harvesting.</i> • <i>The Annual Report on the KSFD was available to the public on request. A summary of the report was also made</i> 	
--	---	--

	<i>available in the web page of the KSFD.</i>	
<p><u>Principle 9</u></p> <p>Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach</p>	<ul style="list-style-type: none"> • <i>The forest managers have initiated an assessment of HCVFs. The FMP has also indicated other potential sites for HCVF.</i> • <i>The FMP has included the need for the establishment and protection of HCVF sites.</i> • <i>Measures to demarcate on maps, maintain and enhance the attributes of HCVFs had been written in the FMP and management prescriptions for them had been developed. Separate maps for the designated HCVFs had been produced. Management guidelines had been written for the HCVF sites identified.</i> • <i>A public summary of the FMP which has been posted on the KSFD's web page has also provided measures to maintain or enhance HCVF attributes.</i> • <i>The results and findings of the HCVFs monitoring activities would be incorporated into the next revision of the FMP.</i> • 	<ul style="list-style-type: none"> • <i>Some consultations with the related governmental agencies had been conducted to identify conservation attributes of potential HCVF sites. The list of relevant stakeholders consulted for HCVF was not comprehensive. Relevant stakeholders such as local universities, forestry research institutions and environmental NGOs had not been included in the stakeholder list provided. These agencies could provide useful information and technical inputs in identifying HCVF sites.</i> • <i>Annual monitoring to assess the effectiveness of measures taken in the management of the HCVFs in the FMU had not been implemented.</i>

4.2 **Certification decision**

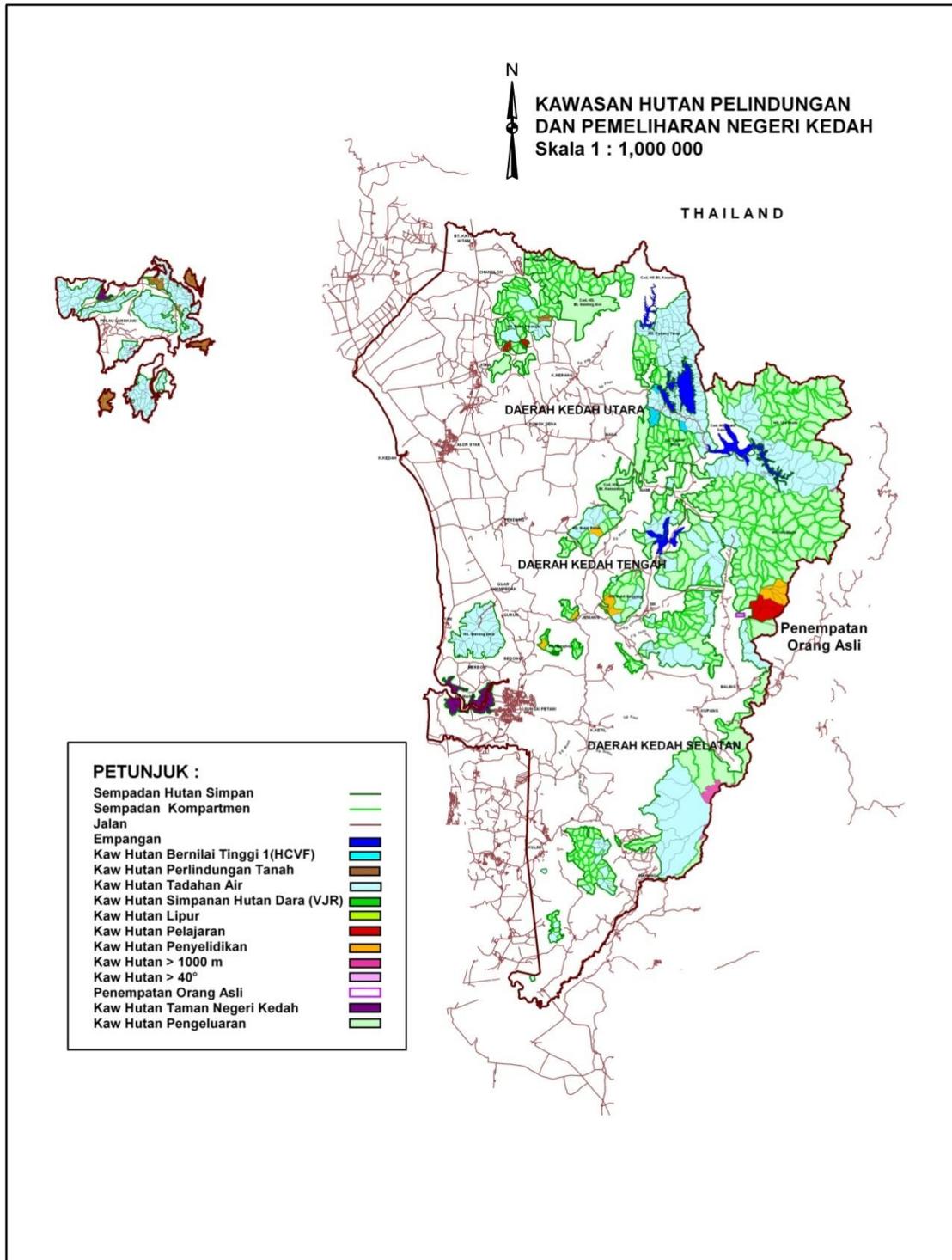
In general, the Kedah State FMU has complied with most the requirements of the *MC&I* (2002). As no Major Non-Conformity Report (NCR) was raised, the FMU was therefore recommended for certification.

4.3 **Recommendation for Certification**

The final Stage 2 Audit Report was tabled to the Certification Panel which convened on 9 June 2010 for a certification decision. The Certification Panel was chaired by the Senior General Manager of the Management System Certification (MSC) Department, SIRIM QAS International Sdn Bhd and comprised the Heads of the various sections of the Management System Certification (MCS) Department.

The Panel had deliberated on the final Stage 2 Audit report and concurred with the recommendations made by the audit team and peer reviewers and therefore decided to award the Certificate for Forest Management to the Kedah State Forestry Department, which manages the Kedah State FMU.

Map of Kedah State FMU



Comments by Stakeholders and Responses from the Audit Team

No	Name	Date Received	Detail of Issue Raised	Comments by Audit Team Leader
1.	Group A	Not applicable	<p>(i) The last pristine areas of Peninsular Malaysia are not safeguarded by the MTCC scheme. Sensitive virgin old-growth forest in the hills of Kedah FMU is being logged using destructive bulldozers - despite the area being recognised as an important water catchment area. Logging in the Ulu Muda Forest Reserve is opposed by a broad coalition of NGOs but is not safe under the MTCC scheme.</p> <p>(ii). Clearance for aquaculture in the Merbok FR.</p> <p>(iii) Forest degradation in the Sg. Badak FR.</p>	<p><i>The PRFs of Kedah State FMU has been classified into production and protection forest. Water catchments are part of the protection forests. A total of 121,904 ha or about 40% of the PRFs have been set aside as water catchments. Another 23,291 ha have been set aside as soil protection forests. Areas that are not classified as water catchments or protected forests are production forest which are being managed based on the principles of sustainable forest management. This includes management under the Selective Management System (SMS) which allows the removal of trees above a prescribed diameter size based on an assessment of the growing stock while ensuring sufficient advanced regeneration is retained for the next cut and at the same time maintaining species composition. The harvesting is being conducted based on the 'Guidelines for Reduced Impact Logging- 2003' and 'Road Specifications 1999'. The same approach had been practised in the management of the Ulu Muda FR where the catchment areas had been clearly demarcated and no logging had been allowed. This was verified by examination of maps of the forest reserve and the compartments allocated for logging during the audit.</i></p> <p><i>This is not part of the PRFs of the Kedah State FMU and thus is not covered under the audit.</i></p> <p><i>The reported area cleared was an alienated land with proper title and marked on a topographic map.</i></p>

			<p>(iv) Clearance for a highway in the Pedu FR.</p> <p>(v) Clearance for a mine in the Bt. Enggang FR.</p> <p>(vi) Clearance for a mine in the Bt. Enggang FR</p>	<p><i>This was done in the early 1970s. This area had now been planted with oil palm and is therefore not part of the Kedah State FMU.</i></p> <p><i>This was part of the Pedu FR that was alienated for the purpose of the highway construction. This was done for the development of the state and which had been approved by the State government.</i></p> <p><i>The area identified is not part of the PRFs within the Kedah State FMU and thus is not covered by the audit.</i></p> <p><i>The area identified is not part of the PRFs within the Kedah State FMU and thus is not under the purview of the audit.</i></p>
--	--	--	---	---

Stage 2 Audit Plan

AUDIT PLAN STAGE II AUDIT ON KEDAH FMU			
Day	Time	Programme	
Day 1 Tuesday (17/11/09)	8.00 am-10.00 am	Opening Meeting with representatives of FMU at the State Forestry Department Office, Alor Setar. <ul style="list-style-type: none"> Briefing on the process of Stage II audit by lead auditor Briefing session by Forest Manager of the FMU Confirmation of audit plan Documentation Review 	
	10.30 am-12.30 pm	Meeting with the State Department of Wildlife and National Parks	
	2.00 pm-6.00 pm	Inspection on Changloon Nursery Inspection of Comp 5 HS Sungai Badak, Kedah Utara	
	9.00 pm-10.00 pm	Discussion among auditors Night in Alor Setar	
Day 2 Wednesday (18/11/09)	7.30 am-5.00 pm	Inspection of logging activities in Comp 52B HS Pedu Kedah Utara Discussion with local contractors Comp 52B HS Pedu Water Catchment HS Chebar Utara Inspection on VJRs Comp 27 HS Gunung Jerai	
	8.00 pm-10.00 pm	Review of Day 2 Findings by Audit Team Leader Night in Sg Petani	
Day 3 Thursday (19/11/09)	7.30 am-5.00 pm	(Team A) Active harvesting sites Comp 31B HS Ulu Muda Kedah Selatan Inspection of COC process Balai Pemeriksaan Hutan Bergerak Weng, Baling	(Team B) Local communities Kg Lubuk Legong, Kg Ulu Tawar/Padang Belon Workers of contractors 13C HS Gunung Inas Kedah Selatan
	8.00 pm-10.00pm	Inspection on Weng Nursery	

		Active harvesting sites Comp 13C HS Gunung Inas Kedah Selatan	
		Review of Day 2 Findings by Audit Team Leader Night in Rimba Teloi	
Day 4 Friday (20/11/09)	7.30 am-5.00 pm	(Team A) Post harvesting sites Comp 8 HS Bukit Relau Kedah Selatan Post harvesting sites Comp 55B HS Rimba Teloi Kedah Selatan Inspection of COC process Balai Pemeriksaan Hutan Charok Sejuk, Sik	(Team B) Staff facilities and chemical storage, Nursery site Renj Office Gurun Training facilities Inspection on HS Jeniang
	8.00 pm-10.30 pm	Discussion among auditors Night in Sg Petani	
Day 5 Saturday (21/11/09)	8.30 am-5.00 pm	Documentation review on Kedah Tengah District Office	
	8.00 pm-10.00 pm	Discussion among auditors Night in Alor Setar	
Day 6 Sunday (22/11/09)	8.30 am-1.30 pm	Documentation review	
		Stakeholder meeting	
		Preparation of closing report	
	2.30 pm-4.30 pm	Closing meeting	

The Details of the NCRs and Planned Corrective Actions and OFIs

NCR No.	Principle	Indicator		Status of NCR	Summary of Non Compliance	Planned Corrective Action Taken by FMU
NCR 1	5 - Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.	5.3.1	Availability and implementation of guidelines for reduced impact logging to minimize damage to residual stand.	Minor	Ten trees that were not tagged were felled and removed from the site. One of the trees was below the cutting limit and 2 were removed from the riparian buffers.	<p><i>The offence was detected earlier by KSFD and immediate action had been taken by the KSFD in issuing a stop work order to the contractor to prevent further damages. A compound notice was also issued.</i></p> <p><i>A briefing session attended by Forest Rangers and Foresters regarding control of logging activities in the field was delivered on the 18 January 2010.</i></p> <p><i>Courses pertaining to RIL and related logging activities had been planned and included in the 2010 KSFD Training Plan.</i></p> <p><i>The planned corrective actions were accepted by the audit team and verification will be done during the surveillance audit.</i></p>
NCR 2	6 – Forest management shall conserve biological diversity and its associated	6.2.3	Existence of cooperation between forest	Minor	Adequate efforts were not made by the FMU to consult and cooperate with the	<p><i>The KSFD had approached PERHILITAN for information regarding the presence of</i></p>

	values, water resources, soils and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest		managers, and conservation organizations and regulatory authorities in implementing conservation and management activities.		Department of Wildlife and National Park (PERHILITAN) to identify the presence of wildlife as well nesting sites and feeding areas for wildlife within the FMU. During the consultation with PERHILITAN, it was indicated that such information were available and could be provided to the FMU.	<p>wildlife as well as nesting and feeding areas within the FMU. Ground survey would be carried to confirm the information given by PERHILITAN which will then be incorporated in the FMP.</p> <p>The planned corrective actions were accepted by the audit team and verification will be done during the surveillance audit.</p>
NCR 3	6 – Forest management shall conserve biological diversity and its associated values, water resources, soli and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.	6.5.1	Availability and implementation of harvesting procedures to protect the soil from compaction by harvesting machinery and erosion during harvesting operations.	Minor	Earthworks were observed to be excessive during road construction and maintenance. Skid trails were long and heavily bladed making them similar to feeder roads. Sumps and cross drains had not been adequately constructed particularly in steep areas. Excess soil which was pushed to the sides of roads was not compacted and some log culverts were not constructed and maintained according to specifications of RIL.	<p>The KSFD had reprimanded the contractor and taken immediate action on the contractor with the issuance of a stop work order.</p> <p>The KSFD will give its full attention and consideration to comply with the specifications for the construction of feeder roads and skid trails. As such the KSFD would supervise the construction of feeder roads and skid trails in new license areas.</p> <p>The planned corrective actions were accepted by the audit team and</p>

						verification will be done during the surveillance audit.
NCR 4	6 - Forest management shall conserve biological diversity and its associated values, water resources, soli and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.	6.5.3	Availability and implementation of guidelines for forest road lay-out and construction, including log landings and drainage requirements	Minor	The construction of skid trails and log landings did not follow the alignment drawn on the harvesting plans. Deviations in the construction of feeder roads and skid trails from the harvesting plan had not been approved by the KSFD prior to their construction. Harvesting plans were not updated accordingly following such changes.	<p><i>Full attention and consideration will be taken to upheld specifications for feeder roads and skid trails construction. Proper and supervise construction will be the key elements in new license areas.</i></p> <p><i>Construction of feeder roads and skid trails will be carried out according to the approved Harvesting Plans as reflected in the new areas.</i></p> <p><i>Deviations in the construction of feeder roads and skid trails from the harvesting plan are being looked into and monitored by the Range Officer on a monthly basis.</i></p> <p>The planned corrective actions were accepted by the audit team and verification will be done during the surveillance audit.</p>
NCR 5	6 - Forest management shall conserve biological diversity and its associated	6.5.4	.	Minor	The riparian buffers were damaged and encroached. Trees were felled within the	<i>The KSFD had taken an immediate action by issuing a stop work order and</i>

	values, water resources, soli and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.				buffer zones and were removed. Excess soil resulting from road construction was also pushed into the riparian buffers.	<p><i>compound notice to the contractor.</i></p> <p><i>Trees felled into buffer zone will be removed immediately so as not to block the water flows.</i></p> <p><i>Soft soil conditions requires frequent blading to provide better traction especially after heavy rains when the ground dries.</i></p> <p><i>The planned corrective actions were accepted by the audit team and verification will be done during the surveillance audit.</i></p>
NCR 6	9 - Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach	9.2.1	Forest managers should provide the assessors with a list of relevant stakeholders who have been consulted regarding the HCVFs.	Minor	Relevant stakeholders for HCVF such as universities, forestry research institutions and environmental NGOs were not included in the list provided to the auditors.	<p><i>Additional stakeholders had been included in the list.</i></p> <p><i>Feedback received from these stakeholders will be considered and included during the FMP review</i></p> <p><i>The KSFD in collaboration with the Forestry Department Headquarters Peninsular Malaysia had and will be organizing biodiversity expeditions and getting the involvement of experts in various fields related to HCVF to help the department in writing up the FMP.</i></p>

						<i>The planned corrective actions were accepted by the audit team and verification will be done during the surveillance audit.</i>
NCR 7	9 - Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach	9.4.1	Forest managers should conduct, appropriate to scale and intensity of forest management operations, annual monitoring to assess the effectiveness of the measures in the management of the HCVFs in the PRFs for Peninsular Malaysia and forest management areas for Sabah and Sarawak.	Minor	Annual monitoring to assess the effectiveness of measures taken in the management of HCVFs in the PRFs was not conducted.	<i>Management regimes will be included for HCVFs in the review of the FMP. Some of the initial work which had been done for the various HCVFs sites includes: an inventory on Compartment 36 of the Pedu FR to assess the number of Tualang (Compassia spp.) trees specifically for honey. Signboards will be put up as each area of HCVF is being identified.</i> <i>The planned corrective actions were accepted by the audit team and verification will be done during the surveillance audit.</i>

Details on Opportunities for Improvement

Indicator	OFI No.	Status	Summary of OFI
Indicator 1.5.2	1	-	Annual monitoring of encroachment could be enhanced by utilizing a GIS System to monitor boundaries and potential encroachment.
Indicator 4.1.1	2	-	It was observed that training could be further enhanced by having additional programmes for the contract forest workers on the RIL system. Annual training courses shall be prepared.
Indicator 4.2.4	3	-	The existing form on safety records could be improved with the maintenance of a monthly record on occurrences or absence of accidents.
Indicator 4.4.1	4	-	It was observed that the information to be captured on the social impact assessments conducted on the Orang Asli communities and 3 Malay villages were inadequate. The completed survey forms used for Kg. Orang Asli Lubuk Legong, Kg. Ulu Tawar/Padang Belon, Kg. Bendang Man and Kg. Batu 7, Jalan Kroh, Baling did not contain information on population, economic activities, dependency on non-timber forest produce and services.
Indicator 5.3.1	5	-	In Compartment 52 of the Pedu FR, it had been observed that some trees had two tags with different serial numbers on them. The auditors were informed that some of the trees had been tagged earlier but the field staff had forgotten to remove the old tags. The KSFD shall ensure that only a single tag should be left on the trees as double tagging could create confusion in monitoring the harvesting operations.
Indicator 6.7.2	6		It was observed during the field inspection that two tanks of diesel fuel were kept without containment in the Ulu Muda FR. Fuel and oil storage had to be stored in a contained storage area in accordance to the Environmental Quality Act to avoid spillage.

Indicator 8.2.1	7	-	Information on pre-felling and post-felling inventories was made available but there was no comparison being made between pre-felling and post-felling inventory data to assess the extent of ecological changes on the residual stand.
-----------------	---	---	---