

SmartLogging Generic Certification Performance Standard

December 1, 2006

Version 6

SmartWood Program of the Rainforest Alliance

INTRODUCTION

Need for Logging Certification and Performance Standard

The wood products industry has been under intense scrutiny in recent years as environmentalists, consumers, landowners, and policy makers have sought to achieve a balance between production, the stability of resource-based economies, and the long term sustainability of the world's forests. A number of initiatives have resulted, with the focus primarily upon the land management and production practices of wood products industries and the safety of individual loggers.

The Forest Stewardship Council (FSC), Sustainable Forestry Initiative (SFI) and Canadian Standards Association (CSA), Pan European Forestry Council, Lembaga Ekolabel Indonesia, Malaysia Timber Certification Council among others certify that forest management companies and governments are managing their lands in a manner that will not jeopardize the availability of forest resources for future generations. Logger education programs and low impact logging initiatives provide training courses and certificates addressing safety and technical skills.

While these initiatives have led to improvements, one element of the wood products industry still remains largely unrecognized, or at least only indirectly recognized or monitored – the logging community. Wood harvesting companies, ranging from sole proprietors to large-scale businesses to state run enterprises, have perhaps the greatest direct impact on the health of the forest ecosystem. They also operate on forest land where there has been limited, if any management planning. Their operations supply raw material for wood products industries, but they also have the potential to better preserve or compromise water and soil quality, wildlife habitat, biodiversity, and forest aesthetics.

Recognizing the need for a third party certification program for forest products harvesting companies, the SmartWood Program of the Rainforest Alliance worked with forest products companies, loggers, forestry specialists, academics, environmentalists and other interested parties to develop the "SmartLogging" Program. The purpose of the program is performance-based, third party logger certification. The end goal will be to insure a more sustainable supply of environmentally harvested forest products from the world's working forests. The SmartLogging program is, with multi-stakeholder consultation, developing best practice logging standards and assessment procedures.

Implementation of the SmartLogging Program

The Performance Standard presented below includes the major subject areas for evaluation, the criteria, and the indicators to be used by auditors for assessing performance of harvesting operations. Conformance with this standard is a required element for receiving SmartLogging certification.

The subject areas for evaluation in the SmartLogging Performance Standard are as follows:

1. Legal Requirements
2. Harvest Planning and Monitoring
3. Harvest Practices
4. Community Values
5. Occupational Health and Safety
6. Business Viability
7. Continuous Improvement and Innovation

SmartLogging certification is performance-based; meaning that the assessment of a harvesting harvester or group of harvesters will focus on evidence gathered pertaining to documentation, on-the-ground harvesting practices, and interviews with the harvester and stakeholders.

The fundamental intent of each criterion is the most important factor for SmartLogging assessments. Conformance at the criterion level is required to receive a SmartLogging certificate. If there is nonconformance at the criterion level, a major Corrective Action Request (CAR) must be issued. The indicators are a tool for assessing conformance with each criterion. All indicators must be evaluated during the initial assessment. Auditors are to use professional judgment when evaluating the indicators, and must reach a clear conclusion as to whether the fundamental intent of each criterion has been met. Nonconformance with an indicator will generally result in a minor CAR. Verifiers may be used by the auditor(s) to help evaluate the indicator, but are not required to be met by the candidate operation

If an operation attains SmartLogging Certification, annual audits are required and focus first on applicable CARs, second on issues raised by stakeholders, and third ensure that throughout the life of the certificate conformance is audited for all indicators during a five year certification period (not all indicators must be evaluated each audit year).

SmartLogging certification may be obtained by individual harvesting companies, harvesters (i.e. sole proprietors) or groups of harvesters (e.g. a logger association or other type of grouping). Whether individual loggers or groups of loggers are certified, each candidate operation must demonstrate compliance with SmartLogging standards. For group SmartLogging certification assessments, a sample of group members is selected and audited and each group member is expected to demonstrate full compliance with the SmartLogging criteria and indicators.

Complementary Add-on Standards and Certifications

SmartLogging, candidate operations may also apply for “Controlled Wood” and/or “Chain of Custody” certification when they apply for SmartLogging certification. The Controlled Wood standards are based on those of the international Forest Stewardship Council or FSC, specifically FSC-STD-30-010 – Controlled Wood for Forest Management Enterprises. The Controlled Wood standards include aspects of product tracing and tracking from the forest to the point where the harvester relinquishes legal control of the forest product to another user (i.e. buyer, mill, etc.).

The Chain of Custody (COC) is also an FSC Standard whereby the candidate operation is certified that they have systems in place to track FSC certified wood from the forest to the manufacturer. Many of these companies want to make a product using materials from both FSC certified and non-FSC certified forests. To do this they must obtain Controlled Wood from the non-FSC forests. Harvesters certified by SmartWood to the Controlled Wood standard will be able to supply those companies with Controlled Wood.

Candidate operations can also meet the Sustainable Forestry Initiative Standard (SFIS) Objectives for Procurement (SFIS Objective 8).

Synopsis of the Certification Assessment Process¹

Application - The certification assessment process begins with a SmartLogging candidate submitting an application to SmartWood. The candidate harvester or group manager (when a group of loggers applies for certification) is assigned a SmartWood Task Manager who will work the SmartLogging certification candidate to determine the scope of certification and develop a certification assessment cost estimate. After agreement with the budget a Service Agreement is formalized and the assessment process can begin.

Auditor Selection and Planning – The SmartWood Task Manager, with input from the candidate operation, selects a qualified Lead Auditor and other team members (where appropriate) to participate in the assessment. The Lead Auditor is chosen based on their experience and knowledge of logging operations, master logger, BMPs, forest management and SmartLogging standards and auditing experience. The auditor must also be free of conflicts of interest with the certification candidate. For example, the auditor can not have any financial interest in the candidate's operations, come from a competing operation or have any ongoing disagreement with the candidate. Auditors are provided with detailed guidance on the certification process and are provided training and written SmartLogging auditing procedures.

Stakeholder notification: At least 30 days prior to SmartLogging evaluation, stakeholders are notified of the pending assessment and SmartWood requests stakeholders' observations or comments with regard to the operations conformance with the certification standard.

Fieldwork Evaluation – Evaluation of conformance with the standard is based upon data collection by the auditor(s) through review of the harvester's documentation, interviews with employees and stakeholders, and field observations and measurements. The Lead Auditor organizes opening meetings with the harvester or group manager to review the assessment scope and procedures and certification standards. The assessment process then moves quickly to the field phase. Inspections are made to sites chosen by SmartLogging auditors based on a comprehensive review of the candidate's harvesting systems, harvesting jobs, forest conditions, discussions with interested/affected stakeholders, and identification of critical issues or challenging sites.

Data Analysis and Decision making – The auditor(s) evaluates performance by the harvester at the criterion and indicator level of the standard. Any non-conformances are analyzed and classified as either minor or major and specific corrective action requests (CARs) are defined. The following definitions apply, and are the basis for all certification assessments:

Nonconformance	Corrective Action Type	CAR definition
Major nonconformance: failure to meet the objectives of the criterion	Major CAR	Requirements that harvester must meet <u>before</u> SmartLogging certification by SmartWood can take place.
Minor nonconformance: noncompliance not leading to failure at the criterion level	Minor CAR	Requirements that harvester must meet, within a defined time period (usually within one year), during the period of the

¹ For detailed information about procedures, contact our headquarters or regional offices through www.smartwood.org.

		certification.
Observation: very minor problem or beginning stages of a problem that if untreated could result in a minor non-conformance	Observation	Non-mandatory actions or recommendations suggested by the assessment team to address the operation's performance.

Comment on the SmartLogging Standard and Certification Processes

We strongly encourage input, either positive or negative on both our certification standards and our certification procedures. For a copy of the SmartWood guidelines and more information about the program, see www.smartwood.org or contact your local field representative or Richard Donovan, Chief of Forestry, SmartWood Headquarters (61 Millet Street, Suite 201, Richmond, Vermont USA 05477, telephone 802-434-5491 or FAX 802-434-3116).

1. Legal Requirements

Harvesters shall respect all applicable laws.

1.1 Harvester has a legal right to harvest the forest areas under consideration.

- a) Harvester has documents that demonstrate that legal permits from the applicable government agency, where needed, are in place to harvest. These may be obtained by a dealer, landowner, and landowner's agent, whichever is appropriate.
- b) A timber sale contract is signed by the landowner, or the landowner's agent (forester, land manager, etc.) and wood purchaser.
 - Timber sale Boundaries are defined in TSA
- c) A service/logging contract has been signed between the harvester and wood purchaser.

1.2 Harvester obeys legal/regulatory requirements, obtains necessary permits in accordance with laws

- a) Legal requirements are met, including, but not limited to those related to:
 - Environmental quality (BMP manual, harvesting regulations);
 - Water or water quality (BMP manual, Water Quality Regulations);
 - Rare, threatened or endangered species (Endangered Species Act, CITES); and,
 - Non-timber forest products: Hunting, fishing and other NTFPs meet applicable regulations.
- b) Worker and harvester occupational health and safety and labor laws are met.
 - (Government and ILO Labor laws, workers compensation laws)
- c) Where applicable, harvester is legally licensed professional, with required permits and license kept current.
- d) Logging equipment used by the harvester meets government safety requirements.
- e) Trucks meet government regulations
- f) Harvester has insurance in accordance with local legal requirements, which may include:
 - General Liability;
 - Worker Comp; and,
 - Automotive liability.
- g) Containment and disposal of hazardous materials (pesticides, petroleum, chemicals) in accordance with federal and state law.

1.3 Harvester effectively works to avoid conflicts or legal disputes related to harvesting activities.

- a) Harvester makes an effort to avoid disputes ,
 - Proactively communicating with concerned stakeholders (neighbors, landowner, businesses, mills, workers)
 - Staying within the harvest boundaries
- b) Harvester works in a systematic and fair way to resolve disputes.
- c) Any dispute resolution processes and outcomes are respected.

2. Harvest Planning & Monitoring

Harvester does adequate planning prior to harvest to assure an understanding of landowner harvest objectives and site-specific environmental concerns, monitors progress of harvest to

see that environmental and landowner harvest objectives are met, and does a post-harvest assessment to determine if follow-up actions are necessary.

2.1 A written harvest plan or service/logging contract (see 1.1 c) is in place prior to harvest, based on site-specific conditions, and in agreement with the landowner's harvest objectives.

- a) If the landowner has a forest management plan and/or management and harvesting objectives, as described in or related to the written harvest plan, they are discussed with the landowner prior to harvest.
- b) Any major changes to the harvest plan or service/logging contract are approved prior to implementation by the landowner or the landowner's agent.

2.2 Harvest prescriptions/service/logging/sale contract.

(NOTE: Harvest plan/service/logging contract can be prepared by landowner, purchaser or harvester who buys timber, and then signed by landowner.)

a) Harvest plan or service/logging contract includes:

- Landowner's harvest prescriptions;
- Silviculture;
- Harvesting restrictions;
- Protection of wildlife habitat, unique plant communities, stream zones, historical or personal sites and other critical environmental or cultural features;
- Penalty clauses for unauthorized cutting, excessive damage to residual stand; roads, bridges or other infrastructure;
- Infrastructure improvements/construction (roads, skidtrails, landings);
- Harvesting close-out measures (e.g. waterbars, stream crossing rehabilitation, mulching and seeding, etc.); and,
- A clause to allow sale area to be audited for conformance with SmartLogging standards

b) Harvest map, or aerial photos, identify:

- Property boundaries;
- Harvest area;
- Streamside management zones and other riparian zones;
- Unique historic, religious or cultural sites;
- Rare, threatened or endangered species habitat; and,
- Other unique biological or geological features.

2.3 Onsite Pre-harvest inspection is conducted.

- a) Pre-harvest inspections are done by the harvester, preferably with the landowner or land manager.
- b) Pre-harvest inspections review property boundaries, harvest area boundaries, streamside management zones and limits of harvesting in those areas, special considerations for protection of special sites, and harvest "close out" procedures.
- c) Property boundaries and limits of the harvest area are clearly marked on the ground.
- d) Harvesting infrastructure (e.g. existing roads, log landings, skid trails, stream crossings) is reviewed and where improvements are needed they are reflected in the sale/service agreement.

2.4 Post harvest assessment of harvest site is conducted.

- a) A post-harvest evaluation (i.e. checklist or close-out document) is completed by the harvester and follow-up actions identified and conducted as necessary.

2.5 Documentation is used and retained for monitoring the movement of forest products from forest of origin to destination.

- a) A trip ticket, load receipt or other transportation document accompanies each load of forest products (logs, chips, biomass) delivered to the purchaser.
- b) Trip tickets, load receipts or other documentation mentioned above contain the harvester's SmartLogging certification code and subcode (if applicable) number.
- c) A summary of forest products, which includes at a minimum, delivery dates, destinations, volume and species is provided to the SmartLogging auditor during the annual audit.
- d) All records are kept for at least five years.

3. Harvesting Practices

Harvesting practices, including equipment used, are chosen and employed based on specific site conditions and landowner harvest prescriptions for the stands and site. Protection of water quality is an increasingly important consideration in management of forest resources. Harvesters can have a significant impact in protecting water quality and the soil resource. They follow state, provincial or regional BMPs and other recognized practices in all harvesting activities such as road construction, location of logging trails and log landings, stream crossings, and protection of SMZs. In addition, harvester's work to conserve the timber resource and all forest resource values within the context of the landowners' harvest prescriptions and they protect worker health and safety and promote community economic well-being

3.1 Harvesting practices meet or exceed applicable state best management practices (BMPs).

- a) Applicable state harvesting BMPs are being implemented.
- b) BMP manuals are accessible to employees, contactors and employees.

3.2 Harvesting practices are conducted when risk of impacts are lowest.

- a) Harvesting, especially of identified sensitive areas, is conducted when risk is lowest, e.g. on dry or frozen ground.
- b) Harvesting systems are appropriate for the site.
- ⇒ Appropriate equipment (low impact tires, mats) is used in wet (swamp) areas).

3.3 Harvest prescriptions are followed and the site is left in good condition.

- a) Silviculture prescriptions are followed.
- b) Damage to residual trees and other resources is minimized, as specified in the harvest contract, by the harvest and extraction process.
 - Residual trees are not scarred on the boles from being rubbed by skidded logs;
 - Residual tree leaders and limbs are in good condition; and,
 - Coarse woody debris is left on site.
 - Understory vegetation is left in good condition.
- c. Harvest closeout activities are undertaken and occur as per the harvest plan.

3.4 Streams, lakes and wetlands are protected during harvest operations.

- a) Riparian buffer zones and Stream Management Zone's (SMZ) are protected as outlined in BMPs.
- d) Equipment use in SMZs and wetlands is minimized.
- e) Additional buffer zone management practices outlined by the landowner are respected.

3.5 Road and landing construction is implemented in a manner that minimizes soil erosion and does not impede water flow.

- a) The number of, and forest area affected by, roads, log landings and concentration yards is based on site conditions.
- b) Roads and landings are constructed outside of SMZs unless the reuse of a preexisting facility is the less damaging alternative.
- c) Layout of roads, skid trails and landings consider soil, slope stability, gradient, and weather conditions.
- d) Erosion control structures such as waterbars and rolling (broad-based) dips are properly constructed to effectively divert water from roads and skid trails.
- e) Erosion control structures (waterbars, rolling dips) are constructed prior to stream crossings to divert direct water flow into buffers or filter strips.
- f) Road surfaces are designed to drain water effectively:
 - Road are rocked if feasible; and,
 - Roads are outsloped.
- g) Permanent culverts are adequately sized and placed, including:
 - Placed to effectively manage water flow;
 - Installed so that subsequent road maintenance does not result in damage to culverts; and,
 - Sized adequately for periods of high volume water flow.
- h) Disturbed soil is stabilized to prevent soil erosion or sediment flow, including:
 - Road cut banks,
 - Sidecast banks, and,
 - Landing sites.
- i) Non-invasive species are used for soil stabilization and re-vegetation of disturbed sites.

3.6 Skid trails are designed and managed in a manner that effectively enhance soil and water conservation

- a) A reasonable effort is made to minimize disruption of soil organic layers during harvest operations
 - Minimal skidder rutting
 - Minimal blading of slash.
 - Minimal machinery use off skid trails
- b) Steep skid trails are stabilized during and following harvesting activities, including
 - Using slash,
 - Seeding, and,
 - Mulching.
- c) Slash is placed in skid trails to reduce compaction and rutting during harvest.
- d) Skid trails avoid sensitive site such as wet areas and unstable soils.

3.7 Stream crossings are managed to avoid negative environmental impacts during road building and harvest.

- a) Road or skid trail stream crossings for all categories of streams are minimized.
- b) Log landings are placed on either side of the stream where practical to reduce multiple

crossing of intermittent streams.

- c) Portable bridges, mats, or logs are used to cross streams when necessary.
- d) Stream crossings are placed at right angles to the stream where appropriate.
- e) Culverts are installed properly in a manner not to inhibit migration of aquatic organisms.
- f) Integrity of stream channel and stream banks is maintained during installation and removal of stream crossing devices.

3.8 Chemicals and petroleum products are contained as to not cause environmental damage.

- a) Spills are dealt with according to state regulations and BMPs.
- b) Spill kits are available on the worksite and operators are familiar with their use.
- c) Chemical and petroleum product waste from equipment maintenance procedures are captured and not allowed to flow on the ground or in watercourses.
- d) Equipment is properly maintained to avoid hydraulic fluid, motor oil and gear oil leaks.

3.9 Wildlife habitat, unique flora, fauna or other special natural sites is conserved according to the harvest prescriptions. .

- a) Specific wildlife habitat is protected as marked or designated in the harvest plan.
- b) Harvesting avoids time periods and known sites when and where the landowner identifies species and areas that are sensitive to human activity (e.g. nesting, breeding, etc.).
- c) Wildlife trees, snags, and other special situations are retained in a creative and safe manner in compliance with hazardous tree regulations or procedures.
- d) Areas designated for strict conservation by the landowner (i.e. no harvesting or other activity) are protected.
- e) Rare, threatened or endangered species that are discovered during harvest operations are protected and reported to the landowner.
- f) Unique features are protected during the harvest.

4. Community Values

Efforts are made to conduct harvesting operations in such a way that protection of unique features is acceptable to the property owner, surrounding landowners, and the public.

4.1 Harvesting demonstrates sensitivity to local community values.

- a) Cultural features of historic and/or archeological value are protected in the field as identified in the harvest prescription.
- b) Aesthetic prescriptions as defined in the harvest prescriptions are implemented during harvest and close-out operations.
- c) Chemical containers, solid non-organic wastes and other refuse produced during harvesting are disposed of in an environmentally sound manner at off-site locations.
- d) Truckers observe weight and speed limits.
- e) Harvester is a good neighbor when operating in an urban interface, including:
 - Being mindful of working hours;
 - Limiting the use of compression brakes;
 - Taking precautions to keep children and adults out of work area;
 - Reminding operators periodically of the possibility of children in the area and to maintain constant vigilance for them; and,

- Using extra precautions when operating near property lines or houses to avoid accidental damage to neighboring property.

5. Occupational Health and Safety

5.1 Harvester has an occupational health and safety plan.

- a) A written safety & health plan includes:
 - Emergency response plan;
 - Requirements for personal safety equipment are defined in the safety plan;
 - Policies for forest workers when working alone, including strategies for making their whereabouts known to others at prescribed times each day, and this is verified as a daily procedure when in the forest; and,
 - Periodic safety inspection of equipment.
- b) Harvester participates in insurance or government compensation programs.

5.2 Harvester ensures compliance with safety plan and related requirements in terms of protective equipment (hardhats, hearing protection, etc.), machine/tool operation, maintenance of harvesting and felling equipment, and handling of dangerous materials.

- a) Harvesters, employees or sub-contractors have received occupational safety and health orientation/training.
- b) Harvesters, employees and sub-contractors demonstrate safe harvesting techniques in the field.
- d) Harvester evaluates employee and sub-contractor safety performance.
- e) Harvester's written safety plan is accessible to sub-contractors and employees.
- f) CPR, first aid training (e.g. blood lost stoppage, stabilizing broken bones, immobilization of injured worker, etc.) and transport of injured workers, is provided by the Harvester.
- g) Where available, communications equipment for emergencies is on-site.

6. Business Viability

Harvester demonstrates awareness of the need for sustainable business practices.

6.1 Harvester demonstrates business viability

- a) Harvester has a business plan.
- b) Harvester uses professional business services.
- c) Harvester maintains records of harvesting activities, including:
 - Contracts with landowners, mills, dealers and subcontractors are in place; and,
 - Load reports and scale records and summaries are in place.
- d) Harvester understands cost of doing business, including:
 - Equipment, personnel and overhead costs are calculated; and,
 - Cost per production unit (ton, board feet) per daily production is known
- e) Equipment is well maintained.

6.2 Harvester provides employees with wages, benefits and opportunities that enhance workforce stability.

- a) Harvester provides equal opportunities for employment and advancement.
- b) Employee job training is provided.
- c) Wages and benefits are commensurate with local norms.

6.3 Harvester maximizes timber resource utilization.

- a) Grading and sorting of harvested products is conducted to add or maintain commercial value where appropriate.
- b) Harvested products are transported from harvest site to markets on a timely basis to minimize product degrade and loss.
- d) Where appropriate, harvester seeks markets for ecologically abundant, but traditionally low-value and lesser known species and products.
- e) All merchantable materials as prescribed in the harvest contract are shipped.

6.4 Harvester maintains ethical business practices.

- a) Contracts are honored.
- b) Fair value is provided for services rendered.
- c) Fair value is provided for timber purchased.

7. Continuous Improvement & Innovation

Harvester demonstrates efforts to improve logging operations and shows innovation in the procedures used. Observation of harvest sites, harvester's attendance at training courses, and observations by landowners and others familiar with the Harvester's work demonstrate efforts at improvement.

7.1 Harvester continually learns from experience to improve practices.

- a) Harvester analyzes challenging harvesting situations and preplans innovative solutions.
- b) Data from post-harvest assessments is used to improve harvesting practices.
- c) Harvesting skills are maintained or enhanced through periodic training (e.g. continuing education courses, equipment operator training and environmental education).
- d) Harvester proactively works with regional experts, trade associations, technical centers and/or colleagues to inform themselves about new harvesting approaches/techniques.
- e) Business skills are improved through training, education and/or use of professional business services.