

REPORT

Forest Certification



J.D. Irving, Limited

November 2007

In 2007, an audit team from KPMG Performance Registrar Inc. (KPMG PRI) carried out an annual surveillance audit of J.D. Irving, Limited's (JDI) woodlands and procurement operations against the requirements of the Sustainable Forestry Initiative® (SFI®) Standard in conjunction with a surveillance audit against the requirements of the ISO 14001:2004 (ISO 14001) Standard for Environmental Management Systems (EMS). This Summary Report provides an overview of the process and KPMG's findings.

Background

Annual surveillance audits of an SFI® System provide ongoing evidence to the public that operations continue to conduct sustainable forest management (SFM) to the standards defined by SFI Inc., an independent registered non-profit, with a governance structure with equal representation across three chambers: social, economic and environmental. The standard sets specific forest management and wood procurement objectives, each of which has a number of indicators that must be met in order to achieve verification requirements.

The ISO 14001 standard requires regular assessments by an accredited Registrar, including re-registration every three years, to assess continuing conformance with the standard and the implementation of action plans related to previous assessments. The implementation of the SFI® program through an EMS consistent with the requirements of ISO 14001 provides evidence to the public that the operations have used the internationally recognized benchmark for environmental management to implement effective processes to manage and minimize environmental risk and promote continuous improvement in SFM performance.



Description of J.D. Irving, Limited Woodlands Operations

JDI's forestry operations occur on both freehold and Canadian Crown Land. The freehold land is in New Brunswick (750,000 ha), Nova Scotia (143,000 ha) and Maine (493,000 ha). On Canadian Crown Land in New Brunswick, the company operates a sub-licence on licence #9, #3 and #5 and manages licence #7 (1,038,000 ha). The annual volume allocations are 417,000m³ on licence #9, 44,000m³ on licence #3, 20,000m³ on licence #5 and 1,134,000m³ on licence #7. Additional Crown volume allocations exist in Nova Scotia (35,000 m³ a year).

All of the JDI forestry operations have previously (2000-2001) individually completed both ISO 14001 registration and SFI® certification. The more recently purchased Miramichi Timber Holdings freehold land was added to JDI's SFI® certification program in 2006. Consistent with the prior years, sub-licencee operators on the area based tenure in New Brunswick have operated under the JDI EMS and are included within the scope of JDI's ISO 14001 and SFI® certifications.





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JDI's procurement operations in New Brunswick, Nova Scotia, Prince Edward Island, Quebec and Maine provide fiber for the Irving Paper Limited and Irving Pulp and Paper Limited mills in Saint John New Brunswick, the Lake Utopia corrugated medium mill in St. George, New Brunswick and 14 Sawmills (9 in New Brunswick, 1 in Nova Scotia, 1 on Prince Edward Island, 3 in Maine). Procurement operations for all of the sawmills, pulp, paper and corrugated medium mills are included within the scope of JDI's SFI® certification.

The Audit

Audit Objectives –The following audit objectives were included within the scope of the audits:

- A limited scope SFI surveillance audit to evaluate the Company's conformance with selected requirements of the 2005-2009 version of the SFI® standard.
- An ISO 14001 periodic assessment to assess the Company's continuing conformance against selected elements of the ISO 14001:2004 standard.

Audit Scope – The scope of the 2007 SFI® surveillance audit of JDI's woodlands operations included the woodlands operations as well as fibre procurement activities for the Company's 14 sawmills, and was focused on the following:

- SFI® Objective 2: Forest Productivity and Conservation of Forest Resources;
- SFI® Objective 6 Management of Special Sites;
- SFI® Objective 9 Forestry Research, Science and Technology;
- SFI® Objective 11 Compliance with Legal and Regulatory Requirements;
- SFI® Objective 12 Public and Forestry Community Involvement in the Practice of Sustainable Forestry;
- SFI® Objective 13 Management Review and Continual Improvement;

The verification criteria included the core indicators associated with each of the above objectives.

Audit Team – A three person audit team conducted the work. The team included 2 certified environmental auditors from KPMG PRI (an SAF forester and a biologist), and a consulting forester. All of the team members had previous certification experience in the Maritimes.

The members of the audit team were:

- **Chris Ridley-Thomas, CEA(SFM), EMS(LA)** – Lead Verifier. Chris is a Certified Environmental Auditor in sustainable forest management, and a BC professional biologist. He has led numerous SFI® assessments within North America on both private land and Crown land, including audits at each of the JDI operations in Nova Scotia, New Brunswick and Maine. As well as leading audits under the SFI® program, Chris leads audits under the ISO 14001 environmental management system standard, the CSA Sustainable Forest Management standard and the Forest Stewardship Council (FSC) principles and criteria.

J.D. Irving, Ltd. Audit Findings	
Open Nonconformities from previous audits	0
New Issues requiring major nonconformities	0
New Issues requiring minor nonconformities	0
New opportunities for improvement	3

Major nonconformities:

Are pervasive or critical to the achievement of the SFM Objectives.

Major nonconformities must be addressed immediately or registration cannot be achieved / maintained.

Minor nonconformities:

Are isolated incidents that are non-critical to the achievement of SFM Objectives.

All nonconformities require an action plan within 30 days and must be addressed by the operation.

Opportunities for Improvement:

Are not nonconformities but are comments on specific areas of the SFM System where improvements can be made.



- **Craig Roessler, CEA(SFM), EMS(LA)** – Audit Team Member. Craig is a Certified Environmental Auditor, with broad experience in forestry attained over 15 years working for industry, consultants and government as a BC professional forester. Craig has been a team member and lead auditor on a large number of forest practice audits against the requirements of ISO 14001, CSA Z809 and SFI® standards. In addition to having a Bachelor of Science degree in Forestry from the University of British Columbia, Craig also has a Master of Science degree in Community and Regional Planning, also from UBC.
- **Clark Brander** – Audit Team Member. Clark is a forestry consultant with over 30 years experience of forestry operations in the Maritimes. He has held a series of progressive positions with Stora Enso including Operations Manager for company controlled land in Nova Scotia and Operations Manager for the Cape Breton region. Clark has successfully completed the ISO 14001 lead auditor course. Clark also participated in the JDI audit in 2006.

JDI's SFI® Program Representative – Scott MacDougall, Forest Certification Manager was JDI's SFI program representative for the audit.

Field Audit – The field audit took place over a two week period in late September and early October 2007 and assessed performance at Operations in Maine and New Brunswick. Assessments included both the appropriateness and effectiveness of field activities and the design of the underlying EMS and its delivery on the SFI® objectives. An intensive field inspection program covered 41 roads, 62 harvesting units and 28 silviculture sites. Regular assessments are conducted by the audit team to ensure that action plans are implemented and SFI® and ISO 14001 requirements continue to be met.

Audit Conclusions

The audit found that:

- The Company's woodlands operations continue to meet the requirements of the the SFI® standard in all material respects. No major or minor nonconformities were issued as a result of the surveillance audit.
- The Company's EMS continues to be effectively implemented.

General Surveillance Audit Findings by SFI Objective

- **SFI® Objective 2 Forest Productivity and Conservation of Forest Resources.** The assessment looked closely at management of artificially and (especially) naturally regenerating stands and found good results. JDI continues to upgrade programs to minimize site productivity impacts associated with rutting and maintains active programs for managing forest health and responding to forest fires.
- **SFI® Objective 6 Management of special sites.** JDI has had an active unique areas program since prior to 2000 and has spent significant effort on identifying rare plant sites in particular. In 2007, the extension of the unique areas program to the newly acquired Miramichi Timber Holdings lands was initiated.



The operations continue to implement new programs to reduce the potential for rutting when portering wood to roadside.

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- **SFI® Objective 9 Forestry research, science and technology.** JDI has a very active and well focused research program that supports its continuous improvement objectives. JDI is assisted in assessing research priorities by an external panel.
- **SFI® Objective 11 Compliance with Legal and Regulatory Requirements.** Overall performance was strong based on review of compliance data and compliance audits, field inspections and assessment of the internal audit program. The EMS is updated with additional preventive measures in response to compliance audit findings.
- **SFI® Objective 12 Public and Forestry Community Involvement in the Practice of Sustainable Forestry.** JDI maintains active stakeholder committees in each of the areas where it has operations and these committees provide feedback on activities and assistance in diverse areas such as the identification of special sites, visually sensitive areas, cabins etc. as well as being briefed on and commenting on JDI's overall forest management strategies. Good examples were noted during the audit of accommodating such concerns during operational planning. On Crown land in New Brunswick much of the consultation associated with new management plans is conducted by the Provincial Government rather than the licensee, whose role is relatively limited. However, it was noted that JDI exceeds the standards required for its consultation efforts in relation to new Crown land plans.
- **SFI® Objective 13 Management Review and Continual Improvement.** Management review and continual improvement functions are implemented through the EMS. Overall performance was strong. Key opportunities for improvement from the last assessment were effectively addressed.

Good Practices

A number of exemplary practices were identified during the 2007 audits. Some of these were Company-wide in nature, while others were limited to one or more of JDI's Operations. Examples of those determined to be particularly worthy of mention are as follows:

- Overall EMS and operational controls are functioning well and are being effectively implemented in the field (work orders, inspections, emergency response, operator awareness).
- Timely entry of incidents and nonconformities into tracking software and action plans overall are being implemented by the established dates.
- Major road maintenance projects are being effectively identified, prioritized and implemented (environmental and operational).
- Quality culvert installations, including effective sediment control measures, and comprehensive crossing installation audit process.
- Excellent training program for staff and contractors overall (particularly noteworthy in Black Brook).



An example of a visually sensitive area where the logging plan was altered to retain the viewscape.

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- Promotion of goodwill with neighbours via thoughtfully planned and implemented buffering strategy (e.g., adjacent to campground in Chipman, expansion of riparian management prescription to whole block to accommodate nearby houses and camp in Maine).
- Good examples noted of thoughtful, detailed work order prescriptions tailored to site and stand conditions and stand improvement and regeneration objectives (e.g., selection logging prescriptions well implemented to promote natural regeneration of desirable tolerant hardwood species in tolerant hardwood stands).
- A number of measures were effectively employed to minimize rutting (e.g., adjustment to processing strategy on harvest block in Sussex; brush mat placement on skid trails; etc.).
- Noteworthy examples observed in field of plans adjusted to accommodate resource features, e.g., visuals around Crawford and Washedemoak Lakes (Sussex); buffering of vernal pools (block in Sussex), wetlands (block in Deersdale) and stick nests (a number of blocks in various Divisions)).
- Effective monitoring of plantations at key periods to assess survival, stocking status and treatment requirements.
- Good control over natural regeneration success (e.g., Sussex).
- Ongoing research related to mixedwood and grouse and coverage of regional research initiatives during stakeholder meetings (Deersdale).
- Ongoing extension of SFI program to Miramichi Timber Holdings and coverage of this in Deersdale's quarterly management reviews.
- Company is investigating processes for minimizing soil disturbance (i.e., combining depth to water table and soil type mapping with equipment type).
- Strong performance by Forest Patrol Ltd. in its separate ISO 14001 re-registration audit. Forest Patrol Ltd. conducts aerial herbicide application and forest protection work for JDI in Canada.
- Strong performance by the JDI nurseries in their separate ISO 14001 surveillance audit.

Follow-up on Action Plans from Previous SFI® Audits

There were no minor nonconformities resulting from the previous surveillance audit. A review of opportunities for improvement issued during the 2007 audit indicated that the Company had made strong progress on addressing the root cause of the opportunities for improvement.



An example of the narrow trail widths employed for selective and regeneration protection cuts.



Findings

No nonconformities were identified in 2007. The three opportunities for improvement identified were isolated in nature or non-critical to the overall achievement of SFI® objectives and are often specific to a particular district. Action plans to address opportunities for improvements are recommended but not required. However, in the absence of corrective action, these issues can result in nonconformities in subsequent audits.

The key opportunities for improvement identified during the 2007 audits were as follows:

- While few operational issues were identified during the audit, isolated weaknesses in the implementation of operational controls were noted in relation to right-of-way width, trail spacing, road drainage, drainage around chipper sites, minimization of ruts, deposition of rip rap within the channel of new bottomless culverts (already in the process of being addressed by JDI), placement of delimeter debris, block layout and access to Standard Operating Procedures.
- While overall emergency preparedness levels and implementation of Transportation of Dangerous Goods (TDG) requirements were high, isolated deficiencies were noted during the field audit in relation to availability of spill response material, up to date MSDS sheets, dangerous goods signage on truck box fuel tanks, drip containment for fuel nozzles and refueling practices).
- While environmental records were well maintained overall, in isolated cases there were opportunities for improvement in the implementation of controls over inspections and records, including the timeliness of JDI supervisor review of a contractor inspection on one site, documentation of action item follow-up in some quarterly management reviews and maintenance of records of quarterly silviculture audit results at one division. In addition, at one site the emergency response plan had been amended by hand by a contractor to reverse the priority of response actions.

Key focus areas for the 2008 audit

The 2008 surveillance audit will involve a re-registration to both the ISO 14001 and SFI standards. As such, all elements of both standards will be assessed in 2008.



Prompt revegetation of roadsides helps to reduce the potential for sediment transfer from newly built road.

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