



REPORT Forest Certification



J.D. Irving, Limited Woodlands Operations – 2014 SFI® Surveillance Audit

In September and October 2014, an audit team from KPMG Performance Registrar Inc. (KPMG PRI) carried out a surveillance audit of J.D. Irving, Limited's (JDI's) woodlands operations against the requirements of the 2010-2014 edition of the Sustainable Forestry Initiative® (SFI®) standard. To provide for a more efficient audit, an ISO 14001 re-certification audit was conducted at the same time. This Certification Summary Report provides an overview of the audit process and KPMG's findings.

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 (728,000 ha), Nova Scotia (50,000 ha) and Maine (505,000 ha). On Canadian Crown Land in New Brunswick, the company operates a sub-licence on licences #9, #3, #5, #1 and #8 and manages licence #7 (1,038,000 ha). The annual volume allocations are 446,000m³ on licence #9, 140,000m³ on licence #3, 40,000m³ on licence #5, 212,000 m³ on licence #1, 1,574,000m³ on licence #7 and 7,000m³ on licence #8. Additional Crown volume allocations exist in Nova Scotia (35,000 m³ a year).

Consistent with prior years, sub-licencee operators on licence #7 in New Brunswick have operated under the JDI Environmental Management System (EMS) and are included within the scope of JDI's ISO 14001 and SFI® certifications.

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 Paper corrugated medium mill in St. George, New Brunswick and 11 Sawmills (8 in New Brunswick, 1 in Nova Scotia and 2 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.

Audit Scope

The audit was conducted against the requirements of the 2010-2014 edition of the SFI standard, and incorporated a limited scope assessment against the SFI program objectives for:

- Forest management planning;
- Protection and maintenance of water resources;
- Management of visual quality and recreational benefits;
- Protection of special sites;
- Landowner outreach;
- Use of qualified resource and logging professionals;
- Adherence to best management practices when fibre sourcing;
- Forestry research, science and technology;
- Training and education;
- Public land management responsibilities;
- Communications and public reporting; and
- Management review and continual improvement.



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The Audit

- **Audit Team** – The SFI surveillance and ISO 14001 re-certification audits were conducted by a four person audit team. The team included three environmental auditors from KPMG PRI (a BC Registered Professional Forester/SAF certified forester, a BC Registered Professional Forester and a biologist) and a consulting forester. Craig Roessler, RPF(BC), SAF(CF), EP(EMSLA) was the lead auditor on the engagement.
- **Audit Approach** – Both the ISO 14001 and SFI Standards follow a 3 year certification cycle with a full scope audit of all elements of each standard conducted once every 3 years, with annual limited scope surveillance audits conducted in between.
- **Audit Focus Areas** – The audit focused on assessing actions taken with respect to opportunities for improvement identified during previous KPMG PRI audits and actions to maintain conformance with selected SFI objectives.
- **Site Visits** – The field audit took place over a two week period in late September and early October 2014 and assessed performance at field operations in Maine, New Brunswick and Nova Scotia. Forestry program planning, implementation and monitoring were assessed in Nova Scotia, Northern NB (Black Brook), Central NB (Deersdale, Chipman and Doaktown), Southern NB (Sussex and St. George) and Northern Maine woodlands operations. The audit also focused on the Company’s fibre procurement operations in southeast New Brunswick, Nova Scotia, Dixfield, Maine and northern Maine. The work included an assessment of field activities and the design of the underlying EMS and its delivery on the selected SFI® objectives. The field inspection program covered 37 roads, 61 harvesting units, 14 commercial thinning operations, 12 silviculture sites, 7 procurement sites and 19 unique or special sites.
- **J.D. Irving, Limited’s SFI Program Representative** – Scott MacDougall served as J.D. Irving, Limited’s SFI program representative during the audit.

Use of Substitute Indicators

No substitute indicators were utilized during the audit.

Audit Objectives

The objectives of the 2014 audit were to evaluate the environmental management system and sustainable forest management system at J.D. Irving Limited to:

- Determine their conformance with the ISO 14001:2004 and 2010-2014 SFI® standards;
- Evaluate the ability of the systems to ensure that J.D. Irving Limited meets applicable regulatory requirements;
- Evaluate the effectiveness of the systems in ensuring that J.D. Irving Limited meets its specified objectives, and;
- Where applicable, identify opportunities for improvement.

Evidence of Conformity with SFI 2010-2014

Primary sources of evidence assessed to determine conformity with the SFI 2010-2014 standard are presented in Table 1 below.

J.D. Irving, Limited SFI Surveillance Audit Findings

Major non-conformities	0
Minor non-conformities	0
Opportunities for improvement	7

Types of audit findings

Major nonconformities:

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

Minor nonconformities:

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

All nonconformities require the development of a corrective action plan within 30 days of the audit, which must be reviewed and approved by the audit team.

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

Opportunities for Improvement:

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

SFI Objective #	Key Evidence of Conformity
1. Forest Management Planning	Forest Management Plans (FMPs), Geographical Information System (GIS) data base/map layers, inventory data, Environmental Management System (EMS), Standard Operating Procedures (SOPs) and Policies, Sustainable Forest Management (SFM) report card, Work Orders (WOs), Field inspections, Planning staff interviews, Internal audits.
2. Forest Productivity	Not included within the scope of the 2014 surveillance audit.
3. Protection and Maintenance of Water Resources	FMPs, EMS, SOPs and Policies, Sustainable Forest Management (SFM) report card, WO, Best Management Practices (BMPs) for Road Building, Company and DNR inspection and audit records, District road and bridge maintenance inspection records and lists, Field inspections, Staff and contractor interviews.
4. Conservation of Biological Diversity	Not included within the scope of the 2014 surveillance audit.
5. Management of Visual Quality and Recreational Benefits	FMPs, EMS, SOPs, WO, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
6. Protection of Special Sites	FMPs, EMS, SOPs, WO, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
7. Efficient Use of Forest Resources	Not included within the scope of the 2014 surveillance audit.
8. Landowner Outreach	EMS, Responsible wood purchasing policy, BMP manuals/handbooks distributed to landowners, Company records respecting landowner outreach, Field audit of purchase wood blocks, Staff and logger interviews.
9. Use of Qualified Resource and Logging Professionals	EMS, Responsible wood purchasing policy, BMP manuals/handbooks distributed to landowners, Certified and qualified logger lists/websites, Company records respecting the use of qualified resource and logging professionals, Field audit of purchase wood blocks, Staff and logger interviews.
10. Adherence to Best Management Practices	EMS, Responsible wood purchasing policy, Field inspections of a sample of sites (including in Dixfield, ME, Nova Scotia and Southeast New Brunswick (SENB) Marketing Board audited sites) and JDI and SENB Marketing Board inspection records/results.



Stand management activities include commercial thinning (CT) (picture taken in the Saint George, NB operating area). Engaging in CT along with pre-commercial thinning supports the Company's objective of adding value to the timber resource.



This picture shows a deactivated temporary bridge crossing. The field audit observed good practices around the installation, maintenance, and deactivation of bridges and crossings, with little evidence of post-operation disturbance.

SFI Objective #	Key Evidence of Conformity
11. Promote Conservation of Biological Diversity, Biodiversity Hotspots and Major Tropical Wilderness Areas	NA – Company does not source fiber from outside North America.
12. Avoidance of Controversial Sources including Illegal Logging	NA – Company does not source fiber from outside North America.
13 Avoidance of Controversial Sources including Sources without Effective Social Laws	NA – Company does not source fiber from outside North America.
14. Legal and Regulatory Compliance	Not included within the scope of the 2014 surveillance audit.
15. Forestry Research & Technology	Research records, FMPs, JDI Nursery EMS, 2013 SFI Progress Report, Interviews with key staff.
16. Training and Education	EMS, Environmental policy, Responsible wood purchasing policy, Company training program and records, SIC training resources/materials, Interviews with key staff and contractors.
17. Community Involvement in the Practice of Sustainable Forestry	Not included within the scope of the 2014 surveillance audit.
18. Public Land Management Responsibilities	FMP, WOs, Company and DNR stakeholder engagement process/records, Staff interviews.
19. Communications and Public Reporting	KPMG PRI SFI public summary report, 2013 SFI Progress Report and supporting records, Past SFI progress reports and supporting records.
20. Management Review and Continual Improvement	EMS, Corporate and District management review records, SFM report card, Internal audit records, District inspection, monitoring and audit records.



JDI employs a range of site-specific harvest prescriptions on the lands under its management. The above image (taken in Black Brook, NB) is indicative of the variety of prescriptions JDI applies to different stand types across the landbase.

Audit Conclusions

- Based on our limited scope SFI surveillance audit, the Operation’s forest management planning and practices continue to meet the requirements of the 2010-2014 version of the SFI standard in all material respects. Consequently, a decision has been made to continue certification of the Company to the SFI 2010-2014 standard. J.D. Irving, Limited’s SFI certification continues to be valid until November 4, 2015.
- Based on our full scope ISO 14001 re-certification audit, the operation’s environmental management system continues to meet the requirements of the ISO 14001 standard. Consequently a decision has been made to re-certify the Company to the ISO 14001 standard.



This image shows a recently implemented partial cut, which involves the harvesting of poor quality, low value species in order to promote the retention and growth of thrifty, valuable hardwood species for the next harvest pass (Black Brook, NB).

Good Practices

A number of good practices were identified during the course of the audit. Examples included:

SFI Objective 1: The operation is using LIDAR for a variety of operational and planning applications (e.g., identifying streams, vernal pools, wet areas and rare habitat, vegetation types and stand types for proposed silviculture prescriptions, inventory, locating of roads, etc.) (Black Brook).

SFI Objective 3: The operation is continuing its implementation of outcome based forestry. An active focus has been placed on capturing imminent mortality in riparian and separation zones (Maine).

SFI Objectives 3: The organization has maintained good practices around the installation, maintenance, and deactivation of bridges and crossings (Sussex, St. George, Deersdale and Chipman).

SFI Objective 3: The operation has been proactive in the identification and protection of sensitive vernal pools within its harvest areas (Chipman, Deersdale).

SFI Objectives 4 and 6: The operation has established and implemented a methodical unique areas and rare plants identification program which has resulted in numerous noteworthy rare plant sites and unique areas being identified and protected (including a number of excellent examples observed during the field audit) (Black Brook).

SFI Objective 6: The organization has implemented an incentive program to encourage the identification and protection of legacy trees across all operating areas.

SFI Objective 7: Field inspections determined that the Deersdale district was limiting losses to wind damage by recovering pulp logs from severely wind damaged stands following a major blowdown event in 2014 (Deersdale).

SFI Objective 16: Machine operators demonstrated a high level of awareness and understanding of their responsibilities with respect to environmental management (Maine).

SFI Objectives 16: The operation made use of a trial area in order to train new operators in the implementation of unfamiliar prescriptions (Chipman, Doaktown).

SFI Objectives 20: The organization makes use of a hierarchy of inspections and checklists to properly allocate responsibility and ensure maintenance of best practices (all areas).

SFI Objective 20: The organization continues to make use of its incident tracking system to track, manage, and correct environmental incidents and nonconformities (all areas).

SFI Objective 20: The operation is actively tracking and addressing trends in NCs and incidents during quarterly management reviews (Black Brook).

Follow-up on Findings from Previous Audits

The 2014 audit found that J.D. Irving, Limited's woodlands operations continue to make adequate progress towards addressing the findings of previous ISO 14001 and



The field audit observed numerous examples of well protected unique sites and waterbody features, including (as shown in this photo taken in Deersdale), vernal pools, which in this case were removed from a cutblock in order to prevent disturbance (which are highly valued as a frog and lizard spawning sites).



This photo (taken in the Saint George area) shows an effectively implemented riparian buffer.

SFI audits. The audit determined that the opportunities for improvement issued during the 2013 surveillance audit were satisfactorily addressed.

New Areas of Nonconformity

The 2014 audit of J.D. Irving, Limited’s woodlands operations did not identify any nonconformities against the requirements of the SFI or ISO 14001 standards.

Opportunities for Improvement

A total of 7 new opportunities for improvement were identified during the 2014 audit, as follows:

- **SFI Objective 1 (Forest management planning)** – JDI currently has yet to develop a strategy to make sure stakeholders are aware of information regarding a new Management Plan for NB Licence 7 (Sussex, St. George, Chipman, Doaktown).
- **SFI Objectives 1 & 2 (Forest management planning and forest productivity)** – Projected harvest levels presented in the Licence 7 Management Plan are modeled over an 80 year planning horizon. However, the graphs in the management plan only show the harvest levels over the first 40 years and do not make it clear that an 80 year planning horizon was used (Sussex, St. George, Chipman, Doaktown).
- **SFI Objective 3 (Protection and maintenance of water resources)** – JDI employs a conservative approach to managing buffers, which (given the degree of variability in the age and health of buffer wood) may limit in some stand types the ability to balance harvest volume and buffer integrity and reduce the availability of buffer volume (Maine, Chipman, Doaktown, Sussex, St. George).
- **SFI Objective 16 (Training and education)** – Two operators provided inaccurate answers to question regarding the process to follow if previously unidentified stick nests are identified during operations (Sussex).
- **SFI Objective 20 (Management Review and Continual Improvement)** – JDI’s non-conformance and recordable incident database does not include a feature for developing and tracking corrective actions for recordable incidents and public concerns, which is resulting in inconsistent workaround practices for capturing this information to demonstrate that public concerns/complaints are being addressed.
- **SFI Objective 20 (Management Review and Continual Improvement)** – While the current superintendent inspection checklist indicates that biweekly supervisor auditing of contractor checklists is required, the actual practice is now a monthly check.
- **SFI Objective 14 (Legal and regulatory compliance)** – Field inspections determined that operational controls were being implemented overall with only isolated lapses observed (examples include isolated instances of high stumps or missed piles, an unclear work order respecting species to be retained, a recordable rut not captured as an incident in the database, two operators without SOPs in their machines and inadequate spill equipment on one block).



The Company operates a Legacy Tree program with prizes to incentivize the identification of these unique trees (in this case, a large (>70cm DBH) Yellow Birch located in the Chipman operating area).



This photo provides an example of well executed culvert installations. Visible here are rip-rap check dams installed near the culverts to reduce the potential of siltation (Chipman).

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