Audit of Forest Planning and Practices

A&A Trading Ltd. and Terminal Forest Products Ltd.
Forest Licence A19229

FPB/ARC/220
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Introduction

The Forest Practices Board is the public's watchdog for sound forest and range practices in British Columbia. One of the Board’s roles is to audit the practices of the forest industry to ensure compliance with the Forest and Range Practices Act (FRPA) and the Wildfire Act.

As part of its 2018 compliance audit program, the Board randomly selected the Sunshine Coast Natural Resource District as a location for a full scope compliance audit. The Board selected forest licence A19229 for audit. The licence is held by A&A Trading Ltd. (A&A), but some silviculture obligations are the responsibility of the previous licensee, Terminal Forest Products Ltd. (Terminal).

This report explains what the Board audited and the results. Detailed information about the Board’s compliance audit process is provided in Appendix 1.

Background

In January 2009, A&A purchased forest licence A19229 from Terminal. Terminal retained all silviculture obligations up to the date of sale. The licence, which is located in the Sunshine Coast Timber Supply Area, has an allowable annual cut of 125 966 cubic metres per year, and A&A harvested approximately 380 000 cubic metres during the two-year audit period.¹ The activities audited are located in several areas near the communities of Sechelt and Powell River, including Salmon Inlet, Sechelt Peninsula, Ramsey Arm, West Redonda Island and Bute Inlet (as shown on the

¹ A licensee may harvest up to 110 percent of their five-year cut control cycle, or over 692 000 cubic metres in this case, in just one or two years, while still meeting cut control requirements.
map of the audit area below). A&A’s planning and practices are managed out of its offices in Campbell River and Vancouver. Terminal’s obligations are managed out of its office in Richmond. With the exception of the Sechelt Peninsula, the audit area is remote and can only be accessed by water or air. Rugged mountains, lakes and numerous inlets, which create operational challenges, characterize the area. It is ecologically complex, supporting a rich and diverse array of wildlife, and contains a mixture of hemlock, Douglas-fir and western red cedar tree species. Topography in the operating area varies from steep mountainous terrain to rolling ground on low-lying islands and peninsulas.

A&A’s operating areas are covered by several land use and Government Actions Regulation orders, which legally establish old growth management areas, recreation sites and trails, and visual quality objectives.
Audit Approach and Scope

This was a full scope compliance audit with a two-year timeframe. Activities carried out by A&A and Terminal on forest licence A19229, between July 1, 2016, and July 11, 2018, were subject to audit. The activities include operational planning (involving the preparation of forest stewardship plans (FSP) and site plans), harvesting, roads, major structure construction and maintenance, silviculture and wildfire protection for A&A and just silviculture activities for Terminal.

Auditors assessed these activities for compliance with FRPA, the Wildfire Act, and applicable regulations. Auditors’ work involved interviewing A&A and Terminal staff, conducting an office review of operational plans and silviculture records, and conducting field visits using trucks and helicopters.

The standards and procedures used to carry out this audit are set out in the Board’s Compliance Audit Reference Manual, Version 7.1, July 2016.

Two forest professionals, a professional engineer and a chartered professional accountant made up the audit team. The audit team was in the field from July 9 to 11, 2018.

Audit Results – A&A Trading Ltd.

Planning and Practices Examined

Operational Planning

A&A planned its activities under FSP 55, which was approved by government in 2016 and remains in effect until December 2021.

Auditors examined the FSP for consistency with legal requirements, including government orders for old growth management areas, recreation sites and trails and visual quality objectives and notices for marbled murrelet, northern goshawk and coastal tailed frog habitat.

Auditors also confirmed whether site plans accurately identified site conditions during harvesting, road and silviculture field sampling.

Timber Harvesting

A&A conducted harvesting activities on 37 cutblocks during the audit period. Auditors examined 20 of these cutblocks.

Road and Major Structure Construction, Maintenance and Deactivation

During the audit period, A&A constructed 52 kilometres and maintained 376 kilometres of road. A&A constructed 8 bridges, maintained 59 bridges and did not deactivate any roads or bridges.

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2 Major structure includes bridges and major culverts.

- Bridge means a temporary or permanent crossing structure with a span length equal to or greater than 6 metres or an abutment height of 4 metres or greater.
- Major culvert has a pipe diameter of 2 metres or greater or is a pipe arch or open bottom arch with a span greater than 2.13 metres.
Auditors examined 50 kilometres of the constructed road, 115 kilometres of the maintained road, all 8 of the constructed bridges and 24 of the maintained bridges.

**Silviculture Activities and Obligations**

A&A planted 43 cutblocks, brushed 2 cutblocks, had 29 cutblocks with regeneration obligations due, and 3 cutblocks with free-growing obligations due during the audit period.

Auditors examined 8 of A&A’s planted cutblocks in the field and all 43 cutblocks for compliance with the chief forester’s seed transfer guidelines. Auditors also examined both of the brushed cutblocks, 6 of the cutblocks with regeneration obligations due and 2 of the cutblocks with free-growing obligations due.

Auditors examined all of the above cutblocks for compliance with annual reporting requirements.

**Wildfire Protection**

A&A had one active harvest operation during the field audit, which auditors examined for compliance with requirements for fire preparedness.

A&A abated fire hazards on 33 cutblocks and had 37 cutblocks with fire hazard assessments due during the audit period. Auditors examined 17 of the abated cutblocks and 20 of the cutblocks with fire hazard assessments due.

**Findings**

Auditors found that A&A’s operational planning, harvesting, road and bridge construction and maintenance, silviculture and protection activities complied with FRPA and the *Wildfire Act*.

**Operational Planning**

The FSP and site plans were consistent with FRPA requirements. The FSP incorporated the requirements of the government orders and notices. A&A addressed site-specific resources in the site plans by accurately identifying and prescribing practices for resource features.

A&A met requirements for old growth by avoiding activities in established old growth management areas. It also met notice requirements by conducting habitat inventories to identify habitat management areas, avoiding road construction and harvest activities in the identified areas and avoiding areas that met the habitat criteria specified in the notices.

A&A met visual quality objectives in scenic areas by conducting visual impact assessments, incorporating visual design principles such as cutblock size, shape, orientation and tree retention into cutblock design.

A&A refers proposed development to First Nations on an annual basis. It keeps an itemized record of the referral and any comments received.

There were no concerns with operational planning.

**Timber Harvesting**

A&A managed streams well, deactivating in-block access structures that crossed streams and maintaining natural drainage patterns. Reserve zones were established along fish streams and harvesting did not infringe on the reserve zones. Riparian management area (RMA) protection measures included the use of narrow road right-of-ways, maintaining trees and vegetation, piling
logging debris outside RMAs and minimizing sedimentation through the use of rock armouring at the inlets and outlets of culverts.

Dispersed soil disturbance was well managed, using cable, hoe and helicopter harvest systems to minimize disturbance. A&A rehabilitated and planted temporary access trails.

Harvesting practices conformed to site plans and there were no issues with timber harvesting.

**Road and Major Structure Construction and Maintenance**

A&A’s roads were well constructed and maintained. Construction followed conventional techniques, as well as specific construction techniques such as full benching and three quarter benching. In those circumstances, A&A consulted with qualified professionals and followed their recommendations. Road documentation was complete and well organized.

Natural drainage patterns were maintained and additional cross-drains installed where required. New roads were capped with shot rock and were safe for industrial use.

A&A’s bridges were well constructed and maintained. It kept comprehensive bridge records, and made inspection, general arrangement drawings and assurance documentation available to the audit team.

The Bute Inlet area has not been active for a number of years and the majority of roads are heavily brushed in. There are 19 bridges in this area that are inaccessible by truck but have had professional inspections in anticipation of operations ramping up within the next few years.

There were no issues with road and major structure construction or maintenance.

**Silviculture Activities and Obligations**

A&A operates in an area with difficult access, steep slopes and high post-harvest slash loading, making reforestation very challenging. A&A’s silviculture program was well managed and executed. It planted all cutblocks with suitable tree species and stock and all planted trees met the chief forester’s seed transfer guidelines.

All annual reporting obligations were up to date.

There were no issues with silviculture activities or obligations.

**Wildfire Protection**

Auditors found that A&A met fire preparedness requirements on the one active cutblock examined. The logging contractor knew the fire danger class, provided 24-hour contact information to the local fire centre, had the required fire tools on site and had an adequate water delivery system.

**Hazard Assessment and Abatement**

The *Wildfire Act* requires licensees to assess the fire hazard at specified intervals, including an assessment of the fuel hazard and the associated risk of a fire starting or spreading. If a licensee identifies a fire hazard, they must abate it.

Auditors found A&A had completed hazard assessments within the required timeframes for all 20 cutblocks sampled and all of the assessments met content requirements.

It is A&A’s standard practice to pile slash and then burn it when it is safe to do. Auditors found that A&A met abatement requirements in all 17 of the cutblocks sampled.
In unabated cutblocks, A&A piled slash in locations where it can safely be burned when conditions become suitable to do so.

Auditors found that A&A met its assessment and abatement obligations.

**Audit Opinion**

In my opinion, the operational planning, timber harvesting, road construction, road maintenance, silviculture, and fire protection activities carried out by A&A Trading Ltd. on forest licence A19229 between July 1, 2016, and July 11, 2018, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of July 2018. There is no opinion provided for road or bridge deactivation.

In reference to compliance, the term “in all significant respects” recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

The *Audit Approach and Scope* and the *Planning and Practices Examined* sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board, including adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the *Forest and Range Practices Act*, and the *Wildfire Act*.

Christopher R. Mosher CPA, CA, EP(CEA)
Director, Audits
Victoria, British Columbia
November 8, 2018
Audit Results – Terminal Forest Products Ltd.

Planning and Practices Examined
Silviculture Obligations
Terminal had 22 cutblocks with free-growing obligations due during the audit period, of which auditors examined 12.

Auditors examined all 22 cutblocks for compliance with annual reporting requirements.

Findings
Auditors found that Terminal’s silviculture activities complied with FRPA requirements.

Silviculture Obligations
Terminal’s silviculture program was well managed and executed. It regenerated all cutblocks with suitable tree species and stock and met free growing requirements.

All annual reporting requirements were up-to-date.

There were no issues with silviculture obligations.

Audit Opinion
In my opinion, the silviculture activities carried out by Terminal Forest Products Ltd. on forest licence A19229 between July 1, 2016, and July 11, 2018, complied in all significant respects with the requirements of the Forest and Range Practices Act and related regulations, as of July 2018. There is no opinion provided for operational planning, timber harvesting, road and major crossing construction, maintenance, or deactivation or fire protection activities.

In reference to compliance, the term “in all significant respects” recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

The Audit Approach and Scope and the Planning and Practices Examined sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board, including adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Forest and Range Practices Act, and the Wildfire Act.

Christopher R. Mosher CPA, CA, EP(CEA)
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November 8, 2018
Appendix 1:  
Forest Practices Board Compliance Audit Process

Background
The Forest Practices Board conducts audits of government and agreement holders under the Forest and Range Practices Act (FRPA), section 122, and the Wildfire Act. Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or Wildfire Act requirements. The Board conducts about 10 compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government’s BC Timber Sales Program (BCTS).

Selection of Auditees
To begin with, auditors randomly select an area of the Province, such as a natural resource district. Then the auditors review the forest resources, geographic features, operating conditions and other factors in the area selected. These are considered in conjunction with Board strategic priorities (updated annually), and the type of audit is determined. At this stage, auditors choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2016, the Board randomly selected the Dawson Creek portion of the Peace Natural Resource District as a location for an audit. After assessing the activities within the area, it was noted that there were two community forest agreements that had not yet been audited by the Board. As the Board strives to audit an array of licence types and sizes each year, these two community forest agreements were selected for audit.

For BCTS audits, a district or timber supply area within 2 of the 12 business areas in the province are selected randomly for audit. Only those areas that have not been audited by the Board in the past five years are eligible for selection.

Audit Standards
The audits are conducted in accordance with auditing standards developed by the Board. These standards include adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour and are consistent with Canadian generally accepted auditing standards. The standards for compliance audits are described in the Board’s Compliance Audit Reference Manual.

Audit Process
Conducting the Audit
Once the Board randomly selects an area or district and determines the scope of audit to be conducted and the licensee(s) to be audited, all activities carried out during the period subject to audit are identified (such as harvesting or replanting, and road construction or deactivation activities). Items that make up each forest activity are referred to as a population. For example, all sites harvested form the timber harvesting population and all road sections constructed form the road construction population.
A separate sample is then selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to areas where the risk of non-compliance is greater. For smaller audits, the sample will include the full population.

Auditors’ work includes interviewing licensee staff, reviewing applicable plans, assessing features from helicopters and measuring specific features like riparian reserve zone width using ground procedures. The audit teams generally spend three to five days in the field.

**Evaluating the Results**

The Board recognizes that compliance with the requirements of FRPA and the *Wildfire Act* is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legal requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

- **Compliance** – where the auditor finds that practices meet FRPA and *Wildfire Act* requirements.
- **Unsound Practice** – where the auditor identifies a significant practice that, although in compliance with FRPA or the *Wildfire Act*, is not considered to be sound management.
- **Not significant non-compliance** – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not generally worthy of reporting. However, in certain circumstances, these events may be reported as an area requiring improvement.
- **Significant non-compliance** – where the auditor determines a non-compliance event(s) or condition(s) is, or has the potential to be, significant and is considered worthy of reporting.
- **Significant breach** – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or more non-compliance events.

If a significant breach of the legislation has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Minister of Forests, Lands, Natural Resource Operations and Rural Development.
Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a copy of the draft report for review and comment before it is submitted to the Board.

The Board reviews the draft report and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report. The representations allow parties that may potentially be adversely affected to present their views to the Board.

The Board reviews representations from parties that may potentially be adversely affected, makes any necessary changes to the report, and decides if recommendations are warranted. The report is then finalized and released: first to the auditee and then to the public and government seven days later.

ENDNOTES

1 A forest stewardship plan (FSP) is a key planning element in the FRPA framework and the only plan subject to public review and comment and government approval. In FSPs licensees are required to identify results and/or strategies consistent with government objectives for values such as water, wildlife and soils. These results and strategies must be measurable and once approved are subject to government enforcement. FSPs identify areas within which road construction and harvesting will occur but are not required to show the specific locations of future roads and cut blocks. FSPs can have a term of up to five years.