

Monitoring Plan for the Environmental Management System and Sustainable Forest Management (CSA & FSC)

Principle 8, "Monitoring and Assessment", of the Forest Stewardship Council (FSC), Boreal Standard states: *Monitoring shall be conducted - -appropriate to 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 impact.* The following table represents a monitoring plan for CBBPL Woodlands that meets the requirements of this principle.

The table describes the activity being monitored, the frequency and intensity of monitoring, who is responsible, where results are reported and stored, and corrective actions. Corrective actions are initiated if results are outside predetermined parameters. The monitoring plan is reviewed annually by the EMS Management Review Committee and made available to the public. All monitoring activities in the plan have their own procedures elsewhere in the EMS.

EMS / SFM (CSA FSC) Monitoring Plan

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
CSA /FSC Indicators	Indicators used to measure performance relative to CSA and FSC standards, and to guide implementation of SFM planning	See VOIT table - varies by indicator.	See indicator profile, SFM Plan	EMS Review Committee or designate and PAC	EMR	CBPPL Woodlands network CSA Z809-16	Annual Indicator Report www.cbpppl.com/	If outside acceptable range of variance, actions determined by the EMS Review Committee in consultation with PAC will be initiated
Innovative Silvicultural Practices	Investigation of new technologies and practices as they become accepted	Whenever appropriate	NA	Silviculture and Scaling Supervisor	Silviculture and Scaling Supervisor or designate	NA	When new or innovative practices become accepted, Silviculture and Scaling Supervisor will inform Woodlands Management Committee	NA
EMS Compliance Inspections #1	Contractor must conduct an environmental inspection of his operation	One Inspection per month while operating	All harvesting and roads contractors	Contractor and Operations Superintendent or designate	Contractor Supervisor	CBPPL Woodlands Manual 9	Contractor supervisors report findings at monthly Operations Meetings	Item identified must be corrected and will be assessed during the # 2 & #3 inspection
EMS Compliance Inspections #2	Operations Superintendents or designate conduct environmental inspections on roads and harvesting areas.	Roads: 1-2/yr. Harv.: 3/yr.	All Harvesting and Road Contractors	Operations Superintendents or designate	General Operations Superintendent/ Planning and Development Superintendent	CBPPL Woodlands Network Q 5 System; results are also tracked on EMS manual 9 EMS Compliance inspections	Operations Superintendents report results to the General Operations Superintendent/ Planning and Development Superintendent	Contractor is responsible for any remediation possible, which will be checked during the next #2 inspection.
EMS Compliance Inspections #3	Operations Superintendents or designate conduct a final inspection when operations are completed in an area	When required	All harvesting operations	Operations Superintendents or designate	General Operations Superintendent	CBPPL Woodlands Network, Woodlands Operations ; also results are tracked in EMS	Operations Superintendents report results to the General Operations Superintendent	Contractor is responsible for any remediation possible, which will be checked during the next #2 inspection.

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
						Manual 9, EMS Compliance inspections		
EMS Scarification Compliance Inspections #3	Silviculture and Scaling Supervisor or designate will conduct a final inspection when operation is complete in an area	When required	All scarification Operations	Silviculture and Scaling Supervisor or designate	Silviculture and Scaling Supervisor	CBPPL Woodlands Network Q 5 System ; also results are tracked in EMS Manual 9, EMS Compliance inspections	Silviculture and Scaling Supervisor reports results to the Woodlands Management Committee	Contractor is responsible for any remediation possible, which will be checked during the next #2 inspection.
#2 OHS Compliance Inspections	Operations Superintendents or designate conduct safety inspections on roads and harvesting areas.	Roads: 1-2 per year Harvesting: 3 per year	All Harvesting and Road Contractors	Operations Superintendents and Planning and Development Superintendent or designate	General Operations Superintendent	CBPPL Woodlands Network Q 5 System	Operations Superintendents report results to the General Operations Superintendent	Contractor is responsible to correct deficiencies identified
External OHS Compliance Inspections	Provincial OHS officer jobsite inspections	Unannounced random inspections or by invitation	A sample of all Operations	OHS Officer or designate	Operations Superintendent	Safety and Training Supervisor	Woodlands Management Committee	Directives issued by the inspector are addressed by the Woodlands Management Committee and General Safety Committee
External Audit PRIME	Workers Compensation Commission audit of company's safety program	Annually	All aspects of the company's Safety program	WHSCC auditor or designate	Safety and Training Supervisor	Safety and Training Supervisor	Audit findings are addressed by the Woodlands Management Committee	Action plan developed to address audit findings if not in compliance.
INTELEX	Web-based health, safety and training management software. Environmental Module add-on available.	When required.	All aspects of the company's Safety program	Safety and Training Supervisor or designate	Safety and Training Supervisor or designate	Safety and Training Supervisor or designate	Woodlands Management Committee	Action plan generated to address findings.
BBS	Behavior Based Safety system to communicate safety awareness and track	As per schedule developed by Safety and	All Woodlands Operations that fall under CBPPL Safety program	Safety and Training Supervisor or designate	Safety and Training Supervisor	Safety and Training Supervisor	Results are reported at monthly operations meetings and reviewed by	Track trends and initiate actions to address them

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
	at risk situations at the jobsites	Training Supervisor					General Safety Committee	
Utilization Surveys	Monitoring harvesting operations to ensure compliance to CSA indicator 5.1.2	Annual	All Harvesting Operations	Operations Superintendents or designate	General Operations Superintendent	CBPPL Network EMS Manual 5	Results are reported at Monthly Operations Meeting and SFM indicator report	If not meeting guidelines or SFM target, an action plan will be developed to deal with it.
EMS/SFM (CSA /FSC) Internal Audit	Internal audits conducted to monitor compliance with requirements of ISO 14001, CSA Z809-08 and FSC Standards	Annual	All aspects of Woodlands operations	Internal Auditors or designate	EMR	CBPPL Network EMS Manual 14 Audits	Audits results are reported to the EMS Management Review Committee	A CAR is generated for all non-compliance issues and action items are generated for all other findings
Kruger Corporate EHS Division	Internal and External auditing of Corporate procedures associated with Kruger Environmental Management System	Annually	All Corporate procedures protocols' for Monthly Reporting, Quarterly Reporting, Incident Reporting and Identification of Applicable Laws and Regulations requirements re	Internal Auditors or designate and Stantec external Auditing	EMR	CBPPL Network EMS Manual 14 Audits	Audits results are reported to the EMS Management Review Committee and distributed	Action Plans are developed and distributed to Corporate Director – Environment
EMS/SFM (CSA /FSC) External Audit	External audits conducted to monitor compliance with requirements of ISO 14001, CSA Z809-08 and FSC Standards	Annual	All aspects of Woodlands operations	External Auditors or designate	EMR	CBPPL Network EMS Manual 14 Audits	Audits results are reported to the EMS Management Review Committee	A CAR is generated for all noncompliance issues and action items are generated for all other findings
Legal Compliance	Compliance to all Provincial and Federal legislation is audited and monitored regularly , Including compliance to all Social and Labour laws	1 Audit once every 3 years Legal Tracking service provided by Resource Innovations Ltd through Global legal tracking website. EMR	All aspects of woodlands Operations	Internal Auditor EMR or designate	EMR	CBPPL Network EMS Manual 14 Audits Legal Tracking Service	Audits results are reported to the EMS Management Review Committee New Legislation is reported to EMS Management Review Committee quarterly	A CAR is generated for all noncompliance issues and action items are generated for all other non-favorable findings

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
		is notified whenever a change in legislation occurs, once a month						
Road Inspections	Final inspections conducted to ensure compliance with specifications and EMS requirements	Random	All Road construction	Planning and Development Superintendent or designate	Planning and Development Superintendent	Planning and Development Superintendent	Major issues are reported to the Management Committee	Contractor Payment holdback until specifications and EMS compliance are met
Truck Inspections	Truck inspections are performed at CBPPL wood yard and in the field to monitor compliance with safety and environmental requirements	Annually	All ballast trucks and all wood trucks that are directly employed by CBPPL contractors	Safety and Training Supervisor or designate	Safety and Training Supervisor	Safety and Training Supervisor Office	Results of inspections are reported at Monthly Operations Meetings	Directives are issued to drivers to correct deficiencies noted. If deficiencies are severe trucks are parked until deficiencies are corrected.
FSB Compliance Inspections	FSB Staff monitor harvest, road and Silviculture operations for compliance to Certificate of Managed Lands and Environmental Protection Guidelines	Random	All CBPPL operations	FSB Conservation Officers or designate	Planning and Development Superintendent	CBPPL Network Manual 9	Results are reported to Operations Superintendents and EMS Management Review Committee	When non conformances are raised they are recorded as environmental incidents and an action plan is developed to deal with each.
Emergency Response Testing	To evaluate and test contractor awareness and implementation of emergency response plans	Annual	Each contractor must do at least one test per year	Operations Superintendent or designate	General Operations Superintendent Silviculture and Scaling Supervisor Planning and Development Superintendent	CBPPL network EMS Manual 2	Results of test are reported at Monthly Operations Meetings	Procedures and documentation are modified when gaps are found.
HCVF Effectiveness	To evaluate CBPPL's Woodlands operation with HCVF	Annual	All HCVs are monitored as outlined in the	Woodland Management Team or	EMR	CBPPL Network EMS Management	Results are reported to EMS Management Review Committee	Action Plan developed to address areas

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
	management approaches to ensure compliance		HCVF Assessment Report	designate		Review minutes		where HCV are not being maintained
FSB Inventory Data	CBPPL Woodlands has access to data generated by FSB.	Annual	Provincial inventory updated every 10 years	Data monitored by Planning and Development Superintendent or designate	Planning and Development Superintendent	FSB Provincial Inventory database and CBPPL Woodlands GIS	NA	NA
Report of Past Annual Operations	CBPPL reports on actual amounts harvested by district and by operating area, and amount and type of silviculture treatment	Annual	All Operations	Planning and Development Superintendent or designate	Planning and Development Superintendent	Office of the Planning and Development Superintendent	Annual harvest levels are tracked to ensure compliance with AAC allocations by district Annual harvest are reported to FSB and Woodlands Manager	Annual allowable cuts may be reduced and areas declared unmanaged if AAC is exceeded over a five -year period.
Wood Supply Land Base Determination	CBPPL Planning Staff works with FSB wood supply personal to classify the land base for calculating annual allowable cuts.	5 years	All CBPPL Limits	Planning and Development Superintendent or designate	Planning and Development Superintendent	CBPPL GIS System	Land base determination provides a spatial representation of available wood supply and other values associated with the DFA	NA
Integrated World Office (IWO) reporting system	IWO allows daily tracking and reporting of wood deliveries from all sources on the DFA	Daily	All fiber sources for CBPPL's DFA	Woodlands Staff or designate	Silviculture and Scaling Supervisor	CBPPL IWO	The IWO allows for electronic reporting for all deliveries off CBPPL's DFA	NA
Cutover Mapping	Cutovers are photographed and inventory data is updated		All areas harvested previous year	Planners or designate	Planning and Development Superintendent	CBPPL GIS System	Regular annual updates allow consistent tracking of past activities and more reliable information when planning future activities.	NA
PWC Chain of Custody	Fiber tracking system to ensure that all sources of fiber to CBPPL Mill comes from legal sources.	Monthly	All sources	Operations Superintendent or designate	Paper Mill Continuous Improvement and Technical Manager and Operations Superintendent			

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
FSC Chain of Custody	Fiber tracking system to ensure that all sources of fiber to CBPPL Mill comes from legal sources, meets FSC Controlled Wood and Chain of custody standards.	Monthly	All sources	Operations Superintendent or designate	Paper Mill Continuous Improvement and Technical Manager and Operations Superintendent			
PCT Quality Assessment	Monitoring to ensure quality standards are met	Weekly	All PCT operations	Silviculture Technician	Silviculture and Scaling Supervisor	Office of the PCT Supervisor	Weekly quality report to Silviculture and Scaling Supervisor	Non compliance will affect individuals rate of pay
PCT EMS Compliance Inspection	PCT Supervisor conducts an environmental inspection on PCT crews.	2-3 inspections per year	All PCT Crews	PCT Supervisor or designate	Silviculture and Scaling Supervisor	CBPPL Woodlands Network, results are tracked on EMS manual 9 EMS Compliance inspections	PCT Supervisor reports results to Silviculture and Scaling Supervisor	Crews are responsible for any remediation possible.
Planting Quality Assessment	FSB and CBPPL conduct quality assessment on planted areas	CBPPL Daily FSB ongoing assessment	All planting areas	Planting Quality Technician or designate FSB Conservation Officers	Silviculture and Scaling Supervisor FSB Silviculture Division	Silviculture Technician CBPPL Network EMS Manual 9	Quality reports are sent to Silviculture and Scaling Supervisor FSB Reports to Silviculture of FSB	Non compliance will affect contractors' rate of pay Non compliance will affect CBPPL's rate of pay
Scarification EMS Compliance Inspection #2	Silviculture Technician conducts environmental inspection on scarification operations	Two inspections per year	All Scarification operations	Silviculture Technician or designate	Silviculture and Scaling Supervisor	CBPPL Woodlands Network, results are tracked on EMS Manual 9 EMS Compliance inspections	Silviculture Technician reports results to Silviculture and Scaling Supervisor then reported to EMS Management Review Committee	Contractor is responsible for any remediation possible
Herbicide Monitoring	Silviculture Technician completes proposals and reports on areas treated and herbicide dispensed	Daily during the operation	All of proposed area	Silviculture Technician or designate	Silviculture and Scaling Supervisor	Silviculture Technician	Application rates and volumes are reported to Dept. of Environment	If found outside proposed area, calibration and adjustment will take place
KPI Performance Indicators for	Monitors contractor performance through key performance Indicators:	Three times per year	Performance indicators for that period	Operations Superintendents and General Operations	General Operations Superintendent	General Operations Superintendent	KPI results are reported to the General Operations Superintendent	The KPI process and results are reviewed annually and result in a

Monitoring Activity	Description	Frequency	Intensity	Monitored By	Responsible	Storage	Reporting	Corrective Action
Contractors	Productivity, Quality, Safety, and Environment. The KPI program is part of the signed contract with contractors			Superintendent or designate				holdback to the contract or an incentive paid, depending on performance.

