Annual Work Schedule Revision - Title, Certification and Approval Page

PRESCRIBED BURN PLAN - REVISION TO THE ANNUAL WORK SCHEDULE for the WHISKEY JACK FOREST

Kenora District, Northwest Region, Ontario Ministry of Natural Resources
Miitigoog LP
for the one-year period from April 1, 2021 to March 31, 2022

I/We hereby confirm that this revision to the annual work schedule has been prepared in accordance with the requirements of the Forest Management Planning Manual, and the Forest Information Manual and is consistent with the forest management plan.

Prepared by: Kurt P	ochailo	
		[date]
Submitted by: Kurt	<u>Pochailo</u>	
Plan Author		[date]
scheduled in this rev	the Prescribed Burn Plan opera vision to the annual work schedu requirements of the Forest Mar	ule have been developed in
[R.P.F. Seal]	[Plan Author]	 [date]
NRIP Submission Ide	ntifier:	

The original signed and stamped version of this page is retained at MNR Kenora District office and the Miitigoog/Miisun office in Kenora.

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WHISKEY JACK FOREST

Kenora District, Northwest Region, Ontario Ministry of Natural Resources
Miitigoog LP

for the one-year period from April 1, 2021 to March 31, 2022

I hereby certify that the Prescribed Burn Plan operations which are scheduled in this revision to the annual work schedule have been developed in accordance with the requirements of the Forest Management Planning Manual.

Derian Caron Forester All Sections _____ August 23, 2021
[Name] [Title] [Sections] [Signature] [date]

Low Complexity Prescribed Burn Plan for Slash Pile Burning

Company Name:	Miisun Integrated Resor	urce Management Co.
Location:	District:	Kenora
Fores	st Management Unit:	Whiskey Jack Forest
	Gross Area:	1700 ha*
N	let Area in Hectares:	42.5 ha*
	Year:	2021
Plan prepared by:	<u>Date</u>	<u>):</u>
Derian Caron	Augu	st 2021

DISCLAIMER

This slash pile burn plan follows the process laid out in the Ontario Ministry of Natural Resources (OMNR) Prescribed Burn Manual. The PB plan is developed for prescribed fire operational requirements and is not intended to meet other planning requirements. Prescribed burn operations will follow established Ministry of Natural Resources (MNR) guidelines and standards to ensure that all prescribed burns are conducted in a safe and effective manner

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1.0 Introduction

This slash pile burn plan follows the process laid out in the Ontario Ministry of Natural Resources and Forestry (OMNRF) Prescribed Burn Manual. Prescribed burn operations will follow established Ministry of Natural Resources (MNRF) guidelines and standards to ensure that all prescribed burns are conducted in a safe and effective manner.

Slash pile reduction programs have been developed to reduce the area covered in slash piles as a result of full tree logging operations, while increasing the area available for regeneration and reducing the fire hazard. A prescribed burn plan is required for burning if the area to be treated is over 2 hectares (ha) in size, the burn is to last more than one day, or its complexity poses a risk to adjacent values. Slash pile burning is a silvicultural operation under the Forest Management Planning (FMP) process and will be included in the Annual Work Schedule (AWS). This plan **must** be approved 30 days prior to ignition to allow time for implementation of the communications portion of this plan. Burning generally occurs in the fall when the risk of fire spread is reduced.

The plan will evaluate the varying fuel types, burning conditions, adjacent values, safety, resource requirements, weather and communications. The Sustainable Forest License Holder (SFLH) will ensure that the burn plan has received approvals from the appropriate levels of Company and MNR signing authority. The local Fire Management Supervisor (FMS), prior to ignition, can approve minor revisions to the plan if it does not affect safety, control or objectives. Major changes that affect the safety, control and objectives must be approved through the formal approval process. Miisun IRM Co. must also ensure all burning permits have been issued and are current. In addition to the MNR permit, issued under Regulation 207 of the Forest Fires Prevention Act (FFPA), organized townships and municipalities have their own burning conditions and permits which must be obtained and adhered to.

It is not the intent of this prescribed burn plan to allow fire to spread across the cutover. A more complex burn plan following the Prescribed Burn Manual would be required.

2.0 Objectives

The objectives of the operation are to reduce the amount of productive land lost to unmanaged slash pile accumulation and reduce the fire hazard resulting from full tree logging in a safe and efficient manner.

Miisun Integrated Resource Management Co.'s objective are as follow:

- 1. To recover valuable land for reforestation by reducing the amount of area covered by slash.
- 2. To reduce the potential fire hazard slash piles pose for current year and following years.
- 3. To improve aesthetics.

3.0 Timing of the Burn

The burn operations will be conducted between November 1, 2021 and February 15, 2022. All piles will be checked and extinguished prior to March 15th, 2021.

3.1 Desired Results

All adjacent values will be protected and mitigation measures identified.

Acceptable results of the burning operations will be the removal of at least 70%-80% of the fine fuels and 60% of the coarse fuels over 80% of the slash piles within the cutblock area.

3.2 Treatable Area

The treatable area is typically limited to the slash piles and any area within 30 meters (m). Any fire spread more than 30 meters from the pile will be treated as an indicator of problematic control, and reported to the MNR. Actions will be taken to ensure the burn remains in a controlled state. Actions can include halting ignition, increasing monitoring, initiating suppression action (where required).

4.0 Intelligence

4.1 Detailed Fuel Description

This plan is designed to reduce/remove softwood and hardwood slash piles. The fuel to be burnt is accumulated roadside logging slash from blocks where harvesting was completed between 2017-2020. The slash piles consist of tops and limbs of jack pine, black spruce, white spruce and balsam fir. The average pile is 3-4m high, 5-8m wide and 6-10m long. All slash piles submitted for burning have been aerated/fluffed using loaders or dozers.

Chipper debris piles are not included as they have the potential to smoulder for extended periods and are difficult to suppress.

4.2 Fire Intelligence/Values Information

Known values within a 5 kilometre (km) range of the slash pile burn areas are identified on the attached map(s) Appendix F. Values that may be impacted within 2 kilometres (km) of the burning operation will be identified on the chart below, with the appropriate mitigation measures identified.

Map Location	Adjacent Values	Base Map/Block	Proximity of Values	Adjacent Topography and Fuel Types	Fire Break Present	Escape/Impact Potential	Access	Mitigation Measures
•1	HWY 804Hydro lineStick NestsPatent Land	48560 48559 47559 47560 • 12.750 • 12.756	Adjacent – 5km	 Rolling topography Mature timber & regen 	Camping LakeRice LakeCedar RiverEnglish RiverHWY 804	•Low/mod	• Truck •ATV	•Avoid burning with NW or W wind •Burning to occur under parameters defined in Appendix B
•2	 Wabauskang First Nation HWY 105 Private land Hydro Line Conservation reserves 	48559 48558 49559 49558 • 12.760	Adjacent – 5km	 Rolling topography Mature timber & regen 	• Lac Seul • HWY 105	•Low/mod	• Truck • ATV	• Burn with W, NW, SW winds •Burning to occur under parameters defined in Appendix B
-3	 Wabauskang FN Hydro line Stick nests Permanent growth plots Private property Hwy #105 	48558 49558 49557 48557 • 12.342 • 12.344 • 17.768 • 12.770	50 m to 5 km	 Rolling topography mature timber & regen 	 Lac Seul Wabaskang lake Perrault Lake Railbed Road Hwy #105 Small Unnamed lakes 	•Low/mod	Truck access ATV	Burning to occur such that smoke does not interfere with highway Burning to occur under parameters defined in Appendix B

Map Location	Adjacent Values	Base Map/Block	Proximity of Values	Adjacent Topography and Fuel Types	Fire Break Present	Escape/Impact Potential	Access	Mitigation Measures
•4	• Stick nests • Private land • HWY 105	48555 49555 48556 49556 • 12.295 • 12.297 • 12.299 • 12.301 • 12.303 • 12.305	Adjacent - 5 km	Rolling topography mature timber & regen	 Cedar Lake Moose lake Gerrard Lake Road Ord Road Small Unnamed lakes Hwy #105 	•Low/mod	Truck access ATV	Burning to occur with any wind Burning to occur under parameters defined in Appendix B
•5	 Pipe line Stick nests Permanent growth plots Private property 	47555 48555 47554 48554 12.960	1 km to 5 km	Rolling topography mature timber & regen	Trail LakePerrault lakeApril Lake RoadHwy #105Small Unnamed lakes	•Low/mod	• Truck access • ATV	 12.960 burning to occur with any wind but east Burning to occur under parameters defined in Appendix B
. 6	•Whitefish Bay •Stick nests • Conservation reserves	43548 44548 44547 43547 • 12.103 • 12.188	2km – 5km	•Rolling topography •Mature timber & regen	Dryberry Lake Lake of the Woods Sandford Lake Dirtywater Lake Kishquabik Lake Kenu Lake Unnamed lakes Lobstick Road Maybrun Road	•Low/low	•Truck •ATV	• Burning to occur with any wind • Burning to occur under parameters defined in Appendix B

Map Location	Adjacent Values	Base Map/Block	Proximity of Values	Adjacent Topography and Fuel Types	Fire Break Present	Escape/Impact Potential	Access	Mitigation Measures
. 7	 Mac Lake Road Private land Conservation Reserves Stick Nests 	43549 43548 42548 42549 • 12.373	Adjacent - 5km	Rolling topographyMature timber and regen	 Dryberry Lake Mac Lake Road Berry Lake Ulster Lake Various other lakes HWY 71 	•Low/mod	• Truck •ATV	Prioritize burning with a West wind Burning to occur under parameters defined in Appendix B
. 8	 Mac Lake Road HWY 71 Conservation Reserves Stick Nests 	43549 43548 42548 42549 • 19.904	3km - 5km	Rolling topography Mature timber and regen	 Dryberry Lake Mac Lake Road Berry Lake Ulster Lake Various other lakes HWY 71 	•Low/mod	• Truck • ATV	Prioritize burning with a West wind Burning to occur under parameters defined in Appendix B
•9	 Hydro line Private Property Stick nests Communicati on towers Conservation Area/Parks 	40550 41550 40549 41549 • 12.101	• Adjacent - 5km	 Rolling topography mature timber & regen 	 Blindfold Lake Dogtooth lake Lake of the Woods Hwy #71 Small Unnamed lakes 	• Low/mod	• Truck access • ATV	Burning to occur with any wind but south Burning to occur under parameters defined in Appendix B
• 10	• Conservation Reserves • Private/ patent land • Stick nests	40549 41549 41548 40548 • 12.347	• 1 km to 5 km	Rolling topography Mature timber & regen	 Lake of the Woods Loon Lake Desbiens Lake Numerous other lakes Loon Lake Road Witch Bay Road 	• Low/mod	• Truck	Burning to occur with any wind Burning to occur under parameters defined in Appendix B

4.3 Fire Prescription

The burning will be conducted in the fall or over winter when the risk of fire escape is reduced. The range of indices and weather parameters for slash pile burning are as follows:

Fine Fuel Moisture Code (FFMC) 0 to 85 Build Up Index (BUI) 0 to 40

Wind Speed 0 to 20 km per hour (kph)

Onsite wind and moisture conditions will always be taken into account:

- if the actual wind speed exceeds 20 kph, in other than low risk conditions, ignition will cease pending discussion with the local Fire Management Headquarters (FMH).
- if the 3 day forecast winds exceed 20 km, ignition will also be reevaluated pending discussions with the FMH.
- if suitable snow cover or wet conditions are present, then the wind restrictions may not be applicable, pending discussions with the FMH.

Wind direction and relative humidity will be closely monitored with on site equipment or the nearest weather station. Indices will be calculated using the 13:00 weather observations.

The **Slash Pile Burning Resource Chart** for ignition/monitoring of the burn has been developed and is attached as Appendix B.

The following Drought Code (DC) restrictions have been incorporated into the plan:

- > 241 Monitor the burning activity and ensure daily dialogue, or as agreed upon, with the local FMH.
- >300 Consider curtailing ignition pending discussions with local FMH. Monitor areas where piles are still active.
- >340 Ignition suspended. The Permittee may identify site specific areas in which they would like to continue burning. Burning will only be permitted if the local FMH and Fire Duty Officer (FDO) considers the operation to be safe.

Wind direction constraints may be required to minimize the impact of smoke on certain identified values.

Under very low to low conditions, some prescription parameters may be exceeded if agreed upon with the local FMH.

4.4 Fire Behaviour Prediction

Based on the slash being piled, the required indices and time of year, it is anticipated that the fire will remain within the treatable area. While burning, the piles should exhibit the following fire behaviour characteristics:

- flame lengths estimated to be between 5 and 10 m
- piles may exhibit open flame for 12 to 24 hours
- piles may smoulder for an extended period of time (e.g., a few weeks to a month)

Based on the listed indices, should the fire move outside of the piles, the following fire behaviour characteristics can be expected in the adjacent slash fuels:

Indices Range	Head Fire Rate of Spread (ROS)	Flame Height	Back Fire Rate of Spread (ROS)	Flame Height
Low	1 m/m	0.1 to 1 m	1 m/m	0.1 to 1 m
High	7 m/m	2 to 3 m	1 m/m	0.1 to 1 m

At the low end of the prescription, ignition will be slow. At the high end of the prescription, fuels will ignite easily. By burning when the FFMC is 80 or less, the ignition and spread potential are minimized although the fine fuels dry quickly. Any forecasted weather that would result in a FFMC greater than 85 will initiate actions to curtail ignition, consider aggressive monitoring and possibly suppression actions.

4.5 Fire Behaviour Observations

The following fire behaviour observations will be made by the Burn Boss on site and documented for inclusion in the post burn report.

- peak flame lengths and time of occurrence after ignition
- ease of ignition
- spotting distance
- spot fire ignition and spread rates
- smoke column development (height, direction and drift)
- slash pile consumption

4.6 Weather

It is important to monitor burning indices in the area where burning is taking place. Arrangements may be negotiated to utilize MNR weather stations and the fire weather indices for that station. Other sources of weather information include the weather station on television and the Meteorological Service of Canada (MSC). Forecasted weather may also be taken from the Internet. Weather information will be collected from Kenora Fire Management Headquarters to ensure that the burning is done under prescription. If available, the MNR weather station(s) Kenora, Clearwater Bay (CLB), Separation (SEP), Sioux Narrows (SXN) will be used. Wind speeds onsite will be determined using a handheld anemometer or the Beaufort scale for estimating 10-m open wind speeds.

4.7 Personnel

The Burn Boss in charge of the operation will be <u>selected at a later date</u>. He/she is qualified to the <u>SP-300</u> level (qualifications attached).

All personnel will be qualified and receive refresher training to maintain a minimum training level (SP-100, SP-102 or RX 100). They will receive training in ignition strategies and techniques as well as fireline suppression and safety. The total number of staff involved in the burn operation is 5, with a minimum of the burn boss and one other trained individual required to conduct burning operations. Refer to Appendix C to see the list of key staff who may be involved in the burn operation. If the number of staff or the people in key positions change, the local FMH will be advised.

4.8 Maps

Maps are attached in Appendix G.

4.9 Post Burn Report

When the burning operation is completed, a post burn report will be completed as per requirements in Appendix F. The report will summarize, by date, the amount of slash piles burnt in hectares, whether the piles were engineered or not, degree of success, fire behaviour observations, any problematic control that occurred and recommendations. The agreed upon conversion from gross hectares harvested to net area burned in slash piles is 2.5%. Post burn reports will be submitted to the local MNR FMH with written confirmation that the piles are out prior to March 15th.

4.10 Burn Communications

A communications system that is accessible to all parties is vital to a safe and successful burning program. The ignition crew will have both radio and radio telephone contact with the Burn Boss and Miisun Integrated Resource Management Co. officials. The Burn Boss will have a radio telephone link to the Kenora MNRF Fire Management Headquarters and will be available at all times, for contact by either Company or MNRF to ensure communication is always maintained. The Burn boss will also have a satellite phone available. Information can also be relayed through the Company radio system (Derian Caron) if required. Additionally, contact with the Contractor can be forwarded through the Miisun Office 1-807-467-3351 and Derian Caron (24 hour) 807-466-3577.

The Burn Boss/Company will notify and inform the MNR of a burn each day or as agreed upon between the Sector Response Officer (SRO) and the Burn Boss, prior to ignition.

He/she will indicate the area to be burnt, local conditions and personnel available. The Burn Boss will relay this information to the SRO and keep him informed as to progress, control difficulties and changing burning conditions of each day's burn.

Any changes to the burning activities requires immediate notification to the FMH (i.e., changes to the burn location, personnel, etc.).

The SRO will advise the Burn Boss/Company as to any anticipated changes in the forecast burning conditions and, as the need arises, make revisions to the burn strategy that may include discontinuation of ignition.

The person in charge of the burn program will provide regular situation reports on the progress of the burn and changing burning conditions and fire behaviour to the company and will also forward these reports to the MNR.

The Company/Burn Boss will inform the FMH immediately regarding any wildfires or problems resulting from the burn program. For **wildfire reporting only**, whenever possible call 310 – FIRE (3473) but when you can't, use the following phone numbers: 1-807-937-5261 (Northwest Region) and 1-705-564-0289 (Northeast Region). The following information must be conveyed.

- Location, size and fire behaviour.
- Assistance required.
- Suppression action taken.
- Resources onsite.
- Values present or threatened.
- Access (truck, air).

Following any burning problems, the Company, Burn Boss and FMH will reassess the situation and postpone or cancel the operation if necessary.

A current list of Company and MNR contacts responsible for the area is attached to the plan. The Burn Boss particulars for each area will be forwarded to the FMH once determined.

The contact persons for the Company and MNR Fire with phone numbers by area for the burn operation are:

Contact	Business	Fax	After Hours
Shannon Rawn	(807) 467-3351	(807) 467-3355	(807) 464-0066
Derian Caron	(807) 467-3351	(807) 467-3355	(807)-466-3577
Kurt Pochailo	(807) 467-3351	(807) 467-3355	(807) 466-3802
Scott McAughey (MNRF)	(807) 468-2517	(807) 468-2736	(807) 467-7528
Krista Prosser (MNRF)	(807) 468-2544	(807) 468-2736	
Sector Response Officer (KFMH)	(807) 548-5837	(807) 548-5412	(807) 467-7540 (cell)

Contact	Business	Fax	After Hours
Doug McClain (KFMH)	(807) 548-8416	(807)548-5412	(807) 465-4477 (cell)
John Mash (KFMH)	(807) 548-6195	(807) 548-5412	(807) 464-0754 (cell)
Pat Harvey (KFMH)	(807)-548-5720	(807)-548-5412	(807) 467-1297 (cell)
After Hours Fire Reporting			310-FIRE or 310-3473
Burn Boss-TBD	TBD		

5.0 Ignition

This section of the plan describes the ignition process for the burning operation. It includes the approval to ignite process, method of ignition, and discusses equipment and personnel. Ignition planning will use the fire behaviour predictions for the prescribed indices ranges to ensure overall safety and control of the burn.

5.1 Approval to Ignite

Daily or as agreed upon by the local FMH and prior to ignition, the Burn Boss/Company will notify the FMH of planned burn locations, at phone number <u>548-5837</u>. The MNRF has the right to cancel/postpone burn operations based on the local, regional or provincial fire situation. There will be no ignition if the FFMC is greater than 85.

Prior to ignition each day of the operation, on site staff will meet for a briefing from the Burn Boss to outline the plan for the day. The briefing will cover the area to be burnt, fire behaviour observations from previous burns, fire behaviour predictions for the day, the ignition and suppression tactics, equipment caches, escape routes, safety zones, communications procedures, etc.

5.2 Ignition Method

The Burn Boss will assess changing burning conditions and modify ignition/suppression activities accordingly. He/she will postpone or cancel operations as necessary.

The Crew is to be briefed daily by the Burn Boss responsible for the burn as to expected weather and fire behaviour, previous problems encountered, potential problem areas, safety, the day's objectives and reporting procedures. Hand ignition will be utilized with drip torches or fire logs starting from the downwind end of the road system progressing upwind.

5.3 Personnel and Equipment

The Burn Boss will ensure that the required amount of equipment is on site as per the attached the Slash Pile Burning Resource Chart.

The ignition operation will consist of $\underline{1}$ crew; each made up of $\underline{3-5}$ people. They will be using <u>drip torches</u> (and potentially fire logs if required for <u>difficult hardwood piles</u>) to ignite the piles.

6.0 Suppression

6.1 Strategy and Tactics

The strategy for the suppression component is to limit the burn to the treatable area. Under favourable conditions, the burn may spread a very short distance out from the slash piles. Due to piling the available fuels, the indices required prior to ignition and having roads and varying degrees of mineral soil boundaries, it is not anticipated that suppression measures will be required if the burning is conducted sufficiently late in the season.

Should suppression measures be required, the Burn Boss/Company is to ensure that each burn area has sufficient equipment, personnel and the proper level of supervision required based on the burning conditions and values present to control the burn and any escape fires. The Burn Boss must also ensure that all equipment is serviceable and that the crews are trained in its use and maintenance.

The ignition/suppression crew will be responsible for all suppression efforts required during the burning operation. When burning conditions will facilitate fire spread from the treatable area, ignition will cease and suppression crews will closely monitor/extinguish to minimize fire spread. Further details regarding suppression, equipment and monitoring requirements for the range of indices are contained in the Slash Pile Burning Resource Chart located in Appendix B.

Depending on burning conditions, any values within 200 m of the piles to be burnt that may be in danger or affected by the fire will be fire guarded as required. This may include clearing of flammable debris, prewetting, use of foam, snow cover and the use of low intensity burning near values.

All fire leaving the immediate vicinity of the slash pile and considered problematic will have a suppression plan developed. This plan will outline the fuels in the area of fire, all values will be identified and an action plan will be prepared consistent with the current and forecasted weather and fire behaviour indices. All ignition will stop and all fire outside the slash piles will be extinguished.

Fire suppression equipment will be on site (as per Appendix B) and Forest Helicopters, in Kenora has confirmed that a 130 gallon water bucket will be available for patrol and suppression if needed. Other available resources to assist in limiting the escape of fires from the allowable burn perimeter

include SP-102 trained industry workers operating in adjacent blocks (45-90 minutes).

If problemmatic control stage occurs, the Burn Boss will contact the Kenora Fire Management Headquarters and continue to have contact until control of the fire is achieved. The burn boss will continue to monitor any problematic excursions until suppression has been completed and the problematic area is declared out.

6.2 Suppression outside the Treatable Area

All burning will be limited to the treatable area.

If the fire spreads away from the piles and has the fuel to continue to spread, ignition will cease and an assessment will be conducted to determine the most appropriate actions to ensure the fire remains under control. Actions can include increasing monitoring and initiating suppression action (where required). Ignition of spot fires is an indicator of dry, receptive fine fuels and possible problematic control. Spotting > 30 meters indicates possible problematic control and must be reported to the FMH.

6.3 Personnel and Equipment

All personnel involved in the burn operations will be current and qualified to the standards (SP-100, SP-102, LCPB Worker). These personnel will receive training and briefings in ignition strategies and techniques as well as fire line suppression and safety. Ignition and suppression equipment must be thoroughly checked to ensure availability and serviceability prior to ignition.

A standard pumping unit will consist of the following:

- a centrifugal power pump capable of delivering water at a minimum of 65 psi. when used with a ½" opening attach directly to the pump
- a toolbox, which contains nozzles with assorted tip sizes, wyes, stranglers, hose wrenches, plus spark plugs and assorted hand tools (i.e., screwdriver, crescent wrench, pliers, etc.)
- 1 full 5-gal sceptre gas can with proper gas/oil mixture to run the pump
- 1 intake hose -8 to 10' in length complete with foot valve
- 24 lengths of serviceable 1 1/2" fire hose, with each length measuring 90 to 100' and packed 4 lengths per box/packsack

6.4 Problematic Control

The following are indicators of problematic control with the slash pile burn:

- fire intensity (flame lengths) that is greater than what was predicted
- observed weather conditions increase the fire behaviour beyond an acceptable range
- fire spread that exceeds predicted rates of spread
- fire spread more than 30 metres away from the piles
- smoke drift affecting values or safety
- spot fires that do not self extinguish

If the problematic control stage occurs, the Burn Boss/Company on site will immediately cease ignition, conduct an assessment and contact the FMH. Efforts will be taken to return the burn to a controlled state as safely as possible. The FMH will be kept informed every 30 minutes of progress until control is achieved.

The MNRF is to be contacted as soon as control difficulties occur; ignition is to stop and suppression begins. The Burn Boss will discuss the opportunity to use Type II Sustained Action Contract Fire Crews for suppression and mop-up, with MNRF. The fire's stage of control, fire behavior and fire intensity will determine if the use of these crews is viable. The Type II contract crew is listed in Appendix "D". Due to timing of burn, Company equipment and personnel as noted in Appendix "D" will be made available for suppression if required or at the request of MNRF.

6.5 Fire Assessment Report

If the burn reaches the problematic control stage and cannot be returned to the controlled state by the end of the burning period or if the burn escapes, the following information will be reported to the FMH. This assessment will include location, size, number of piles, resources available/required, values threatened, weather conditions, etc.

If the burn is declared a wildfire, a Fire Assessment Report will be completed by MNR for the FDO.

6.6 Declaration of a Wildfire

There are indicators which crews must be able to recognize when a fire is in or about to enter a wildfire or out of control stage. These indicators include:

- Erratic fire behaviour
- Changes in weather; i.e., lower relative humidity (air seems dry), higher temperatures, an increase in wind speed
- Excessive suppression efforts are required
- Fire spreads readily from the treatable area, values will be threatened
- Fire spread and spot fires that exceed the level of suppression, personnel and equipment available to put the fire into a Being Held (BHE) or Under Control status (UCO)

The Burn Boss/Company will inform the FMH that the fire has gone beyond problematic control and should be considered a wildfire. The Burn Boss/Company/MNR will assess the situation and take the necessary actions. These may include:

- Informing the local authorities of the situation including Ontario Provincial Police, Chief Fire Official (Municipality), adjacent landowners (large commercial operations), native bands, and the public
- In the event of an escaped fire to which heavy waterbombers have been dispatched, the crews will remove themselves from the fire area (minimum 300 m). They will secure the area from the public to allow the air attack to proceed safely.
- The Company will provide additional resources as required and/or request resources from the FMH
- Identifying any resources available; i.e., heavy equipment, contract fire fighters, etc.
- Stop ignition at other sites and commence aggressive monitoring MNR Crews may be committed to escaped fires until the SRO releases them after consultation with the Burn Boss/Company Official(s). The Burn Boss will discuss with MNR, the opportunity to use Type II Sustained Action Contract Fire Crews for suppression and mop up. The fire's stage of control, fire behaviour and fire intensity will determine if the use of these crews is viable. The contractor for Type II crews is listed in the Appendix D. MNR will assist until the fire is BHE or UCO, at which time, the MNR will turn the burning operations back to the Company conducting the burn.

7.0 Service

No additional services will be required.

8.0 Safety

This operation will be carried out in a safe manner as regulated by the Occupational Health and Safety Act (OHSA) and company policies.

As per the Company's standards, First Aid kits and mobile radios are required in all vehicles. Induction prior to the start of burning will include Company emergency procedures and incident reporting. All vehicles will contain a list of emergency contact numbers.

Safe ignition/suppression practices will be discussed with work crews. All employees will adhere to all current company safety practices and protection procedures. Supervisors are to ensure compliance with the OHSA.

In areas where the pile burning is adjacent to public roads or highways, ignition will commence only if smoke from the burn will not impair visibility on the road.

While burning in or near a community, care will be taken to limit the amount of smoke into the community.

Burning will occur from back of block out toward the main road. Wind direction and speed will be assessed for each area. Pre-ignition meetings will be held before each area is ignited to review all safety concerns and possible issues to be encountered or that may arise in area. Blocks will be checked prior to burning to ensure no other forest users are in areas. Weather forecast will be reviewed prior to burn. Access roads will be only ignited on one side with favourable winds until no risk to travellers exists from heavy smoke or heat.

9.0 Communications

This communications section outlines AFFES communication requirements for prescribed burns and is separate from any communications requirements related to prescribed burns outlined in the Forest Management Plan. The Burn Boss/Company will inform both the municipal office and the fire official on a daily basis or as arranged, when and where burning is to take place within the municipality. Whenever possible, coordination of burning with the local fire departments will take place.

The Company will make every effort to inform the general public. They may be informed through newspaper ads, radio announcements and signs posted along roads where burning will take place. These announcements are solely the responsibility of the SFL holder and will indicate dates and locations where burning is to occur and a phone number for additional information.

9.1 Key Audiences/Contact List

Name	Phone Number	Address
Ministry of Natural Resources and Forestry	468-2501	808 Robertson St PO Box 5080 Kenora ON P9N 3X9
City of Kenora	467-2090 (Fire Hall) 468-1990 (dispatch)	1 Main St. S. Kenora, ON
Kenora Airport Manager	548-5377	Airport Road Kenora, ON
OPP – Kenora	548-5534	350 Hwy 17A Kenora, ON
Ingolf Fire Department	733-3304 or 733-2866	P.O. Box 310 Ingolf, ON
McKenzie Clearwater Bay Fire Department Dale Charbonneau	204-797-8387 (cell)	P.O. Box 20 Clearwater Bay, ON P0X 1S0

Minaki Fire Department Matt Bruce	224-3591 (home) 204-996-3565 (cell)	P.O. Box 4 Minaki, ON POX 1J0
Municipality of Sioux Narrows/ Nestor Falls Fire Department – Tyrell Griffith	226-5241 (work) 226-5402 (home) 276-1155 (cell) 468-1990 (dispatch)	P.O. Box 417 Sioux Narrows, ON POX 1N0
Longbow FD Fire Chief – Warren Brinkman	548-4437 (home) 467-7573 (cell) 468-1990 (dispatch)	Longbow Lake Post Office P0X 1H0
Pellatt United Fire Fighters Chief – Barry Bennett	543-2163 (work) 543-3261 (home) 466-3737 (cell) 468-1990 (dispatch)	RR #1 Keewatin, ON P0X 1C0
Redditt Fire Department Chief— Thomas Choong	225-1089 (home) 468-1990 (dispatch) 464-5993 (cell)	General Delivery Redditt, Ontario P0X 1M0
Ear Falls Fire Chief Chief-Darryl Desjardins	728-0992	
Central Dispatch	468-1990	
Flight Services	807-548-5076	
CN Rail	807-475-6718 (office) 705-561-4820 (cell)	Lucinio Pereira
CP Rail	204-348-2692 (office) (204) 771-5919 (cell)	Reinhard Sommerfeld

9.2 Key Messages

Controlled slash pile burning is done safely under strict guidelines monitored by the Contractor, Company and MNRF covering ignitions, burning, monitoring and suppression.

Miisun Integrated Resources Management Co., on behalf of the MNRF Kenora District will be conducting prescribed burning for the purpose of hazard reduction and site preparation. The burn operations will be conducted between November 1, 2021 and February 15, 2022. All piles will be checked and extinguished prior to March 15th, 2022. Periodic winter burning may occur after that time.

For details on areas to be burned and dates of ignition contact Kurt Pochailo at 1-807-467-3351 or Derian Caron at 1-807-466-3577.

9.3 Methods

The methods used to communicate the progression of the burn plan may include radio ads on Q104.5 and CJRL, newspaper ads in the Kenora Daily Miner and News and Lake of the Woods Enterprise. Signs posted on forest roads where burning will occur.

Main access roads into burn area will be posted with large signs at the start of any road system 2 weeks prior to burn to notify the public. Operational signs will be posted each day along roadways directly accessing the immediate burn area and will remain on site until all risk of reduced road visibility has passed.

Municipal and volunteer fire departments that may be affected by this operation will be notified 5 days in advance of the planned operations scheduled in their area and will be notified again the day of ignition.

10.0 Plan Approval

This plan has been approved with the understanding that the Burn Boss, all section leaders and pertinent staff involved in the burn operation have read the plan and that any resulting queries have been satisfied prior to ignition. Furthermore, the Permittee acknowledges that they have read, understand and agree to abide by the Terms and Conditions for Conducting Prescribed Burns (Appendix A).

Title	Signature	Date
Company Official/Client – Derian Caron		

Title	Signature	Date
District Manager –		
Brian Kilgour		

Title	Signature	Date
Fire Management Supervisor – Pat Harvey		

Appendices

- A Terms and Conditions for Conducting Low Complexity Slash Pile Prescribed Burns
- B Slash Pile Burning Resource Chart
- C Qualifications of Personnel
- D Type II Crew Contractors Contract Equipment
- E Proof of Liability Insurance
- F Low Complexity Slash Pile Burn Post Burn Report
- G Maps

Appendix A - Terms and Conditions for Conducting Low Complexity Prescribed Burns

The following terms and conditions are requirements for any person wishing to conduct a Low Complexity Prescribed Burn under authority of a fire permit, issued under the Forest Fires Prevention Act, or on OMNR managed Crown land outside of the legislated "Fire Region". Failure to meet these conditions will result in the cancellation of the permit/approval.

As part of the issuance of this permit, the permit holder agrees to the following:

Definitions

"Minister" means the Ontario Minister of Natural Resources.

"Ministry" means the Ontario Ministry of Natural Resources.

"Fire Permit" means the fire permit issued under the authority of the Forest Fires Prevention Act and Ontario Regulation 207/96.

"Permittee" means the person(s) being issued the Fire Permit and includes the person(s) responsible for planning and conducting the Prescribed Burn operation and the manager(s) for the land base that the Prescribed Burn is being conducted on.

"Prescribed Burn" means an operation as described in the Aviation Forest Fire Management Policy and Procedure Manual under "Prescribed Burning".

"Prescribed Burn Manual" means the manual that sets standards and procedures for the planning and conducting of a prescribed burn as referenced in Ministry Policy FM:2:10.

"Low Complexity Prescribed Burn Plan" means a plan that complies in total with the requirements of the Ministry's Prescribed Burn Planning Manual.

"Indemnified Parties" means Her Majesty the Queen in right of Ontario, her ministers, appointees and employees.

Terms and Conditions

- 1. The Permittee requires an approved Prescribed Burn Plan, prepared and approved in accordance with the Prescribed Burn Manual.
- 2. The Permittee may be responsible for all direct costs incurred by the Ministry for approval of the Prescribed Burn Plan.
- 3. The Permittee will ensure that the Prescribed Burn is conducted in accordance with the approved Prescribed Burn Plan.
- 4. Where the Permittee is of the opinion that the approved Prescribed Burn Plan ought to be expanded, reduced or modified, the Permittee will immediately advise the Ministry accordingly and obtain written approval for any variations of the Plan, as outlined in the Prescribed Burn Manual.

- 5. All personnel involved with the delivery of the Prescribed Burn will be trained and certified to conduct the Prescribed Burn in accordance with the Ministry's Prescribed Burn Manual. Certifications of key positions required for the Prescribed Burn and those of the Permittee, their employees and/or contractors filling these positions will be listed in an attached schedule to the Prescribed Burn Plan.
- 6. A Ministry employee may be on-site at any stage of the Prescribed Burn Operation and the Permittee will allow Ministry employees access to the Prescribed Burn Area.
- 7. The Permittee is responsible for contacting all Regulatory agencies within an adequate time frame prior to igniting the burn as outlined in the Prescribed Burn Manual.
- 8. The Permittee is responsible for contacting all known parties with a vested interest in the burn, including the general public, in an adequate time frame prior to ignition of the burn as outlined in the Prescribed Burn Manual.
- 9. The Permittee will notify the Ministry of its intent to ignite the burn at least 48 hours prior to actual ignition.
- 10. On the day of the burn, the Permittee will seek final approval from the Ministry to ignite the burn and will only begin ignition after approval is given.
- 11. The Permittee will closely monitor ignition and report progress in accordance with Ministry standards in an attached schedule of the approved Prescribed Burn Plan.
- 12. The Permittee will closely monitor control stages of the burn in accordance with Ministry standards and report such to the Ministry in a timely fashion. This is required until the Prescribed Burn is declared out. In the event that a fire starts, even after it has been declared out, does not remove liability from the Permittee.
- 13. In the event the Prescribed Burn escapes its boundaries or threatens to become uncontrolled; wildfire response will be consistent with Ministry Guidelines. The Permittee must report that the Prescribed Burn is not under control without undue delay. Declaration of the Prescribed Burn as a wildfire does not remove liability from the Permittee. The Permittee is obligated to take suppression action described in the Prescribed Burn Plan. The Ministry will not reimburse the Permittee for their suppression costs incurred to suppress or limit the spread of any fire related to this permit. If the Ministry must respond to and help extinguish a fire related to this Permit, and the Permittee is in compliance with the approved plan and exercises due diligence in their efforts to suppress the fire excursion, the Ministry will not pursue recovery of suppression costs incurred by the Ministry.

- 14. In the event the Prescribed Burn escapes its boundaries and requires a wildfire response, a Review Panel will be appointed by the Ministry to review the circumstances of the escape.
- 15. The Permittee agrees to indemnify and hold harmless the Ministry, its officers, employees and agents from any and all claims, demands, expenses, actions, causes of action and for any liability for damages to property and injury to persons (including death) howsoever caused, arising from or attributable to anything done or omitted to be done by the Permittee, its officers, employees, agents and contractors in the course of carrying out the Prescribed Burn. This indemnity shall survive the termination or expiry of the Permit.
- 16. The Permittee hereby agrees to put in effect and maintain for the duration of the Permit at its own cost and expense, with insurers acceptable to the Risk Management & Insurance Services (RMIS) of Shared Services Bureau, all the necessary and appropriate insurance that a prudent person in the business of the Permittee would maintain including, but not limited to, the following:
 - Commercial general liability insurance on an occurrence basis for third party bodily injury, personal injury and property damage, to an inclusive limit of not less than \$2,000,000 per occurrence, \$2,000,000 products and completed operations aggregate. The policy is to include the following:
 - the Indemnified Parties as additional insured's with respect to liability arising in the course of performance of the Permittee's obligations under, or otherwise in connection with, the permit
 - · liability coverage
 - · cross-liability clause
 - · employer's liability coverage
 - · 30 day written notice of cancellation, termination or material change
- 17. The Permittee shall be knowledgeable of, and abide by, the provisions of all legislative enactment, by-laws and regulations in regard to health and safety, and the Occupational Health and Safety Act of Ontario.
- 18. In the event that any of the terms and conditions contained within are determined invalid, unlawful, or unenforceable to any extent, such term or condition shall be severed from the remaining terms and conditions which shall continue to be valid to the fullest extent of the law.
- 19. Nothing in the Fire Permit, Terms and Conditions, or Prescribed Burn Plan removes the obligation of the Permittee to comply with all federal and provincial laws, rules, orders and regulations and all by-laws of all relevant authorities.

Appendix B - Slash Pile Burning Resource Chart

Risk	Weather Pa	arameters	Burn Boss	Communications	Suppression Staff	Suppression Equipment	Monitoring
Shut Down Criteria If any of the weather parameters are exceeded, the ignition should cease.	FFMC: BUI: DC: Observed winds forecasted winds kph anytime ove day period.	s to be > 20	Minimum IC4 or LCPB Boss - dedicated (not part of suppres- sion crews; may do monitoring).	 Call local FMH and discuss shutdown period. Burn Boss must have direct communications with all areas. 	 1 suppression crew per area (on site within 1 hour). 1 additional suppression crew available within 4 hours per area ignited. 	 Minimum 1 pump unit per suppres- sion/monitoring crew in the area. Minimum 1 pack pump and shovel per suppression person. 	 At a minimum, an IC5 or LCPB Boss is required for monitoring piles. Company must have enough staff to monitor all piles not declared out at least twice during the burning period. One patrol must be between 15:00 and 17:00 hrs
High Consider curtailing ignition.	FFMC: BUI: DC: Winds:	81-85 31-40 300-340 ≤ 20 kph	Minimum IC5 or LCPB Boss - dedicated.	Communications required on site between Burn Crew and IC5 / LCPB Boss and FMH.	 1 stand alone suppression crew available on site within 1 hour per area. 1 additional stand alone suppression crew available within 4 hours. 	 Minimum 1 pump unit per ignition crew within 30 minutes. Minimum 1 pack pump and shovel per ignition/suppression staff. 	 IC5 or LCPB Boss required for monitoring piles. Piles must be monitored during the burning period after ignition until no open flame is visible. Check piles next day before starting ignition of more area. Company must have enough staff to monitor all piles not declared out at least once during the burning period.
Moderate	FFMC: BUI: DC: Winds:	75-80 21-30 241-299 ≤ 20 kph	Minimum IC5 or LCPB Boss - may be part of ignition/ suppression crew.	 Communications required on site. Monitor daily and have daily dialogue with the local FMH. 	 Minimum 3 suppression staff per pump unit available within 1 hour. Ignition/suppression crew can be the same. 	 Minimum 1 pump unit per ignition crew available within 1 hour. Minimum 1 pack pump and shovel per ignition staff. 	 IC5 or LCPB Boss required for monitoring of piles. Company must have enough staff to monitor all piles at least once during the burning period until no open flame is visible. Additional monitoring as burning conditions dictates.

Risk	Weather Parameters	Burn Boss	Communications	Suppression Staff	Suppression Equipment	Monitoring
Low	FFMC: ≤ 74 BUI: ≤ 20 DC: ≤ 240 Winds: ≤ 20 kph Snow cover that may melt.	 Minimum SP-200 qualified and can be part of the ignition crew. SP-102 or LCPB Worker with 3 seasons of burning experience. 	Communications required within 15 minutes of burn location.	Ignition crew and suppression crew can be the same.	 1 pumping unit available within 4 hours during ignition phase. Minimum 1 pack pump and 1 shovel per person. 	 Minimum crew boss (SP-200 or SP-102 or LCPB Worker with 3 seasons of burning experience.). Monitoring during the burning period, as conditions dictate.
Very Low	Snow cover that will stay.	• SP-102 or LCPB Worker with 2 seasons burning experience.	Communications required within 30 minutes of burn location.	• Ignition crew and suppression crew can be the same.	Minimum 1 pack pump and 1 shovel per person.	 SP-102 or LCPB Worker with 2 seasons burning experience As required, pending burning conditions. No burning after February 15th. Piles must be out by March 15th.

Notes:

- Burning period is defined as noon local time to 1 hour before sunset.
- An area is defined by the company, in consultation with the FMS. In general terms it should be an area that can be adequately monitored by vehicle in a burning period.
- All prescribed burn workers must have completed the Hand Held Burnout Operations and Ignition Pattern Module before any involvement in prescribed burn operations.
- Suppression crew is defined as 3 staff: a Crew Boss SP-200 or LCPB Boss and 2 other trained staff (SP-100/SP-102/LCPB Worker).
- Generally no burning before October 1st depending on indices and drought conditions. Fire Management Supervisors will have local discretion to adjust after discussions with the Regional Duty Officer.
- If the forecasted winds over a 3 day period are expected to exceed 20 kph, then companies to consider not igniting piles before the expected wind increase
- Under low risk situations with snow present and snow is expected to stay, wind restrictions do not apply.
- Under low risk situations with wet conditions, discuss situation with local FMH if winds expected to exceed 20 kph.
- In below freezing temperatures, the pack pumps may be empty.
- If FFMC and BUI values are in the low to very low category, but DC values remain moderate to extreme, the suppression staff, suppression equipment, and monitoring requirements can be waived by the local FMS, after discussions with the Regional Duty Officer if the probability of fire escaping the piles is expected to be minimal for the remainder of the year.

Appendix C - Qualifications of Personnel

Name	Position	Qualification(s)	Ignition (Y/N)	Suppression (Y/N)
TBD	Burn Boss	-Burn Boss Cert (2012) -Sp-300 (with 5 years of burning exp.)	yes	yes
Jonathon Beauchamp	Crew	Sp-102 (3yr burning exp.)	yes	yes
TBD	Crew			
TBD	Crew			

Appendix D - Lists of Type II Crew and Equipment Contractors

Name of Contractor	No. of Crews	Contractor Contact
Outland	20 (24 hours to report)	1-807-345-3534 1-807-627-4306 (cell)

Name of Equipment Contractor	No. and Type of Equipment	Equipment Contractor Contact	Distance or Time to Site
Devlin Timber Co. (1992) Ltd.	1 Feller Buncher, 1 Loader, 1 bulldozer, 1 grapple skidder, 1 Backhoe	807 548-7676	~30 min – 2hrs
W5 Logging	1 Feller Buncher, 1 Loader, 1 bulldozer, 1 grapple skidder, 1 Backhoe, 5 saws	807 548-2739	~30 min – 2hrs

Appendix E

Certificate of Insurance

Proof of Insurance

The Permittee shall provide the Ministry with proof of the insurance required by this Plan in the form of valid certificates of insurance that reference this approved plan and confirm the required coverage, on or before the commencement of this permit, and renewal replacements on or before the expiry of any such insurance. Upon the request of the Ministry, a copy of each insurance policy shall be made available to it. The Permittee shall ensure that each of its subcontractors complies with the insurance requirements set out in this permit by obtaining similar types of insurance and providing the Permittee with proof of the acquisition and maintenance of such insurance.

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Appendix F

Low Complexity Slash Pile Burn - Post Burn Report

Slash Pile Burn Name (SI	(L)
Location	
Forest Management Unit:	
MNR District:	
Geographic Area:	
Township(s):	
Gross Area (ha) of Cut Bl	locks:
Net Area (ha) of Slash Co	verage:
Total # of Piles Burned:	Conifer Mixed Hardwood
Total # of Piles Left:	Conifer Mixed Hardwood
Area Recovered by Burni	ng (ha):
Average Consumption of	Piles: >90% 70-90% 50-70% <50%
Date(s) of Burning	Location:

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Observed Fire Behaviour:
Problematic Control Activities:
Safety Issues:
Objectives Met (As Related to Objectives Stated in LCPB Slash Burn Plan):
Comments:
Recommendations:
Date Piles Called Out:
Post-Burn Report Author:
Date Post-Burn Report Submitted:

Appendix G - Maps