

MOORE MILL COMPANY
2005 FIRE PLAN

TABLE OF CONTENTS

Objectives -----	1
Moore Mill Company Policy -----	1
Fire Season -----	1
Definitions -----	2
Industrial Fire Precaution Levels -----	3
Closure Levels -----	3
Weather Monitoring -----	3
Waivers -----	4
Fire Prevention Rules -----	5
Power Saws -----	5
Cable Yarding -----	6
Tractors - Logging and Road Construction -----	6
Blasting -----	7
Vehicles -----	7
Fire Hand Tools -----	7
Water Supply -----	8
Fire Extinguisher -----	8
Spark Arresters and Mufflers for Engines -----	8
Fire Watch Person -----	9
Warming Fires -----	9
Smoking -----	9
Other Fire Prevention Measures -----	10
Fire Reporting Procedures -----	11
Emergency Fire Suppression Procedures -----	12
Fire Fighting Safety -----	13
Fire Equipment List -----	14
Fire Prevention Regulations -----	15-16
CFPA Regulated Use Zone Map -----	Inside Back Cover

OBJECTIVES

The purpose of this Fire Plan is to communicate fire prevention measures to be implemented on Moore Mill Company land and to communicate mobilization procedures should a fire occur. The goal of the fire prevention measures is to prevent fires from starting. The goal of the mobilization plan is to quickly suppress any fire on or threatening Moore Mill Company property.

This plan applies to everyone entering upon land owned by Moore Mill Company during the fire season.

Moore Mill Company is a member of Coos Forest Protection Association (CFPA) and pays annual assessments for protection against fire. This plan is in accord with CFPA fire prevention plan.

MOORE MILL COMPANY POLICY

Moore Mill Company is dedicated to the long term management of our timber lands. Consistent with this philosophy is the protection of our reproduction, immature timber and merchantable timber, as well as the soil, water and wildlife. This plan deals primarily with protection from fire, but the same protection and care must be applied to all activities that occur on Moore Mill Company lands. We must protect the growing capacity of our tree farm. The reproduction and timber stands are the raw materials and jobs of the future. The Moore Mill tree farm is our future.

Every employee of Moore Mill, contractor or visitor on Moore Mill Company lands during fire season will comply with this plan, as well as all State Forestry laws pertaining to fire prevention and control. In addition, every employee or contractor working on Moore Mill administrated private sales must comply with this plan, State Forestry laws and private owner requirements.

CFPA and State Forestry personnel have authority on Moore Mill Company lands for issuing instructions and enforcement pertaining to fire prevention and control to everyone on Moore Mill Company land during fire season.

FIRE SEASON

Moore Mill's fire season will begin on June 1 and end on November 15, unless otherwise notified. Preparations for fire season must begin on May 15 to insure that all equipment is on site by June 1, unless otherwise notified. Moore Mill Company may extend fire season on its own lands or portions of its lands if weather conditions' warrant. Fire watch is not necessary until CFPA declares fire season or until Moore Mill requires fire watch.

DEFINITIONS

The following definitions will apply to the industrial fire precaution levels:

- Loading Sites: A place where any product or material (including but not limited to logs, rock, soil, slash, poles, post, firewood, etc.) is placed in or upon a truck or other vehicle.
- Cable Yarding Sites: A Yarding system employing cables and winches in a fixed position.
- Ground Yarding: A Yarding system employing ground driven equipment (including cats, skidders, FMC's, etc.).
- Low Hazard Area: Any area where the responsible representing agency determines that the combination of the elements reduces the probability of a fire starting and/or spreading.
- Fire Season: That season of the year when a fire hazard exists.
(Fire precautionary period)
- Safe Zone: A 10 foot by 10 foot squared area clear of flammable debris, used for storing all flammable fuels and extra saws, also to be used as a saw refueling site. The safe zone must be an area where if fire should occur, the fuels will be accessible to load out by pick up and moved to a safe distance away.

INDUSTRIAL FIRE PRECAUTION LEVELS

CLOSURE LEVEL	RESTRICTIONS
I.	Fire Season requirements are in effect.
II. (Partial Hoot Owl)	The following are prohibited from 1:00 P.M. to 8:00 P.M.: <ol style="list-style-type: none">1. Use of power saws except at loading sites2. Cable Yarding3. Blasting4. Welding and cutting of metal5. No road changes in shot-gun operations6. No use of motorized carriages
III. (Partial Shutdown)	The following are prohibited: <ol style="list-style-type: none">1. Cable Yarding2. Use of power saws except at loading sites3. Mechanical feller-buncher The following are prohibited from 1:00 P.M. to 8:00 P.M.: <ol style="list-style-type: none">1. Use of power saws at loading sites2. Tractor Yarding3. Mechanized loading and hauling4. Blasting5. Welding or cutting of any metal6. Any other spark emitting operation not specifically mentioned
IV (General Shutdown)	All operations are prohibited

WEATHER MONITORING

Operators must monitor weather conditions. Weather instruments for monitoring relative humidity will be required. Operations must cease when R.H. is at **32%** without wind or when R.H. is **35%** when accompanied by winds of **10 MPH** or more. Operations must also cease when temperatures reach **90°**. When temperature reaches **80°** or humidity reaches **45%**, an operator or watch person must call weather into Moore Mill's office on an hourly basis.

Moore Mill may, at its discretion, require additional preventive measures, restrictions or closures on any or all operations if conditions warrant, even though State or Federal regulations may not restrict operations.

WAIVERS

Written waivers may be issued for fire-safe activities in low-hazard areas. The waiver must be approved in writing in advance. Any waiver must be approved by Moore Mill first, before submitting for approval by appropriate agencies.

FIRE PREVENTION RULES

FIRES CAN BE PREVENTED. The following rules for fire prevention will be observed by all employees and contractors operating on Moore Mill lands during fire season.

All employees of any Moore Mill contractor must be OR-OSHA certified in Basic Fire Prevention, including watch person.

POWER SAWS

1. Saws must be equipped with an exhaust system which retains at least 90% of carbon particles over .023 inches in diameter. A standard .023 screen meets this requirement. Saws must also be certified to meet exhaust temperature requirements established by Oregon Administrative Rules.
2. A fire extinguisher of at least 8 ounce capacity will be kept on each person using a power saw and a shovel at least size "O" must be kept within 50 feet of each power saw at all times during operation.
3. Saws must be refueled in the designated "Safe Zone" and then moved at least 20 feet from "Safe Zone" before starting. "Safe Zone" must be at least 20 feet from where power saw work will be conducted. All combustible materials are to be kept in "Safe Zone" and clear of flammable debris.
4. Be aware of burning embers on saw cut and sawdust.
5. Never set a hot saw on flammable material.
6. Periodically check over the area in which you are working and make a thorough check at the end of the day.
7. Watch person is required as listed in the Fire Watch person portion of this section.
8. Leave saw on cool mineral soil clear of flammable material and woody debris at end of day.

CABLE YARDING

1. Keep all flammable debris cleared away from yarding and loading machines.
2. Clear out all flammable debris from inside a 10 foot radius of any tail block.
3. At each tail block provide and maintain a serviceable 5 gallon pump can filled with water and provide one fire shovel and axe.
4. Keep all blocks in good well-greased condition.
5. Yarding lines should be set to avoid repeated dragging on the ground or rubbing together.
6. No line rubbing on any surface.
7. Fire equipment will be on the site as called for in the Fire Tool portion of this section.
8. Watch person is required as listed in the Fire Watch Person portion of this section.

TRACTORS - LOGGING AND ROAD CONSTRUCTION

1. Any self propelled piece of equipment (tractor, skidder, etc.) must be equipped with a fire extinguisher not less than 10 lb.-ABC and a serviceable fire shovel and axe. Each yarder, brusher, shovel, mechanical feller or track hoe must have a minimum of 20 lb.-ABC fire extinguisher. Any required poundage can be one total poundage or broken into two units, not less than 5 lb.-ABC per unit.
2. Fire equipment will be on site as called for in the Fire Tool portion of this section.
3. Have an area free of flammable material nearby to place tractor in case of fire.
4. Do not bury any flammable material.
5. Avoid dragging organic material under machines.
6. Avoid accumulation of debris in belly pan with periodic checks and clean-outs.
7. Watch person is required as listed in the Fire Watch Person portion of this section.

BLASTING

1. No blasting will be done when humidity is 40% or less.
2. Only electric caps will be used.
3. Watch person must remain in the work area for at least three hours after shooting.
4. No blasting will be allowed for the purpose of choker setting.

VEHICLES

1. All vehicles must be in good operating condition.
2. All vehicles operating on Moore Mill lands during fire season will have fire tools and a minimum of a 2 ½ lb.-ABC fire extinguisher readily accessible.
3. Vehicle exhaust and mufflers systems must be in good working condition.

FIRE HAND TOOLS

1. Each vehicle entering Moore Mill property must be equipped with one shovel, one axe or Pulaski with a handle at least 26" long and one fire extinguisher rated not less than 2½ lb.-ABC.
2. Each operation must have a fire box containing tools as listed in the following table:

TOOL TABLE

# of men in operation	1-4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Tool Boxes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Axe or Pulaski	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3
Shovels	2	2	2	3	3	3	3	4	4	5	5	6	7	7	7	7	7
Hazel Hoes or Pulaski	1	2	3	3	4	5	5	5	6	6	7	7	7	8	8	9	10

3. Operations having in excess of 20 men will use multiples of any of the above columns to arrive at a tool distribution equal to or greater than the number of men in the operation.
4. All tools will be for fire use only and maintained with sharpened cutting edge and sturdy handles.
5. Fire tools will be stored in a sturdy box marked clearly "FOR FIRE ONLY."
6. Color code all tools for identification purposes.

WATER SUPPLY

1. A water supply for fire fighting only, will be present at each landing used for yarding or loading and at each road construction or reconstruction site. The water supply must be mobile, either a self-propelled fire truck or a tank on a trailer and have a minimum capacity of 1,000 gallons for yarder operations and 500 gallons for ground base operations. If a trailer is used, a vehicle capable of pulling the trailer must be in the immediate vicinity of the trailer during all operating and fire watch hours.
2. A full water supply, pump and a minimum of 250 feet of hose and nozzle will be maintained as a connected operating unit ready for immediate use (hard line, live reel).
3. A minimum complement to reach the tail blocks of 1 inch or larger fire hose and a nozzle capable of operating simultaneously with the hard line will be maintained with each water supply.
4. The pump must be capable of drafting 50 gallons per minute and pump at 150 psi.
5. Ground base operations, road builders/dozer sites are required to maintain water supply at 500 ft. maximum of active operations or complement of hose.
6. Additional equipment may be required at the discretion of Moore Mill.

FIRE EXTINGUISHER

1. Each internal combustion engine used in an operation will be equipped with one chemical fire extinguisher rated not less than 10 lb.-ABC.
2. A 5 lb.-ABC fire extinguisher must be mounted in every motorized carriage.
3. Extinguishers will be placed so as to be visible and ready for instant use.

SPARK ARRESTERS AND MUFFLERS FOR ENGINES

1. All gas powered engines will have approved spark arresters unless the state forester authorizes a muffler.
2. All motorized carriages are required to have an approved spark arrester.
3. Gas engines less than 50 cubic inches must be equipped with factory installed mufflers.
4. Non-turbo charged engines must be equipped with an approved spark arrester.
5. Diesel trucks must be equipped with a baffled muffler and exhaust system in good repair. Exhaust must extend above the cab or to the end of the truck frame and discharge upward or to the rear.

FIRE WATCH PERSON

1. A watch person is required at each operation site.
2. The watch person will be on duty for 3 hours after the power driven equipment being used has been shut down for the day or after welding or cutting. The 3 hour period may be reduced with approval from Moore Mill and written approval from the Forest Practice Forester. The watch person is required to call Moore Mill's office upon start of fire watch with time watch is started, temperature and humidity and again at the end of fire watch. (See Weather Monitoring Portion) This can either be done by radio (KOK) or phone. After 5:00 p.m. the message machine at Moore Mill's office will be on for fire watch reporting. (KOK will respond within 30 seconds between the hours of 8:00 a.m. to 5:00 p.m. If the fire watch does not hear KOK within the 30 seconds, then fire watch needs to check their radio - if radio is in working condition they need to change their location and try again.) It is the contractor's responsibility to verify that the call in location is in radio range.
3. The watch person will be physically capable and experienced in operating all fire fighting equipment.
4. The watch persons must have transportation and communications, other than CB radios, but not excluding a CB as required for vehicle location.
5. Watch person must be in line of sight of daily work area(s) with periodic checks of work area(s).

WARMING FIRES

1. **ABSOLUTELY NO WARMING FIRES OR COOKING FIRES ON MOORE MILL LANDS BETWEEN MAY 1ST AND DECEMBER 1ST, REGARDLESS OF DAILY WEATHER CONDITIONS.** These dates may be adjusted if seasonal weather conditions permit. Any variance from this rule will be issued in writing.

SMOKING

1. **SMOKING IS NOT ALLOWED WHILE ON MOORE MILL PROPERTY. THERE ARE NO EXCEPTIONS TO THIS RULE.**

OTHER FIRE PREVENTION MEASURES

1. A fire watch patrol will be initiated on Moore Mill land immediately following any lightning storms exhibiting down strikes.
2. Areas of extreme fire hazard on Moore Mill land will be posted and gated during fire season.
3. Moore Mill lands are monitored from CFPA and USFS lookouts. However, special patrols may be organized during weekends and holidays.
4. Moore Mill road systems are being marked by road signs and numbers. This is an on going project until all major roads and junctions are posted.
5. Moore Mill will maintain water holes at strategic locations during fire season. Moore Mill has implemented water hole and pump chance locations into our GIS mapping system. At the onset of a new logging operation, the operator will receive a map of the nearest water source.
6. Each water supply required on an operation will be operated Monday, Wednesday and Friday of each week. Pumps must be started and at least one line must show water. Operate pumps drafting capability as required to maintain the water supply capacity at 90% or more.
7. Moore Mill may inspect required fire equipment at any time. Any operation that does not comply with fire prevention rules or meet fire equipment standards will be shut down until compliance is met.
8. When fire danger is high, Moore Mill Forestry Department will coordinate internally to insure that someone is available to receive calls during non-working hours. The designated person will remain near a telephone or mobile phone at all times. Persons calling to report a fire should begin at the top of the list shown on page 11 and continue until the designated person is contacted. All forestry department personnel will leave their radios on at all times.

FIRE REPORTING PROCEDURES

All fires on Moore Mill land will be reported immediately to Coos Forest Protective Association, then to Moore Mill personnel, then to Oregon Department of Forestry if appropriate. **ALL FIRES MUST BE REPORTED**, even minor fires that are extinguished quickly. This will allow follow-up patrolling to ensure that the fire stays out.

REPORT FIRES TO:	OFFICE
<u>Coos Forest Protective Association</u>	
Coos Bay Office	267-3161
Four Mile Office	347-3400
Gold Beach Office	247-6241
Bridge Office	572-2796

If unable to contact CFPA - Call 911
Moore Mill Office - 347-2412, Moore Mill Truck Shop 347-3603

INFORMATION TO REPORT

1. Location on fire - Road number, name of area, unit name or number.
2. Approximate size of fire.
3. Local weather conditions influencing the fire.
4. Terrain and fuel conditions (steepness, fell and bucked, precommercial thinning).
5. Can you handle the fire or is more help needed? What fire suppression resources are available on site?
6. If possible, landowner where fire is burning.

EMERGENCY FIRE SUPPRESSION PROCEDURES

The first and most important action to take upon detection of any fire is to report it, regardless of size.

AFTER THE FIRE HAS BEEN REPORTED

1. Assess the following related to the fire; size, direction and rate of spread, local weather, terrain and fuels. If the fire is controllable, take aggressive action as quickly and safely as possible with no risk to bodily harm.
2. If the fire is uncontrollable with the resources available, make sure the right help is on the way. Locate yourself in a position to observe the fire and watch for any spot fires so that you can update help when it arrives.
3. Until help arrives, take charge and do whatever you can to minimize damage. CFPA or Moore Mill personnel will be in charge once on the scene.
4. Upon becoming aware of a fire in progress, all operations in the area will cease. Personnel of each operation will locate themselves so they can be easily summoned when needed.
5. All company employees and contractors working for Moore Mill will be considered on call for fire suppression and upon learning of a fire in progress will stand by or call for instructions.
6. As time and activity allows, Moore Mill or CFPA personnel will notify any adjacent landowners whose lands are threatened.

REMEMBER - REPORT ALL FIRES, regardless of size or status.

FIRE RECORD

So that everyone is compensated for their services or damages, it is necessary that a complete and accurate record of the fire is kept. Each supervisor or contractor must keep a written record of the names of men and equipment he is responsible for and hours worked. In addition, he should record any other pertinent facts about the fire origin, cause or odd occurrences, such as unfamiliar vehicles in or leaving the area. Supervisors or contractors should keep all fire information confidential and discuss only with CFPA or appropriate Moore Mill personnel.

FIRE FIGHTING SAFETY

Another fire trail can always be constructed if the fire jumps the line, but a human life cannot be replaced. No timber stand is worth a human life or serious injury.

Fire suppression activities should proceed in an aggressive yet organized manner. Avoid reckless hurrying which only leads to confusion and panic. The following are simple fire fighting procedures that will provide for safety and effective suppression of fires.

1. BE ALERT - KEEP CALM - THINK CLEARLY - ACT DECISIVELY
2. Be aware of fire weather conditions and forecasts.
3. Know what the fire is doing at all times.
4. Base all actions on the current and expected behavior of the fire.
5. Locate or prepare escape routes and safe areas and MAKE THEM KNOWN.
6. Post lookouts when there is a possibility of danger.
7. Maintain prompt communications with your men, boss and adjoining forces.
8. Give clear instructions and make sure they are understood.
9. Maintain control of your men at all times.

Proper personal protective equipment must be worn during fire fighting procedures. This equipment includes hard hat, gloves, boots and jeans. No one will be allowed on the fire scene without proper equipment.

REMEMBER - Fight fire aggressively while providing for ***SAFETY FIRST***.

MOORE MILL COMPANY - FIRE EQUIPMENT

ENGINES:	FT-1	3,200 gallons with PTO pressure pump - gas fill pump, 3,000 feet 1/4 turn hose and accessories
	FT-2	3,200 gallons with PTO pressure pump - gas fill pump, 3,000 feet 1/4 turn hose and accessories
	ST-1	250 gallon slip-in tank with pump and foam capability
	ST-4	1,000 gallon slip-in tank with pressure and draft pump capability, 1,000 feet of hose and accessories
	T-1	4,200 gallon tender with drafting capability

PORTABLE TANKS AND PUMPS:

- 2 - 1,600 gallon folding tanks
- 2 each 1 inch 2 cycle backpack pressure pumps
- 1 each 1½ inch 4 cycle pressure pump
- 1 each 3 inch volume pump trailer mount

FIRE CACHE:

A fire cache is maintained with approximately 2,000 feet of 1/4 turn hose, assorted fittings, nozzles, hand tools and miscellaneous equipment.

LOCATION:

Retain shed at Moore Mill Log Yard
Barn at Crystal Creek house

6H71 key to all fire cache's and equipment

FIRE PREVENTION REGULATION

All operations on Moore Mill lands must abide by the Industrial Fire Precaution Levels and comply with all State Fire Equipment Requirements and any Moore Mill requirements which exceed the State's. The following is a check list of basic equipment requirements. This list covers the basic requirements during fire season, but is not intended to cover all the specifics of the rules. Further information may be obtained through the Forestry Department.

HAND TOOLS

- Fire Tool Box marked "FIRE TOOLS"
- Box and tools in good condition/repair
- Adequate number and mix of tools, 1 per man, minimum of 4
- Tools kept in box and used for fire only

POWER SAWS

- Muffler with spark arrester screen
- Spark arrester screen in good condition and proper fit
- No modification*, no additional porting or removing dogs, etc.
- Minimum 8 oz. fire extinguisher and size "0" or larger shovel
- Moved at least 20' from fueling spot before starting

WATER SUPPLY, HOSE

- Pump meets required performance specifications minimum 20 GPM through 1/4" nozzle
- Pump operable with gasoline, oil and proper maintenance
- 250' pre-connected hose ready for immediate use
- Additional 300' minimum except minimum 1000' required on yarder operations
- 500 gallon minimum capacity
- Properly positioned on the job site
- Tank has water
- Everyone knows how to use pump and draft
- Started - pumped and drafted regularly
- Nearest water source identified

ENGINES

- Engine has a turbo or approved spark arrester
- Minimum 5 lb.-ABC fire extinguisher

TRUCKS

- Size "0" or larger long handled shovel
- One Pulaski or axe with 26" handle or larger
- Minimum 5 lb.-ABC fire extinguisher
 - ☆ Visible to operator
 - ☆ Ready for immediate use
 - ☆ Pressure gauge in green
- Exhaust system in good repair

FIRE PREVENTION REGULATION

SNAGS

- Cut all snags within 100' of roads, landings or unit boundaries unless specifically marked as a wildlife tree

WATCH PERSON

- 3 hours required
- Waivers to 1 hour in writing only
- Physically capable
- Able to operate fire equipment
- Transportation and communications

SMOKING

- No Smoking is permitted while on Moore Mill lands. There are NO EXCEPTIONS to this rule.

WARMING FIRES

- Prohibited between May 1 and December 1, regardless of daily weather conditions