Lessons from Losses

Proper Hot Work Procedures Could Have Prevented Fire

To help TPA members avoid accidents resulting in injury or damage to property, the Timber Bulletin, in association with Lumbermen's Underwriting Alliance, will publish details of actual incidents and what can be done to avoid such occurrences n the future. By sharing this information, TPA and LUA hope to make our industry as safe as possible.

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Background: The equipment involved was a Morbark chipper and a Hood loader. The loader unit was equipped with one 10-pound multi-purpose fire extinguisher, and the parts trailer located on the landing had two 10-pound extinguishers. Manual electrical disconnects (master switch) are on all equipment. Maintenance and housekeeping was rated as good. The skidder was recently power-washed and the rest of the machines were scheduled to be washed at the next move. Most maintenance needs are completed in-house with the exception of large-scale maintenance.

On the day of this incident, the weather was mostly cloudy and dry with temperatures in the low 70s during the mid-morning hours with a light southeast wind. In general, the weather had been very dry for the previous few weeks and the humidity very low. A weather change was just starting to occur later that day, with some wet weather moving into the area.

The job site was located approximately 1½ miles from the nearest city, just off a county blacktop road. The actual landing was only 75 yards from the roadway on a good access roadway.

Operator: The operator (family member) had eight years' logging experience working for another logging company and has been involved with this company for just under two years. This individual is very ambitious with a good work ethic. He is considered trained in equipment operation and woods work.

Incident: On a Saturday at approximately 9:25 a.m. a fire destroyed the loader and damaged the chipper unit. At this job site they were logging a mixed hardwood stand of aspen, maple, basswood, etc. and were approximately 75% complete with this sale. On this day, the owner and operator were going to complete some maintenance and improve the access door enclosing the chipper head. These two individuals first met at the owner's home/shop area to discuss tools and supplies needed to complete this task. As they were getting ready to go to the logging job site, the owner received a phone call and the operator went ahead and was going to start prepping the job until the owner arrived. They estimated the owner was behind by approximately 20 minutes. When checking what was needed to complete the job, the operator made the decision to start the grinding process on the access door area of this chipper unit. While focusing on the job at hand, sparks ignited some wood waste beside the chipper unit and the southeast wind blew the fire under the chipper unit. The fire quickly grew, creating a stronger wind which blew the fire squarely into the loader unit. These two units work together, with the hydraulic system on the loader unit supplying power to the chipper unit. The feeder hoses between the loader and the chipper were believed to be the path of the fire. As the operator worked to extinguish the fire with the two extinguishers from the equipment, the fire continued to grow on the other side, spreading quickly to the loader unit. By this time, the operator had called 911 and the fire department responded in approximately 8-10 minutes. This operator continued to fight the fire until the fire department arrived and the fire had grown to a level where hand-held extinguishers were too small. The fire department extinguished the fire using water and foam.

Due to the height of the loader, the heat rise, and direction of the wind, the loader received severe damage. The slasher unit and the loader boom/bucket – both part of

7200 Volts vs Log Truck – Volts Win

This is why you must be careful when working around power lines.

It happened in July in Jackson, Tenn. The driver of what used to be a truck and trailer was attempting to throw the logging cable over the logs to secure them. As you can see, he hooked the electric line instead!

The tires began to fry within seconds, but the driver was a very lucky man. He survived, but could easily have been fried himself!

All who haul timber should keep this photo in mind and remember to maintain the proper distance away from the power lines.

the loader unit – may have some salvage value. The chipper unit received damage to the hydraulic controls, hoses, etc. The power unit and chipper head may have some salvage value and repair maybe considered. No injuries occurred.

Unsafe Act and/or Condition: Here are some unsafe acts that contributed to this human error mishap.

- Operator didn't use HOT WORK PRACTICES!
- Operator did not move machine to a safe location (with a clean hard work surface, etc.) away from other equipment.
- Operator did not wait for the spark watcher to arrive.
- Operator did not thoroughly clean before the job.
- Operator did not bring the power washer and water supply to wet down before and after.
- The current dry conditions (low humidity) creating a very dry environment.

The cause of this fire is poor **HOT WORK** practices, and being too aggressive in getting the job done quickly. Sometimes you need to slow down to go faster! The dry conditions worsened this situation. However, **PROPER HOT WORK PROCEDURES** need to be utilitzed every time, all the time.

Preventative Measures:

1. Enforcement of safe **HOT WORK PROCEDURES** with all employees and independent welders. Also, review what hot work situations (grinding, use of open flame, welding, etc.) are needed, and which can be completed without being in the field so a fire situation does not occur.
2. Complete proper work procedure (emergency response, equipment operation, maintenance, housekeeping, etc.) training and refresher training for all new and existing employees. Being sure your employees understand the tasks at hand will complement the safety of both your personnel and equipment.
3. Practice fire extinguisher use and discuss the dos and don'ts when using this fire protection. Discussing this topic, including hands-on practice, will help in your preparedness in an emergency situation.
4. Always utilize the electrical disconnect (master switch) on your mobile equipment during shut down, during maintenance, and in an emergency situation. Refresher training for all employees and temporary operators needs to be reviewed regularly.