

FIRE HAZARD ASSESSMENT

This form can be used by staff and Licensees when assessing hazards, as defined under the Wildfire Act and its Regulations, and must be completed by a qualified person as defined in the Guidance and Interpretation section on page 2.

Licence/Contract/Project: _____ **Block:** _____

Date: _____ **Describe Condition(s) being Assessed:**

Hazard Interpretation & Abatement Strategy

| Fuel Loading Factors | Industrial Activity Area characteristics and Point Rating | | | | Score |
|---|---|--|--|---|-------|
| | Score each factor within range that best describes the condition(s) being assessed. | | | | |
| Fuel Depth: Dispersed, or Piles with 3m fuel breaks | <20cm <4x4m, <10/ha 1 | 20 to 40cm >4x4m, <10/ha 3 | 40 to 60cm >4x4m, <10/ha 5 | >60cm >4x4m, >10/ha 7 | |
| Fuel Size: (% all fuels < 7 cm diameter) | <15% 1 | 15 to 30% 3 | 31 to 45% 5 | >45% 7 | |
| Horizontal Fuel Arrangement: (% of area) | Fuel coverage <20% 1 | Fuel coverage 20 to 50% 3 | Fuel coverage 51 to 80% 5 | Fuel coverage >80% 7 | |
| Vertical Fuel Arrangement: (fine fuels < 7 cm) | Mixed with soil or > 50% of area piled 1 | On ground or roadside piled with fuel breaks 3 | Partially Elevated dispersed fuel 5 | Mostly elevated dispersed fuel 7 | |
| Vegetation: (contributes to Fuel Load) | None 0 | Low 1 | Moderate 3 | High 5 | |
| Cedar Slash Component: | <20% 1 | 20 to 40% 2 | 41 to 60% 3 | >60% 4 | |
| Risk of Ignition: | No access (barrier >500 m or isolated) 1 | Poor access (or mostly piled 30m from road) 2 | Good access (or piled within 30m of road) 3 | Readily accessible (public use road) 4 | |
| On average conditions a score over 14 should have hazard abatement associated with the conditions and factors causing the greatest risk. Apply an interpretation of this score to surrounding factors and state hazard abatement to reduce risk in specific terms to change inherent risk to managed risk. | | | | Inherent Fire Hazard Risk Total: | |

Completed by: _____

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| | | |
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| | | |
| | Managed Fire Hazard Risk Total: | |

Note:

Attach a map showing areas and conditions assessed, additional notes and provide a copy to the BCTS staff contact.
Timber Sales will not be closed until BCTS receives a copy of the most recent fire hazard assessment.

Guidance and Interpretation

Wild Fire Act Section 7 Legal Requirement

*In prescribed circumstances and at prescribed intervals, a person carrying out an industrial activity or a prescribed activity on forest land or grass land or within 1 km of forest land or grass land **must conduct fire hazard assessments**. A person carrying out an industrial activity or a prescribed activity **must abate within a prescribed period a fire hazard of which the person is aware or ought reasonably to be aware**.*

BCTS Licensee's are responsible for completing assessments and abating any hazards created by their operations. BCTS is responsible to complete Wildfire Hazard Assessments on any of its contracts where it has created the hazard. This fact should be communicated to the Contractor at the EMS Prework. BCTS will not assume another party's responsibility or take ownership of a fire hazard not of their doing under these legal requirements. BCTS staffs are not officials as defined in the *Wild Fire Act* and cannot verify if the assessment or abatement strategy developed by licensees meets these legal requirements. This responsibility rest with Compliance and Enforcement Staff and Protection Branch.

Wild Fire Regulation Section 11 and 12

*The hazard assessment must **assess the fuel hazard, risk of a fire starting and spreading**. The prescribed interval for assessment and abatement is either:*

- ***Assessment every 3 months** (during the period of industrial activity when within an area of local government (municipal area or regional fire protection district) and on completion of the activity if a shorter interval **and abate the hazard within one burning season** following the assessment. Or,*
- ***Assessment every 6 months** in all other areas and on completion of activity if a shorter interval **and abate the hazard within one burning season** following the assessment.*
- ***Abatement must reduce the fuel hazard without increasing the risk of a fire starting, fire behaviour or fire suppression.***

A person may request an exemption in writing from their local Fire Centre Manager specifying the section of the act to which they are requesting and exemption and the duration of the exemption. See *Section 70 of the Wild Fire Act* for a further explanation. If an exemption is granted, any conditions or alternative requirement must be followed.

Completion of Fire Hazard Assessment Forms

The preparation, implementation, and supervision of fire hazard assessment and abatement is considered "professional forestry" and must only be carried out by persons authorized and qualified to do so under the Foresters Act of BC.

Fuel Loading Factors

In general terms each of the 7 factors scored should be interpreted as they approximate the actual conditions being assessed. Using good judgement and awareness assess each factor, low risk being the lowest number and high risk being the highest number. All factors must be scored to make the threshold of 14 of any significance. Other considerations such as values at risk, likelihood of human or lightning fire starts, slope position, terrain, aspect, adjacent fuel hazards, local prevailing winds and local fire history should all be used when determining a hazard score and to interpret whether the total score is over or under an acceptable threshold for the specific area of activity to trigger abatement strategies.

| | |
|------------------------------------|--|
| Fuel Depth | Used to describe average fuel depth in a dispersed area. Ignore fuel free areas. Indicator of fuel hazard and suppression difficulty. If the dispersed area has had piling done than interpret smaller and fewer piles as lower risk than larger and frequent piles. Stratify and average out areas either piled or dispersed. If piling reduces all fuel loading to less than 20cm, assess strictly on pile size and number. If not, determine average dispersed fuel height and factor higher for the added piled fuel |
| Fuel Size | Used to describe the amount of fine fuels. Indicator of fire ignition due to rapid drying and spread. Regardless of piled or dispersed fuel, estimate how much as a % of the total fuel loading |
| Horizontal Fuel Arrangement | Used to describe the amount of area covered by continuous fuel. Indicator of fire spread. If piles have a 3 meter fire guard, deduct the area of the piles and guard. If piles do not have guards, include the area of the pile. Reduce % area of fuel for roads, and other disturbed or natural fuel free areas within the total area being assessed. |
| Vertical Fuel Arrangement | Used to describe air space and stacking of fine fuels only for oxygen supply and preheating of fine fuels much as one would kindle a camp fire. Indicator of ignition and fire behaviour. Easily confused with fuel depth but is assessing ignition vs. fuel hazard. The interpretation on piles here is how risk of ignition or risk of fire spread was altered. In piles, consider if they have reduced or increased fine fuel aeration and height. |
| Vegetation | Used to describe contributing fuel hazard from brush. Indicator of fuel hazard and fire spread. Low brush would not impede walking High brush would make walking difficult. Perennial succulent types of vegetation do not contribute to fuel hazard. |
| Cedar Slash Component | Cedar has ease of ignition and intense burning characteristics effecting fire spread and behaviour. A % of the total fuel load that is comprised of cedar. |
| Risk of Ignition | This is the risk posed by ease of access for human start fires. Indicates ease of ignition. The more ready the 4X4 vehicle access, the higher the risk. Roadside piling can reduce risk; consider distance of piles from the road edge and if significant reduction of fine fuels. |

A fire hazard score of 14 is not a clear indication of a fire hazard. It is a default threshold for average conditions where the assessor considers the effect of the fire hazard exists and develop an abatement strategy which reduces the fire hazard that reduces the chance of a fire starting. Options to consider in developing an abatement strategy should consider the following possibilities; reducing fuel loading, rearranging fuel, removing ignition sources, creating fuel breaks or limiting access.

In the Hazard Interpretation & Abatement Strategy section, the assessor should address the factors and conditions most contributing to the risk of fire if reasonable or common sense to do so. Assessor's should address the fuel hazard, fire start or fire spread directly as they contribute overall to the greatest fire hazard. By referencing the specific factor scores, the assessor should then re score the fire hazard based on the implementation of their abatement strategy.

Fire Hazard Assessment is a process of risk management. The assessment is intended to describe the inherent fire hazard risk on an area of industrial activity. The abatement strategy reduces the risk to a manageable level commensurate with the values at risk, expected fire behaviour and suppression difficulty.

Note: This guide is not an instructional tool. The assessor is assumed to be qualified to follow this procedure and be able to interpret its intent.