Representative Weather Data & Fire Danger Class Bulletin

Purpose

This bulletin provides guidance to BCTS staff, registrants and contractors regarding obtaining representative weather data and calculation of the Fire Danger Class as required under the *Wildfire Act* and Regulation. BCTS has been told that compliance with the *Wildfire Act* and Regulation will be a key focus area of the Compliance & Enforcement Program during fire season.

This bulletin is not intended to replace guidance provided by BC Wildfire Service but rather just increase awareness around the requirements and highlight resources that are available. For more information, please refer to the "Interpretive Bulletin on the Application of the Wildfire Regulation for the Forest Industry." https://www.for.gov.bc.ca/bcts/areas/TST/TST_ems.htm

Become Familiar With the Canadian Forest Fire Weather Index System

The Fire Danger Class as defined in the *Wildfire Act* and Regulation is based on the Canadian Forest Fire Weather Index System (CFFWIS). http://cfs.nrcan.gc.ca/publications?id=31168

The CFFWIS, when used correctly, will calculate accurate Buildup Index and Fire Weather Index. These two numbers are then cross referenced with the Wildfire Regulation Schedules 1 and 2 to determine the Fire Danger Class for a given location.
http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/11_38_2005

CFFWIS – Starting the Calculations (page vii) outlines two means of obtaining start up data for calculations at your work site. If neither of these two options fit your situation you can contact a Fire Weather Forecaster or your BCTS representative for help in obtaining the required information.

CFFWIS – Fire Weather Observations (page viii) outlines the required weather information that is needed in order to accurately calculate the Buildup Index and Fire Weather Index under the CFFWIS. It is important to note that the CFFWIS is based on consecutive daily observations recorded on site at the location of work at either 1200 or 1300 hours.

Starting the Calculation

It is recommended that all registrants and contractors ensure that the weather data being used to start calculations is as accurate as possible. This start-up weather data can be obtained from a Fire Weather Forecaster directly or through your BCTS representative. To obtain this information you will need to identify the latitude, longitude, and elevation for the specific location of your worksite. If this information is being obtained through your BCTS representative, you will need to allow time for processing the request.

Fire Weather Observation

Once start-up information is available it is imperative that weather data be recorded daily at the same location and the same time of day, and that it be representative of the worksite. Weather data can be gathered in several different ways. There are handheld weather data collectors, portable weather

stations, or depending on the area, there may be a representative Environment Canada or BC Wildfire Service weather station. It is important to remember that wherever your weather data comes from it needs to be accurate and representative of the worksite. The daily fire weather data is used to calculate the Buildup Index and Fire Weather Index.

Calculating Fire Danger Class

Now that you have accurate start up data and a means to collect the required daily weather data you need to be able to calculate the Buildup Index and Fire Weather Index. This can be done using the tables in the CFFWIS or by way of an excel spreadsheet that has been developed by BC Wildfire Service for this purpose. A copy of the spreadsheet is available for download from the BCTS Seaward EMS Website. BC Wildfire Service is not responsible for improper use of this spreadsheet or changes made to the formulas, but it can be a useful tool when used properly.

Once the Buildup Index and Fire Weather Index are confirmed, they can then be cross referenced with the Wildfire Regulation Schedules 1 and 2 to determine the Fire Danger Class.

Documentation

It is important to document each step of the process used to calculate the Fire Danger Class. This can be done by hand (worksheets available in the CFFWIS) or using the excel spreadsheet referenced above. The method you choose must accurately record the information used in your calculations. BCTS has been told that Compliance & Enforcement staff will be inspecting for this documentation.

Contact

For further details, contact Lisa Brown, Woodlands Manager.