

bulkley valley - lakes district airshed management society

Abbreviations and Glossary

AIVIP	Alished Management Plan
BFP	Babine Forest Products

BMP Best Management Practice

BVLD Bulkley Valley-Lakes District

CanFor Canadian Forest Products

CFDC Community Futures Development Corporation

CSA Canadian Standards Association

CWD Coarse Woody Debris

CWG Community Working Group

DM District Manager (Ministry of Forests)

DLFP Decker Lake Forest Products

EPA Environmental Protection Agency

HFP Houston Forest Products

MOF British Columbia Ministry of Forests

MOTH British Columbia Ministry of Transportation and Highways

PED Potential Episode Day

PIR Pacific Inland Resources

PLC Programmable Logic Controller

RWG Regional Working Group

TSA Timber Supply Area

WETBC Wood Energy Technicians of British Columbia

WLAP British Columbia Ministry of Water, Land and Air Protection

AIR QUALITY ADVISORY	An advisory issued by the Ministry of Water, Land and Air Protection alerting the public that air quality is degraded.
AIR QUALITY EPISODE	A period of degraded air quality (due to higher than normal levels of pollution), due to a combination of emissions, topography and meteorology.
AIR QUALITY INCIDENT	See Air Quality Episode.
AIRSHED	A geographic area that, because of emissions, topography and meteorology typically experiences similar air quality.
AMBIENT	Environmental or surrounding conditions.
ASTHMA	A condition often of allergic origin that is marked by continuous or spastic laboured breathing accompanied by wheezing, by a sense of constriction in the chest, and often by attacks of coughing or gasping.
ASTHMATIC	A person who is sensitized to allergens and with hyper-responsive airways. There is genetic predisposition, but non-genetically related asthma occurs also in adults.
ATMOSPHERIC MIXING	Movement of air that results in mixing. Typically caused by atmospheric instability.
ATMOSPHERIC PROFILE	A chart or graph which shows meteorological variables (temperature, wind, etc.) from the surface up into the atmosphere at one location.
BEEHIVE BURNER	A beehive burner is a large conical steel structure used to burn wood residue. The beehive burner contains a series of dampers, air ducts, fans and various controls. Wood residue is fed into the structure near 2/3 from the base.
BENCHMARK	A standard by which something can be measured or judged.
BEST MANAGEMENT PRACTICES	A practice or combination of practices that are determined to be the most effective, practical means of reducing the amount of pollution generated by a source to a level compatible with environmental quality goals.
BIOMASS	Biomass refers strictly speaking to the total weight of all the living things in an ecosystem. However, it has come to refer to the amount of plant and crop material that could be produced in an ecosystem for making biofuels and other raw materials used in industry, for example.
BROADCAST BURNING	Debris is burned as is on the ground as opposed to being piled into distinct piles.

Acute or chronic inflammation of the bronchial tubes. **BRONCHITIS** A suspension of the exemption under the Waste Management Act of the **BURN BAN** requirement to have a permit or approval to discharge waste (therefore, no burning under the Open Burning Smoke Control Regulation is allowed). This means that only operators with a valid permit or approval for open burning can do so during a burn ban. **BURN REFERENCE** Ministry of Forests require residents planning a fire larger than a typical backyard burning pile to obtain a burn reference number by calling 1-888-797-1717. This **NUMBER** number ensures that MOF can track every person planning to burn debris. A computer model that uses modeled meteorology from CALMET along with **CALPUFF** inputted emission information from sources to produce an estimate of air quality at numerous locations throughout a defined area and period of time. A computer model that uses meteorological monitoring data, land use data and **CALMET** terrain data to develop a 3-dimensional estimate of meteorological conditions at numerous locations over a defined area and period of time. A not-for-profit, membership-based association serving business, industry, CANADIAN government and consumers in Canada and the global marketplace. It works in **STANDARDS** Canada and around the world to develop standards that address needs, such as ASSOCIATION enhancing public safety and health. Ministry of Forests defines small open fires/backyard burning (reference number CATEGORY 1 & 2 not required) as category 1 & 2 burns. Note, a burn reference number is not **BURNS** required. Ministry of Forests defines industrial and agricultural burning as category 3-6 CATEGORY 3 - 6 burns. Note, a burn reference number is required. **BURNS** Ministry of Forests defines open fires for resource management purposes as CATEGORY 7 & 8 category 7 & 8 burns. Note, a burn reference number is required. **BURNS CIRCULATORY** Disease caused by the normal flow of blood through the body being restricted or blocked as a result of arterial plague. This may cause damage to the heart, brain, DISEASE kidneys or other organs and tissues. The lowest broken or overcast layer of a cloud. Usually the term will only be used **CLOUD CEILING** if clouds occupy more than %50 of the visible sky at a particular height. If a cloud ceiling is low, chances are the sky is drab and visibility for small aircraft may be

reduced.

COARSE WOODY
DEBRIS

Coarse woody debris is dead woody material, in various stages of decomposition, located above the soil, larger than 7.5 cm in diameter (or equivalent cross-section) at the crossing point, which is not self-supporting. Trees and stumps (intact in ground) are considered self-supporting.

COMBUSTIBLE MATERIAL

Material which have the potential to burn.

COGENERATION

Simultaneous production of heat energy and electrical or mechanical power from the same fuel in the same facility. The use of waste heat (as in steam) from an industrial process to produce electricity, or the use of steam from electric power generation as a heating source are examples of cogeneration.

COMMUNITY
WORKING GROUP

Three groups (Lakes, Morice and Bulkley (with Kispiox)) of stakeholders developed for the BVLDAMP with a focus on local air quality issues.

DAMPING

The act of starving a fire of air, thereby lengthening the time it takes for wood to burn. This decreases the efficiency of the burn, causing incomplete combustion (burning) which results in smoke (smoke is wasted, unburned fuel).

DIABETES (TYPE II)

Mild form of diabetes mellitus that develops gradually in adults; can be precipitated (made to occur sooner or faster) by obesity, severe stress, menopause or other factors; can usually be controlled by diet and hypoglycemic agents without injections of insulin.

DIOXINS

Any in a family of over 200 chlorinated organic chemicals (all heterocyclic hydrocarbons). Dioxins are produced when chlorinated materials such as plastics are burned. Dioxins are known to cause skin diseases (chloracne), birth defects, miscarriages, and cancer.

EPA EMISSION CERTIFIED APPLIANCE A wood-burning appliance which has met the low-emission standards set by the United States Environmental Protection Agency.

EMISSION INVENTORY

Involves qualifying and quantifying the emissions in an area which contribute to ambient air quality. Qualifying entails determining what sources exist that emit the pollutant of interest, and quantifying involves determining how much each source emits and when.

EMISSION

A substance discharged into the environment.

EPISODE

See Air Quality Episode.

EPISODE SCENARIO

Modelled air quality episode.

FALL AND BURN Hand felling, hand piling, and burning individual trees or patches of trees for the

purpose of bark beetle control.

Tiny solid or liquid particles that come in many shapes and sizes and from FINE many sources, both natural and human-caused. Fine particulates 10 PARTICULATE(S)

micrometer or less in diameter are called PM10, and those 2.5 micrometers or

less in diameter are called PM2.5 (PM stands for particulate matter).

FORECAST LOOPS An animated prediction model which plays repeatedly.

FORECAST VENTING See Venting Index Forecast.

HAND BUCKING Trimming tops and branches from harvested trees, and cutting that tree to ideal

lengths. This can be done using a chainsaw or handsaw.

Industrial and commercial facilities incinerate 'Hog' to power their facilities. Hog **HOG SYSTEM**

is the unusable waste generated by saw-milling logs and consists of bark and sawdust. A hog system grinds and chops this material from larger material and

collects/prepares it for transport from the sawmill to the end user.

The system of glands that secrete (produce) hormones. HORMONAL SYSTEM

A collection of cells and proteins that work to protect the body from potentially **IMMUNE SYSTEM**

harmful, infectious microorganisms (microscopic life-forms), such as bacteria,

viruses and fundi.

Efforts that reduce the risk of insect damage spreading. Fall and Burn is one INSECT HAZARD **ABATEMENT**

example of this.

LANDING An area of concentrated skidding activity, where logs are dropped to be 'Hand

Bucked' or 'Machine Processed'. Skidding is where machines drag logs to a

centralized point (landing) or roadside.

Refers to a holder of a Major License under the Forest Act. LICENSEE

A numerical weather forecast in which the output displays temperature (surface **METEOGRAMS**

and at 850 hPa), mean-sea level pressure, wind and precipitation.

The study of the weather, as well as the atmosphere and atmospheric **METEOROLOGY**

phenomena including the atmosphere's interaction with the earth's surface,

oceans, and life in general.

A computer program used to estimate or simulate a real world situation. MODEL

of solid materials that are released into and move around in the air. Particulates MATTER

are produced by many sources, including the burning of wood, diesel fuels by trucks and buses, incineration of garbage, mixing and application of fertilizers and pesticides, road construction, industrial processes such as steel making, mining operations, agricultural burning (field and slash burning), and operation of fireplaces and woodstoves among others. Fine particulate are a subset of

A criteria air pollutant. Particulate matter includes dust, soot and other tiny bits

particulate matter

PARTICULATE

PHENOMENA The plural of phenomenon, an occurrence, circumstance, or fact that is perceptible by the senses. Placing logging debris into specific vertical piles for the purpose of burning the **PILING** debris more efficiently or to reduce the area of ground affected by the debris. Particulate matter with a diameter of less than 2.5 micrometers (µm). One PM2.5 micrometer is one millionth of a metre. PM2.5 is included in fine particulate, and is a subset of PM10 (when measuring PM10, it includes PM2.5). PM2.5 is typically associated with combustion sources (smoke) and is more closely related to adverse health effects than larger particles. Particulate matter with a diameter of less than 10 micrometers (µm). One PM10 micrometer is one millionth of a metre. PM10 is included in fine particulate and includes PM2.5 (when measuring PM10, it includes PM2.5). The larger particles in PM10 are typically associated with crustal (ie. dust) sources. A day where, based on meteorological variables (still air, poor venting) the POTENTIAL EPISODE potential for an air quality episode exists, dependent on emissions. DAY A solid-state control system that has a user-programmable memory for storage PROGRAMMABLE of instructions to implement specific functions such as I/O control, logic, timing, LOGIC CONTROLLER counting, report generation, communication, arithmetic, and data file (PLC) A controller consists of a central processor, input/output manipulation. interface, and memory. A controller is designed as an industrial control system. Replanting of trees on land that has recently been harvested for trees (logged). REFORESTATION Made up of representatives from Community Working Groups and others, **REGIONAL WORKING** developed for the BVLDAMP with a focus on airshed-wide air quality issues. **GROUP** Tree limbs and tops, rotten wood, etc. **RESIDUAL DEBRIS** Describes a number of problems that affect the organs of the respiratory RESPIRATORY system. The respiratory system is made up of the organs that are involved in **DISEASE** breathing. These include the nose, throat, larynx, trachea, and lungs, which are made up of the bronchi, and arterioles. Refers to forest harvest debris piles based located near or on a roadside. ROADSIDE BASED Roadside based debris piles are smaller but greater in number than piles concentrated at a landing. **SILVICULTURE** A pre-harvest paper document that outlines factors to consider during and after logging that will achieve a new plantation when complete. **PRESCRIPTION** SITE PREPARATION Sometimes post-harvest ground is not plantable. Either the ground has too much debris, is too wet, or the soils are too compact. A Site Preparation **TREATMENTS** treatment will target the problem to create a more favorable planting and growing environment for the seedling. The ability of the atmosphere to dilute smoke through mixing and transport. SMOKE DISPERSION Reduction of hazard due to smoke. SMOKE HAZARD

ABATEMENT

STACK EMISSIONS Substances coming out of a stack.

TIMBER SUPPLY ARFA An integrated resource management unit established in accordance with the Forest Act.

TIER 1 (BEEHIVE)
BURNER

A Tier 1 burner is one that is 5 km or less from a populated area of 500 or more people.

TIER 2 (BEEHIVE) BURNER A Tier 2 burner is defined as other than a Tier 1 burner.

TOPOGRAPHY The terrain of an area including position and elevation information for surface

features.

VALUE ADDED ALTERNATIVE A solution or alternative to any situation which has direct or indirect 'value' of any kind. Value could be in the form of alternate cash generation (ie. use of waste as or to create a useable product), waste reduction or pollution prevention.

VENTING An atmospheric phenomenon (resulting from a combination of wind and the

atmosphere's ability to lift air), which allows for smoke dispersion.

VENTING INDEX FORECAST A numerical weather forecast in which the result is a scale from 0-99, consisting of three categories (good, fair and poor), which describes venting conditions. Poor venting exists when the venting index forecast is from 0-33, fair venting exist when the venting index forecast is from 34-54 and good venting conditions exist when the venting index forecast is from 55-99.

VISUAL BLIGHT Something which Impairs or destroys vision.

WELL BEHAVED In this plan, refers to a realistic outcome produced by a numerical weather

forecast or weather variables in general.

WINDGRAMS A numerical weather forecast in which the output is a forecast of wind

conditions (speed and direction) up into the atmosphere and foreword into time

at one given location.

WOOD STOVE CHANGE OUT PROGRAM A program in which education and incentives are available to people wanting to trade in a non-EPA emission certified appliance in exchange for a new lower

emission (fine particulate) appliance.