



MEDIA RELEASE

Ambient Formaldehyde Testing Results

The Ministry of Environment (MOE) is conducting further sampling of ambient formaldehyde at a variety of locations in Prince George this year. This is in response to high levels reported during tests taken in July-August of 2008. Priority is given to testing sites based on public complaints about odour.

Formaldehyde is a volatile organic compound (VOC). It is a colourless and flammable gas at room temperature and is characterized by a pungent odour at higher concentrations. Formaldehyde is a common substance, produced by nature as well as human-caused processes. It is the product of incomplete combustion and is formed in the atmosphere by photochemical reactions. For more information on formaldehyde see: <http://www.bcairquality.ca/reports/agoft.html>.

The following table is a summary of preliminary formaldehyde measurements following the most recent sampling event on May 26, 2010. This initial testing was done to assist in establishing a baseline and further testing will follow including testing on days with poor air quality. For comparison purposes, monitoring results obtained by the Millar Addition Citizen's Coalition (MACC) along with the People's Action Committee for Healthy Air (PACHA) during the same period using a different type of sampler are also included. All sample results (including duplicate field tests and blanks) were below the method detection limits.

SUMMARY OF MOST RECENT 2010/2011 FORMALDEHYDE RESULTS

Date/Time	Location	BC Action Level (1-hr)	BC Episode Level (1-hr)	Sampler	Sample Results
2010-05-26 13:38 – 14:38	End of 17 th Ave (Ft. George Park)	60 µg/m ³	370 µg/m ³	MOE	Below detectable (<0.0019 ppm or <2.3 µg/m ³)
				MACC/PACHA	Below detectable (Detection limit 0.01 ppm or 12.3 ug/m ³)

The MOE also analyzed its samples for other aldehydes, for which there are no BC objective levels. Results from the most recent sampling event (May 26, 2010) for the other measured aldehydes are included in Appendix A. The corresponding raw data will be published on the PGAIR website as soon as possible.

Formaldehyde air quality objectives

The Province has a two-tiered ambient air quality objective for formaldehyde. The action level (1-hour average of 60 µg/m³) is the target used when managing the level of formaldehyde in an airshed. The episode level (1-hour average of 370 µg/m³) corresponds to the concentration that starts to be of concern to the health of the general population; at this level, it is recommended that immediate steps be taken to reduce the release of formaldehyde into the atmosphere.

June 15, 2010

The Worker's Compensation Board uses two different standards for formaldehyde as occupational limits: a short-term ceiling of 1 ppm (1230 ug/m³) and a 8 hour time weighted average of 0.3 ppm (369 ug/m³).

Health effects of formaldehyde

At low levels, formaldehyde can cause irritation of the eyes, nose, throat and skin. Those with asthma may be more sensitive to these effects. Long term exposure to very high levels of formaldehyde can cause severe pain, vomiting, coma and possible death. Formaldehyde can also cause cancer, most commonly in the throat and nose after long-term exposure in the work environment.

Formaldehyde is unstable in the atmosphere and it is more of a health concern indoors than outdoors. For further information on formaldehyde and its' health effects, please visit <http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/psl2-lsp2/formaldehyde/index-eng.php>.

PG AIR's Role in Formaldehyde Sampling Program

Analysis of the samples are expected to take approximately 3 weeks, after which the results upon receipt will be passed to PG AIR. PG AIR, in turn, will communicate the results to the public. PG AIR will release the raw data through media releases to the public and post the results on the PG AIR website (www.pgairquality.com).

All technical inquiries and interpretation of results should be directed to the MOE.

For more information, please contact:

Kathryn Graham, Air Quality Management Coordinator
Prince George Air Improvement Roundtable (PG AIR)
250-649-9114 or kgpgair@gmail.com

For technical and sampling information, please contact:

Suntanu Dalal
Public Affairs Branch, Ministry of Environment
250-387-9745 or Santanu.Dalal@gov.bc.ca

June 15, 2010

**APPENDIX A – SAMPLE RESULTS OF ALDEHYDES AND KETONES TAKEN ON MAY 26, 2010 AT THE
END OF 17th AVENUE (FT GEORGE PARK)**

PARAMETER	SAMPLE RESULT (ug/m3)
Acetaldehyde	< 2.4 (Below Detection)
Acetone	Analysis in progress
Acrolein	< 2.3 (Below Detection)
Propionaldehyde	< 2.4 (Below Detection)
Crotonaldehyde	< 2.4 (Below Detection)
Butyraldehyde	< 2.4 (Below Detection)
Benzaldehyde	< 2.4 (Below Detection)
Isovaleraldehyde & Valeraldehyde	< 2.4 (Below Detection)
o-Tolualdehyde	< 2.4 (Below Detection)
m-Tolualdehyde	< 2.4 (Below Detection)
p-Tolualdehyde	< 2.4 (Below Detection)
Hexaldehyde	< 2.4 (Below Detection)
2,5-Dimethylbenzaldehyde	< 2.4 (Below Detection)

For Immediate Release

June 15, 2010