# **ASPHALT CODE OF PRACTICE**

# CODE OF PRACTICE FOR THE REDUCTION OF VOLATILE ORGANIC COMPOUND EMISSIONS FROM CUTBACK AND EMULSIFIED ASPHALT



The Asphalt Code of Practice (the Code) applies to manufacturers of asphalt, paving companies, and anyone hiring a paving company or issuing a paving contract (purchasers). It aims to protect the environment and the health of Canadians by encouraging the use of low volatile organic compounds (VOCs) asphalt products such as emulsified asphalt. VOCs are chemicals that are released into the atmosphere whenever asphalt is applied and contribute to the formation of smog.

# WHY SHOULD I CHOOSE LOW-VOC ASPHALT PRODUCTS

- The use of low-VOC asphalt products protects the environment and reduces the health impact on workers and local communities.
- Low-VOC asphalt products are comparative to cutback asphalt in performance and price.
- The use of low-VOC asphalt products demonstrates corporate environmental responsibility.

## HOW CAN I FOLLOW THE CODE

- Paving companies should adopt the Code and recommend low-VOC asphalt products to purchasers when appropriate.
- Purchasers of asphalt should include a provision to follow the Code and select low-VOC asphalt products whenever possible in all contracts and project specifications.
- Manufacturers and paving companies should not exceed the maximum VOC content recommended for asphalt products.
  This limit changes seasonally, and is lower during the warmer summer months when VOCs make a greater contribution to smog (ozone season). Limits are as follows:

# **RECORD KEEPING AND REPORTING**

- Purchasers of asphalt or people entering into a contractual agreement with a paving company should keep copies of contracts for a minimum of 6 years.
- Paving companies should keep records of the quantity and type of asphalt products used each year for a minimum of 6 years.
- Manufacturers should submit a report to Environment and Climate Change Canada by March 31 of every second year, starting in 2018. The report should contain the product name, type, quantity and percentage VOC content of asphalts manufactured and sold during the previous calendar year.

#### **CUTBACK AND EMULSIFIED ASPHALT**

Cutback and emulsified asphalts are made up of asphalt cement combined with a solvent. Cutback asphalts use a petroleum product as a solvent such as gasoline, kerosene or fuel oil, while emulsified asphalts predominantly use water and an emulsifying agent. When these asphalts are applied, the liquid solvent evaporates as the asphalt cools. Compared to cutback asphalt, emulsified asphalt emits fewer VOCs.

Cutback Asphalt (High VOC emissions)



Emulsified Asphalt (Low VOC emissions)

ASPHALT CEMENT	+	Water + Emulsifying agent	

SEASON	Maximum VOC Content		
	Cutback Asphalt	Emulsified Asphalt	
May – September (ozone season)	0.5%	3.0%	
October – April	5.0%	N/A	



# STAY INFORMED:

Volatile organic compounds in consumer and commercial products

Environmental Codes of practice: fact sheet

Please contact your regional Environment and Climate Change Canada office if you have any questions or concerns.

# Atlantic Region:

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