

Memorandum

To	Giuseppe Delfino (MTO)	Page 1
CC	Kyle Hampton / Steve Roy / Jason Wright (AECOM)	
Subject	GWP 5376-11-00 – Highway 17, Rehabilitation of the Barrett River Bridge, Sand River Bridge and the Alona Bay Creek Culvert Designated Substance Memorandum	
From	Michael Wallace	
Date	January 6, 2020	Project Number 60569837

OVERVIEW

Under the *Occupational Health and Safety Act* (OHS), MTO must identify and disclose Designated Substances that may be present on a project to help protect workers who may be exposed to these substances. This requirement is addressed by including a Standard Special Provision in the Contract Documents (i.e. SSP101F21 – List of Designated Substances).

Ontario Regulation 490/09 under the OHS lists the following Designated Substances: acrylonitrile, arsenic, asbestos, benzene, coke oven emissions, ethylene oxide, isocyanates, lead, mercury, silica, and vinyl chloride. Of these substances, arsenic, asbestos, benzene, lead and silica are considered most-likely to be encountered during conventional MTO construction projects while the remaining substances are unlikely to be present, as discussed in the MTO Guideline for the Identification of Designated Substances (November 2014).

PRELIMINARY IDENTIFICATION

In performing Detail Design services for the above-noted Group Work Project (GWP), AECOM completed a thorough document review of existing historical drawings and contract specifications to identify any potential Designated Substances for this project. Subsequently, the following potential Designated Substances were identified for this GWP:

Arsenic. Assumed to be present in wood preservative coatings.

Lead. Assumed to be present in the epoxy coating on the reinforcing steel within the Sand River Bridge, Barrett River Bridge and the Alona Bay Creek Culvert.

Silica. Assumed present throughout project area including, but not limited to, asphalt, concrete and granular materials.

Benzene. Assumed to be present in asphalt-based products.

CONFIRMATORY SAMPLING AND TESTING

Arsenic. Arsenic is assumed to be present in wood preservative coating, and further sampling for identification purposes is generally considered unnecessary.

Lead. Confirmatory sampling and testing for the presence of lead was not completed as part of this assignment. Epoxy coated reinforcing steel is known to exist within the Barrett River Bridge, Sand River Bridge, and the Alona Bay Creek Culvert, and further sampling for identification purposes is generally considered unnecessary.

Silica. Confirmatory sampling and testing for the presence of silica was not completed as part of this assignment as silica is known to be present.

Benzene. Benzene is assumed to be present in asphalt-based products, and further sampling for identification purposes is generally considered unnecessary.

CONCLUSIONS

Review of the above information has confirmed that arsenic, lead, silica and benzene are expected to be encountered as part of this GWP.

SSP101F21 has been completed accordingly, and is attached for reference.

OCCUPATIONAL HEALTH AND SAFETY ACT COMPLIANCE

Special Provision No. 101F21

November 2014

List of Designated Substances

In accordance with the *Occupational Health and Safety Act, R.S.O. 1990, c. 0.1*, the Contractor is advised of the presence of the following Designated Substance(s):

Substance	Location
Arsenic	Arsenic is assumed to be present in wood preservative coatings.
Asbestos on Construction Projects and in Buildings and Repair Operations (O. Reg. 278/05)	None Identified
Lead	Lead is assumed to be present in the epoxy coating on the reinforcing steel within the Sand River Bridge, Barrett River Bridge and the Alona Bay Creek Culvert. The work shall be performed as though lead is present.
Silica	Silica is assumed to be present throughout the working area, including but not limited to, asphalt, concrete, and granular materials.
Benzene	Benzene is assumed to be present in asphalt based products.
Vinyl Chloride, Coke Oven Emissions, Ethylene Oxide, Acrylonitrile and Isocyanates	None Identified
Mercury	None Identified