



Ministry of
Environment

PRELIMINARY DETERMINATION
(Pursuant to Section 44 of the *Environmental Management Act*)

I have made a Preliminary Determination that the site identified in Schedule A of this document **is not** a contaminated site.

This Preliminary Determination is qualified by the requirements and conditions specified in Schedule B.

The site **does not have** concentrations of the substances specified in Schedule C that exceed the applicable standards and criteria prescribed in the Contaminated Sites Regulation for determining whether a site is a contaminated site.

I have issued this Preliminary Determination based on a review of relevant information including the documents listed in Schedule D. I, however, make no representation or warranty as to the accuracy or completeness of that information.

This is to advise that I will consider submissions received 35 days after delivery of this Preliminary Determination before a Final Determination is made

In accordance with the *Environmental Management Act*, I will notify persons with an interest in the subject site once a Final Determination is made.

This Preliminary Determination should not be construed as an assurance that there are no hazards present at the site.

AUG 07 2015

Date Issued

A handwritten signature in blue ink, appearing to read "Alan W. McCammon".

Alan W. McCammon
For Director, *Environmental Management Act*

Schedule A

The site covered by this Preliminary Determination is located at 2101 West 4th Avenue, Vancouver, British Columbia which is more particularly known and described as:

Lot A Block 234 District Lot 526 Group 1 New Westminster District Plan EPP49387
PID: 029-570-671

The approximate centre of the lands using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 16' 6.3"
Longitude: 123° 9' 10.8"

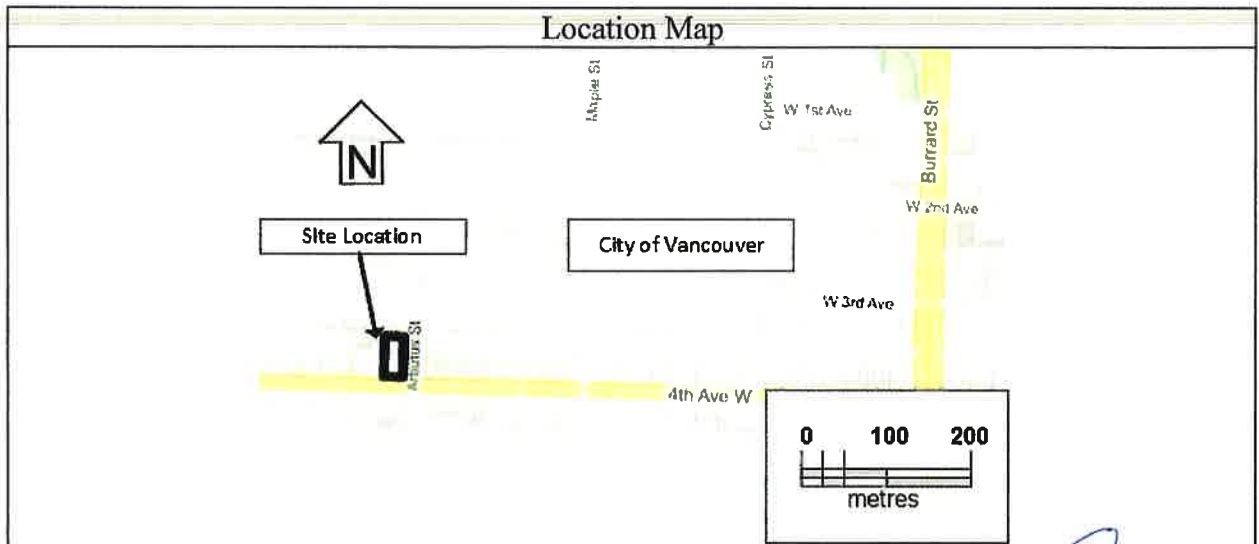
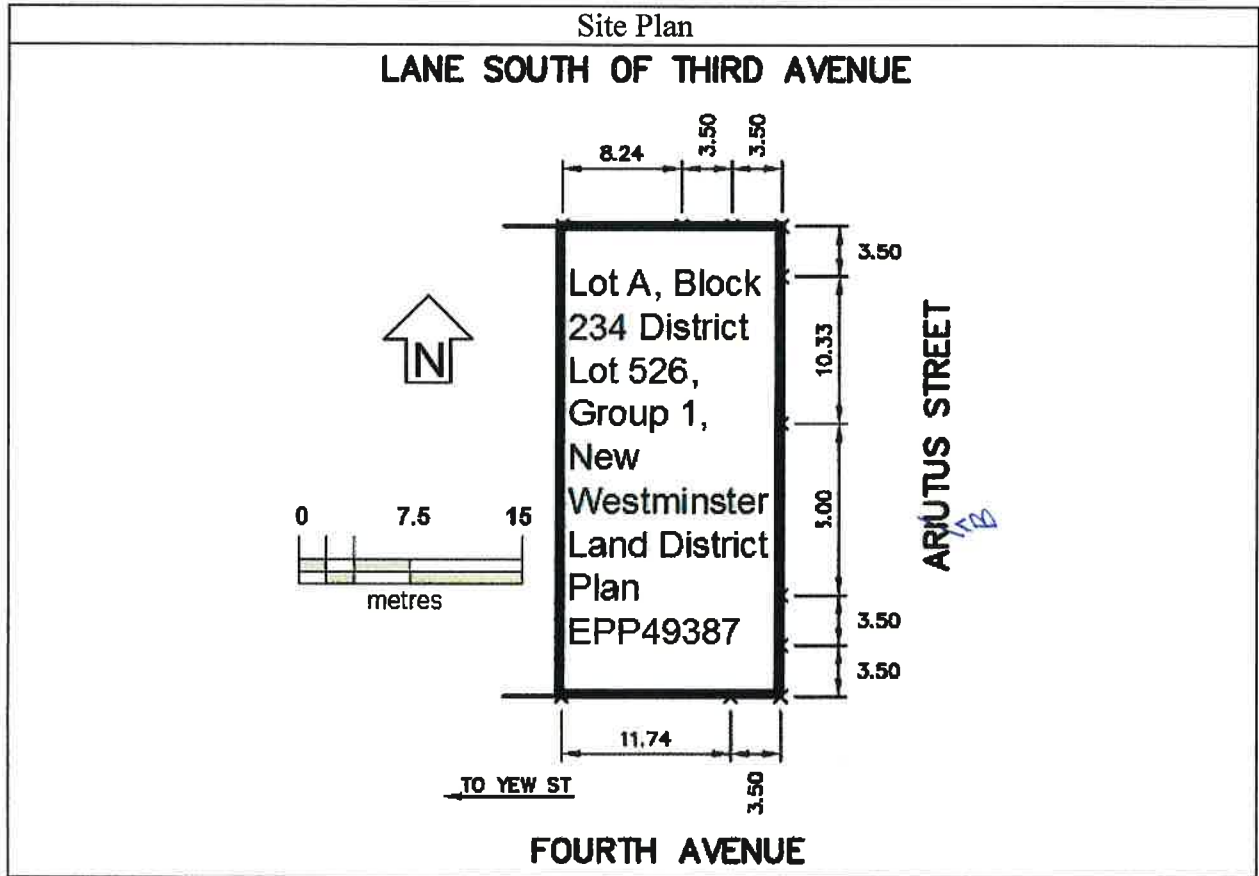
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Date Issued

SITE Identification Number 17276
Version 8.0 R



Alan W. McCammon
For Director, *Environmental Management Act*
2 of 7



AUG 07 2015

Date Issued

SITE Identification Number 17276
Version 8.0 R

Alan W. McCammon
For Director, *Environmental Management Act*
3 of 7

Schedule B

Requirements and Conditions

1. Any changes in land, vapour, or water uses must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination of Contaminated Site may be necessary. The uses to which this condition applies are described in Schedule C and in the site investigation documents listed in Schedule D.

The documents listed in Schedule D indicate that vapour attenuation factors were applied to meet Contaminated Sites Regulation numerical standards at the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of buildings existing or expected at the site. These assumptions include the following:

- (a) Any building erected on the site must be a slab-on-grade building.

Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings at the site and the range of structures, locations and depths of buildings assumed in the selection of vapour attenuation factors in the documents listed in Schedule D must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination of Contaminated Site may be necessary.

AUG 07 2015

Date Issued

SITE Identification Number 17276
Version 8.0 R



Alan W. McCammon
For Director, *Environmental Management Act*
4 of 7

Schedule C

Substances and Uses

Substances evaluated in soil for commercial land soil use:

To meet numerical standards prescribed for defining whether a site is contaminated:

- Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, tin, uranium and zinc;
- Methyl tert-butyl ether (MTBE), VPHs, LEPHs, and HEPHs;
- 1,3-Butadiene, chloroethane (ethyl chloride), chloroethene (vinyl chloride), 1,2-dibromoethane, 1,2-dichloroethane, 1,2-dichloroethene (cis), 1,2-dichloroethene (trans), 1,1-dichloroethylene, tetrachloroethylene (PERC), 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene (TCE), and chlorinated aliphatics (each (chloroform));
- Benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno [1,2,3-cd] pyrene, naphthalene, phenanthrene, and pyrene;
- Benzene, ethylbenzene, styrene, toluene, and xylenes (total); and
- Ethylene glycol, diethylene glycol, and propylene glycol.

Substances evaluated in vapour for commercial land vapour use:

To meet numerical standards prescribed for defining whether a site is contaminated:

- Naphthalene and PCE (tetrachloroethylene).

Substances evaluated in water for marine aquatic life water use:

To meet numerical standards prescribed for defining whether a site is contaminated:

- Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, titanium, uranium, and zinc;
- Methyl tertiary butyl ether (MTBE), VPHw, LEPHw, VHw₆₋₁₀, EPHw₁₀₋₁₉;
- 1,2-Dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, dichloromethane (methylene chloride), tetrachloroethylene,

AUG 07 2015

Date Issued

SITE Identification Number 17276
Version 8.0 R



Alan W. McCammon
For Director, *Environmental Management Act*
5 of 7

trichloroethylene, tetrachloromethane (carbon tetrachloride), and trichloromethane (chloroform);

- Ethylene glycol and 1,2-propylene glycol;
- Benzene, ethylbenzene, styrene and toluene; and
- Acenaphthene, acridine, anthracene, benzo[a]anthracene, benzo[a]pyrene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, and quinoline.

AUG 07 2015

Date Issued

SITE Identification Number 17276
Version 8.0 R



Alan W. McCammon
For Director, *Environmental Management Act*
6 of 7

Schedule D

Documents

- *Additional Subsurface Investigation, 2101 West 4th Avenue, Vancouver, B.C.*, prepared by D.Kelly Environmental Consulting Ltd., dated 8 July 2015;
- *Summary of Site Condition*, prepared by Gandalf Consulting Ltd., dated 09 Jun 2015;
- *Addendum to Stage 1 & 2 Preliminary Site Investigation, 2101 West 4th Avenue, Vancouver, B.C.*, prepared by D.Kelly Environmental Consulting Ltd., dated 15 May 2015;
- *Stage 1 Preliminary Site Investigation, Update on 2013 Phase 1 ESA, 2101 West 4th Avenue, Vancouver, BC*, prepared by D.Kelly Environmental Consulting Ltd., dated 08 May 2015; and
- *Stage 2 Preliminary Site Investigation, 2101 West 4th Avenue, Vancouver, BC*, prepared by D.Kelly Environmental Consulting Ltd., dated 11 Mar 2015.

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SITE Identification Number 17276
Version 8.0 R



Alan W. McCammon
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7 of 7