



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.

Nov 28, 2016
Date Issued

Peggy Evans
Peggy Evans
For Director, *Environmental Management Act*

Schedule A

The site covered by this Preliminary Determination is located at the Former Waste Water Treatment Facility, Elkford, British Columbia which is more particularly known and described as:

Lot 2, District Lot 12378, Kootenay District Plan 9810
PID: 013-041-029

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

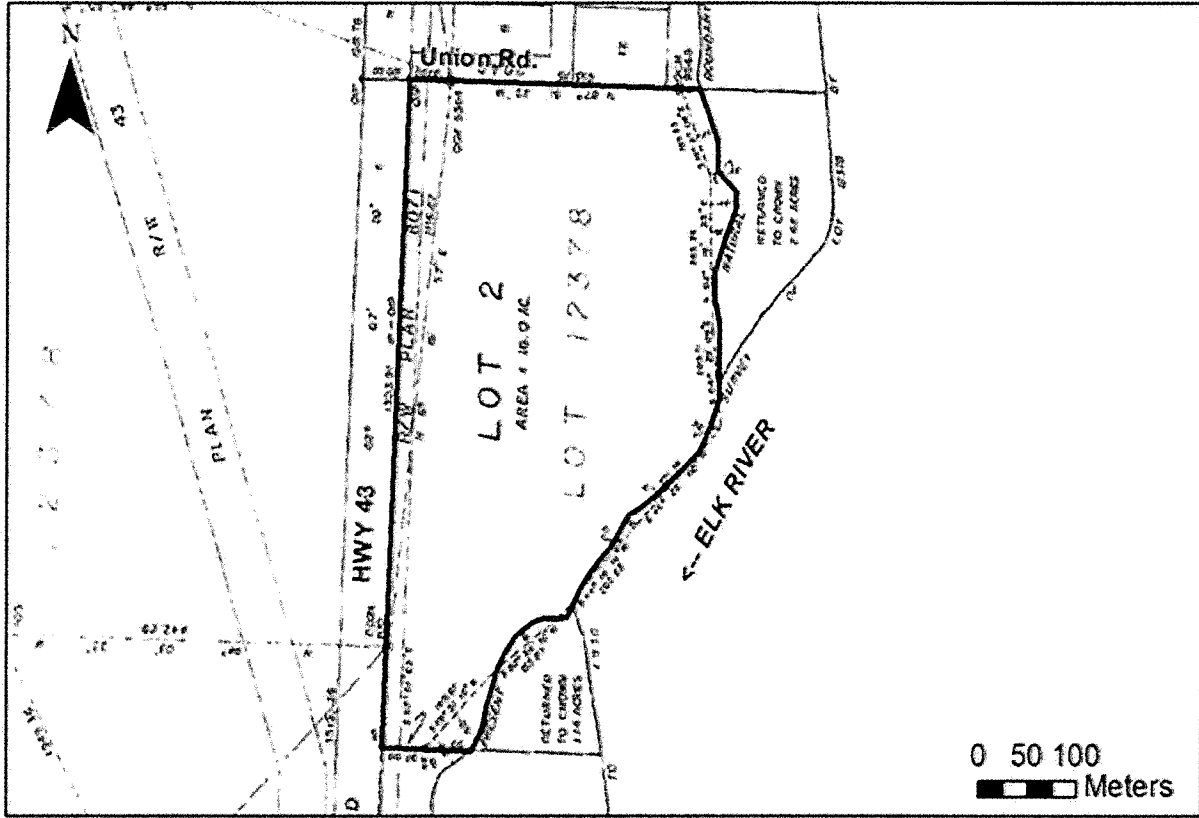
Latitude: 50 ° 00' 58.99"
Longitude 114 ° 54' 55.69"

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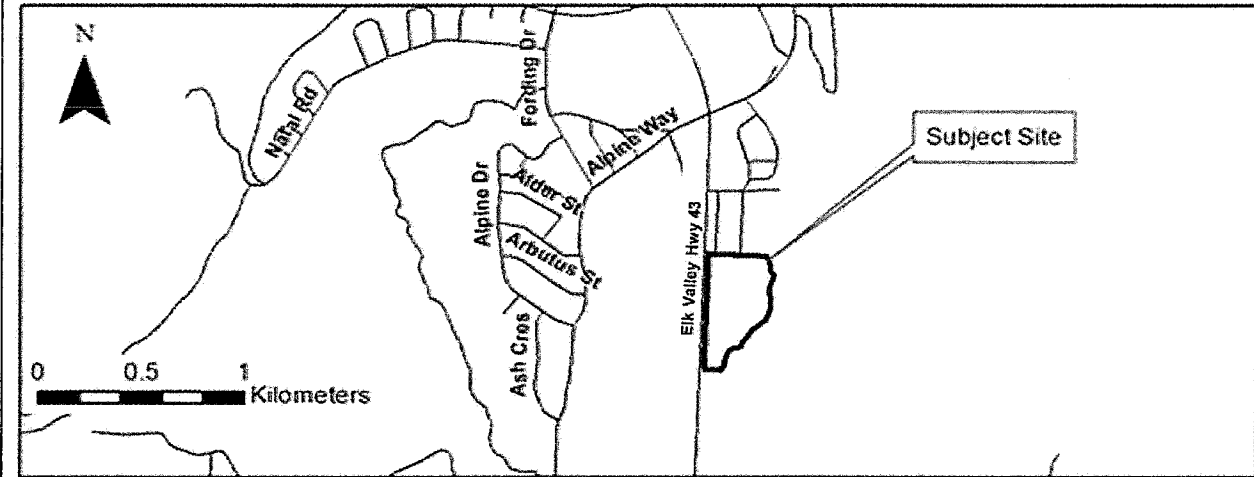
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Site Plan, Elkford, BC



Location Map, Elkford, BC



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Schedule B

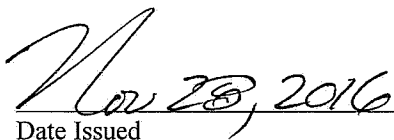
Requirements and Conditions

1. Any changes in land, vapour or water uses must be promptly identified by the responsible persons in a written submission to the Director. An application for an amendment or new Determination 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 current or future buildings on the site must be constructed with a concrete floor slab located at or above the site grade on September 2016.

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 persons in a written submission to the Director. An application for an amendment or new Determination may be necessary.


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Schedule C

Substances and Uses

Substances evaluated in soil for urban parkland soil use:

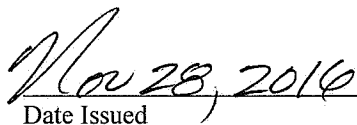
To meet numerical standards prescribed for defining whether a site is contaminated:

- Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, mercury, manganese, molybdenum, nickel, selenium, silver, thallium, tin, uranium, vanadium and zinc;
- MTBE, VPHs, LEPHs and HEPHs;
- Bromodichloromethane, bromoform, 1,3-butadiene, 2-butanone (methyl ethyl ketone), carbon tetrachloride, chloroform, dibromochloromethane, dibromomethane, 1,2-dibromoethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, dichloromethane, 1,2-dichloropropane, cis-1,3-dichloropropylene, trans-1,3-dichloropropylene, monochlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, trichlorofluoromethane, and vinyl chloride;
- Benzene, ethylbenzene, styrene, toluene, xylene;
- Benz[a]anthracene, benz[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, pyrene;
- Butyl benzyl phthalate, diethyl phthalate, dimethyl phthalate, di-n-octyl phthalate; and
- Carbon disulfide, chloride ion, PCBs, and sodium ion.

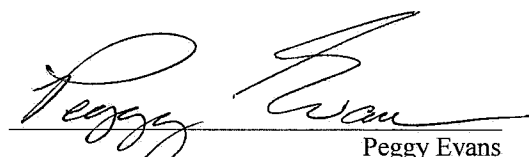
Substances evaluated in vapour for urban parkland vapour use:

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

- Acetone, acrylonitrile, allyl chloride, benzene, bromobenzene, bromodichloromethane, bromoform, 1,3-butadiene, 2-butanone (methyl ethyl ketone), carbon disulfide, carbon tetrachloride, chlorobenzene, chloroethane, chloroform, 2-chlorotoluene, n-decane, 1,2-dibromo-3-chloropropane, dibromochloromethane, 1,2-dibromoethane, dibromomethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,2-dichloropropane, 1,3-dichloropropane, 1,3-dichloropropene, ethyl acetate, ethylbenzene, ethyl ether, ethyl methacrylate, hexachlorobutadiene, hexachloroethane, n-hexane, isopropylbenzene (cumene), methacrylonitrile, methyl acrylate, methyl cyclohexane, methyl tert-butyl ether, methylene chloride, methyl methacrylate, 4-methyl-2-pentanone (methyl isobutyl


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ketone), naphthalene, nitrobenzene, styrene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, tetrahydrofuran, toluene, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, 1,1,2-trichloroethane, trichloroethylene (TCE), trichlorofluoromethane, 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, vinyl chloride, xylenes (total), VPHv.

Substances evaluated in water for freshwater aquatic life water use:

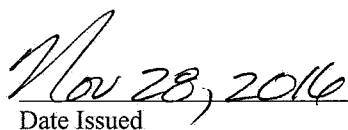
To meet numerical standards prescribed for defining whether a site is contaminated:

- Ammonia, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chloride ion, chromium, cobalt, copper, fluoride, lead, mercury, molybdenum, nickel, nitrate, nitrite, selenium, silver, sulphate, thallium, titanium, uranium, and zinc;
- Chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene;
- Carbon tetrachloride, chloroform, methylene chloride;
- VHw6-10, VPHw;
- Benzene, ethylbenzene, styrene, toluene;
- Dibutyl phthalate, di(2-ethylhexyl) phthalate;
- Acenaphthene, acridine, anthracene, benzo[a]anthracene, benzo[a]pyrene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, quinoline; and
- Chloroethane, 1,2-dibromoethane, dibromomethane, 1,1-dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,2-dichloropropane, methyl tert-butyl ether, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene and trichlorofluoromethane.

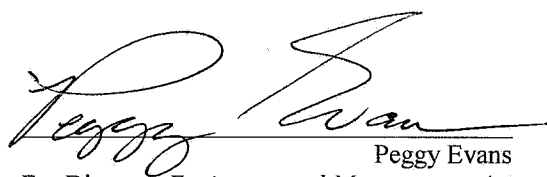
Substances evaluated in water for drinking water use:

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

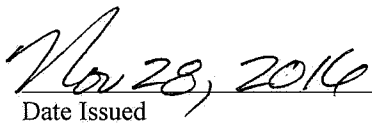
- Aluminum, ammonia, antimony, arsenic, barium, boron, cadmium, chloride ion, chromium, copper, fluoride, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nitrate, nitrite, selenium, sodium, strontium, sulphate, uranium, and zinc;
- VHw6-10;
- Benzene, ethylbenzene, toluene, xylenes;
- Benzo[a]pyrene;
- Vinyl chloride;
- Chlorobenzene, chloroform, dibromochloromethane, 1,2-dichlorobenzene, 1,4-dichlorobenzene;


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- Bromodichloromethane, bromoform, carbon tetrachloride, dibromochloromethane, methylene chloride; and
- Chloroethane, 1,2-dibromoethane, dibromomethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,2-dichloropropane, methyl tert-butyl ether, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, trichlorofluoromethane, butyl benzyl phthalate, diethyl phthalate, dimethyl phthalate, and di-n-octyl phthalate.


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Schedule D

Documents

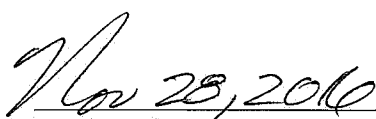
Summary of Site Condition. Prepared by James Malick, CSAP, September 23, 2016;

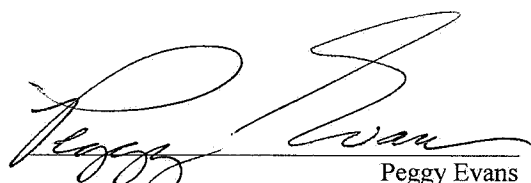
Addendum to Stage 1 PSI of WWT Facility in Elkford, BC and subsequent 2014 and 2015 works. Response to June 2014 Final Findings Performance Assessment Report (CSAP 13 110). Associated Environmental Consultants Inc., April 26, 2016;

Addendum No. 2 to Stage 1 PSI of WWT Facility in Elkford, BC. (CSAP PA 16 017). Associated Environmental Consultants Inc., August 12, 2016;

Stage 1 Preliminary Site Investigation – Former Waste Water Treatment Plant Facility – Elkford, B.C., Summit Environmental Consultants Inc., October 11, 2013; and

Stage 1 & 2 Preliminary Site Investigation - Former Waste Water Treatment Plant Facility – Elkford, B.C., Summit Environmental Consultants Inc., January 26, 2012 (Appendix I in Document 4).


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