

#### **VIA EMAIL**

Victoria File: 26250-20/24588

Site ID: 24588

05 October 2023

Stephen Mancer
ALT JACKSON DEVELOPMENTS LIMITED PARTNERSHIP
2750 Rupert St.
Vancouver, BC, V5M 3T7
Stephen.mancer@luminaservices.com

Dear Mr. Stephen Mancer:

Re: Preliminary Determination – 460, 470 & 478 East Hastings Street, Vancouver, BC

Please find enclosed a Preliminary Determination respecting the site referenced above and be advised of the following:

- 1. The Director has made a Preliminary Determination that the site is not contaminated because the numerical standards and criteria of the Contaminated Sites Regulation have been met at the site.
- 2. Information about the site will be included in the Site Registry established under the *Environmental Management Act*.
- 3. The provisions of this Preliminary Determination are without prejudice to the right of the Director to make orders or impose requirements as the Director may deem necessary in accordance with applicable laws. Nothing in this Preliminary Determination will restrict or impair the Director's power in this regard.
- 4. A qualified environmental consultant should be available to identify, characterize and appropriately manage:
  - (a) any environmental media that may be contaminated, or
  - (b) removal of soil under the provisions of Part 8 of the Contaminated Sites Regulation and may be encountered during any future work at the site.
- 5. Groundwater wells that are no longer required must be properly decommissioned in accordance with the *Water Sustainability Act's* Groundwater Protection Regulation.

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

If you require clarification of any aspect of this Preliminary Determination, please contact the undersigned at <a href="mailto:site@gov.bc.ca">site@gov.bc.ca</a>.

Yours truly,

Annette Mortensen, Ph.D., P.Eng Senior Contaminated Sites Officer

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Enclosure

cc: City of Vancouver, <a href="mailto:Contaminated.Sites@vancouver.ca">Contaminated.Sites@vancouver.ca</a>

Isabella Dann, Vancouver City Savings Credit Union, isabella\_dann@vancity.com

CSAP Society, 613 – 744 West Hastings St., Vancouver, BC V6C 1A5, apopova@csapsociety.bc.ca

Gavin Leung, Approved Professional, 8545 Commerce Court, Burnaby, BC V5A 4N4, <a href="mailto:gleung@nextenvironmental.com">gleung@nextenvironmental.com</a>

Client Information Officer, BC ENV, Victoria, csp cio@victoria1.gov.bc.ca



### 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.

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A. Mortensen For Director, *Environmental Management Act* 

#### Schedule A

The site covered by this Preliminary Determination is located at 460, 470 & 478 East Hastings, Vancouver, BC, which is more particularly known and described as:

Lot A, Block 70, District Lot 196, Group 1, New Westminster District, Plan EPP104936. PID 031-717-314.

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

Latitude: 49° 16' 51.4" Longitude: 123° 05' 37.8"

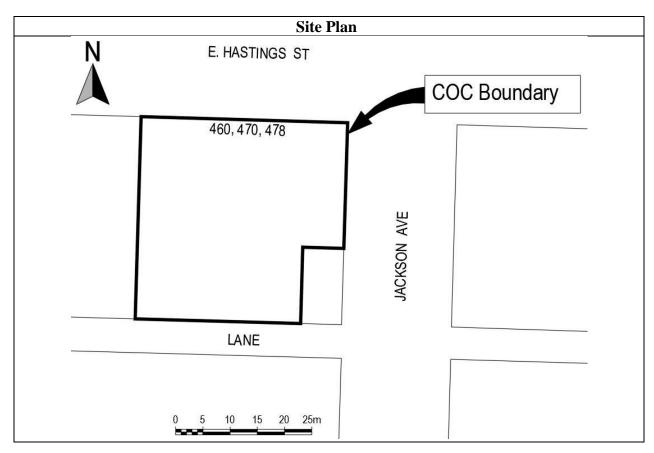
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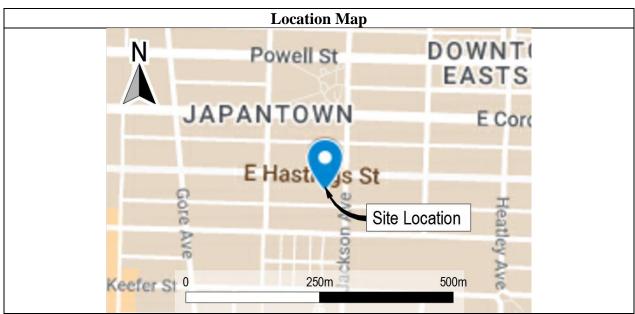
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For Director, *Environmental Management Act*3 of 10

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#### Schedule B

#### **Requirements and Conditions**

1. Any changes in land or vapour 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) Future Site development will be High Density Residential with one level of underground parking.

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.

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### **Schedule C**

#### **Substances and Uses**

# Substances evaluated in soil for residential high density soil use:

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

| acenaphthene                 | 83-32-9    | LEPHs                            | NA        |
|------------------------------|------------|----------------------------------|-----------|
| aluminum                     | 7429-90-5  | lithium                          | 7439-93-2 |
| anthracene                   | 120-12-7   | manganese                        | 7439-96-5 |
| antimony                     | 7440-36-0  | mercury                          | 7439-97-6 |
| arsenic                      | 7440-38-2  | methylnaphthalene, 1-            | 90-12-0   |
| barium                       | 7440-39-3  | methylnaphthalene, 2-            | 91-57-6   |
| benz(a)anthracene            | 56-55-3    | molybdenum                       | 7439-98-7 |
| benzene                      | 71-43-2    | naphthalene                      | 91-20-3   |
| benzo(a)pyrene               | 50-32-8    | nickel                           | 7440-02-0 |
| benzo(b+j)fluoranthene       | 205-99-2 & | perfluorobutane sulfonate (PFBS) | 375-73-5  |
|                              | 205-82-3   |                                  |           |
| benzo(k)fluoranthene         | 207-08-9   | perfluorooctane sulfonate (PFOS) | 1763-23-1 |
| beryllium                    | 7440-41-7  | phenanthrene                     | 85-01-8   |
| boron                        | 7440-42-8  | pyrene                           | 129-00-0  |
| cadmium                      | 7440-43-9  | quinoline                        | 91-22-5   |
| carbon tetrachloride         | 56-23-5    | selenium                         | 7782-49-2 |
| chloroform                   | 67-66-3    | silver                           | 7440-22-4 |
| chromium                     | 7440-47-3  | strontium                        | 7440-24-6 |
| chrysene                     | 218-01-9   | styrene                          | 100-42-5  |
| cobalt                       | 7440-48-4  | tetrachloroethane, 1,1,1,2-      | 630-20-6  |
| copper                       | 7440-50-8  | tetrachloroethane, 1,1,2,2-      | 79-34-5   |
| dibenz(a,h)anthracene        | 53-70-3    | tetrachloroethylene              | 127-18-4  |
| dichloroethane, 1,1-         | 75-34-3    | thallium                         | 7440-28-0 |
| dichloroethane, 1,2-         | 107-06-2   | tin                              | 7440-31-5 |
| dichloroethylene, 1,1-       | 75-35-4    | toluene                          | 108-88-3  |
| dichloroethylene, 1,2- cis   | 156-59-2   | trichloroethane, 1,1,1-          | 71-55-6   |
| dichloroethylene, 1,2- trans | 156-60-5   | trichloroethane, 1,1,2-          | 79-00-5   |
| dichloromethane              | 75-09-2    | trichloroethylene                | 79-01-06  |
| ethylbenzene                 | 100-41-4   | tungsten                         | 7440-33-7 |
| fluoranthene                 | 206-44-0   | uranium                          | 7440-61-1 |
| fluorene                     | 86-73-7    | vanadium                         | 7440-62-2 |
| HEPHs                        | NA         | vinyl chloride                   | 75-01-4   |
| indeno(1,2,3-cd)pyrene       | 193-39-5   | VPHs                             | NA        |
| iron                         | 7439-89-6  | xylenes, total                   | 1330-20-7 |
| lead                         | 7439-92-1  | zinc                             | 7440-66-6 |
|                              |            |                                  |           |

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## Substances evaluated in soil for commercial soil use:

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

| acenaphthene                 | 83-32-9    | LEPHs                            | NA        |
|------------------------------|------------|----------------------------------|-----------|
| aluminum                     | 7429-90-5  | lithium                          | 7439-93-2 |
| anthracene                   | 120-12-7   | manganese                        | 7439-96-5 |
| antimony                     | 7440-36-0  | mercury                          | 7439-97-6 |
| arsenic                      | 7440-38-2  | methylnaphthalene, 1-            | 90-12-0   |
| barium                       | 7440-39-3  | methylnaphthalene, 2-            | 91-57-6   |
| benz(a)anthracene            | 56-55-3    | molybdenum                       | 7439-98-7 |
| benzene                      | 71-43-2    | naphthalene                      | 91-20-3   |
| benzo(a)pyrene               | 50-32-8    | nickel                           | 7440-02-0 |
| benzo(b+j)fluoranthene       | 205-99-2 & | perfluorobutane sulfonate (PFBS) | 375-73-5  |
|                              | 205-82-3   |                                  |           |
| benzo(k)fluoranthene         | 207-08-9   | perfluorooctane sulfonate (PFOS) | 1763-23-1 |
| beryllium                    | 7440-41-7  | phenanthrene                     | 85-01-8   |
| boron                        | 7440-42-8  | pyrene                           | 129-00-0  |
| cadmium                      | 7440-43-9  | quinoline                        | 91-22-5   |
| carbon tetrachloride         | 56-23-5    | selenium                         | 7782-49-2 |
| chloroform                   | 67-66-3    | silver                           | 7440-22-4 |
| chromium                     | 7440-47-3  | strontium                        | 7440-24-6 |
| chrysene                     | 218-01-9   | styrene                          | 100-42-5  |
| cobalt                       | 7440-48-4  | tetrachloroethane, 1,1,1,2-      | 630-20-6  |
| copper                       | 7440-50-8  | tetrachloroethane, 1,1,2,2-      | 79-34-5   |
| dibenz(a,h)anthracene        | 53-70-3    | tetrachloroethylene              | 127-18-4  |
| dichloroethane, 1,1-         | 75-34-3    | thallium                         | 7440-28-0 |
| dichloroethane, 1,2-         | 107-06-2   | tin                              | 7440-31-5 |
| dichloroethylene, 1,1-       | 75-35-4    | toluene                          | 108-88-3  |
| dichloroethylene, 1,2- cis   | 156-59-2   | trichloroethane, 1,1,1-          | 71-55-6   |
| dichloroethylene, 1,2- trans | 156-60-5   | trichloroethane, 1,1,2-          | 79-00-5   |
| dichloromethane              | 75-09-2    | trichloroethylene                | 79-01-06  |
| ethylbenzene                 | 100-41-4   | tungsten                         | 7440-33-7 |
| fluoranthene                 | 206-44-0   | uranium                          | 7440-61-1 |
| fluorene                     | 86-73-7    | vanadium                         | 7440-62-2 |
| HEPHs                        | NA         | vinyl chloride                   | 75-01-4   |
| indeno(1,2,3-cd)pyrene       | 193-39-5   | VPHs                             | NA        |
| iron                         | 7439-89-6  | xylenes, total                   | 1330-20-7 |
| lead                         | 7439-92-1  | zinc                             | 7440-66-6 |
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## Substances evaluated in vapour for commercial vapour use:

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

| benzene                      | 71-43-2  | n-hexane                    | 110-54-3  |
|------------------------------|----------|-----------------------------|-----------|
| carbon tetrachloride         | 56-23-5  | styrene                     | 100-42-5  |
| chloroethane                 | 75-00-3  | tetrachloroethane, 1,1,1,2- | 630-20-6  |
| chloroform                   | 67-66-3  | tetrachloroethane, 1,1,2,2- | 79-34-5   |
| chloromethane                | 74-87-3  | tetrachloroethylene         | 127-18-4  |
| dichloroethane, 1,1-         | 75-34-3  | toluene                     | 108-88-3  |
| dichloroethane, 1,2-         | 107-06-2 | trichloroethane, 1,1,1-     | 71-55-6   |
| dichloroethylene, 1,1-       | 75-35-4  | trichloroethane, 1,1,2-     | 79-00-5   |
| dichloroethylene, 1,2- cis   | 156-59-2 | trichloroethylene           | 79-01-06  |
| dichloroethylene, 1,2- trans | 156-60-5 | vinyl chloride              | 75-01-4   |
| dichloromethane              | 75-09-2  | VPHv                        | NA        |
| ethylbenzene                 | 100-41-4 | xylenes, total              | 1330-20-7 |
| naphthalene                  | 91-20-3  |                             |           |
| n-decane                     | 124-18-5 |                             |           |
|                              |          |                             |           |

### Substances evaluated in vapour for parkade vapour use:

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

| benzene                      | 71-43-2  | n-decane                    | 124-18-5  |
|------------------------------|----------|-----------------------------|-----------|
| carbon tetrachloride         | 56-23-5  | n-hexane                    | 110-54-3  |
| chloroethane                 | 75-00-3  | styrene                     | 100-42-5  |
| chloroform                   | 67-66-3  | tetrachloroethane, 1,1,1,2- | 630-20-6  |
| chloromethane                | 74-87-3  | tetrachloroethane, 1,1,2,2- | 79-34-5   |
| dichloroethane, 1,1-         | 75-34-3  | tetrachloroethylene         | 127-18-4  |
| dichloroethane, 1,2-         | 107-06-2 | toluene                     | 108-88-3  |
| dichloroethylene, 1,1-       | 75-35-4  | trichloroethane, 1,1,1-     | 71-55-6   |
| dichloroethylene, 1,2- cis   | 156-59-2 | trichloroethane, 1,1,2-     | 79-00-5   |
| dichloroethylene, 1,2- trans | 156-60-5 | trichloroethylene           | 79-01-06  |
| dichloromethane              | 75-09-2  | vinyl chloride              | 75-01-4   |
| ethylbenzene                 | 100-41-4 | VPHv                        | NA        |
| naphthalene                  | 91-20-3  | xylenes, total              | 1330-20-7 |
|                              |          |                             |           |

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Site Identification Number 24588

## Substances evaluated in water for drinking water use:

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

| acenaphthene                 | 83-32-9    | lithium                          | 7439-93-2 |
|------------------------------|------------|----------------------------------|-----------|
| aluminum                     | 7429-90-5  | mercury                          | 7439-97-6 |
| anthracene                   | 120-12-7   | methylnaphthalene, 1-            | 90-12-0   |
| antimony                     | 7440-36-0  | methylnaphthalene, 2-            | 91-57-6   |
| arsenic                      | 7440-38-2  | molybdenum                       | 7439-98-7 |
| barium                       | 7440-39-3  | naphthalene                      | 91-20-3   |
| benz(a)anthracene            | 56-55-3    | nickel                           | 7440-02-0 |
| benzene                      | 71-43-2    | perfluorobutane sulfonate (PFBS) | 375-73-5  |
| benzo(a)pyrene               | 50-32-8    | perfluorooctane sulfonate (PFOS) | 1763-23-1 |
| benzo(b+j)fluoranthene       | 205-99-2 & | Perfluorooctanoic acid (PFOA)    | 335-67-1  |
| ( )/                         | 205-82-3   | ,                                |           |
| beryllium                    | 7440-41-7  | pyrene                           | 129-00-0  |
| boron                        | 7440-42-8  | quinoline                        | 91-22-5   |
| cadmium                      | 7440-43-9  | selenium                         | 7782-49-2 |
| carbon tetrachloride         | 56-23-5    | silver                           | 7440-22-4 |
| chloroform                   | 67-66-3    | strontium                        | 7440-24-6 |
| chromium                     | 7440-47-3  | styrene                          | 100-42-5  |
| chrysene                     | 218-01-9   | tetrachloroethane, 1,1,1,2-      | 630-20-6  |
| cobalt                       | 7440-48-4  | tetrachloroethane, 1,1,2,2-      | 79-34-5   |
| copper                       | 7440-50-8  | tetrachloroethylene              | 127-18-4  |
| dibenz(a,h)anthracene        | 53-70-3    | tin                              | 7440-31-5 |
| dichloroethane, 1,1-         | 75-34-3    | toluene                          | 108-88-3  |
| dichloroethane, 1,2-         | 107-06-2   | trichloroethane, 1,1,1-          | 71-55-6   |
| dichloroethylene, 1,1-       | 75-35-4    | trichloroethane, 1,1,2-          | 79-00-5   |
| dichloroethylene, 1,2- cis   | 156-59-2   | trichloroethylene                | 79-01-06  |
| dichloroethylene, 1,2- trans | 156-60-5   | tungsten                         | 7440-33-7 |
| dichloromethane              | 75-09-2    | uranium                          | 7440-61-1 |
| EPHw10-19                    | NA         | vanadium                         | 7440-62-2 |
| ethylbenzene                 | 100-41-4   | VHw6-10                          | NA        |
| fluoranthene                 | 206-44-0   | vinyl chloride                   | 75-01-4   |
| fluorene                     | 86-73-7    | VPHw                             | NA        |
| iron                         | 7439-89-6  | xylenes, total                   | 1330-20-7 |
| lead                         | 7439-92-1  | zinc                             | 7440-66-6 |
|                              |            |                                  |           |

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## Substances evaluated in water for marine aquatic life use:

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

| acenaphthene         | 83-32-9   | fluorene          | 86-73-7   |
|----------------------|-----------|-------------------|-----------|
| acridine             | 260-94-6  | lead              | 7439-92-1 |
| anthracene           | 120-12-7  | LEPHw             | NA        |
| antimony             | 7440-36-0 | mercury           | 7439-97-6 |
| arsenic              | 7440-38-2 | molybdenum        | 7439-98-7 |
| barium               | 7440-39-3 | naphthalene       | 91-20-3   |
| benz(a)anthracene    | 56-55-3   | nickel            | 7440-02-0 |
| benzene              | 71-43-2   | phenanthrene      | 85-01-8   |
| benzo(a)pyrene       | 50-32-8   | pyrene            | 129-00-0  |
| beryllium            | 7440-41-7 | quinoline         | 91-22-5   |
| boron                | 7440-42-8 | selenium          | 7782-49-2 |
| cadmium              | 7440-43-9 | silver            | 7440-22-4 |
| carbon tetrachloride | 56-23-5   | styrene           | 100-42-5  |
| chloroform           | 67-66-3   | thallium          | 7440-28-0 |
| chromium             | 7440-47-3 | titanium          | 7440-32-6 |
| chrysene             | 218-01-9  | toluene           | 108-88-3  |
| cobalt               | 7440-48-4 | trichloroethylene | 79-01-06  |
| copper               | 7440-50-8 | uranium           | 7440-61-1 |
| dichloroethane, 1,2- | 107-06-2  | vanadium          | 7440-62-2 |
| dichloromethane      | 75-09-2   | VHw6-10           | NA        |
| EPHw10-19            | NA        | VPHw              | NA        |
| ethylbenzene         | 100-41-4  | xylenes, total    | 1330-20-7 |
| fluoranthene         | 206-44-0  | zinc              | 7440-66-6 |
|                      |           |                   |           |

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#### Schedule D

#### **Documents**

Summary of Site Condition, 460, 470 & 478 East Hastings, Vancouver, BC, Next Environmental Inc., dated June 26, 2023

Stage 1 Preliminary Site Investigation, 460, 470 & 478 East Hastings, Vancouver, BC, by Chloe Rolfe & Ryuji Marumo, Next Environmental Inc., dated June 9, 2023

Supplemental Site Investigation, 460, 470 & 478 East Hastings, Vancouver, BC, by Chloe Rolfe & Ryuji Marumo, Next Environmental Inc., dated June 9, 2023

Stage 2 Preliminary Site Investigation, 460, 470, 478 East Hastings & 419 Jackson Avenue, Vancouver, BC, by Alison Lundgren & Kaitlyn Mumm, Next Environmental Inc., dated November 4, 2020

Stage 1 Preliminary Site Investigation, 460, 470, 478 East Hastings & 419 Jackson Avenue, Vancouver, BC, by Riley Donaldson & Aio Haberli, Next Environmental Inc., dated July 23, 2020

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