

August 5, 2016

10-775T29

Imperial Oil Limited
505 Quarry Park Blvd SE
Calgary, Alberta
T2C 5N1

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Attention: Environmental Services

Re: Performance Verification Plan
Portions of the City of Vancouver Property Beneath West 41st Avenue
to the South, and Beneath Larch Street to the West, of
2465 West 41st Avenue
Vancouver, British Columbia
Site ID: 18734

Further to your request, Parsons Inc. (Parsons) is pleased to provide this Performance Verification Plan (PVP) in support of an application for a risk-based Certificate of Compliance (CofC) for portions of City of Vancouver property located adjacent to the south and west of 2465 West 41st Avenue in Vancouver, British Columbia (the Management Area on the City of Vancouver Property). The PVP presents the principal risk management measures that must be applied at the Management Area on the City of Vancouver Property for the CofC to remain valid (i.e. the key risk management controls of Schedule B of the CofC which must remain in place at the City of Vancouver Property). The PVP was prepared in accordance with British Columbia Ministry of Environment (BCMOE) Procedure 12: Procedures for preparing and issuing contaminated sites legal instruments (December 2015) (Procedure 12).

A plan indicating the areal extent of the Management Area on the City of Vancouver Property, relevant to this PVP, is indicated in Schedule A of the CofC.

PRINCIPAL RISK ASSESSMENT MANAGEMENT CONTROLS

A human health and ecological risk assessment (HHERA) was conducted for the City of Vancouver Property, with the results presented in the Parsons reports, "Updated Preliminary



Site Investigation/Detailed Site Investigation/Confirmation of Remediation, 2465 West 41st Avenue, Vancouver, British Columbia (June 27, 2016)” and “Detailed Risk Assessment – City of Vancouver Management Area Adjacent 2465 West 41st Avenue, Vancouver, British Columbia (June 27, 2016)”. The principal risk management measures on which the risk assessment were based, as presented in Schedule B of the CofC, are as follows:

- (a) Drinking water wells must not be installed within the Management Area on the City of Vancouver Property.
- (b) The Management Area on the City of Vancouver Property is expected to remain as roadways/sidewalks/boulevard.

DETERMINATION OF PROCEDURE 12 REMEDIATION TYPE

Based on the risk management measures within the Management Area on the City of Vancouver Property, (i.e. the use of institutional controls to mitigate/eliminate risks within the Management Area on the City of Vancouver Property and lack of imminent risks in the event that controls were not implemented) the Remediation Type applicable within the Management Area on the City of Vancouver Property is considered to be Type 2.

Under a Remediation Type 2 scenario, Procedure 12 indicates that a PVP is required, while an operations and maintenance plan may be required.

PERFORMANCE VERIFICATION PLAN

A PVP is required to document that the principal risk management measures upon which the risk assessment is based and that must be met within the Management Area on the City of Vancouver Property.

If requested by the Director, the responsible person(s) must provide a signed statement on whether the principle risk management controls outlined in (a) and (b) above are being met.

Performance verification actions for the City of Vancouver Property include the following:

- (a) Communication with the City of Vancouver that drinking water wells must not be constructed within the Management Area on the City of Vancouver Property.

Imminent risks to drinking water receptors are not anticipated based on the following:

- the current absence of drinking water wells at Management Area on the City of Vancouver Property and developments in the vicinity of the City of Vancouver Property;
- the Management Area on the City of Vancouver Property is and will continue to be utilized as a boulevards, sidewalks and roadways; and
- potable water within the City of Vancouver is sourced from a piped distribution system maintained and operated by Metro Vancouver and is supplied from the Capilano, Seymour and Coquitlam watersheds. To our knowledge, there are no plans to install water wells in the area of the Management Area on the City of Vancouver Property.

As such, an advisory for the Management Area on the City of Vancouver Property that drinking water wells must not be constructed within the Management Area on the City of Vancouver Property is considered sufficient to meet this risk management measure. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

- (b) Communication with the City of Vancouver that the Management Area on the City of Vancouver Property is expected to remain as roadways/sidewalks/boulevard.

The assumptions in the risk assessment regarding future development were based on, and consistent with, the current land use within the Management Area on the City of Vancouver Property (i.e. roadways/sidewalks/boulevard).

As such, an advisory for the Management Area on the City of Vancouver Property that “the Management Area on the City of Vancouver Property must remain as roadways, sidewalks or boulevards” is considered to be appropriate to meet this risk management measure. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

In summary, it is my opinion that the advisories listed in Schedule B of the CofC are sufficient for the risk management measures required for the Management Area on the City of Vancouver Property.

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I trust that the foregoing information is satisfactory for your present requirements. Should you have any questions, please do not hesitate to contact the undersigned.

Respectfully submitted,

PARSONS INC.

A handwritten signature in black ink, appearing to read "Dennis Moffat", with a long horizontal flourish extending to the right.

D.R. Moffat, B.Sc.

DRM/cer

LIMITATION OF LIABILITY, SCOPE OF REPORT AND THIRD PARTY RELIANCE

This report has been prepared and the work referred to in this report has been undertaken by Parsons for Imperial Oil Limited. It is intended for the sole and exclusive use of Imperial Oil Limited, its affiliated companies and partners and their respective agents, employees and advisors (collectively, "Imperial Oil"). Any use, reliance on or decision made by any person other than Imperial Oil based on this report is the sole responsibility of such other person. Imperial Oil and Parsons make no representation or warranty to any other person with regard to this report and the work referred to in this report and they accept no duty of care to any other person or any liability or responsibility whatsoever for any losses, expenses, damages, fines, penalties or other harm that may be suffered or incurred by any other person as a result of the use of, reliance on, any decision made or any action taken based on this report or the work referred to in this report.

The investigations undertaken by Parsons with respect to this report and any conclusions or recommendations made in this report reflect Parsons' judgment based on the site conditions observed at the time of the site inspection on the date(s) set out in this report and on information examined at the time of preparation of this report. This report has been prepared for specific application to this site and it is based, in part, upon visual observation of the site, subsurface investigation at discrete locations and depths, and specific analysis of specific chemical parameters and materials during a specific time interval, all as described in this report. Unless otherwise stated, the findings cannot be extended to previous or future site conditions, portions of the site which were unavailable for direct investigation, subsurface locations which were not investigated directly, or chemical parameters, materials or analysis which were not addressed. Substances other than those addressed by the investigation described in this report may exist within the site, substances addressed by this investigation may exist in areas of the site not investigated and concentrations of substances addressed which are different than those reported may exist in areas other than the locations from which samples were taken.

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BRITISH COLUMBIA MINISTRY OF ENVIRONMENT'S RELIANCE

Notwithstanding the above, the British Columbia Ministry of Environment is permitted to rely on this report and the information contained herein to the extent necessary to confirm that Imperial Oil has met their statutory obligations with respect to the Performance Verification Plan.