

November 14, 2016

Ref. No.: 10-3092T29

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Attention: Environmental Services

Re: Performance Verification Plan for
Portions of 280 and 288 Burton Avenue
Princeton, British Columbia
Location No.: 88002194/JW.00212

Further to your request, Parsons Inc. (Parsons) is pleased to provide this Performance Verification Plan (PVP) in support of an application for Risk-based Certificates of Compliance (CofCs) for portions of two residential properties (portions of 280 and 288 Burton Avenue, henceforth referred to as the "Management Area") located proximate to the former Imperial bulk plant property located at 297 Burton Avenue in Princeton, British Columbia (henceforth referred to as the "Imperial Property"). The PVP presents the principal risk management measures that apply within the Management Area to ensure the CofCs remain valid (i.e. the key risk management controls of Schedule B of each CofC which must remain in place within the Management Area). The PVP was prepared in accordance with British Columbia Ministry of Environment (BCMOE) Procedure 12: Procedures for preparing and issuing contaminated sites legal instruments (Procedure 12) and Administrative Guidance on Contaminated Sites 14: Performance Verification Plans, and Operations and Maintenance Plans Procedures (AG14).

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



PRINCIPAL RISK MANAGEMENT CONTROLS

A human health and ecological risk assessment (HHERA) was conducted for the Management Area, and the results presented in the Parsons reports, "Supplementary Preliminary Site Investigation (PSI)/Detailed Site Investigation (DSI)/Confirmation of Remediation Report for the Property" prepared for Imperial by Parsons and dated November 14, 2016 (hereafter referred to as the "Parsons DSI"), and "Detailed Risk Assessment, Portions of 280 and 288 Burton Avenue, Princeton, British Columbia" and dated November 14, 2016 (hereafter referred to as the "Parsons Risk Assessment"). The principal risk management measures on which the Parsons Risk Assessment were based, as presented in Schedule B of the CofCs, are as follows:

- a) Plants with root structures capable of reaching deeper than 1.8 metres below ground surface (mbgs) must not be planted, or be allowed to become established, within the Management Area.
- b) Within the Management Area, building will be restricted to buildings without basements or other underground facilities used for human occupancy.
- c) Drinking water wells must not be constructed within the Management Area boundaries.

DETERMINATION OF PROCEDURE 12 REMEDIATION TYPE

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

Under a Remediation Type 2 scenario, Procedure 12 and AG14 indicate that a PVP is required, while an operations and maintenance plan may be required.

PERFORMANCE VERIFICATION PLAN

A PVP is required to ensure that the principal risk management measures upon which the risk assessment is based are met for the Management Area.

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

Performance verification actions for the Management Area include the following:

- a) Plants with root structures capable of reaching deeper than 1.8 mbgs must not be planted, or be allowed to become established, within the Management Area.

An advisory for the Management Area that: “Plants with root structures capable of reaching deeper than 1.8 mbgs must not be planted, or be allowed to become established, within the Management Area” is considered appropriate to meet this risk management measure. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

- b) Within the Management Area, building will be restricted to buildings without basements or other underground facilities used for human occupancy.

Currently the two residential properties covered by the risk assessment (280 and 288 Burton Avenue) are vacant. As described in the Parsons DSI, a Building Official from the Town of Princeton has confirmed that, generally, basements are not permitted on the properties on Burton Avenue (within the Management Area) due to the flood plain construction level requirement. Because the high seasonal water table has been observed as shallow as 0.74 mbgs, it is unlikely that underground building structures would even be considered on the properties within the Management Area. Given these conditions, restricting the building of such basements would not be considered an undue hardship on future land owners.

As such, an advisory for the Management Area that: “Within the Management Area, building will be restricted to buildings without basements or other underground facilities used for human occupancy” is considered appropriate to meet this risk management measure. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

- c) Drinking water wells must not be constructed within the Management Area boundaries.

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

- the current absence of groundwater wells within the Management Area;
- groundwater within and upgradient of the Management Area currently meets the regulatory standards for drinking water use;
- within the Town of Princeton potable is supplied via a piped distribution system sourced at a distance greater than 500 m from the Management Area; and

- existing municipal infrastructure currently exists to connect the building lots in the Management Area to the municipal piped potable water distribution system.

As described in the Parsons Risk Assessment, groundwater with concentrations of petroleum hydrocarbon constituents in excess of the regulatory standards exists immediately downgradient of the Management Area (was identified in the monitoring wells installed beneath 258 and 266 Burton Avenue). Given the possibility that a water well within the Management Area could draw these impacts against the groundwater gradient, the installation of groundwater wells within the Management area should be avoided until an assessment of the status of the downgradient plume can be carried out.

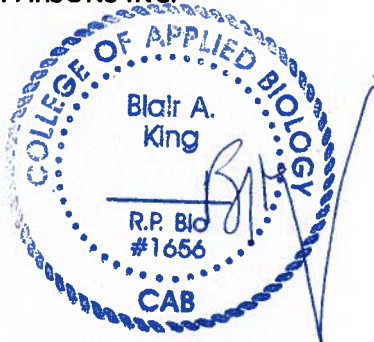
Given these conditions, an advisory for the Management Area that: "drinking water wells must not be constructed within the management area" is considered appropriate to meet this risk management measure. The listing of this risk management measure in Schedule B of the CofC meets this requirement.

In summary, it is our opinion that the advisories listed in Schedule B of the CofC are for the risk management measures required for the Management Area.

We 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.



B.A. King, Ph.D., R.P. Bio.

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LIMITATION OF LIABILITY, SCOPE OF REPORT AND THIRD PARTY RELIANCE

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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.

If site conditions or applicable standards change or if any additional information becomes available at a future date, modifications to the findings, conclusions and recommendations in this report may be necessary. Other than by Imperial Oil, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of Parsons. Nothing in this report is intended to constitute or provide a legal opinion.

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.