

ENVIRONMENTAL APPEAL BOARD FOR BRITISH COLUMBIA

**In the matter of an appeal under the *Environmental Management Act*,
S.B.C. 2003, c. 53**

Between:

SHAWNIGAN RESIDENTS ASSOCIATION

And:

DIRECTOR, *ENVIRONMENTAL MANAGEMENT ACT*

AND

Between:

COWICHAN VALLEY REGIONAL DISTRICT

And:

DIRECTOR, *ENVIRONMENTAL MANAGEMENT ACT*

AFFIDAVIT

I, David Mitchell, Professional Engineer and Contaminated Sites Approved Professional with offices at 160 – 2250 Boundary Road, Burnaby, BC V5M 3Z3 **DO AFFIRM AND SAY:**

1. I am a licensed professional engineer and Contaminated Sites Approved Professional employed by Active Earth Engineering Ltd. (“Active Earth”), a full service geological (environmental) and civil engineering firm who has been retained by Cobble Hill Holdings Ltd. (the “Permit Holder”) since September 2010 for the purposes of investigating the subject site and assisting the Permit Holder in applying for a Permit under the Environmental Management Act. I have been involved in the application process now in issue from the beginning and am familiar with the evolution of the application to the present. As such, I have firsthand knowledge of the matters hereinafter deposed to, except where the same are expressly stated to be made by way of information and belief and where so stated I verily believe the same to be true.
2. I have a degree in Geological Engineering from the University of British Columbia, and I have been practicing in the field of environmental engineering including contaminated sites since 1998. I have been employed with Active Earth for four years. Attached hereto as Exhibit “A” to this my Affidavit is a true copy of my curriculum vitae.
3. I am a Contaminated Sites Approved Professional (CSAP) in good standing with the Contaminated Sites Approved Professional Society (also commonly referred to as the Roster of Professional Experts). CSAP members are specialists in both technical

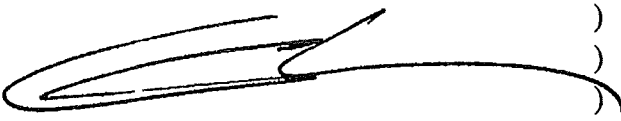
assessment of contaminated sites and with Provincial environmental regulations including the Contaminated Sites Regulation and Environmental Management Act. All CSAP members must be qualified by the CSAP Society through both experience and examinations and must be appointed by the Director of the Ministry of Environment. The role of CSAP members is to provide regulatory recommendations to the Ministry of Environment for issuance of legal instruments (e.g. Certificates of Compliance, Contaminated Soil Relocation Agreements).

4. I am currently appointed as a Performance Assessment Committee Member with the CSAP Society and routinely conduct quality reviews on behalf of the CSAP Society to confirm that CSAP submissions are completed in accordance with Ministry of Environment requirements.
5. The Permit Holder has been notified of 5 appeals taken against the issuance of the Permit. I have reviewed the appeals and supporting documentation as follows (the "Appeals"):
 - a. Appeal File: 2013-EMA-015, the Appeal of Shawnigan Lake Residents Association ("SRA") and the Stay Application of SRA supported by the affidavit of Mr. Dennis Lowen sworn on September 5, 2013 and the affidavit of Calvin Cook sworn on August 25, 2013;
 - b. Appeal File: 2013-EMA-017, Witherspoon;
 - c. Appeal File: 2013-EMA-019, the Appeal of the Cowichan Valley Regional District and the Stay Application of the Cowichan Valley Regional District supported by the affidavit of Mr. Tom Anderson;
 - d. Appeal File: 2013-EMA-20, Hayes, John & Lois; and
 - e. Appeal File: 2013-EMA-21, Sanders, Rick
6. In response to each of the Appeals, I say the following:
 - a. None of the Appeals, or the materials filed in support of them, raise any issue that can be properly considered a short term contamination risk;
 - b. None of the Appeals identifies an environmental risk arising from the correct operation of the Permit Holder's proposed activities as set out in the Permit;
 - c. The Appeals are all concerned with potential harm if the Permit Holder were to fail to comply with the Permit's terms;
 - d. None of the Appeals, or the materials filed in support of them, raise any environmental or engineering issue that was not fully addressed by Active Earth and considered by the Ministry in completing "The Ministry Assessment"

authored by Luc Lachance attached as Exhibit "B" to the Affidavit of Calvin Cook and by Mr. Hubert Bunce in the course of reviewing and approving the Permit; and

- e. Respecting the Appeal of the Cowichan Valley Regional District, municipal land use issues were expressly excluded from the scope of the Permit.
7. The purpose of this affidavit is to state that in my opinion as a CSAP member that absent the Permit, the Permit Holder is entitled under the Environmental Management Act to accept contaminated soils under soil relocation agreements for use in the quarry operations. There are no prescribed limits for soils being imported under a contaminated soil relocation agreement except that all risks to receptors must be evaluated and appropriately managed. Soils imported under a soil relocation agreement are not subjected to the same ongoing monitoring and reporting requirements as are stipulated by the Permit.
 8. The process for obtaining a contaminated soil relocation agreement is routine and can be accomplished in a relatively short period of time (i.e. 2 to 4 weeks). The Ministry of Environment has stated that it proceeds on the basis that it is compelled by law to process contaminated soil relocation agreements against the established requirements for environmental protection whenever made. The Ministry of Environment mandates that all contaminated soil relocation agreements be processed through the CSAP Society regardless of soil quality or quantity. Over the course of my career, I have obtained a number of contaminated soil relocation agreements.
 9. As a result, it is my opinion that the alleged effect of the Permit, in creating a risk to the environment in general, or the water resources in the area is not correct for this reason alone. Current regulations and practise allows the deposit of contaminated soils by the Permit Holder with or without the Permit.
 10. In my opinion operating under the Permit provides more, not less safeguards against harm to the environment.

SWORN BEFORE ME at the City of)
 Burnaby, in the Province of British)
 Columbia, this 21st day of October, 2013.)


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A Commissioner for taking Affidavits
 within the Province of British Columbia

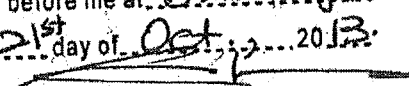


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David Mitchell, P.Eng., CSAP
Principal Senior Engineer



This is Exhibit " A " referred to in the
Affidavit of David Mitchell
sworn before me at Burnaby BC
this 21st day of Oct, 2013.

A Commissioner for taking Affidavits
for British Columbia

EDUCATION

G.D.B.A. Graduate Diploma in Business Administration
Simon Fraser University (2004)

B.A.Sc. Bachelor of Applied Science (Geological Engineering)
University of British Columbia (1998)

EXPERIENCE

Mr. Mitchell is a Senior Engineer with Active Earth Engineering Ltd. He is a BC Contaminated Sites Approved Professional (Standards) and has over 15 years of consulting experience as a project manager for contaminated site investigation and remediation projects within BC. Areas of expertise include formulating, conducting, coordinating, analyzing, reporting and reviewing all stages of environmental and hydrogeological investigations and remediation and monitoring programs.

Briefly, his work experience is summarized as follows:

2009 - present	Active Earth Engineering Ltd., Vancouver, BC Principal and Senior Engineer
2008 - 2009	Ministry of Agriculture and Lands, Victoria, BC Senior Environmental Engineer
2005 - 2008	EBA Engineering Consultants Ltd., Vancouver, BC Senior Project Manager / Team Leader, Contaminated Sites
1998 - 2005	Next Environmental Inc., Burnaby, BC Project Manager

David has designed, managed and undertaken varied contaminated sites assignments including:

- Stage 1 Preliminary Site Investigations (PSIs) on industrial sites, commercial sites, residential sites and institutional and municipal sites in British Columbia. David has been a lead project manager and senior reviewer for over 300 Stage 1 projects.
- Stage 2 PSIs and Detailed Site Investigations (DSIs) at fuelling facilities, railways, ports, municipal works yards and wood sort yards, scrap yards, dry cleaners, landfills, wood treatment facilities and brick factories in British Columbia. David has been a lead project manager and reviewer for dozens of Stage 2 and DSI projects.
- Remediation, confirmation of remediation and environmental monitoring at industrial sites, commercial sites and residential sites in British Columbia. Received numerous Certificates of Compliance on behalf of clients from the Ministry of Environment.
- Hydrogeological investigations of contaminated sites to determine the groundwater flow characteristics. In addition, David has completed groundwater flow modelling on a number of sites in support of remediation design and has assisted and contributed to geothermal assessments.

- Risk Assessments of contaminated sites to evaluate the risk to human health and the environment as a consequence of residual contamination.
- Baseline environmental investigations of leased properties such that liability for any environmental damage on a property can be apportioned.
- Historic mine-site assessment including properties known as Iron Crown, Caledonia, Union Bay, Mowson Pond, Cronin, Athelstan, Jackpot and Emerald Glacier.
- Tailings Dam Reclamation conducted while at the then Ministry of Agriculture and Lands, Crown Contaminated Sites Program at Mount Copeland.

David has had extensive experience in liaison with the Ministry of Environment and has obtained a significant number of Certificates of Compliance, Determinations and Approvals in Principal amongst other regulatory instruments via the CSAP process.

David has conducted Ministry of Environment external review of PSI, DSI and confirmation of remediation reports. In addition, David has provided numerous third-party technical reviews of environment reports prepared by other consulting firms to verify the adequacy of works completed.

David is currently a Performance Assessment Committee member with the CSAP Society and routinely conducts quality reviews of CSAP submissions for legal instruments.

PROJECT EXAMPLES

SITE INVESTIGATIONS

Some notable site investigation projects completed in the past five years have included:

- Project Manager and lead reviewer for a dry-cleaning operation located in Kerrisdale. The drycleaner was noteworthy as it contained free product (DNAPL) in two source areas and contaminant migration had affected a large number of off-site parties, complicating initiation of remediation.
- Investigation of various Small Craft Harbour properties operated by the Department of Fisheries & Oceans applying both Federal and Provincial standards.
- Completed a Stage 1 and 2 Site Investigation for a MOT property in Kamloops. A Protocol 9 Background Release was successfully obtained to remove groundwater selenium as a potential contaminant. Mr. Mitchell subsequently obtained a Determination for the property via the CSAP process.
- Completed a Stage 1 and 2 Investigation for a former automotive hulk storage yard property in the Okanagan. The findings of the investigation revealed that no contamination had been present from either on-Site or off-Site sources. Mr. Mitchell subsequently obtained a Determination for the property via the CSAP process.
- Completed a DSI at a drycleaning facility in Vancouver involving the drilling of approximately 20 monitoring wells on-Site and on two affected properties.

REMEDIATION

Some notable remediation projects completed in the past five years have included:

- Remediation of a former drycleaner in Kerrisdale that had impacted six neighbouring properties. The project included a large scale excavation requiring the demolition of structures and support of significant utilities within a laneway. A COC was obtained via the CSAP Review process in 2011.
- Project Manager for the remediation of hydrocarbon contamination at the Oakridge Transit Centre (completed in 2008). The scope of work included: demolition of structures (fuel island building); removal of underground storage tanks; removal of utilities; construction of a shored wall comprising shotcrete and ground anchors along one excavation face; excavation of contaminated soil; collection of contaminated groundwater; disposal of contaminated soil to an authorized landfill; replacement of excavated soil with clean backfill and repaving of the excavated area. Approximately 50,000 m³ of soil was excavated during the project of which half was contaminated.
- Project Manager for remediation of an auto-wrecker property in the Okanagan where soil hydrocarbon and metals contamination had been identified in three distinct areas of the Site. Mr. Mitchell managed the overall remediation and completed the CSAP review for the COC, which was issued in 2010.
- Project Manager for remediation of an auto-wrecker property in Okanagan, which had soil hydrocarbon contamination.

CSAP LEGAL INSTRUMENTS

Mr. Mitchell has obtained approximately 20 CSAP Instruments from the Ministry of Environment in the past five years, as discussed below:

- *Determinations* – A total of six Final Determinations have been obtained by Mr. Mitchell and include sites in the Interior and the Lower Mainland
- *Approval in Principle* – Mr. Mitchell has obtained one AIP for a High Risk drycleaning site in Victoria. An exemption for submission under a High Risk Site was obtained by MOE.
- *Contaminated Soil Relocation Agreements* – Mr. Mitchell has obtained three CSRA's to date, including the largest CSRA in the Province to date.
- *Certificates of Compliance* – Mr. Mitchell has obtained ten COCs for sites in Victoria, Vancouver and the Okanagan.
- *Risk Based Certificates of Compliance* - Mr. Mitchell has obtained two Risk-Based COCs: one for a metals contaminated site in Victoria; and one, for a former service station. Risk Assessment showed the sites to meet Risk Based standards.

MINING RELATED EXPERIENCE

Mr. Mitchell was formerly an employee of the Provincial Crown Contaminated Sites Program and had worked on a number of orphan minesites, including Iron Crown, Caledonia, Union Bay, Mowson Pond, Cronin, Athelstan, Jackpot and Emerald Glacier.

Mr. Mitchell procured a challenging Tailings Dam reclamation project at Mount Copeland, which required heavy equipment utilization in a remote environment only accessible via helicopter. Reclamation work had a very narrow time window between snow melt and snow fall, during which all reclamation activities had to be completed.

Mr. Mitchell contributed to the hydrogeological modeling for a sheet pile containment barrier at the Island Copper Mine to reduce the discharge of ARD and Metals in tailings into the receiving environment.

AFFILIATIONS

- Association of Professional Engineers and Geoscientists of BC (P.Eng.)
- Contaminated Sites Approved Professional Society (CSAP)

CERTIFICATES AND COURSES

2006	Project Management Bootcamp II, PSMJ Resources Inc.
2005	Project Management Bootcamp I, PSMJ Resources Inc.
2003	Applied Groundwater Flow and Contaminant Transport Modeling, Waterloo Hydrogeologic Inc.
2001	Occupational Level I First Aid
2000	Health and Safety Training for Hazardous Waste Sites (40 hour), OSHA Certified

