#### **Terms of Reference**

# September 16<sup>th</sup>, 2003

## Science Advisory Board for Contaminated Sites in British Columbia

## Background

During May 2002, the Minister of Water, Land and Air Protection formed an Advisory Panel on Contaminated Sites to review the existing contaminated sites regime that has been in use in British Columbia since 1997. Within the terms of reference to the Panel, it is noted "the Government is committed to the creation of an administratively effective and efficient contaminate sites regime that is performance based, less time consuming and reduces direct Government administration and oversight to only those sites that pose a high risk to the environment and human health". The terms of reference are found within

http://wlapwww.gov.bc.ca/epd/epdpa/contam\_sites/ministers\_panel/terms\_reference\_map.pdf

The Panel then undertook a consultation process with many stakeholders to receive comments and recommendations with regard to the existing legislation and its implementation. In September 2002, the Advisory Panel provided its interim report within which it recommended the need for several major changes to the existing contaminated sites regime. Many of the recommended changes related to two basic categories: scientific; and, legal.

With regard to the scientific categories, the observations and recommendations of the Panel related to:

- The need for more scientific input to the development of standards or screening values for the initial assessment of contaminated sites.
- The need for an effective mechanism to designate a site as "high risk"
- The need for scientific guidance for the private sector that will be responsible for assessment of "non-high risk sites".
- The need for additional scientific resources to the Ministry to satisfy province obligations such as the review and the acceptance of proposed Canada Wide Standards for application in British Columbia.
- The need for "good science" to be applied throughout the process of managing contaminated sites in British Columbia. .

Many scientists had participated in the discussions with the Advisory Panel during its consultations between May and September 2002, and additionally between September and December 2002 after the release of the Advisory Panel's interim report. The final report of the Minister's Advisory Panel on Contaminated Sites was submitted to the Minister in January 2003 and made public in May of 2003.

There is the recognition by scientists in British Columbia that a majority of the science-based issues identified by the Advisory Panel were related to:

- The lack of resources within the Ministry to address all scientific issues related to contaminated sites.
- The increasing complexities of many of the scientific issues that require highly specialized expertise.

To aid the Ministry in the process of assuring that contaminated sites are addressed with the use of "best possible" scientific expertise, a group of interested scientists, including former members of the Standards Subcommittee for Contaminated Sites have formed a Science Advisory Board for Contaminated Sites in British Columbia (SAB). The SAB approached the Government of British Columbia and received a Conditional Grant to assist in its work.

It is proposed that the Board will:

- Provide scientific assessments, opinions and/or recommendations for specific issues identified by the Ministry as requiring attention, and
- Provide where requested, or where a need is identified various scientific tools,
   such as the framework for use by the private sector for the assessment of "non-high risk sites".

The guiding principles, membership and operations for the SAB are described in the Terms of Reference.

#### **Terms of Reference**

## 1.0 Scope and Purpose

The Science Advisory Board for Contaminated Sites in British Columbia (SAB) has been established as a non- profit society under the Societies Act of British Columbia to develop independent science-based tools of benefit to professionals working in contaminated sites management in British Columbia. In pursuing this goal, the Science

Advisory Board seeks collaboration with academic, government, and industry scientists with interests in contaminated sites in all jurisdictions to advance the scientific understanding of the management of contaminated sites. The Science Advisory Board does not explicitly address the socio-economic aspects of the implementation of the guidance that is developed. The SAB does recognize the importance of the social and economic implications of the choices in risk management that are made, and of the standards and protocols that are adopted.

## The SAB has the following purposes:

- (a) To advance science and fundamental knowledge in respect of contaminated sites in British Columbia.
- (b) To review and advise on emerging trends and opportunities in contaminated sites management provincially, nationally and internationally.
- (c) To provide broad strategic advice on the direction of science-based contaminated sites management in British Columbia.
- (d) To review the quality and relevance of the scientific and technical information being used or proposed for the management of contaminated sites.
- (e) To establish science based tools, procedures, and assessment protocols; including those applicable in risk assessment of contaminated sites.
- (f) To work jointly with the Contaminated Sites Roster Steering Committee and its successor to identify needed science-based tools, and to provide

- independent scientific review and advice related to contaminated sites issues of mutual interest.
- (g) To establish specific science based guidance including numerical values that will contribute to independent functioning of the Licensed Environmental Professional system in British Columbia.
- (h) To raise funds or solicit donations in any lawful way to achieve the objectives of the society including accepting donations and grants for the advancement of the scientific understanding of the remediation of contaminated sites.
- (i) To distribute grants to organizations and students in a manner that will promote the advancement of science and fundamental knowledge in respect of contaminated sites management in British Columbia.
- (j) To assist in the development and employment of programs, courses and other tools that would provide people with the capabilities to carry out the requirements of remediation of contaminated sites in British Columbia.
- (k) To facilitate training and opportunities for individuals interested in the remediation of contaminated sites in British Columbia through interim work placements, training courses, colloquia and conferences, assisting in the publication of technical papers and reports, and general information sessions.

## 2.0 Guiding Principles

The advice of the SAB must reflect the highest technical and scientific standards and the widest possible representation of the disciplines, knowledge and emerging scientific trends nationally and internationally in the management of contaminated sites.

The SAB is committed to the expert independent scientific review of studies and development work undertaken related to science-based contaminated sites management, and adheres to all relevant policies related to the ethical conduct of the research that it commissions or reviews on behalf of others as currently adopted in the academic and professional communities.

The SAB is committed to the applicable principles established for science advice by the Council of Science and Technology Advisors, most particularly, inclusiveness, sound science and scientific advice, assessment of uncertainty and risk, openness, and thorough and continual review.

The SAB has no decision-making authority over programs, regulatory functions, or professional conduct, nor is it responsible in any way for the implementation of its advice.

The SAB seeks to contribute advice that will advance the effective management of contaminated sites to promote the principles of sustainability and the protection of the environment and human health.

The SAB recognizes the need for the dissemination of information, and the encouragement of the education and training of highly qualified personnel for the contaminated site sector

## 3.0 Membership

As a registered non profit Society, the SAB will consist of the members, a body of independent individuals of sufficient number and diversity to provide the range of expertise required to fulfill its responsibilities. Recognizing the complexity of the issues in contaminated sites management, members may come from a number of disciplines and professions including but not necessarily limited to toxicology, agronomy, engineering and geo-science, environmental and analytical chemistry and the biological sciences. Acting as independent scientists, members may be drawn from any area of scientific endeavour, including but not limited to the environmental consulting industry, academic institutions, all levels of government, industry and non profit organizations.

The criteria for appointment of members will be primarily as follows:

- (a) independence,
- (b) recognized scientific credentials
- (c) relevant experience in contaminated sites management or a related area of expertise
- (d) need for overall balance of expertise on the Board,
- (e) potential to contribute in a committee environment,
- (f) diversity.

The appointments of members must be approved by the Board of Directors of the SAB, will be for a three year term, and can be renewed.

The Board of Directors of the SAB is elected at the Annual General Meeting of the SAB. The Board of Directors is primarily responsible for the administration, financial and self-regulatory functions of the SAB.

## 4.0 Confidentiality

In the exercise of their functions, members serving on the Board of Directors shall act as recognized experts in their field To avoid any perceived conflict, they must neither request nor receive any instruction from any person or organization external to the Board, related to contracting of projects and grants, priorities, personnel, financial, and other recognized confidential issues except as instructed by the Board. Members of the Board of Directors may consult with and obtain scientific advice from other knowledgeable professionals in order to carry out their duties. Members of the Board of Directors are expected to protect and maintain as confidential any classified or privileged information that is divulged to them in the course of the work of the Board. Members serving on the Board of Directors must agree to and file a statement of confidentiality

### 5.0 Reporting and Consultation

The SAB regularly publicly reports on the nature of scientific studies in progress, and endeavors to expedite the publication of completed studies within two years of completion within limitations imposed by 4.0 above. Each year an annual report of the activities of the SAB is made available publicly

In keeping with principles of openness and inclusivity, whenever possible and normally after reports of studies are completed and technical reviewed, the SAB invites comment and suggestions. Many projects such as those involving development of science based tools procedures and assessment protocols will involve extensive consultation with stakeholders and practitioners while in progress.

Normally reporting will be electronic through a web site and list serve established by the Board

## **6.0 Operation**

The SAB operates in an administrative structure and location as consistent with its independence from stakeholders in the contaminated sites sector. The location and address of the SAB is the University of Victoria, Victoria, British Columbia. The University has agreed to act as a trustee to receive funds on behalf of the SAB. The SAB is established as a society under the Societies Act of British Columbia.

In carrying out its objectives, the SAB and its Board of Directors co-ordinates the development of specific science based guidance. The mode of operation includes participation of members in the development work, with assistance by research associates who may be students, including coop and graduate students. Such educational opportunities may be financially supported by the SAB .The SAB ensures expert independent review and input throughout the course of its work. In carrying out its work the foundation receives and disburses funds for the execution of science based development of tools for the management of contaminated sites. It may commission studies from selected scientists of recognized expertise, or through request for proposals

from qualified applicants. Accordingly it operates within the financial management and research accountability frameworks of the University of Victoria for the performance of contracted research. While the directors may receive no remuneration for their acting as such, both members and directors may be commissioned to carry out duties and studies on behalf of the SAB and receive remuneration. However members or directors may not participate in any decisions regarding such assignments.

The Board of Directors maintains oversight of the progress of the science based work, including the commissioning of the independent expert review of the results and the tools developed. The Chair of the Board of Directors (President of the SAB) is charged with the day-to-day management of secretariat functions, including any agreements with the University of Victoria. The Chair (President), Vice-Chair (Vice-President) and Treasurer have signing authority for the disbursement of funds, subject to agreements that may be in place with the University.

The Board may establish such subcommittees as required for the commissioning, review, and execution of proposals, and assessment of the results. Any sub-committee so formed may include members of the Board, and other experts external to the SAB appointed by the Board of Directors.

#### 7.0 Election of the Board of Directors and Officers

The Board of Directors including the Officers is elected at the Annual General

Meeting by a majority of the members in good standing. Each member has the option of
delegating a proxy vote. The proxy holds only for the meeting in question; no continuing

or permanent proxy is allowed. The election of members to the Board of Directors may be for a maximum consecutive period not to exceed six years. An election may be by acclamation; otherwise it will be by ballot

The president, vice president, secretary, treasurer and one or more other persons are the directors of the society. The term of office of the president shall be for a period of two consecutive years. All other officers will be elected annually. The election of members as directors may be for a maximum consecutive period not exceeding six years

The president, vice-president and treasurer shall have signing authority for the disbursement of funds, subject to agreements that may be in place with the University of Victoria.

The number of directors must be not less than 5 and no more than 9, or greater number determined from time to time at a general meeting.

A past president will be an ex-officio member of the Board for a period of six months following the completion of his or her term as president, provided that he or she does not continue to serve as a director of the society upon completion of his or her term as president.

### 8.0 Meetings

The Board of Directors meets on a quarterly basis to review progress, and additionally as required, to review proposals and recommendations related to the review and development of science-based tools. The Board of Directors may invite individuals to either attend and /or contribute to meetings as deemed necessary and appropriate.

At its Annual General Meeting, the SAB receives the annual report of the society including the reports of any sub-committees. At the AGM as specified in the by-laws, annual elections, annual reports, the annual financial statement, the appointment of the auditor, if necessary; as well as consideration of changes to the purposes, terms of reference, bylaws and constitution are considered. A quorum for the conduct of business at any meeting is sixty percent of the members in good standing including proxy votes that may have been delegated. The quorum must be 3 members or more. The Board of Directors presents any proposed changes in policy direction, and reviews work in progress and new science-based initiatives related to contaminated sites management. From time to time, meetings on topics general interest to members and associate members may be arranged, including joint meetings with other bodies on topics in contaminated sites management.