



# **SUMMARY OF RECOMMENDATIONS FROM THE INDEPENDENT REPORT ON PROFESSIONAL RELIANCE**







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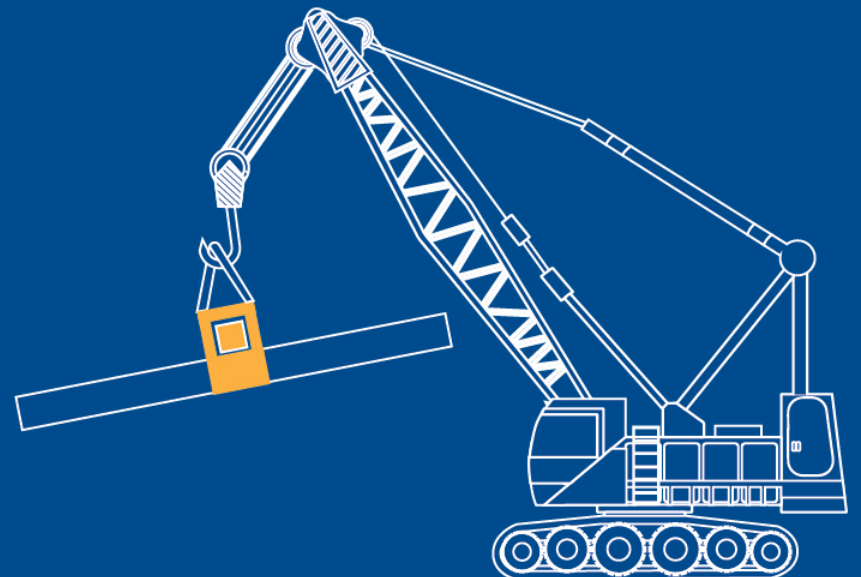
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# INTRODUCTION & SUMMARY TABLE



# INTRODUCTION & SUMMARY TABLE

The following is a summary of the recommendations found in the independent final report of the review of professional reliance in natural resource decision-making. This condensed summary has been created by the Ministry of Environment and Climate Change Strategy.

The following table lists all recommendations (by type) found throughout the report.

RECOMMENDATION #	TYPE OF RECOMMENDATION	PAGE #	PAGE # IN FINAL REPORT
<b>PROFESSIONAL GOVERNANCE RECOMMENDATIONS</b>			
Recommendations #1-2	Governance	Pg. 10-11	Pg. 54-56
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Recommendations #3-4	Competency	Pg. 14	Pg. 61-62
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Recommendations #8-23	Accountability	Pg. 14-18	Pg. 63-70
Recommendations #24-27	Indigenous Governments and Communities Engagement	Pg. 18	Pg. 72-73
Recommendations #28-32	Increase Public Confidence	Pg. 19-20	Pg. 73-75
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Recommendation #34	Improve Ministry Staffing Levels and Resources	Pg. 21	Pg. 76-77
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Recommendations #35-41	Agricultural Waste Control	Pg. 24-25	Pg. 80-81
Recommendations #42-43	Contaminated Sites	Pg. 25	Pg. 83
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Recommendation # 49	Landfill Gas Management	Pg. 26	Pg. 86
Recommendations #50-53	Municipal Wastewater	Pg. 26-27	Pg. 87
Recommendations #54-58	Mushroom Compost Facilities	Pg. 27-28	Pg. 88-89
Recommendations #59-66	Organic Matter Recycling	Pg. 28-29	Pg. 90-91
Recommendations #67-74	Slaughter and Poultry Processing	Pg. 30-31	Pg. 92-94
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## INTRODUCTION & SUMMARY TABLE

RECOMMENDATION #	TYPE OF RECOMMENDATION	PAGE #	PAGE # IN FINAL REPORT
Recommendations # 85 -93	<i>Forest and Range Practices Act</i> and Government Actions Regulation	Pg. 33-34	Pg. 109-110
Recommendation #94	Timber Pricing	Pg. 34	Pg. 111
Recommendations #95-97	BCTS Forest Professional Oversight Certification	Pg. 34-35	Pg. 113
Recommendation #98	<i>Greenhouse Gas Industrial Reporting and Control Act</i>	Pg. 35	Pg. 114
Recommendations #99-102	<i>Mines Act</i>	Pg. 35	Pg. 115-116
Recommendations #103-105	Health, Safety and Reclamation Code	Pg. 36	Pg. 116
Recommendations #106-107	Drilling and Production Regulation	Pg. 36	Pg. 119
Recommendation #108	Oil and Gas Roads Regulation	Pg. 36	Pg. 119
Recommendation #109	Delegation Agreement with Agricultural Land Commission	Pg. 37	Pg. 120
Recommendations #110-111	<i>Public Health Act - Sewerage System Regulation</i>	Pg. 37	Pg. 121
Recommendations #112-115	<i>Riparian Areas Protection Act</i>	Pg. 37-38	Pg. 123-124
Recommendations #116-118	<i>Water Sustainability Act</i>	Pg. 38	Pg. 127-128
Recommendations #119-121	Dam Safety Regulation	Pg. 39	Pg. 128-29







# PROFESSIONAL GOVERNANCE RECOMMENDATIONS



# PROFESSIONAL GOVERNANCE RECOMMENDATION

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## 1. Establish an Office of Professional Regulation and Oversight (the “Office”):

- The Office would:
  - Be an agent of government, independent of oversight from natural resource ministries
  - Have the mandate and authority to do the following:
    - Administer the professional legislation for the five professional organizations;
    - Develop and administer a merits-based process for appointments to professional councils and committees;
    - Research and develop best practices for professional governance in the natural resources sector;
    - Develop governance and other necessary training for council and committee members of professional organizations;
    - Investigate and audit professional organizations on its own initiative, or in response to public complaints and ministerial, Cabinet or Legislative Assembly requests, including the power to obtain information and compel witnesses, and make recommendations;
    - Following an investigation, audit or inquiry, provide directives to professional organizations where necessary;
    - Appoint a public administrator to take over some or all of the duties of a professional organization if necessary, to protect the public interest;
    - Appeal certain professional organization decisions, like registration and disciplinary decisions, to the BC Supreme Court, and join other appeal proceedings as a third party to represent the public interest;
    - Report regularly to the legislature on the performance of professional organizations and on professional governance issues, and make recommendations for legislative reform where needed;
    - Administer lists/rosters of qualified practitioners who are not registrants of a professional organization;
    - Investigate and make recommendations to Cabinet regarding the addition of new natural resource professions under the Act; and
    - Amalgamate professional organizations where desirable to avoid duplication or achieve economies of scale.



# PROFESSIONAL GOVERNANCE RECOMMENDATION

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## 2. Legislate critical elements of professional governance

- Recognized best practices of professional governance should be legislated to achieve greater consistency across the professions. These include:
  - Standardizing the requirements for council and committees necessary for regulation of the professions, and clearly specifying their mandates;
  - Standardizing the appointment process for council and key committees such as complaints and discipline. This would include:
    - Specifying that at least 50% of council and committee members must be appointed following a merits-based process from the professional organization's register (or via a hybrid merits-based qualification/election process);
    - Specifying that up to 50% of council and committee members must be appointed following a merits-based process from the public;
    - Clarifying the main duties of council and committee members, and specifying a procedure for individual acknowledgment of those duties prior to taking office;
- Enabling professional organizations to regulate firms as well as individuals;
- Giving councils the authority to adopt professional practice bylaws, subject to review by the Office;
- Ensuring that professional organization duties and objects are focused on regulation of the profession and the public interest, and do not include advocacy or representation of member interests;
- Requiring continuing professional development (e.g. training and skills development);
- Standardizing codes of ethics, while allowing for profession councils to develop more detailed, profession-specific codes of conduct;
- Improving and standardizing the public interest duties of professional organizations and registrants;
- Improving the reporting duties of professionals who become aware of unprofessional conduct, and extending those duties to firms and employers;
- Providing whistleblower protection to those who report unprofessional or negligent conduct.

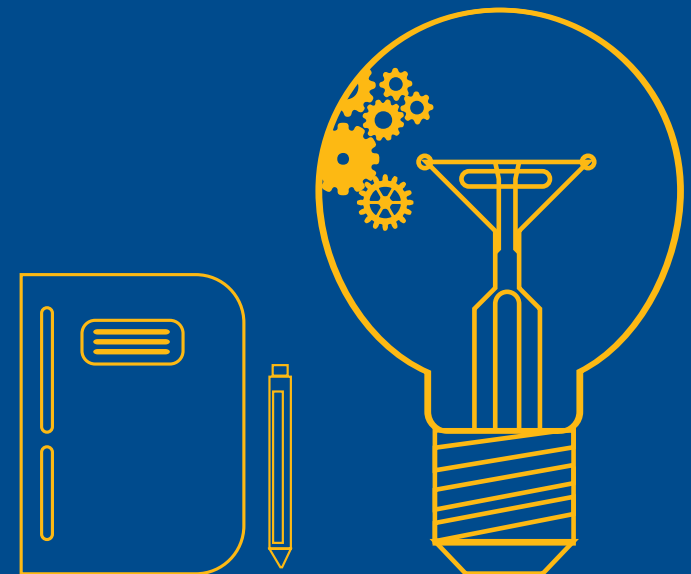






# **RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS**

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# RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS

## COMPETENCY

3. Review regulations and authorizations to ensure that competency requirements are aligned with the professional task or function.
4. Government and professional organizations should collaborate to develop ways and means of addressing the need for specialized expertise within a profession.
  - This could be addressed in a number of ways, including:
    - Specialist designations within a profession;
    - Certification by government agencies (e.g., timber scalers, pesticide applicators);
    - Specifying credentials in the regulation or authorization;
    - Providing for ministry approval of the professional qualifications prior to work commencing; and
    - A roster-type system.

## GUIDANCE AND CLARITY OF GOVERNMENT EXPECTATIONS

5. Review regulations and authorizations to ensure that government's resource management objectives are adequately expressed and made known to professionals.
6. Government and professional organizations should collaborate to identify opportunities and prioritize needs for developing guidance to professionals through practice standards and guidelines.
  - To clarify and enhance enforcement, consider incorporating or referencing these standards and guidelines in regulations, authorizations and orders where appropriate.
7. Government should provide greater guidance concerning activities that require multi-disciplinary expertise.
  - Broad practice definitions and broad or imprecise definitions of qualified professionals should be avoided to ensure that professionals are acting within their competency area.
  - Regulations and authorizations should be flexible to allow statutory decision makers to tailor the need for multi-disciplinary expertise to the setting and circumstances. This could be achieved by a general power to allow a decision maker to specify particular expertise required in certain circumstances.

## ACCOUNTABILITY

8. Restore and clarify government authority to make resource management and environmental protection decisions.
  - Legislation should not unduly restrict government authority over natural resources, or limit statutory decision makers when it comes to approving resource development activity.



## RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS

- Some Codes of Practice under the [Environmental Management Act](#) should be more explicit concerning situations where the director is not satisfied with the adequacy of professional work accompanying a notification or registration for regulated activity.
- 9. **Ensure that regulations and authorizations include authority to obtain and question information provided by qualified professionals (or a proponent), so agencies can carry out their regulatory role appropriately.**
- 10. **Ensure that government has authority to address problems when they arise.**
  - Where government's authority exists, it should also not be restricted or limited, or subject to an undue burden of proof.
- 11. **Review regulations, authorizations, ministry policies and professional codes of ethics to ensure that conflicts of interest are properly disclosed and addressed.**
  - This recommendation calls for review by multiple parties:
    - Government ministries should identify the situations where conflicts could be problematic and identify legislative, regulatory, policy and procedural reforms to address them (e.g., develop disclosure statements that address areas of risk).
    - Professional organizations likewise should review codes of ethics to identify opportunities for improvement.
    - Navigation of this important issue could be a priority for the proposed Office of Professional Regulation and Oversight.
- 12. **Identify ways to promote and ensure professional independence.**
  - Government expectations for independence must be clear in context for professionals.
  - Consideration might be given to a stand-alone regulation that addresses independence that could be referenced by acts, regulations, authorizations and orders where needed to improve consistency across the natural resources sector. This could be similar to the manner in which administrative tribunal practice and procedures are addressed in their enabling legislation by reference to the [Administrative Tribunals Act](#).
- 13. **Expand requirements for proponent adherence to professional advice.**
  - Several regulations address this by requiring "as-built" drawings or certifications of conformance by the professional.
  - There may be some situations in which this is not needed with consideration to the extra cost and low risk of an activity carried out by small operators. Where this is the case, government should consider an enforceable reporting requirement to indicate when professional design or advice has not been followed.

## **RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS**

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### **14. Consider alternatives to proponent selection of professional experts.**

- To garner broad confidence in their independence and objectivity, there may be situations which call for novel approaches to the selection of professionals, including:
  - Major projects where the need for government, Indigenous governments and communities and public confidence in the professional work is very high (or for a discrete issue relating to a project);
  - Projects that entail a high risk to public safety or environment;
  - Projects with government liability concerns;
  - Activities that carry overriding public interest aspects;
  - Situations where there is a high likelihood of irresolvable conflicts of interest;
  - Situations where a professional is providing a monitoring or enforcement role; and
  - Activities that have a strong history of professionals acting as advocates for clients, rather than providing objective professional advice.
- There is merit in exploring alternative approaches, and in drawing from other fields and jurisdictions, particularly with respect to consultation with Indigenous governments and communities.
- It is worth considering alternatives to the “proponent choice” model currently in place, with regards to who retains the expert and the terms of the retainer agreement.

### **15. Improve and standardize requirements for professional documentation and rationale.**

- Requirements for documentation should be consistent across the natural resource sector.
- The professional’s rationale should be required within professional documentation and should be transparent.
- Public access to professional documentation and rationale is often important to transparency and public confidence as well, and will be addressed below.

### **16. Expand the use of professional certifications and assurance statements.**

- While some regulations, authorizations and professional practice standards require professionals to sign and seal their work product, there is merit in expanding the use of certifications and assurance statements, and ensuring that the statements contain sufficient detail to provide assurance of important elements of the professional work.
- Distinctions should be made for work that is prepared, overseen, or reviewed by the professional.
- For complex matters, the roles of each professional responsible for the work product should be clearly identified, bearing the signature and seal of each.



## **RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS**

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### **17. Introduce requirements to ensure that professional work is current and relevant.**

- Where there is a lag time between the professional work and the beginning of actual operations, consideration should be given to placing an expiry date on the professional work.

### **18. Develop auditing programs for professional work product.**

- Government should not overly rely on random audits and practice reviews carried out by professional organizations. These are typically confidential and do not necessarily have the scope or depth to provide assurance of the issues important to government resource managers.
- Ministry auditing programs should not be limited in scope to compliance issues, but rather should address the substantive content and quality of professional work.
- The desirability of audit programs should be informed by a risk management approach.
- This may be one area in which an independent review body (such as a Natural Resource Practices Board) could make an important and cost-effective contribution (see Recommendation 31).

### **19. Consider requiring professional liability insurance.**

- Government should consider whether there are circumstances in which professionals whose work is relied upon should carry professional liability insurance due to the level of risk and the degree of reliance.

### **20. Improve accountability through new liability mechanisms.**

- Government should not overly rely on the single mechanism of professional regulation.
- Government should consider greater use of liability mechanisms in legislation and regulations that require the use of professionals.

### **21. Strengthen monitoring programs and consider new partnerships to enhance monitoring efforts.**

- Government should have greater capacity to review submitted reports where point source monitoring obligations are imposed in an authorization.
- Local monitoring programs with Indigenous governments and communities should be encouraged.

### **22. Improve opportunities for addressing third party concerns and dispute resolution.**

- Government should have authority to resolve disputes locally, including through the use of alternative dispute resolution models.

## **RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS**

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### **23. Reinforce the importance of compliance and enforcement.**

- Compliance and enforcement (C & E) may warrant a separate review process.
- Capacity issues identified through interviews with ministry subject matter experts should be addressed.
- Consideration should be given to greater use of more efficient systems, such as requiring permit holders to electronically submit monitoring data in a format that will support the use of compliance software technology for compliance assessments.
- Further review could also consider embedding legal support within C & E branches, to ensure that they receive legal services for investigations and decisions on enforcement actions.

## **RECOMMENDATIONS TO SUPPORT INDIGENOUS GOVERNMENTS AND COMMUNITIES ENGAGEMENT**

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### **24. Modernize land use planning in partnership with Indigenous governments and communities.**

- Efforts to modernize land use planning should consider how to modernize land use planning in partnership with Indigenous governments and communities, so that land use objectives are developed that can inform resource managers and professionals advising resource companies.
- A land use vision should be developed that incorporates Aboriginal rights and interests more proactively in order to inform resource development, rather than the current system that is often reactive to the applications placed before statutory decision makers.
- This will likely require flexibility to accommodate local preferences for spatial scale and planning process, subject to priorities and resources.

### **25. Develop means to address capacity to engage in resource management processes.**

- Government and industry groups should collaborate with Indigenous governments and communities to devise ways to improve the capacity of Indigenous governments and communities to engage in resource management.

### **26. Consider engaging Indigenous governments and communities in compliance and enforcement.**

- Government should consult with Indigenous governments and communities to identify opportunities for direct engagement in compliance and enforcement activities.

### **27. Consider incorporating Aboriginal interests more directly into regulations.**

- Government should work with Indigenous governments and communities to consider whether to incorporate Aboriginal interests, information and perspectives more directly into regulations.

# RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS

## RECOMMENDATIONS TO INCREASE PUBLIC CONFIDENCE

Many of the reforms recommended above should increase public confidence in natural resource management. The following recommendations are additional:

### 28. Make natural resource information more consistently available.

- Practices related to the disclosure of information and documentation such as tenures, authorizations, permits, and compliance determinations should be consistent across the natural resource ministries.
- Basic legal and policy issues should be consistent across the natural resource sector.
- Areas of uncertainty regarding the authorization of ministries to make documents available should be addressed through legislation.
- There may be merit in having a stand-alone “Public Right to Know” regulation that could be incorporated by reference into other regulations, authorizations and orders. Similar provisions should apply to all resource ministries, and resolve any questions about authority to publish.

### 29. Include the public in processes that address natural resource management objectives and land use.

- This inclusion should invite proactive responses, rather than reactive responses expected under the current project specific, traditional review and comment paradigm.
- Other initiatives currently underway could help for some aspects of resource management (e.g., initiatives addressing land use planning, species at risk, old growth forests, and environmental assessment).

### 30. Improve public notification systems.

- Public notification requirements should utilize modern means of communications.

### 31. Establish an independent review body for natural resource practices and decisions.

- An arm’s length review body should be established that can review professional performance, investigate public complaints, audit practices on-the-ground, and contribute to continuous improvement of regulations (similar to the Forest Practices Board, which borrows from the [Ombudsperson Act](#) and *Auditor General Act*).
- An independent review body such as a Natural Resource Practices Board or a Commissioner for Environment and Sustainability (formerly under the [Auditor General Act](#) but repealed in 2001) could be established as a cost-efficient means to augment the capacity for independent audits of performance, and make recommendations to industry professionals and government agencies.



## RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS

### 32. Standardize standing rules for appeal tribunals to allow for greater public access to remedies.

- While aggrieved citizens have standing under the [Environmental Management Act](#), only proponents or those who are the subject of determinations have standing before other resource tribunals such as the Forest Appeals Commission and Oil and Gas Appeals Tribunal.

## RECOMMENDATION TO IMPROVE NATURAL RESOURCE INFORMATION

### 33. Identify opportunities to improve the quality of natural resource information to help improve professional reliance outcomes.

- The review noted that a number of disputes concern the quality of resource information presented in professional work product. These fell into several categories:
  - There is often little baseline data on resources to inform resource management decisions.
  - The inventory standards developed by the Resources Information Standards Committee (RISC) are not always required to be followed by proponents, or are required but not followed. The norm should be that these standards are required to be followed.
  - Government staff commented that there can be considerable differences between professional reports on similar topics in terms of the quality of information and therefore analysis. Sometimes this is due to the professional's personal standards and abilities, but sometimes it is due to restrictions in the retainer agreement between the professional and his or her client, limiting the budget and therefore level of effort. Government is usually not aware of these limitations, and they may not be disclosed in the professional's report, but can significantly affect decision-making.
  - The situation may be more problematic for resource values that are transient or require effort to locate, such as species at risk. The level of effort made, and the timing of inventory efforts, can significantly affect the conclusions drawn. This is why the standards were developed. It is also a problematic area because the presence of fish in a stream, or species at risk, can result in greater restrictions or even non-approval of the project proposed by the professional's client, giving rise to conflicts of interest.
- The more that the Province can do to prioritize and maintain important resource information, the less opportunity there will be for issues such as professional competence, sampling bias, conflicts of interest, and proponent restrictions on professionals to adversely affect sound resource management decision-making.

# **RECOMMENDATIONS TO IMPROVE LAWS, REGULATIONS AND AUTHORIZATIONS**

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## **RECOMMENDATION TO IMPROVE MINISTRY STAFFING LEVELS AND RESOURCES**

34. **Identify opportunities to improve ministry staffing levels and resources to enhance government oversight.**

- Staffing levels should be restored to ensure that the ministries are able to meet basic levels of oversight across all business areas, and so that goals related to transparency can be met.







# REGIME SPECIFIC RECOMENDATIONS



# REGIME SPECIFIC EVALUATIONS

## AGRICULTURAL WASTE CONTROL RECOMMENDATIONS:

### 35. Qualifications of Professionals:

- Consider aligning the competency requirements with the various tasks that require professionals.
- The 2017 Intentions Paper indicates that professionals will be engaged in new ways, such as the preparation of nutrient management plans, and the design and testing of manure storage structures. The competency requirements for the professionals undertaking these different tasks will also require consideration. There are likely to be situations in which multidisciplinary expertise is required (e.g., agrology, hydrogeology, geoscience). Ensure that the definition of qualified professional aligns with the specific types of expertise required for the professional tasks, to avoid self-declaration of competency and improve enforceability.

### 36. Objectives of Professional Tasks:

- Ensure that the environmental protection objectives relating to nutrient management plans and manure storage structures are clear in the regulation. For nutrient management plans, several of these objectives are identified on page 10 of the Intentions Paper.

### 37. Documentation of Professional Work:

- Consider specifying sign-off requirements in the regulation; a prescribed form could be developed and included as a Schedule to the regulation.
- Consider requiring documentation of the professional's rationale for how she/he decided that the objectives will be met.

### 38. Methodology & Guidance:

- Given that the requirement for nutrient management plans would be a new aspect of the regulation, consider incorporating methodology into the regulation, and developing guidance for professionals and farmers concerning the standards for preparing these plans.

### 39. Filing of Nutrient Management Plans:

- The Intentions Paper proposes tracking and verification requirements for high risk areas, including submission of information, including nutrient management plans, from individual operations. The importance of this was affirmed in this review. If nutrient management plans and related documents are not submitted to government, neighbouring landowners, aquifer users and those seeking other land applications will not have routine access to them, and there will not be a record that is releasable under the [\*Freedom of Information and Protection of Privacy Act\*](#) (FIPPA).

## **REGIME SPECIFIC EVALUATIONS**

### **40 Authority to address deficiencies:**

- The regulation should ensure that there is authority to address deficient professional work. Agricultural waste regulation has hitherto placed the onus on government to prove pollution in order to justify remedial measures, but that can be a difficult and costly undertaking.

### **41. Require QP Independence in High Risk Situations:**

- The Intentions Paper mentions that independent verification of nutrient management plans may be required based on “evidence of negative impact, or potential negative impact”.

## **CONTAMINATED SITES RECOMMENDATIONS:**

### **42. Improve transparency between the ministry and the Contaminated Sites Approved Professional (CSAP) Society:**

- Ensure that the ministry has authority to obtain information on the performance of approved professionals, and that the CSAP Society is authorized to provide it. Also, consider adding the CSAP Society to Schedule 2 or 3 of the Freedom of Information and Protection of Privacy Act.

### **43. Review independence requirements for approved professionals:**

- It is recommended that Schedule A of the Society Rules be reviewed to ensure that they incorporate best practices and are consistent with government’s expectations for the independence of professional work.

## **HAZARDOUS WASTE RECOMMENDATIONS:**

### **44. Initiate a review process:**

- The 2008 Intentions Paper provided many valid reasons for carrying out a major review and redrafting of the Hazardous Waste Regulation, but reform efforts stalled and should be recommenced. In addition to addressing the use of professionals, the Intentions Paper identified a need to improve standards, plan content requirements, strengthen accountability of all involved in the regime, improve oversight and enforcement, reduce complexity and harmonize with other jurisdictions.

### **45. Incorporate professionals into the Hazardous Waste Regulation, and align competency requirements with the QP tasks:**

- The 2008 Intentions Paper indicated ministry intent to adopt the generic definition of “qualified professional” used in other EMA regulations. It is recommended that more nuanced requirements tailored to the specific professional tasks are included.



## **REGIME SPECIFIC EVALUATIONS**

### **46. Address need for independent professionals:**

- If government decides to reinitiate the regulatory review process, it should also provide an early indication of its willingness to improve ministry resources to provide effective oversight of hazardous waste management, so staff will know how to approach regulatory design issues, such as the accountability of independent professionals to government.

### **47. Improve government authority:**

- Consider improving government authority to address issues that may not be captured in the siting, operational, or performance requirements. If a proposed facility is reviewable under the [\*Environmental Assessment Act\*](#) there are means to address issues in the terms and conditions of environmental assessment certificates, but this option is not available for projects that are below the thresholds in the Reviewable Projects Regulation unless the minister designates the project as a reviewable project under section 6. Options might include a power to prohibit a facility, to require a permit, and authority to amend plans and specify additional operational or performance conditions.

### **48. Improve auditing, monitoring and reporting requirements:**

- The 2008 Intentions Paper addressed possible changes to reporting requirements; ministry staff indicated that auditing and monitoring requirements should also be strengthened.

## **LANDFILL GAS MANAGEMENT RECOMMENDATIONS:**

### **49. Qualifications of Professionals:**

- Consider revising the definition of qualified professional to align with the specific types of expertise required for the professional tasks, avoid self-declaration of competency, and improve enforceability.

## **MUNICIPAL WASTEWATER RECOMMENDATIONS:**

### **50. Qualifications of Professionals:**

- Consider revising the definition of qualified professional to align with the specific types of expertise required for the professional tasks, avoid self-declaration of competency, and improve enforceability.

### **51. Improve Objectives and Content Requirements:**

- The regulation is generally quite good in providing the objectives or parameters for professional design work; however, the objectives and content requirements for environmental impact studies could be improved (applies mostly to ss.19, 21, as ss.98, 106 require that the terms of reference for an enhanced EIS must be established in consultation with a director).

## **REGIME SPECIFIC EVALUATIONS**

### **52. Standardize Reporting Requirements:**

- Consideration should be given to developing a standardized reporting system that could flag issues for ministry staff to help focus reviews. Consider also requiring professionals to be engaged in monitoring activities.

### **53. Enhance Ministry Expertise:**

- Government generally has the necessary expertise to administer this regulation, but many relevant experts (e.g., hydrogeologists, biologists) now reside in the Ministry of Forests, Land, Natural Resource Operations and Rural Development. This can be more difficult to access for staff in the Ministry of Environment and Climate Change Strategy.

## **MUSHROOM COMPOST FACILITIES RECOMMENDATIONS:**

### **54. Qualifications of Professionals:**

- Consider refining the professional competency requirements in s.2 of the Schedule to align with the specific types of expertise required for the professional tasks relating to air emissions and liquid and solid wastes, including understanding of pollution prevention and odour abatement technology.

### **55. Objectives and Plan Content Requirements:**

- Consider clarifying the intended results or objectives of, and improving the content requirements for, pollution prevention plans.
- Alternatively, consider adopting the same requirements as other types of composting facilities, such as requirements for operating plans that address odour and leachate management.
- Consider also providing greater detail concerning the intended results or objectives for the design of compost facilities in s.3 of the Schedule.

### **56. Director Authority:**

- Consider improving director's authority respecting pollution prevention plans and facility design, which is currently limited to a 45-day window following notification.
- Given the odour management and safety issues that have arisen in the past, consider greater director authority to address problems when they arise.

### **57. Authorization:**

- Consider reintroducing a permit requirement for mushroom compost facilities to gain greater authority over siting and technology management issues (this would address #56 above).

## **REGIME SPECIFIC EVALUATIONS**

### **58. Professional Assurance Statements and Reporting:**

- Consider requiring more detailed professional assurance statements for plans and designs, and for the operational and annual reviews and evaluations required in s.4 of the Schedule.
- Consider also a duty to report non-compliance events and public complaints about facility operations.

## **ORGANIC MATTER RECYCLING RECOMMENDATIONS:**

### **59. Qualifications of Professionals:**

- Consider revising the definition of qualified professional to align with the specific types of expertise required for the professional tasks, and to avoid unwarranted self-declaration of competency and improve enforceability.

### **60. Objectives and Plan Content Requirements:**

- Consider improving the content requirements and the intended results or objectives for land application plans, and for the operating plans, odour management plans and leachate management for composting facilities.
- More detailed requirements would help QPs better understand government's objectives and intended results, and could improve enforceability. The content requirements and objectives for environmental impact studies (EIS) could also be more explicit to inform and guide the QPs who prepare them.

### **61. Improve government authority:**

- If government wishes to continue regulating land applications of managed organic matter primarily through notifications rather than approvals, consider improving the authority of the director and medical health officer (MHO), and the information that must be included with the notification.
- Consider improving the authority to intervene if problems arise after the 30-day notification period.
- For composting facilities, consider amending s.23 to require that the director be satisfied with the environmental impact study, rather than simply requesting more information.
- Consider also providing a director with authority to require a permit where warranted, or specifying additional conditions that would trigger a permit requirement (s.3.1).
- The director should have authority to require updating of operating plans and specifications, leachate management plans, and odour management plans if changing environmental conditions warrant, rather than the single opportunity to require more information within 90 days of original start-up.



## **REGIME SPECIFIC EVALUATIONS**

### **62. Documentation of Professional Work:**

- Consider requiring that professional documents be submitted to the director, and made available to Indigenous governments and communities and the public.

### **63. Guidance for Professionals:**

- Update best management practices documents for both land applications (2008) and compost facilities (2004).
- Consider also improving the comprehensive guidance on land application plan content and preparation.

### **64. Professional Assurance Statements:**

- Consider requiring professional assurance statements, rather than just the signature currently required for land application plans (s.5).
- Assurance statements could also be required for environmental impact studies (s.23), and sampling and analyses (Sch.5).
- The assurance statements could be submitted to the director.

### **65. Reporting requirement:**

- Consider an obligation to report non-compliance events given the extent of professional reliance in this regulation.

### **66. Improve Odour Management Provisions:**

- There should be more effective means to address public and neighbouring landowner concerns: options could include:
  - I. Requiring a permit in situations likely to give rise to odour issues;
  - II. Director authority to approve or require changes to odour management plans following a public engagement process;
  - III. Community setback requirements for composting facilities and;
  - IV. A right of appeal to the Environmental Appeal Board, or some other mechanism to address complaints.

# **REGIME SPECIFIC EVALUATIONS**

## **SLAUGHTER AND POULTRY PROCESSING RECOMMENDATIONS:**

### **67. Establish Threshold for Registrations:**

- There should be some limits to application of the Code of Practice and the permitting exemptions under s.4 of the Waste Discharge Regulation based on factors such as effluent discharge rates. Operations that exceed a threshold should require a permit, or be regulated similarly to treatment systems under the Municipal Wastewater Regulation.

### **68. Qualifications of Professionals:**

- Consider revising the definition of qualified professional to align with the specific types of expertise required for the various professional tasks in the Code, and to avoid unwarranted self-declaration of competency and improve enforceability.
- Consider means of addressing situations where multi-disciplinary expertise is needed.
- Consider whether to tailor this to the professional functions in the Code, or by providing directors with discretionary authority to specify the expertise required according to site-specific circumstances.

### **69. Improve Objectives and Standards:**

- The Code should specify water quality discharge standards for wastewater design systems. It requires QPs to design Category B systems (and Category A systems where domestic sewage is involved), but is silent on the standards the professional is expected to design to.
- Consider improving the objectives, standards and content requirements for nutrient management plans, landfill design and groundwater monitoring and assessment plans (for nutrient management plans, see proposed reforms to the Agricultural Waste Control Regulation, and note the disparities with sections 8(3) and 26 of this Code of Practice).
- Consider whether objectives should address higher risk areas (e.g., vulnerable aquifers) where cumulative effect or loading issues arise.

### **70. Submission and Documentation of Professional Work:**

- Consider requiring electronic filing of professional documentation such as:
  - Nutrient management plans (s.8),
  - Groundwater monitoring and assessment plans (s.10(2)), and
  - Landfill closure plans (s.14(2)).

## **REGIME SPECIFIC EVALUATIONS**

- Consider reinstating the requirement under s.10(2)(e) that a copy of the QP's groundwater and monitoring plan be submitted to the director and providing for the routine production of records to enhance QP and operator accountability.
- No requirement to submit system designs also makes inspections and audits difficult.

### **71. Certification/Assurance Statement:**

- Consider requiring QP certifications or assurance statements for wastewater disposal systems, nutrient management plans, groundwater monitoring and assessment plans, and landfill closure plans.
- This could include QP assurance that wastewater disposal system was built according to design, and that plans have been complied with.
- There might be a threshold for these requirements in terms of risk or size of operation.

### **72. Improve government authority:**

- Consider greater authority to assess and respond to professional work products.

### **73. Improve monitoring:**

- While monitoring is currently required for groundwater and incinerator stacks, discharge or emission standards should be specified.
- There should be a reporting requirements for monitoring results.
- Consider also monitoring requirements for other activities, such as land applications (e.g. for consistency with requirements for soil amendments).

### **74. Introduce reporting requirement:**

- Consider an obligation to report non-compliance events given the extent of professional reliance in this Code.

## **SOIL AMENDMENTS RECOMMENDATIONS:**

### **75. Qualifications of Professionals:**

- Consider revising the definition of qualified professional to align with the specific types of expertise required for the professional tasks, and to avoid unwarranted self-declaration of competency and improve enforceability.



## **REGIME SPECIFIC EVALUATIONS**

### **76. Improve Objectives for Land Application Plans (LAPs):**

- The content requirements for LAPs should be more fulsome and the management objectives for a LAP more explicit in order to inform the professionals preparing them.
- Chapter 11 of the Best Management Practices (2008) has more detail on LAP objectives that could be incorporated into the Code. Section 8 could be more clear about LAP objectives, for example, in s. 8(2)(b)(ix). Also, while s.8(4)(a)-(c) specify objectives for LAPs, (d) and (e) do not.

### **77. Documentation of Professional Work:**

- Consider requiring electronic filing of documentation such as:
  - The soil amendment sampling and analysis (s.11),
  - Land application plans (s.8), and
  - Monitoring results where required (s.8(4)).
- COPSA currently just requires basic notification of land applications 30 days in advance, with insufficient information for ministry staff to determine whether it is appropriate or whether to request additional information within that narrow window.
- The LAP should include the QP's rationale, indicating how the QP determined that the objectives will be met.

### **78. Certification/Assurance Statement:**

- Consider amending Schedule 1 of the Code to require the use of a professional seal, and to incorporate an assurance statement that is relevant to COPSA objectives.

### **79. Adherence to Professional Work:**

- Consider requiring the land discharger to operate under the supervision of a QP to ensure that the certification is based on direct knowledge.

### **80. Improve monitoring:**

- With regards to land application plans, consider creating standard monitoring protocols and specifying actions in response to monitoring results within the Code to provide greater guidance for QPs and dischargers.

### **81. Siting Issues:**

- Consider improving the ability to address inappropriate locations for soil amendments.

### **82. Improve government authority:**

- If government wishes to keep this activity in a code of practice rather than requiring permits, consider improving the authority to intervene if problems arise after the 30-day notification period.

## **REGIME SPECIFIC EVALUATIONS**

### **83. Introduce reporting requirement:**

- Consider an obligation to report non-compliance events given the extent of professional reliance in this Code.

### **84. Conflicts of interest:**

- Consider addressing the potential for conflicts of interest where QPs are retained by both the facility producing the soil amendments and the landowner where soil amendments are applied.

## ***FOREST AND RANGE PRACTICES ACT AND GOVERNMENT ACTIONS REGULATION RECOMMENDATIONS:***

### **85. Improve forest stewardship plan content:**

- Require identification of proposed roads and cutblocks and other information to support oversight and transparency (relates to FRPA, s.5 and FPPR, Part 2).

### **86. Require submission and approval of site plans:**

- Oversight of cutblock and road plans is necessary to determine whether government's objectives and practice requirements will be met. (relates to FRPA, s.10, 16 and FPPR, Part 3).

### **87. Enhance decision maker authority:**

- Amend the approval test to include consideration of government's objectives, the interests of Indigenous governments and communities, other rights holders (Crown tenure holders and landowners) and the public interest.
- Statutory decision makers should be able to reject plans that are unlikely to meet government objectives, that do not contain sufficient information to make that determination, or that present an unacceptable risk to third parties or resource values (relates to FRPA, s.16).

### **88. Improve objectives:**

- Review the list of objectives in Part 2 of the regulation for completeness and phrasing.
- Many consider the current objectives to be too general and constrained; more detailed factors are listed in Schedule 1 but are not mandatory considerations for professionals (relates to FPPR, Part 2 and Schedule 1).

### **89. Improve minister's authority to make GAR Orders:**

- Review the limitations on the minister's authority to make orders to protect non-timber values.
- Improve clarity regarding restrictions relating to timber supply, material adverse impact on delivered wood costs, and undue constraints on tenure rights (relates to GAR, s.2).

## **REGIME SPECIFIC EVALUATIONS**

### **90. Improve documentation and rationale:**

- Implement Forest Practices Board recommendations that forest plans should include a systematic, transparent and well-documented decision-making process that shows appropriate consideration of the potential impacts of harvesting, silviculture systems, and roads, on public and third-party interests.
- This should include documentation of the professional advice received and how it was considered.
- The rationale for decisions incorporating professional advice should be made public in order to build public confidence in the independence and objectivity of professionals (relates to Recommendation #85 above, and FRPA, s.5 and FPPR, Part 2).

### **91. Clarify professional tasks and qualifications:**

- Given the multidisciplinary nature and forest resource management, the regulation should specify the qualifications required for certain professional tasks and should not rely on professional associations regulation of right to practice and scope of practice.

### **92. Remove compliance certification by professionals:**

- The determination of compliance with legal requirements is a government function that should not be delegated (relates to FRPA s.16(1.01),(1.2)).

### **93. Professional Certifications and Assurance Statements:**

- Consider broader use of professional assurance statements, and requiring them in the regulation itself rather than guidelines. Legislation should not unduly restrict government authority over natural resources, or limit statutory decision makers when it comes to approving resource development activity.

## **TIMBER PRICING RECOMMENDATION:**

### **94. Initiate a review of professional reliance in timber pricing and measurement:**

- The review should consider government's risk tolerance, the availability of cruise-based cutting authorities, the adequacy of auditing capacity, and the adequacy of existing sanctions as deterrents to non-compliance.

## **BCTS FOREST PROFESSIONAL OVERSIGHT CERTIFICATION RECOMMENDATIONS:**

### **95. To ensure the certificate has value, consider developing a more detailed conformance certificate which identifies the results and strategies that are relevant to the Timber Sale License (TSL).**

- A checklist might assist forest professionals in ensuring that they have considered the right issues.

## **REGIME SPECIFIC EVALUATIONS**

96. Depending on the intended purpose of the conformance certificate, consider the need for assurance that the professional is independent and does not have a conflict of interest in relation to the TSL holder.
97. Consider how to address competency issues when assessment of consistency, with FSP results or strategies, such as meeting visual quality objectives, requires specialized expertise or involves expertise from another profession.

### **GREENHOUSE GAS INDUSTRIAL REPORTING AND CONTROL ACT RECOMMENDATION:**

#### **98. Documentation of Professional Work:**

- Consider requiring validation and verification bodies to submit their detailed reports to government in addition to their statements.

### **MINES ACT RECOMMENDATIONS:**

#### **99. Consider amending “qualified person” definition:**

- The current definition is based on the opinion of the mines manager, and EMPR staff have indicated this has been problematic in the past, particularly for smaller mines.

#### **100. Clarify chief inspector permit amendment authority:**

- Provide clarity regarding the chief inspector’s authority to impose additional conditions or changes in the existing conditions in a mine permit without an application from the permit holder to ensure that the chief inspector has authority to respond to conditions as they arise.

#### **101. Improve independent study authority:**

- The chief inspector has authority in s.18 of the [Mines Act](#) to require independent engineering reports for health, safety, accidents or dangerous occurrences. Consider extending this power to environmental damage (which is included in s.7).

#### **102. Consider incorporating professional requirements into *Mines Act*:**

- Section 10 of the Act allows the chief inspector to impose terms and conditions relating to the use of professionals in the permit. To ensure greater consistency in the application of the Act, consider migrating some of the standard professional requirements into the Act itself, while reserving the authority to specify additional requirements in permits for mine-specific requirements.
- This could include new requirements for use of professionals in matters such as mine reclamation, and permit application requirements (especially for those that are not reviewable projects under the [Environmental Assessment Act](#)).



# **REGIME SPECIFIC EVALUATIONS**

## **HEALTH, SAFETY AND RECLAMATION CODE RECOMMENDATIONS:**

### **103. Clarify duty to report safety issues at tailings storage facilities:**

- The new obligation on the engineer of record added to s.10.1.6 of the Code in response to the Mount Polley Tailings Impoundment incident, which requires the engineer to report unresolved safety issues in a timely fashion, is helpful, but could benefit from clarification as to the permissible time frame for discussions between the engineer of record and the mine manager.

### **104. Clarify expertise required:**

- References to “other qualified professionals” under s.10.1.8 or “one or more qualified professionals” under s.10.6.7 could benefit from greater specificity.

### **105. Clarify plan and program objectives:**

- Greater detail as to the management objectives or expected results for mine, environmental protection, reclamation and closure plans and programs could assist professionals preparing them and improve outcomes.
- Greater clarification from government regarding policies concerning issues such as species at risk and cumulative effects may be required. Some of these objectives involve the mandate of other ministries.

## **DRILLING AND PRODUCTION REGULATION RECOMMENDATIONS:**

### **106. Qualifications of professionals:**

- Consider revising the definition of qualified professional to align with the specific types of engineering and geoscience expertise required for the professional tasks (found in s.18(2); 44; 51(5); 78(4)).

### **107. Consider “as-built” certification:**

- In addition to requirements that professional engineers sign, seal and submit all record drawings of production facilities to the commission, consider requiring “as-built” certification to have written confirmation that the facility was built consistent with the engineer’s design.

## **OIL AND GAS ROADS REGULATION RECOMMENDATION:**

### **108. Improve reporting:**

- Consider requiring periodic submission of bridge and culvert inspections by qualified persons to the commission, and a duty to report non-compliance events.

## **REGIME SPECIFIC EVALUATIONS**

### **DELEGATION AGREEMENT WITH AGRICULTURAL LAND COMMISSION RECOMMENDATION:**

#### **109. Improve reporting:**

- Consider requiring periodic submission of bridge and culvert inspections by qualified persons to the commission, and a duty to report non-compliance events.

### **PUBLIC HEALTH ACT – SEWERAGE SYSTEM REGULATION RECOMMENDATIONS:**

#### **110. Establish Registry for Documentation:**

- The Ministry of Health or public health authorities should consider creating a central electronic registry for standardized information that must be filed by authorized persons.
- This registry would enable health authorities, local governments, professional associations, prospective purchasers, realtors and others to access the records that must be filed under the regulation.

#### **111. Improve compliance measures and cooperation:**

- Compliance data should be collected with regard to maintenance plans for sewerage provided to homeowners by professionals.
- It would be helpful if the Ministry of Health, health authorities and local governments could collaborate to identify shared roles and responsibilities for this aspect of the sewerage system regime.

### **RIPARIAN AREAS PROTECTION ACT RECOMMENDATIONS:**

#### **112. Improve accountability to government:**

- The Ministry of Health or public health authorities should consider creating a central electronic registry for standardized information that must be filed by authorized persons.
- This registry would enable health authorities, local governments, professional associations, prospective purchasers, realtors and others to access the records that must be filed under the regulation.

#### **113. Qualifications of professionals:**

- Compliance data should be collected with regard to maintenance plans for sewerage provided to homeowners by professionals.
- It would be helpful if the Ministry of Health, health authorities and local governments could collaborate to identify shared roles and responsibilities for this aspect of the sewerage system regime.

## **REGIME SPECIFIC EVALUATIONS**

### **114. Introduce a gatekeeper function:**

- The list recommended by the Ombudsperson should be implemented, regulated not only by successful completion of the training course but also by ongoing performance evaluation. It should be possible to become de-listed.
- This regulated list could take the form of a roster, or something along the lines of the Ministry of Transportation and Infrastructure's (MOTI) Registration, Identification, Selection and Performance Evaluation (RISP) program.

### **115. Clarify riparian objectives:**

- Clarify riparian objectives where there are known issues, such as differences of interpretation (e.g., terms such as "potential vegetation").
- Consider ways to incorporate local cumulative effects into the methodology.

## **WATER SUSTAINABILITY ACT RECOMMENDATIONS:**

### **116. Consider need and criteria for independent monitors:**

- At a minimum, where circumstances indicate that there may be a conflict of interest, environmental monitors should be independent, and there should be clear criteria for independence. The ministry should be satisfied in advance that the criteria are met.

### **117. Ensure that monitor qualifications and obligations are clear and enforceable:**

- Ensure that authorizations are clear concerning competency requirements, field presence obligations, and incident reporting.
- Consider enforcement mechanisms, including administrative penalties levied against a professional monitor for non-compliance, through the act or regulation if those obligations are not met.

### **118. Consider regulating use of independent monitors:**

- Consider standardizing monitoring requirements in an "Independent Environmental Monitor" regulation that could be referenced in authorizations issued under various regulations or acts.
- Consider alternatives to proponent selection of monitor, such as establishing a roster, with ministry selection by random or according to site-specific criteria (similar to the Ministry of Transportation and Infrastructure's RISP process).
- The regulation should establish that the duty of the independent monitor is to the regulator.



# **REGIME SPECIFIC EVALUATIONS**

## **DAM SAFETY REGULATION RECOMMENDATIONS:**

### **119. Consider improving guidance/methodology:**

- The regulation requires a dam owner to retain an engineering professional who has qualifications and experience in dam safety analysis to determine if a dam is safe.
- It may be beneficial to reference the EGBC Legislated Dam Safety Review Guidelines for compliance promotion and enforcement purposes.
- Staff indicated that additional guidance relating to hydrotechnical assessments and seismic assessments would also be beneficial to professionals carrying out dam safety reviews.

### **120. Professional Rationale:**

- Consider requiring dam safety reviews to include the professional's detailed rationale for his or her opinion on dam safety.

### **121. Consider a regulatory duty to report:**

- Some professionals have suggested that there should be a regulatory requirement to report unresolved dam safety issues, because they find their professional duty to report "hazardous, illegal or unethical decisions or practices" potentially conflicts with their duties of client loyalty and confidentiality, particularly for grey areas.

# **APPENDIX**



## **APPENDIX**

- [\*Administrative Tribunals Act\*](#)
- [\*Agrologists Act\*](#)
- [\*Applied Science Technologists and Technicians Act\*](#)
- [\*Auditor General Act\*](#)
- [\*College of Applied Biology Act\*](#)
- [\*Engineers and Geoscientists Act\*](#)
- [\*Environmental Assessment Act\*](#)
- [\*Environmental Management Act\*](#)
- [\*Forest Act\*](#)
- [\*Foresters Act\*](#)
- [\*Forest and Range Practices Act\*](#)
- [\*Freedom of information and Protection of Privacy Act\*](#)
- [\*Greenhouse Gas Industrial Reporting and Control Act\*](#)
- [\*Mines Act\*](#)
- [\*Oil and Gas Activities Act\*](#)
- [\*Ombudsperson Act\*](#)
- [\*Public Health Act\*](#)
- [\*Riparian Areas Protection Act\*](#)
- [\*Water Sustainability Act\*](#)