

Imperial Oil Resources
237 - Fourth Avenue S.W.
Calgary, Alberta
Canada T2P 0H6

A.R. (Andrew) Teal
Manager

Safety, Security, Health and Environment
Tel. 403 237-3879
Fax. 403 237-2114

Rec'd.
MAY 10 2010

April 30, 2010

Water Act Modernization Submission
Ministry of Environment
Water Stewardship Division
PO Box 9362, Stn Prov Govt
Victoria, B.C. V8W 9M2

Re: Water Act Modernization Submission

Imperial Oil Resources (IOR) appreciates the opportunity to provide feedback on the modernization of British Columbia's Water Act (WAM). Water plays a key role in all oil and gas development and is critical for the success of shale gas development. IOR is one of the largest tenure holders in the shale gas development in the Horn River Basin, and therefore our plans for the basin have the potential to be affected by the WAM.

IOR supports the 4 goals of the Water Act Modernization while emphasizing the need for science and risk based decision making and a balance between environmental, social, and economic benefits. However, we caution that activities within watersheds should not be deferred or delayed while changes to the Water Act are defined and implemented. The use of adaptive management and provincial standards and guidelines while more detailed regional or local water management plans are developed is one approach to balancing social and environmental requirements within a basin without delaying economic development.

As per the submission guide provided in the Water Act Modernization Discussion Paper, IOR is providing feedback below on the specific questions posed by the Ministry of Environment.

Protecting stream health and aquatic environments - Goal One

Indicate your level of support for the proposed objectives for protecting stream health and aquatic environments.

We support the proposed objectives for protecting stream health and aquatic environments in water management plans and frameworks that balance environmental, social, and economic benefits. Caution is expressed with the time and resources required to determine detailed environmental flows.

At the Water Act Modernization Workshop in Fort St. John, MOE suggested it may change the definition of a stream to include muskeg. We caution that because the physical and biological characteristics of streams and muskeg are very different making this change may have unintended consequences for oil and gas development.

Environmental Flow Guidelines or Standards. Which options do you prefer, and why? Are there others?

IOR supports the development of flow guidelines as opposed to rigid flow standards since the variety of rivers/streams/lakes combined with social/economic/environmental cost-benefit analysis does not lend itself well to rigid standards. However, to prevent unnecessary delays in watershed activities or development, interim standards or guidelines could be applied in the absence of detailed assessments that may take considerable time and resources. This may be an effective means of providing for environmental flows while allowing activities in the watershed to proceed.

Under what conditions should a water allocation plan be developed and how should it be applied?

We recommend optional development of water allocation plans with guidelines that the decision-maker must consider. The rationale for this is that these are complex time and resource intensive plans that should first focus on priority areas of the province selected on a scientific and risk basis.

The Water Act Modernization Technical Background Report classified the Ft. Nelson area as a naturally flow sensitive Eco-section, meaning that it is subject to wide variations in water availability. Thus the Fort Nelson Area might be considered a priority area for developing environmental flow guidelines and water allocation plans. We are concerned that the development of these plans and guidelines are not on pace with the development planned for the Horn River Basin. Therefore more generic provincial standards or guidelines could be applied in the interim to allowing activities in the watershed to proceed while specific water allocation plans are developed.

Improving water governance - Goal Two

Indicate your level of support for the proposed objectives for improving water governance.

Imperial supports the proposed objectives for improving water governance including clarification of accountabilities and governance roles along with increased flexibility and responsiveness.

Centralized, Shared or Delegated. Which approach do you prefer, and why? Are there others?

A centralized approach provides consistency, efficiency, and more certainty. A Delegated approach may create ambiguity and complexity to the regulatory process. We have concerns around the lack of capacity and resources at the local level to provide comprehensive water management functions and decisions. A centralized approach also provides governance with a broader perspective and the ability to put water allocation challenges into context.

What scale of watershed is most appropriate for water planning and management?

A major watershed scale is most appropriate, as it would be specific to the needs and concerns within the watershed. However, a centralized approach to governance over the watersheds is preferred.

What are the benefits and implications of sharing roles for water stewardship?

Imperial is supportive of multi-stakeholder engagement to identify and resolve concerns and contribute local and traditional knowledge to water stewardship. However, as previously stated, with respect to governance and decision making, a Delegated or Shared approach may create ambiguity and complexity to the regulatory process.

Introducing more flexibility and efficiency into the water allocation system - Goal Three

Indicate your level of support for the proposed objectives for introducing more flexibility and efficiency into the water allocation system.

We support the proposed objectives for introducing more flexibility and efficiency into the water allocation system.

Water Efficiency - Which options do you prefer, and why? Are there others?

Imperial supports continuous improvement in fresh water use efficiency, and as such would support codes and practices to assess water requirements. We cautiously support incentives to water use efficiency if they are applied equitably, and are not tax or tax-like financial vehicles. Imperial supports clear rules for the transfer and apportionment of existing water rights.

What considerations would help determine which water uses and extraction rates could be a permitted use (no water license required)? What controls are needed? How should permitted use status be protected?

Permitted use should be defined in terms of water availability in a basin. All fresh water users should require registration; otherwise the government of BC will be unable to accurately estimate the volume of permitted uses, which while exempt from licenses, never-the-less use a portion of available water in a watershed.

With respect to selecting water use precedence, certainty of supply is necessary for investment into developments and setting precedence by purpose does not necessarily result in an efficient use of water for the highest value applications. Drought management plans with temporary or permanent water transfer mechanisms with a market driven component can result in efficient re-distribution of water during shortages.

Regulating groundwater extraction and use - Goal Four

Indicate your level of support for the objective proposed for regulating groundwater extraction and use.

We support the objective proposed for regulating groundwater extraction and use with the caveat that this should apply only to fresh groundwater and not saline groundwater alternatives. As mentioned in the technical background report, the definition of saline water in Alberta is defined as water with a TDS level of greater or equal to 4000 mg/L. IOR suggests that BC adopt a similar definition. Exempting saline water from the approval and reporting process would give the Oil and Gas industry further incentives to use saline water alternatives and allow the MOE to focus on stewarding fresh water use.

Which (withdrawal) thresholds do you prefer, and why?

A 500 m³/day threshold would allow MOE to focus on the largest groundwater users and would exempt domestic users and small supply systems. It is none-the-less

recommended that exempt groundwater uses require registration to enable accurate water stewardship. A science based rationale should be provided to stakeholders for this threshold.

What are the appropriate criteria for determining the priority areas for groundwater extraction and use?

Priority areas should be based on the groundwater sustainability and the potential for groundwater-surface water interactions to make a meaningful difference to the surface environment or surface water supplies. A combination of the proposed suggestions in the discussion document could realize this objective but individual ones may not.

Regulatory certainty around water availability and allocation is critical for economic development. In particular shale gas development requires significant upfront and sustaining financial commitments, including costs for defining and installing an efficient water management plan and associated facilities. Industry will evaluate all water source options, but needs certainty for which options are feasible prior to project development.

We would be pleased to meet with MOE to provide further clarity on our submission, water sourcing challenges in the Horn River basin or any other O&G matter the MOE would like more information for the WAM initiative. Should you wish to discuss this further, please contact the undersigned at 403-237-3879.

Yours truly,



Andrew Teal
SSHE Manager
Imperial Oil Resources