

“CONFIDENTIAL - CABINET DOCUMENT”

MINISTER: THE HONOURABLE AGATHA CHRISTIE, MINISTER OF ENVIRONMENT AND MINISTER RESPONSIBLE FOR WATER STEWARDSHIP AND SUSTAINABLE COMMUNITIES

TITLE: CRD LWMP DIRECTIVE

ISSUE: FOR DECISION

Growing scientific, public and business backlash is calling into question the directive of the Minister of Environment requiring the Capital Regional District to submit plans for installation of appropriate (secondary or equivalent) treatment of all CRD wastewater effluent by 2016. In light of these concerns, reconsideration of that directive has been proposed.

RECOMMENDATION:

Option 1. Stay the present policy course: Continue to require land-based secondary (or equivalent) treatment in order to comply with existing law, as previously directed by the Minister.

This ‘Rule of Law’ option achieves compliance with existing international commitments, national policies, legal obligations and regulatory requirements, by maintaining the existing Ministerial orders and directions to the CRD and proceeding with the financial commitments entailed.

BACKGROUND:

The question of sewage disposal in the Capital Regional District has been controversial for years. In the early 1990s a BC-Washington State Agreement on Environmental Cooperation was established. Within that Agreement a Georgia Basin/Puget Sound International Task Force was formed, with one working group tasked to investigate marine water quality in the shared waters of the Georgia Basin-Puget sound region. The 1994 report of this British Columbia Washington State Marine Science Panel explored concerns associated with CRD sewage outfalls as part of a general examination of marine water quality in these shared waters, but attached much higher priority to issues such as marine habitat protection where current practices seemed to be leading to severe and largely irreversible damage.

At present, the CRD wastewater system is operated under a BC Liquid Waste Management Plan approved by the Ministry of Environment in March 2003. Key features of the plan include a source control program, an inflow and infiltration reduction program, preliminary wastewater treatment using 6mm diameter fine

screening, and effluent disposal through two major outfalls, coupled with a marine monitoring program including trigger thresholds whose exceedance should signal the need for further action.

In 2004 the CRD approached the Society of Environmental Toxicology and Chemistry (SETAC) to carry out an independent review of the Core Area LWMP. The SETAC Panel submitted a report in July 2006 concluding that reliance on dilution is not a long-term answer and that “while the benefits of treatment cannot be described or calculated with any precision, this does not mean that the benefits of treatment would be insignificant”.

In the meantime, on November 10, 2005, the Environment Management Branch of the Ministry of Environment received an urgent request from the Sierra Legal Defense Fund (now Ecojustice) for designation of two outfalls as contaminated sites pursuant to the provisions of the British Columbia Environmental Management Act (EMA). MacDonald Environmental Services Limited (MESL) was commissioned to provide an independent assessment of sediment quality conditions in the vicinity of these outfalls. That report, submitted in May 2006, concluded that available data supported only a preliminary evaluation, but that the results of that preliminary evaluation indicated that provincial water quality guidelines were not being met and that in several areas around the outfalls sediments are sufficiently contaminated as to warrant designation of the sites as contaminated sites under the Contaminated Sites Regulation. It also concluded that the seafloor trigger that was established to determine when treatment of wastewater discharged from these outfalls would be required was not reliable and would be unlikely to trigger treatment in a timely manner.

On the basis of these two reports, the Ministry concluded that agreement on an acceptable trigger process to decide on the timing of additional wastewater treatment was not achievable, and that contamination of the seabed exceeded provincial contaminated sites standards for a number of toxic metals and polyaromatic hydrocarbons.

On July 21, 2006, the Minister of Environment issued an order to the Capital Regional District (CRD) to provide an amendment to the Core Area LWMP setting out a fixed schedule for implementation by 2016 of plans for appropriate treatment of all sewage from the region prior to discharging effluent into receiving waters. This directive is consistent with international obligations to which Canada is a signatory and would bring the CRD into compliance with federal policies currently under discussion as part of the harmonization process being coordinated by the Canadian Council of Ministers of Environment, as well as with existing provincial standards. The proposed wastewater management strategy, now scheduled to be considered by CCME ministers this Spring would place Victoria’s raw sewage discharge in a high risk category (that would demand a 10 year timeline for implementation) because of the large volume of sewage discharged daily with only preliminary screening.

But the Minister's order has led to sharp criticism from a number of local experts, who argue that the existing standards are not appropriate to this receiving environment, that no measurable risk has been identified, that the required expenditures would be a massive waste of public funds in the particular circumstances, and that land-based secondary treatment may indeed create a greater adverse environmental impact through the risks associated with the necessary land-based disposal of sludge.

Nevertheless the CRD, in response to the Minister's directive, did submit a letter to the Minister of Environment dated June 27, 2007, setting out a proposed Amendment #6 to the Core Area LWMP; this amendment sets out a fixed schedule for provision of sewage treatment by 31 December 2016.

The Minister, in a further letter, dated December 14, 2007, approved the treatment schedule established in Amendment #6 to the existing LWMP, subject to a requirement that a business plan to be submitted by June 2008, and a further LWMP amendment be submitted before December 31, 2008, setting out decisions on the physical infrastructure model, site locations, P3 approach, and detailed cost estimates, among other items.

Initial capital cost estimates provided by the CRD suggest a capital outlay of \$1.2 billion (2007\$?) would be entailed, to be shared 1/3 each by federal, provincial and CRD governments, but it seems unclear what adjustment in this estimate might be required in light of recent experience with inflation in construction costs as well as land values.

The provincial government has committed itself to providing one-third of the funding required to achieve the best solution for effective treatment of Victoria sewage.

The CRD Liquid Waste Management Committee is meeting to consider its further steps in light of the Minister's December, 2007 letter.

In the meantime, the volume of criticism, now involving some voices within the business community as well as economists and medical officers, along with a wide range of distinguished oceanographers and other scientists, has increased further and become more focused.

This present submission to Cabinet discusses the issues raised by such protest and presents options for a potential government response.

PROPOSED OPTIONS:

Option 1:

Stay the present policy course: Continue to require CRD to develop land-based secondary (or equivalent) treatment in order to comply with existing law, as previously directed by the Minister

Option 2

Defer application of the present directive and require the CRD to strengthen existing source control and oceans-based treatment, while British Columbia negotiates more rational evidence-based, outcomes-oriented regulatory standards in CCME and federal government consultative processes relating to new wastewater strategies and regulatory frameworks.

Option 3

Press the regulatory envelope: push the distributed infrastructure model mentioned already in the Minister's December 2007 letter much further upstream toward ultimate source control and individual responsibility

SIGNIFICANT IMPLICATIONS:

Implications

1. **Land-based**—Stay the present course—Rule of Law: Existing legislation, regulations and standards demand enforcing existing regulations with extreme limits on discretion in compliance; the approach is centralized, hierarchical, not devolved or place-based; and requires that we monitor activities to ensure compliance. In accord with existing regulations and standards, the Ministry has required CRD to come in with amendments to LWMP to conform to existing regulations requiring secondary treatment or equivalent for all discharges into Canadian waters, including marine. [Note that this is the 'no policy change' option, but not the status quo option with respect to ongoing activities: it calls for big investment in infrastructure required to meet current law, but would bring present practice into line with existing international commitments, federal and provincial policies, legislation, regulations, standards and guidelines.]

This is the current law; one should obey the rules ...

2. **Ocean-based**—Stall: let evidence-based decisions and outcomes-oriented smart regulation based on informed responsible discretion in compliance with regulations dictate responsible public action, taking into account the place-based particularities of this receiving environment—negotiate more sensible triggers, thresholds and regs; promote decentralized devolution; monitor outcomes, not activity. [Note that this involves major change in—indeed, reversal of—present policy, but represents the 'status quo' option in terms of ongoing activities, and hence no immediate major investment expenditure. This option can be dressed

up with the additional commitments to going back to CCME consultations, and the required federal consultations once the draft regs are gazetted in December, to try to arrive at an-outcomes oriented set of standards with discretion to fit to particular receiving environments. This may not require any legislative change, but simply appeal to discretion already existing within current law.

This option would respond to the considerable negative commentary from authoritative outside sources by:

- a. revoking any deadline for implementation of the earlier Order, while
- b. requiring the CRD to implement immediately the highest reasonable monitoring and aggressive source control program on an interim basis, while pursuing agreement on an outcomes-oriented system of triggers.
- a. ordering the CRD to investigate further the alternatives and associated risks in management of the disposal of treated sludge and the environmental impacts thereof in order to permit a comprehensive life-cycle evaluation of the environmental and public health consequences of measures to comply with the Ministerial Order by implementation of land-based treatment; and
- b. raising with CCME at the earliest possible opportunity the necessity of incorporating in their proposed harmonized standards a procedure to authorize a variance from standards-based regulatory controls where the receiving environment and local circumstances, on an outcomes-oriented basis, clearly warrant.

Any attention to outcomes would demonstrate that secondary treatment is only a partial response, meeting standards that, though currently in force, have little demonstrable connection to the goals we pursue; any kind of Smart Regulation would require discretion to take into account the particularities of each receiving environment in setting appropriate standards. (Of course it is rather hard to establish the appropriate standards in the face of our ignorance as to the impacts of our intervention in complex and uncertain ecosystem functions, and pathways for those impacts.

But still, in the face of limited resources and unlimited lists of things we should do, we have a duty to allocate resources and spend money sensibly, with some attention to priorities.

3. **Something better**—pressing the envelope: Seek the limits of the principles of individual responsibility for one's own waste and adverse environmental impacts: full source control and closed-cycle technologies, building by building or household by household, with aggregation only to the point where economies of scale enable individuals working from fully-informed consent to benefit from a voluntary association (employing all opportunities for recovery of energy and minerals, and with full credit for

reductions in ghg emissions); individual commitment to pursue agreed principles (carry Basel ethics to limit). This could be argued to be the long-term solution taking advantage of newer technologies and approaches in a region facing dramatic growth. [This longer-term, more visionary solution that Cabinet might wish to consider as part of an attempt to seek reduced individual footprints in an overall sustainability initiative. With full source control, special provisions for individual attention to remaining activities involving inevitable discharge of potentially hormone-disrupting pharmaceuticals or like contaminants would be much more cost-effective than the shot-gun approach of large scale secondary treatment which will at best be only partially effective and confront us with new risks for remaining disposal. [It may be that this longer-term, more fundamental revision in thinking actually could be seen as a way to meet existing standards, but by different and more effective means.]

In an ideal world, people would take personal responsibility for the impacts on others of their actions. In particular, discharges into marine waters could best be controlled by ensuring that toxic materials, pharmaceutical wastes, particulate matter do not enter any waste stream, but are captured and controlled at the level of individual households or buildings, and through custom-tailored disposal for specific toxic or dangerous wastes such as hormone-disrupting pharmaceutical products.

RECOMMENDED DECISION:

Option 1. Stay the present policy course: Require CRD to develop land-based secondary (or equivalent) treatment in order to comply with existing law, as previously directed by the Minister

SIGNATURE:

DATE:

KEY CONTACT:

Appendices