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BRIEFING FORM

SUBMITTED TO: Chair and Members, Environment & Sustainability Standing Committee

MANAGER'S APPROVAL: Original signed by
Richard MacLellan, Manager, Energy & Environment

DATE OF MEETING: February 5, 2015

SUBJECT: Weed Growth in Lakes Banook & MicMac – Additional Information

ORIGIN

Request of ESSC, January 15, 2015, re Item 9.1.1 Weed Growth in Lakes Banook & MicMac

RECOMMENDATION/ DECISION REQUIRED

(None required – In this case, Information Only)

BACKGROUND

On December 19, 2014, Jamie MacNeil, Vice President of m5 Public Relations, on behalf of Lake Management Services, contacted Deputy Mayor Nicoll to propose a presentation to the Environment and Sustainability Standing Committee (ESSC) in support of herbicide application, contrary to the staff recommendation of mechanical harvesting. The proposed presenter, Dr. Keith Solomon, is a recognized international expert on environmental toxicology. Rather than inviting Dr. Solomon to present to ESSC, the Committee directed staff to meet with him and provide an update to Committee on the basis of that meeting.

On Tuesday January 27, Cameron Deacoff conducted a telephone call with Dr. Solomon. During the call, Dr. Solomon made the following points:

- It would be prudent, in determining the preferred weed management option ("treatment"), to consider the risks involved of all possible treatment options
- Although no treatment is absolutely safe, the use of properly applied pesticides – and diquat in particular – is well within acceptable environmental and human health risks
- The use of pesticides is well regulated, both federally (by the Pest Management Regulatory Agency), and provincially (by Nova Scotia Environment)
- Regulators use the precautionary approach to set guidelines for exposure of humans and the environment to pesticides. The results of laboratory tests – typically the exposures that cause no effects in the most sensitive test organism – are used to set a maximum short-term or long-term

exposure for humans or the environment. A safety factor of 100 is applied, such that the acceptable exposure for a human will be 100-fold less than the dose that causes no effect in the sensitive test animal.

- Diquat has very low toxicity, little persistence, and little mobility in the environment. Within approximately 24 hours of application, it binds to the sediment at the bottom of a lake and becomes essentially unreactive at that time. These factors reduce the human and nontarget exposure – the primary driver of risk – allowing the products to be safely used.
- There are no clear or compelling toxicological or health reasons to forgo pesticide use to treat the weed growth in Halifax-area lakes.

ALTERNATIVES AND ASSOCIATED RISKS

These are documented in the staff report to ESSC as originally presented on January 15, 2015.

IMPACT/BENEFITS:

Dr. Solomon's points are acknowledged by municipal staff. The municipality's consideration to manage weeds on Lake Banook and Lake MicMac respects the destinations of these lakes as valued community assets. Given that members of the community attending two public meetings generally opposed the application of aquatic herbicides, this new information does not change staff's recommendation to implement a harvesting program for short-term weed management.

COMMUNICATION ISSUES/OPPORTUNITIES: None

ATTACHMENTS: None

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