



## **Board of Directors Meeting**

### **Addendum**

**Thursday, July 6, 2023 at 6:00 p.m.**

**This meeting will be held in person for the Board of Directors and designated, limited staff only.**

**The public may view the meeting live on HCA's You Tube Channel:  
<https://www.youtube.com/user/HamiltonConservation>**

#### **9. Reports from Budget & Administration Committee and Conservation Advisory Board**

##### **9.1. Conservation Advisory Board – June 8, 2023**

- 9.1.1. CA 2318 Proposal to Terminate HCA Water Quality Monitoring  
Related to Darling Ingredients Effluent Discharge to  
Christie Lake – Amended – Jonathan Bastien**

**Page XXX**

# Report - Amended

**TO:** Conservation Advisory Board

**FROM:** Lisa Burnside, Chief Administrative Officer (CAO)

**RECOMMENDED BY:** T. Scott Peck, MCIP, RPP, Deputy Chief Administrative Officer / Director, Watershed Management Services

**PREPARED BY:** Jonathan Bastien, Water Resources Engineer

**MEETING DATE:** June 8, 2023

**RE:** Proposal to Terminate HCA's Water Quality Monitoring Related to Darling Ingredients's Effluent Discharge to Christie Lake

---

## STAFF RECOMMENDATION

**THAT the Conservation Advisory Board recommends to the Board of Directors:**

**THAT HCA's water quality monitoring related to Darling Ingredients operational effluent discharge to Christie Lake be terminated; and**

**THAT HCA request monthly sampling results and receive annual ECA discharge reports from Darling Ingredients for staff review.**

## BACKGROUND

The Darling Ingredients Plant (formerly Rothsay Dundas Plant) is a meat rendering facility that renders raw meat material from meat processing plants, farms, grocery stores, and restaurants and converts this into products including animal feeds, cosmetics, detergents and other products. As part of the rendering process and operation of the facility, wastewater is produced and treated on-site. The Environmental Compliance Approval (ECA) for Darling Ingredients issued by the Ministry of Environment, Conservation and Parks allows for discharge of the treated wastewater. The discharge is released into a pond located on Darling Ingredients property before being released into a wetland that flows into a watercourse on HCA lands (former Pond 4) and Christie Lake Conservation Area. The approved discharge period is November 1

to March 31. The discharge period is as detailed in the ECA and any variations to the specific dates must be approved by the HCA as per conditions specified in the ECA.

### Requests for Early Discharge

Requests for early and extended discharges were made by Darling Ingredients and approved by the HCA Board of Directors in 2011 and 2013. Further, in 2019 Darling Ingredients requested and the HCA Board approved a permanent change in the earliest allowable discharge date from November 1 to October 1. The recommendations by staff to approve the extension requests were informed by a water quality monitoring program that was undertaken downstream of the plants discharge point, at the expense of Darling Ingredients. This monitoring program has been in place since 2013.

The results of the water quality monitoring program have indicated that Total Phosphorous (TP) and Dissolved Organic Carbon (DOC) concentrations are elevated during the discharge season. However, based on the collected data, they are either not influenced by Darling Ingredients effluent or concentrations are low enough that there are no adverse ecological effects in the receiving waterbodies downstream.

### **STAFF COMMENT**

The original objective of HCA's water quality monitoring was to review whether effluent discharge from Darling Ingredients in October (rather than November) had a negative impact on water quality downstream.

The findings of the revised AMP for each year between 2019 and 2023 continue to confirm previous findings that effluent discharge from Darling Ingredients does not have a negative impact on water quality downstream.

Most key water quality parameters have been decreasing in average annual concentration overall. Given the trend of decreasing concentrations, and the previous conclusion that concentrations are within natural fluctuations and not negatively impacted by Darling Ingredients effluent, there are no concerns regarding most key water quality parameters.

Although Nitrate has shown an increase in average annual concentration overall, concentrations are well below relevant water quality standards.

### **STRATEGIC PLAN LINKAGE**

The initiative refers directly to the HCA Strategic Plan 2019 - 2023:

- **Strategic Priority Area – Organizational Excellence**

- Initiatives – Communicate both internally and externally about what HCA does and why
- **Strategic Priority Area – Water Management**
  - Invest in programs to address the impacts of nutrient and sediment loading on watershed streams, creeks, rivers and receiving water bodies
  - Invest in our monitoring programs and networks to support our ability to track the impacts of climate change and changes in our environment, and inform our adaptation strategies

## **AGENCY COMMENTS**

Not applicable.

## **LEGAL/FINANCIAL IMPLICATIONS**

Not applicable.

## **CONCLUSIONS**

The findings of the revised AMP for each year between 2019 and 2023 continue to confirm previous findings that effluent discharge from Darling Ingredients does not have a negative impact on water quality downstream. As such, it is HCA staff's recommendation that HCA's water quality monitoring program related to Darling Ingredients's effluent discharge to Christie Lake be terminated.

HCA staff have had a positive relationship with Darling Ingredients and with their predecessor, Rothsay, generally and as part of this monitoring program. It is staff's intention to stay in contact with Darling Ingredients to maintain this relationship and to work to identify potential future partnerships with Darling Ingredients, in lieu of this HCA water quality monitoring.