

Hamilton Harbour Remedial Action Plan (HH RAP) Beneficial Uses

|   |    |     |    |   |    |     |      |    |   |    |            |      |     |
|---|----|-----|----|---|----|-----|------|----|---|----|------------|------|-----|
| i | ii | iii | iv | v | vi | vii | viii | ix | x | xi | <b>xii</b> | xiii | xiv |
|---|----|-----|----|---|----|-----|------|----|---|----|------------|------|-----|

**ADDED COSTS TO AGRICULTURE AND INDUSTRY**



2002 Status  
2012 Status

**STATUS**

|          |                             |              |
|----------|-----------------------------|--------------|
| Impaired | Requires Further Assessment | Not Impaired |
| Impaired | Requires Further Assessment | Not Impaired |

**APPROVED BY 2012 RAP STAKEHOLDER FORUM:**

- Beneficial Use xii status remain "not impaired".
- Beneficial Use xii delisting objective wording will remain the same.
- No further assessment of Beneficial Use xii will be necessary prior to the Stage 3 Report.

**2002 HH RAP Delisting Objective:**

When there are no significant additional costs required to treat water prior to use for industrial purposes (i.e. intended for commercial or industrial applications and non-contact food processing). Cost associated with zebra mussels or other invasive organisms are excepted. An added cost related to withdrawal of water from the Harbour to agriculture is not appropriate as this is not a use directly applicable to Hamilton Harbour.

**Why Keep the 2002 Status and HH Wording?**

**Reasonable:** Industry shouldn't have to pay significantly more to use HH water. Zebra mussels are a Great Lakes basin wide problem so should be excluded. There is no agriculture using water directly from HH.

**Achievable:** Neither ArcelorMittal Dofasco nor U. S. Steel Canada report current additional costs beyond those required for normal operation; therefore this is achievable.

**Measurable:** Informal surveys allow HH users to self-determine if costs are beyond those required for normal operation.

**What Was the Original Problem in Hamilton Harbour?**

This BUI was not listed as impaired in the 1992 Stage 2 Report since "industry considers this source of water to be adequate or good compared with other areas in the Great Lakes" (HHRAP 1992, p. 28-9).

BACKGROUND INFORMATION

**IJC Listing Guideline (1991):**

When there are additional costs required to treat the water prior to use for agricultural purposes (i.e. including, but not limited to, livestock watering, irrigation and crop-spraying) or industrial purposes (i.e. intended for commercial or industrial applications and noncontact food processing).

**IJC Delisting Guideline (1991):**

When there are no additional costs required to treat the water prior to use for agricultural purposes (i.e. including, but not limited to, livestock watering, irrigation and crop-spraying) and industrial purposes (i.e. intended for commercial or industrial applications and noncontact food processing).

**How Are Things Today?**

- Industries report having to add mild bleach to intake water to control growth of algae on heat exchangers and condensers; however, this is routine operation (BARC 2005). Reductions in nutrient levels in Harbour water generally reduce algae levels.
- Industries report increased chloride levels in the spring which leads to increased rates of corrosion and need for more frequent exchange (BARC 2005); however, winter road salting is not an issue unique to lands surrounding HH, but restricted HH circulation due to geography shows the effect more acutely.
- Neither ArcelorMittal Dofasco nor U. S. Steel Canada report current additional costs as beyond those required for normal operation.

REFERENCES

**Where Can I Learn More?**

BARC. 2005. Toward Safe Harbours: Progress Toward Delisting – Water Quality  
 HHRAP. 1992. Remedial Action Plan for Hamilton Harbour. Goals, Options and Recommendations: RAP Stage 2.  
*Most references can be provided by the HH RAP Office as a PDF upon request*