



January 25, 2016

**Re: Good Management Practices for “High Strength” Wastewater in Depots**

Dear Depot Owner/Operator:

Our industry plays a key role in the environmental business landscape in Alberta. Good management practices regarding wastewater (in particular, “High Strength” wastewater, as described in the attached document) adopted broadly by our industry will further enhance and cement our position in the hearts and minds of Albertans.

In the recent past we have seen an increase in scrutiny on the wastewater produced by our industry. While this regulatory scrutiny has primarily been focused on processing containers, all depot operators should take steps to both protect the environment and minimize their exposure to legal liability with regards to the “High Strength” wastewater that can be produced when containers are collected, pre-processed or compacted prior to delivery to the processor.

As an industry, we have the collective responsibility to manage any adverse effects on the environment, especially as it relates to High Strength wastewater. Attached is a detailed outline of good management practices for consideration at your depot with the handling of wastewater produced at different locations around your depot.

Should you have any questions or concerns, please do not hesitate to contact the ABDA offices at:

Phone: 780.454.0400  
Email: [info@albertadepot.ca](mailto:info@albertadepot.ca)

Thank you

A handwritten signature in black ink, appearing to read "Jeff Linton".

Jeff Linton  
President  
BCMB

A handwritten signature in black ink, appearing to read "T. Nickel".

Trevor Nickel  
President  
ABDA

A handwritten signature in black ink, appearing to read "Guy West".

Guy West  
President  
ABCRC

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BEVERAGE CONTAINER RECYCLING INDUSTRY OF ALBERTA



## Good Management Practices for “High Strength” Wastewater in Depots

“High Strength” is a term used in this notification to describe wastewater that contains high concentrations of pollutants such as sugar, solids or fat, oil and grease, as opposed to the “Low Strength” grey water or sewage that is typically produced by commercial operations and disposed of in municipal sanitary sewers. In our industry, High Strength wastewater is largely the result of residual liquids in the containers; the most significant contributor being the concentrated sugar solutions that make up many beverages. When tested from an environmental standpoint, these residual liquids are heavy pollutants. High Strength wastewater from our industry may also be quite corrosive due to the low pH levels inherent in the original products.

Both municipalities and environmental regulators have concerns over large amounts of High Strength wastewater being released into the environment:

- a. Municipalities have concerns about large amounts of High Strength wastewater being disposed of in municipal sanitary sewers and have been known to bring surcharges to bear. When advised (with scientific back-up) that wastewater treatment plants require the chemical reaction generated by High Strength wastewater for efficient wastewater treatment, some municipalities may be willing to work with our industry and, in that sense, see us not as polluters, but contributors to the wastewater treatment; and
- b. Environmental regulators have concerns where High Strength wastewater is released into the environment and causes a significant adverse effect. Excessive levels of pollutants have been found to harm natural environments by stimulating too much bacterial activity which chokes aquatic ecosystems by removing available oxygen. Environmental regulators have been known to impose fines and other penalties.

As an industry, we have the collective responsibility to manage any adverse effects on the environment, especially as it relates to High Strength wastewater. To that end, we have identified and recommend the following good management practices for handling High Strength wastewater:

1. Never discharge High Strength wastewater directly into the environment (e.g. storm sewers). It is best practice to ensure that this material gets treated prior to discharge;
2. At your discretion, refuse to accept containers that have not been emptied or otherwise contain a significant amount of liquid residue. If you do accept these containers, empty them into the municipal sanitary sewer system with plenty of rinse water. As these containers add up, the amount of High Strength wastewater generated by operations will grow;
3. Dispose of relatively small amounts of High Strength wastewater into the municipal sanitary sewer system, provided that such wastewater is diluted with

water to ensure the relative concentration of pollutants is reduced and any corrosive effects are minimized;

4. Larger volumes of High Strength wastewater (e.g. wastewater produced by compaction equipment) may require special management if a municipality finds sanitary sewer disposal problematic:
  - a. Dilution with water (even rainwater) may be an option;
  - b. Absorption onto a dry media such as sawdust and subsequent disposal as a solid waste (best practice is to send to environmentally friendly composting) may be an option;
  - c. Capture and disposal as a liquid waste to an energy-recovery facility may be an option. Note that several anaerobic digestion facilities are operating in the province and may accept this material as feedstock; and
5. Very large volumes of High Strength wastewater (such as produced by processing facilities with balers) will almost certainly require special management. ABCRC engages vacuum truck services to collect and deliver all of its wastewater directly to the treatment facilities of either the City of Edmonton or the City of Calgary and is exploring other options, such as the use of treatment tanks to treat wastewater prior to discharge.