

# LIQUID INDUSTRIAL BY-PRODUCTS INC. BY-PRODUCT ACCEPTANCE PROCESS

## By-Product Acceptance Process

The by-product acceptance process is designed to ensure that Liquid Industrial By-Products Inc. (LI) accepts only by-product streams that it is authorized to accept based on applicable law and regulations, and to specifically exclude hazardous waste. The process is based on LI's review of various types of information. Some by-product streams will require more information than others, depending on the nature of the by-product stream and the information furnished by the generator of the stream. In nearly all circumstances, LI will require laboratory testing and analytical data for the by-product stream, either from the generator or as obtained by LI. Occasionally common by-product streams that are well-understood in the industry, and by LI, may not require laboratory analysis. The general steps in the acceptance process are summarized below.

### 1. Completion of Liquid Industrial By-Product, Inc. Generator Profile Form

- a) A LI Generator Profile Form will be completed and signed by the generator of the by-product stream.
- b) Safety Data Sheets (SDS) for major constituents of the by-product stream will accompany the Generator Profile Form.
- c) Existing laboratory analysis of the by-product will be provided to LI.
- d) Completed Generator Profile Form is to be reviewed by LI for content and accuracy.
- e) If the Generator Profile is acceptable, continue to Step 2 or 3 as applicable.
- f) If the Generator Profile content is inaccurate or otherwise unacceptable, LI will contact the Generator to request additional information and/or clarification.
- g) LI must be satisfied that the by-product stream is acceptable, or the by-product stream may be rejected.

### 2. LI Treatability Study (if sample is required)

- a) The LI plant manager or treatment personnel will perform a *jar test* on the sample, based upon the number of gallons that the proposed by-product sample represents.
- b) The sample will be tested for odor, percent solids, treatability, chemical oxygen demand (COD), pH, and solubility; and will be given a torch test as applicable.
- c) The plant manager will make recommendations to the sales personnel regarding possible by-product stream acceptance or rejection.

### 3. By-Product Stream Analytical

- a) *Groundwater or leachate by-product streams*, depending on the nature of the stream, may require analysis for: pH, total metals, flashpoint, chlorinated volatile organic compounds (CVOCs), benzene, toluene, ethylbenzene, and xylenes (BTEX), and total phosphorus.
- b) *Active industrial by-product streams*, depending on the nature of the stream, may require analysis for: pH, toxicity characteristic leaching procedure (TCLP) volatile organic compounds (VOCs), TCLP semivolatile organic compounds (SVOCs), TCLP metals, which may include Michigan metals (copper and zinc), polychlorinated biphenyls (PCBs), flashpoint, reactive cyanide, and reactive sulfide.

- c) Used oil by-product streams, subject to limited exceptions, based on SDSs and/or the nature of the process, will require analysis for total halogens.

**4. By-Product Approval Number**

- a) Once the General Manager or Operation's Manager have approved the Generator Profile Form, and accepted the SDS information, the plant treatability study, and the by-product analytical, as applicable, LI will assign an approval number to the by-product stream. The approval number will be entered on each shipping paper related to that by-product stream.
- b) Thereafter, each 12 months from date of issuance, the stream will be reviewed and re-approved via the re-approval notice.
- c) Depending on the stream and process, every 3 – 5 years, the acceptability of this stream will be reviewed, potentially requiring updated analytical.

**5. Incoming By-Product Acceptance**

- a) When a shipment of by-product is received at the LI Facility, verification of the shipment is performed. Verification activities include, as applicable, container receipt inspection, a check for viscosity, debris content, visual and odor inspections, sampling of the COD and treatment tests. If any problem is found, the by-product stream may be rejected.