



# Reclaim Wastewater For Pennies!

## Battery Wash Recycling System

- Automated single structure Recycling System
- Provides closed loop supply and return of wash water to a Battery Wash Chamber
- Constructed from high grade steel and polypropylene plastic ensures durability
- Automatic pH adjustment of return wash water effluent for removal of hazardous materials, such as heavy metals



- Battery Wash System removes hazardous suspended solids and contaminants
- Wash water effluent micron filtered both before and after treatment
- Filtered contaminants are captured in non-leachable sludge on filter bed
- Filter bed automatically deposits sludge into filter lined deposit bed where it dries

### How It Works!

- The Battery Wash Recycling System receives dirty wastewater pumped from the Battery Wash System for treatment. First, an integral automatic pH adjustment control activates to raise the water to a neutral (safe level) pH of 8 for the removal of heavy metals. In the second step, a reactive separating agent is introduced to the water and agitated, allowing the separating agent to encapsulate the contaminants and form large flocculent.
- Using gravity flow, the treated water is separated from the floc by passing through an automatic deep bed filter. The captured sludge is conveyed to a sludge catch bin, where it dries and hardens into a non-hazardous, non-leachable sludge. The sludge is certified landfill friendly for standard trash disposal.
- This is a closed loop system that removes hazardous contaminants and particulates, insuring that the recycled water is cleaned to continuously supply the battery wash cabinet. In addition, the recycler system is constantly ozonated to remove bacteria (BOD) for odor control.



Manufactured by: HPI Processes, Inc.  
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## ROC 2—BWRS Typical Performance Test Reports

### Wastewater Evaluation Report

Parameter (in ppm or mg/L)	Untreated	After One Treatment
Appearance	Grey, Cloudy	Colorless, Very Slight Cloudiness
Suspended Solids	3198	170
pH	2.93	8.48
Oil & Grease IR -hexane	70	1.5
Chemical Oxygen Demand (COD)	1120	950
Total Organic Carbon (TOC)	542	295
Phosphorous	0.86	0.25
Cadmium	0.13	<0.005
Chromium	0.67	<0.005
Copper	5.3	0.22
Nickel	0.41	0.01
Lead	232	0.03
Zinc	4.6	<0.02
Iron	497	0.67

### Sludge Evaluation Report

Metals (mg/L)	Submitted Sludge	Limits
Cadmium	0.01	1.0
Chromium	<0.005	5.0
Lead	2.8	5.0
Silver	<0.02	5.0
Arsenic	0.04	5.0
Barium	<0.005	100.0
Mercury	<0.02	0.2
Selenium	<0.02	1.0

## Technical Specifications

460 Volt—Three Phase—15 Amp	UV Ozone Generator
77 1/2" X 51 1/2" X 89"	Integrated Alarm for Operator Notification on Low Supply (Paper Low, Flocculent Low, Caustic Low)
2 GPM Wash Water Recycler w/ Automatic pH Adjust	Sump Tank—185 Gallon Capacity
100 lb. Flocculent Hopper	160 Gallon operating level automatically supplied from City Supply.
Automatic Indexing Bed Filter—8 sq. ft. 8 oz. Filter Paper—500 yards	