

Revolu+ION[®]

CLEAR WATER SERVICES, LLC's newly designed Revolu+ION is the state-of-the-art control unit in the stormwater treatment industry. The Revolu+ION is designed to treat sediment-laden stormwater, ground water and industrial wastewater. It is a mobile unit, which can easily be moved from location to location. The Revolu+ION is the control center for a modular system that allows multiple constituents of concern to be addressed besides turbidity and pH such as metals, hydrocarbons and pesticides. It is not only a control unit for the treatment system but also acts as an on-site laboratory, monitoring station, and weather station.

The Revolu+ION is equipped to remotely transmit water quality data and to send remote alarm data information to the project manager when site specific situations arise.

SYSTEM SAFEGUARDS

If water quality characteristics change unexpectedly, the Revolu+ION safeguards will ensure that only treated water that meets your desired discharge criteria will be released to your discharge location. On the rare occasion that treated water does not meet the desired parameters, it will be re-circulated to be treated again. In addition, the on-site weather station, float system, and the text messaging alarm warning provide a safety network unlike any other in the industry. These safeguards provide you the assurance that the Revolu+ION can keep you in compliance even in the worst conditions.

PERFORMANCE

The Revolu+ION control unit has been designed after years of in-field work for optimum performance. It is able to treat influent water of over 1000 NTU to below 10 NTU at 500 gpm.



QUICK FACTS

- Modular unit capable of addressing multiple pollutants of concern
- System safeguards to disallow discharges above preset parameters
- Monitoring of influent and discharge water
- Radio telemetric data collection & transmission
- Self contained lab and weather station



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Revolu+ION[®] Model Specification

Your Clear Water Quality Solu+ION!™

OVERVIEW

- 500 GPM NOMINAL DISCHARGE CAPACITY (W/ 54-4 SAND FILTER COMPONENT)
- MOBILE CESF CONTROL UNIT WITH QUICK-DISCONNECT PLUMBING AND ELECTRICAL CONNECTIONS
- pH ADJUSTMENT, PRETREATMENT, & ENHANCED MIXING CAPABILITIES
- MANUAL OVERRIDE TOGGLE SWITCHES FOR ALL AUTOMATED DEVICES
- AUTOMATED FEATURES:
 - DISCHARGE/RECIRC CONTROL
 - BACKFLUSH CONTROL
 - AUTOMATED MICRO-PACE CHEMICAL INJECTION ADD-ON READY
 - ALARM ANNUNCIATION & TEXT MESSAGING TRANSMISSION
 - PUMP CONTROLS

TREATMENT CAPACITY

- DISCHARGE/TREATMENT RATE: 350 - 600 GPM
- PRETREATMENT RATE: 500 - 1000 GPM

WATER QUALITY PARAMETERS

- TURBIDITY: PRETREAT & MAINLINE INJECTION PORTS
- pH ADJUSTMENT: PRETREAT INJECTION PORTS
- OTHERS AS NEEDED

SAFETY FEATURES

- FIRE EXTINGUISHER
- BUILT IN EXTERNAL LIGHTING WITH AVAILABLE MOTION-DETECT ADD-ON
- FIRST AID KIT
- EYEWASH STATION
- CPR MASKS
- UNIT IS SECONDARILY CONTAINED FOR LIQUID STORAGE

OVERVIEW

Clear Water Services' newly designed Revolu+ION Model CESF-ENCL20-PLC SYSTEM is the state-of-the-art control unit in the storm-water treatment industry. The Revolu+ION is designed to treat sediment-laden stormwater, ground water, and industrial wastewater with influent turbidities reaching upwards of 7000 NTU by employing a specified flocculent to the inflow. The Revolu+ION is a highly mobile unit which can easily be moved from location to location. The Revolu+ION is the control center for a "plug-n-play" system that allows multiple pollutant constituents of concern to be addressed besides turbidity and pH, such as metals, hydrocarbons and pesticides. The Revolu+ION is not only a control unit for the treatment system but also acts as an on-site laboratory, monitoring station, and weather station.

DATA STORAGE

- AUTOMATED WEB BASED DOWNLOAD CAPACITY
- DATA RETENTION CAPACITY: UP TO 48 HOURS BETWEEN DOWNLOADS IN AN EMERGENCY
- RECORDS DATA ON TIME-WEIGHTED AVERAGES OVER 15 MINUTE INTERVALS

DATA POINTS

- pH: PRETREAT, INFLOW, DISCHARGE
- TURBIDITY: INFLUENT, DISCHARGE
- FLOW: PRETREAT, INFLOW, DISCHARGE
- PRESSURE: PRE-SAND FILTER, POST-SAND FILTER
- ENVIRONMENTAL: RAIN EVENT, TEMPERATURE WITH TEXT MESSAGE ALARM SYSTEM
- TANK LEVELS: FLOAT/LEVEL TRANSDUCER WITH TEXT MESSAGE ALARM SYSTEM
- POND LEVELS: FLOAT/LEVEL TRANSDUCER WITH TEXT MESSAGE ALARM SYSTEM

AUTOMATED FEATURES

- PNEUMATIC DISCHARGE/RECIRCULATION VALVE SELECTION: PLC CONTROLLED BASED ON REAL-TIME DATA AND ADJUSTABLE SET-POINTS
- ALARM ANNUNCIATION & TEXT MESSAGING
- DATA COLLECTION
- DATA TRANSMISSION
- AUTOMATED PUMP CONTROLS
- CHEMICAL INJECTION: ADD-ON CAPABILITY FOR AUTOMATIC CHEMICAL DOSING ADJUSTMENTS

MODULARIZATION

- CAPABLE OF ADDING IN-LINE POLLUTANT SPECIFIC FILTERING SYSTEMS
- UNITS CAN BE PLACED IN SUCCESSION TO INCREASE THE ABILITY TO HANDLE VERY HIGH FLOW RATES