

The Bio Complete Water Restoration System is a biological process that uses naturally occurring microbes to remove car wash chemicals out of used water. The resulting clean water can be reused in the car wash.

The Process

Solids Separation

Via gravity, solid matter suspended in the water settles to the bottom of a series of tanks. These solids can then be collected and hauled away.

Aeration

Used water enters the aeration tank where oxygen is infused into it. This infusion causes the naturally occurring microbes to switch from their anaerobic to aerobic state. In their aerobic state these microbes give off odorless carbon dioxide (CO₂) gas.

Cyclonic Separation

From the aeration tank, the used water is pumped into a series of cyclones that separate out any remaining suspended solids larger than 5 micron (approximately the size of one human blood cell).

Biological Consumption

After cyclonic separation is complete, the used water enters the bio tank where naturally occurring microbes consume the car wash chemicals.

Clarification

Once the chemicals are removed, the water enters the clarifier tank. At this point, dead microbes settle to the bottom of the tank where they are pumped out daily.

Clean Water Re-pressurization

The clean water then gravity overflows into the clean water tank where it is stored until it is needed in the wash. On demand the water is re-pressurized and sent back to the wash for use.



System Configuration

The Bio Complete Water Restoration System can be installed in the following configurations and sizes:

- Above ground in PE tanks where equipment room space is available.
- Below ground in concrete or fiberglass tanks.
- The Bio Complete Water Restoration System can be custom-built to any capacity.
- Standard sizes range from 3,000 to 20,000 gallons per hour.

How the Bio Complete Differs From Other Water Recycling Systems In The Industry



All of our systems use natural aeration to eliminate odor from used wash water. We guarantee NO ODOR with our systems



None of our systems use dangerous ozone. Ozone is ineffective at removing odor and chemicals from used wash water. Ground level ozone at high concentrations has been found by the EPA to cause health effects ranging from headaches to long-term lung damage to death



Naturally occurring, harmless microbes consume chemicals out of the used wash water as it passes through the bio tank



Reuse 100% of the used water collected into the Bio Complete System. Since the chemicals have been removed from the water that goes through the Bio Complete Water Restoration Process, the water is clean enough that it can be used in ALL applications in a wash except to send to an RO for spot free rinse water.



Cyclonically separate out remaining suspended solids down to five micron (approximately the size of one human blood cell)