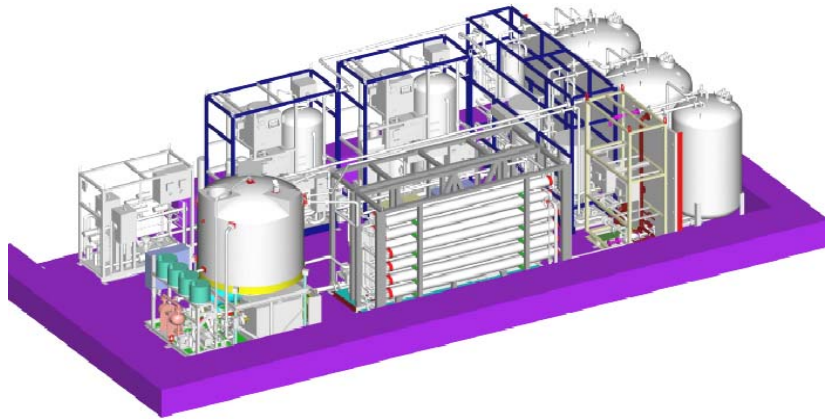




*Integrated Systems  
for Water, Waste-  
water and Wet Waste  
Treatment*



*Streamlined approach using standardized and proven technologies minimizes cost and schedule while providing guaranteed performance without capital expense.*

**FEATURES**

- ✓ No capital required
- ✓ Avantech personnel performs all operations and maintenance activities
- ✓ Staffing 100% dedicated to successful operations
- ✓ Guarantee performance
- ✓ DBO service is applicable to a wide range of treatment technologies

**BENEFITS**

- ✓ Minimizes enduser capital budget
- ✓ Dedicated personnel improves reliability
- ✓ Consistent product quality and compliance
- ✓ Improved operational results
- ✓ Service can be custom tailored to meet nearly all water and waste applications

**END-USER SPECIFIES**

- Process stream characteristics
- Product requirements (*water quality, waste acceptance criteria, etc.*)
- Utilities available (*power, water, air, steam, etc.*)
- Resources available (*site/facility space, support equip., tanks, etc.*)
- Define all regulatory and code requirements
- Payment terms (*price/volume, price/weight, fixed monthly rates, etc.*)

**SUPPLIER PROVIDES**

- Process equipment, instrumentation and controls (*capital equipment*)
- Staffing (*management, tech support, operations, etc.*)
- Consumables (*filters, ion exchange resin, chemicals, etc.*)
- Maintenance (*parts, tools, labor, etc.*)
- Analyses (*process and product characteristics*)
- Infrastructure (*procedures, QC/ QA, training, etc.*)

*Design, Build, Operate*



**KEY VARIABLES INFLUENCING DECISIONS**

At one time it was a given that industrial and government facilities would own and operate all their equipment, but today these choices are made on a case-by-case basis. A few of the key factors influencing decisions are:

- Cost is a key factor that drives the decision to own or lease treatment systems. *Avantech has implemented multiple cost saving initiatives such as standardized design and manufacturing of process components, remote monitoring and personnel multi-tasking (one person operates the equipment, performs maintenance, etc.) that have reduced the outsourcing costs.*
- Increasing treatment requirements (quality, regulatory, etc.), but little corresponding budget. *Avantech can provide all the capital for financing of new equipment, thus facilitating upgrades that were not in the enduser's long term capital budget.*
- Lack of qualified in-house personnel to operate and maintain the processing equipment. *Performance and reliability are improved through implementation of a time-tested employee training and safety program that focuses on specific aspects of processing, including: equipment maintenance, theory and principles, configuration control and regulatory compliance.*

**RECENT EXPERIENCE SUMMARY**

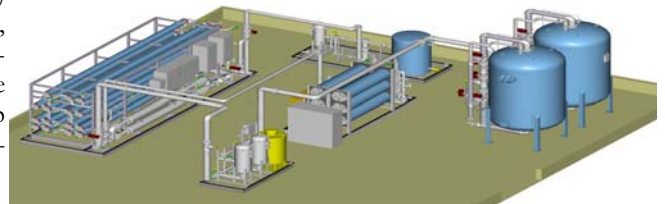
**River Bend Station** Avantech installed new equipment under a DBOO contract for treatment and recycling of liquid radioactive waste. The new equipment, which incorporates Avantech's proprietary Ultrex™ ozonation and reverse osmosis processes, became fully operational in June 2004. Since installation, River Bend has experienced the following benefits:



- Reduced solid radioactive waste generation associated with liquid waste processing by factor of ~10 from 2200 to 231ft<sup>3</sup> (62.3 to 6.5 m<sup>3</sup>)
- Increased processing rate from 50 to 150 gpm (11.36 to 34.10 m<sup>3</sup>/hr)
- Improved quality of recycled water (Salts <2 ppb; Organics <20 ppb; radionuclides <1E-06 μCi/ml)

Avantech operates, maintains and provides all consumables associated with this equipment, thus allowing RBS personnel to focus on power production.

**Puerto Rico—Power Plant Makeup Water Treatment System** Design/Build contract was awarded to Avantech to design, build and commission a makeup water treatment system for purification of well water. The system is rated at 366 gpm (~83 m<sup>3</sup>/hr) and consists of multi-media and cartridge filtration, anti-scalant addition, reverse osmosis, electrodeionization and clean-in-place equipment. Avantech's scope of work requires complete integration of the make-up treatment facility including; automated controls, inter-connecting piping, and start-up support services.



**WE'RE AVAILABLE**

For additional information on this and other AVANTech products and services, please contact us at the office nearest you or at our web site.

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