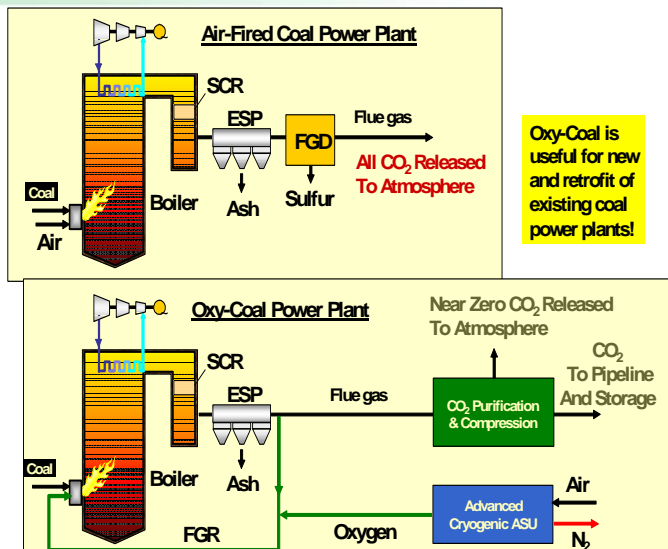


**OXY-FUEL EXPLAINED**

**Coal Power Made Clean with Oxygen**



Oxy-Coal is useful for new and retrofit of existing coal power plants!

On July 31, the BPU announced, with Praxair, Inc., Ecology & Environment, University of Buffalo School of Engineering/Applied Sciences and Dresser-Rand, a potential carbon capture-and-storage (CCS) demonstration project which could bring “cutting-edge” technology to the BPU’s proposed 43-megawatt clean-coal power plant project.

In an effort to make the Circulating Fluidized Bed (CFB) plant project as environmentally-friendly as possible, the BPU contacted Praxair, Inc. of Tonawanda whose personnel had been seeking a good location for a demonstration of its oxy-coal technology.

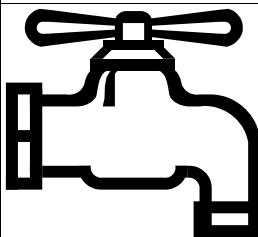
The oxy-coal technique is illustrated in the above diagram. Air is cooled into a liquid in an air separation unit attached to the power plant. Nitrogen is removed, leaving pure oxygen. The oxygen is then combined with recycled flue gas and helps fuel the fire in the power plant. Since the nitrogen has been removed, the only by-products of the fire are carbon dioxide, ash and impurities. The flue gas is cooled and the oxygen intake is heated in the pre-heater. Dust and ash are removed at the bag house. Some of the carbon dioxide is diverted and joined with incoming oxygen while the rest is diverted to a carbon dioxide processing plant. There, the carbon dioxide is purified and compressed for transport and sequestration.

The carbon dioxide can be sequestered deep into the earth. It can also be used to refract old oil and gas wells. Research may result in other uses for the carbon dioxide.

According to Praxair officials, the BPU clean coal project is perfect for Praxair’s demonstration site for several reasons. The location of the BPU is ideal in that Jamestown is near Western New York and Pennsylvania gas and oil wells. Western and Central New

*Continued on page 2*

**Fall Flushing of BPU Water Mains Begins October 6**



The BPU Water Resources Division begins its fall flushing of water mains at 9 p.m. Saturday, October 6, in the Village of Falconer and moves into the northeast section of the City of Jamestown (near JCC and Lutheran Social Services) on Sunday evening, October 7. Flushing will proceed counter-clockwise throughout the

BPU water system nightly from 9 p.m. to 5 a.m., Mondays through Thursdays, until the flushing procedure is complete.

Crews will move through the BPU water system in the following order: the north side of Jamestown, downtown Jamestown, the west side of Jamestown, West Ellicott, the Village of Lakewood, the towns of Busti and North Harmony and the south side of Jamestown. Flushing will conclude on the extreme east of Jamestown (the Allen Street industrial corridor).

The entire process is expected to take three to four weeks. Specific flushing locations will be posted daily on the BPU website and advertised in the newspaper, on cable television and on local radio. Flushing each day is weather permitting.

Water Division customers should be aware of when the utility is flushing in their neighborhoods. If the flushing is taking place in the vicinity of your home, **EVEN IF IT IS NOT ON YOUR STREET**, you may experience roily water. Be careful **BEFORE** drawing water into your hot water systems (heating, clothes washer, or dish washer) by running the water in your bathtub for a few moments to see if it is clear.

“Flushing of the BPU water mains occurs each fall and spring,” says Becky Robbins, BPU Communications Coordinator. “BPU flushing is accomplished by systematically opening hydrants and allowing water to run full force, flushing out sediments and minerals that have settled in pipes.”

The flushing process not only cleans the pipes, but also allows the utility to achieve greater flows through its mains. Flushing also provides BPU employees with the opportunity to inspect valves and hydrants to keep them in top operating condition for fire protection.

The alternative to flushing is adding rust-inhibiting chemicals to the water, according to Robbins.

“The utility has made a conscious effort not to add chemicals to our water supply as they would affect other qualities such as taste, smell and mouth-feel,” continues Robbins, “and, it would increase water distribution costs.”

BPU Customer Service has available a rust stain remover for customers who may get caught with a load of laundry washed by mistake with roily water. Commercial products also are sold at local supermarkets to assist in ridding laundry of rust stains.

The BPU Customer Service Office is located at 92 Steele Street, behind the D building. Hours are 7 a.m.—5:30 p.m. weekdays.



**BPU FALL CLEANUP**  
 Week of September 24th  
 (no recyclables to be picked up this week)  
 Please place cleanup items at the curb after 6:00 P.M. the evening

**BEFORE** your normal garbage pickup.

Items to be picked up curbside include:

- clothes, dishes, pots & pans, toys, garden hoses, lamps, small appliances, small pieces of carpet, microwave ovens and portable televisions.

Small items should be contained in bags.

**WOOD and ALL-METAL ITEMS** should be taken to the landfill or transfer station.

**YARD WASTE** should be taken to the Fluvanna Avenue Yard Waste site.

**Questions?** Call the Garbage Hotline at 661-1651.

**OCTOBER 3rd IS THE FINAL WEDNESDAY THAT THE FLUVANNA YARD WASTE SITE WILL BE OPEN IN 2007.**

**THE SITE REMAINS OPEN 9 a.m.—1 p.m. SATURDAYS THROUGH EARLY NOVEMBER.**

York also contain salt mines in which the carbon dioxide can be buried. The smaller size of the proposed BPU power plant and the fact that the CFB plant is well along in its permitting process make it attractive to Praxair. Finally, the proposed BPU plant can burn bio-fuel, such as wood, tire derived fuels and plants.

Praxair is seeking government funding for the addition to the original BPU project. Additional capital and operating costs associated with the oxy-coal project will be funded by outside sources—not by BPU rate payers or by local taxpayers.

BPU Board Chair John Zabrodsky states that “The addition of Praxair’s technology could take the project’s environmental performance to a whole new level, drawing national and international attention to this initiative.”

According to economic forecasts prepared by Ecology and Environment, Inc., a private consulting firm, the project will generate \$900 million in annual economic impact and 3,500 new jobs in future years (2012-2020) in New York State. Direct annual spending could potentially total \$575 million annually.

Initially, the Jamestown base project will create 300 construction jobs and generate \$29 million in short-term impact for the western New York region.

Also, the University of Buffalo (UB) envisions the establishment of a UB Education and Research Center in Carbon Capture and Sequestration. The Center would cluster a core group of research and education faculty and staff with expertise to study carbon dioxide sequestration, by-product use, sequestration methods and outcomes and the optimal production of alternative fuels.

### EASY WAYS TO SAVE WATER, MONEY AND ENERGY AT HOME

The bathroom is like an indoor “Niagara Falls” that consumes about 75% of the water we use in the house (half of which is heated). Saving the tons of water that flow needlessly through showers, toilets and bathroom faucets is the key to big water and energy savings.



Changing to a low-flow shower head can save water and electricity. In shopping for a conservation shower head, make sure to check the advertised flow rate—the flow should be under three gallons a minute if you want substantial savings.

Many “standard” toilets have tanks that hold 5-7 gallons of water. All of these gallons spill into the toilet bowl when the toilet flushes. An inexpensive panel, called a “dam,” can be set in the bottom half of a toilet tank to hold back about 3/4 of a gallon—without reducing the pressure. Those on the market are made with stainless spring steel inserts, plastic inserts or rubber-coated pieces of metal. They fit between the front and back walls of a toilet tank.

### WATER STORAGE TANK IN BUSTI BACK ON LINE

The Jamestown Board of Public Utilities (BPU) Water Resource Department reactivated the two million gallon, steel water storage tank located on Hunt Road in the Town of Busti back on-line August 23.



Eric Myers & Dave Bergstrom prepare to disinfect the newly-painted Lakewood tank interior.

The 1969 tank serves portions of the Towns of Busti and North Harmony as well as water customers in the Village of Lakewood.

The tank was drained in late May when water paths were re-routed in order to accomplish the restoration. The tank was stripped of exterior and interior paint and recoated.

BPU project engineer James Butler explains that minor structural repairs were undertaken and safety features were added.

Before the tank could be utilized after painting and repairs, it was necessary to disinfect the interior and conduct extensive tests to assure the water quality of water stored in the tank.

### BPU Outside Electricians Move Transformers to Make Way for New BWB Center

BPU Outside Electricians Dave Allen and Jim Baron (top to bottom) install a new pad mount transformer which will serve the BWB Center to be built in the corner block of Washington St. between Second and Third Streets. Power will be re-located from pole-mounted transformers currently on the lot where the building will stand.



The new pad mount transformer is located at the BPU Washington Street sub-station, at Washington and Second Streets.

### Work Continues on New Allen Street Substation



BPU linemen and outside electricians have been working to transfer electrical service to a new substation located on the Allen Street.

Linemen Jeff Ohlssen and Dennis Bouquin are pictured (left to right) activating an electrical circuit at the new substation which primarily serves industrial customers.

BPU Electrical Engineer and Project Director David Paterniti explained that the new substation will contain updated equipment housed in the brick building original to the substation site. According to Paterniti, the impact for BPU customers will be continued reliable service in that service area. The current building, which encloses the older equipment, will be used for storage.



**Question:** Is rusty water safe to drink? According to the *University of California Berkeley Wellness Letter*, although rusty water may look and taste unpleasant, it is not a health concern. (A possible exception is people with hemochromatosis, a rare disorder that causes excess iron accumulation in body organs). On its own, according to the *Wellness Letter*, rust in water is not a sign of harmful bacteria or lead, which are hazards. In fact, the limits set by the EPA for iron in drinking water are based on taste, odor and color, not safety concerns. You’ll know the problem is in the pipes in your house, not the municipal water supply, if rust appears only in hot water, comes only from certain faucets or clears after running for a short time. You can filter the water if it bothers you, but you may want to consult an experienced plumber to find out what device will work best.

A sudden appearance of rusty water, however, can occur if a water main breaks, a fire hydrant is activated or some other disturbance (such as BPU water main flushing) causes a change or increase in water flow. Fall flushing of BPU water mains is scheduled to begin October 6.