

## **Kingston Fossil Plant – Summary of FY 2004 Inspection Report**

After a leak/blowout occurred at the toe of the slope on the east side slope of dredge cells 2/3 on November 6, 2003, dredging operations were ceased immediately and dredge cells 2/3 were drained. This was a localized failure approximately 5' x 10' and was attended to quickly. As the report states, riprap was placed to help stabilize the area, as well as a filter fabric and crushed stone to help contain a seepage found above the failure area. An investigation by EDS Civil Engineering and its design partner MACTEC began immediately to determine the cause of the leak, the best method of repairing the dike, an alternate location for a new dredge cell if needed and if/when dredging operations could resume.

Two additional seeps were noticed on the slopes above the failure area and were recommended to be monitored.

The seeps spotted from the January 19<sup>th</sup> inspection are not located near the dredge cell, but along the dike next to the intake channel.

### **Recommendations:**

#### **Active Ash Disposal Area and Dredge Cells**

- Areas on the dike slopes with sparse vegetation should continue to be reseeded and mulched until a good vegetative cover is present.
- Dredge cell slopes with exposed ash should receive a layer of top soil and be seeded as soon as possible.
- Dredge cell drainage ditches should be kept free of cattails. The existing cattails should be cut.
- Remove trees from the slope of the stilling pool dike. At this point, the trees are small enough to be mowed. Mowing at least twice a year is recommended to control the size of the trees. Preventing the trees from getting larger than 1" in diameter at the ground is preferred. Any trees larger than 3" in diameter at the base must be pulled from the dikes, roots and all. Repair and reseed the area the tree was removed from.
- Repair the ruts in the road along the stilling pool and Dike C by filling with soil, compacting it, grading the road to turn water to the outside and covering the repairs with ¾" crushed stone. It is estimated the repairs will require approximately 20 yards of soil to fill the ruts and 70 tons of stone for cover.
- Plant personnel should continue monitoring the limestone drain area and all exterior dike slopes for seepages, soft wet spots, animal burrowing, sloughing, etc., and notify Lynn Petty of FPG Engineering Design Services., 423-751-6704 of any changes.
- Do not close the valves at the spillway outlet. Closing the outlet valves puts the joints in the pipe under pressure they were not intended to withstand. This pressure could cause the pipe joints to leak and wash out a portion of the dike causing the dike to fail. The valves should be removed when possible.

#### **Coal Yard Drainage Basin**

- Dredge the Coal Yard Drainage Basin to restore its design contours and protect the pumps from further damage. There is an estimated 2,800 cubic yards of sediment in the original pond and an extra

3,400 cubic yards in the "V" section that needs to be removed as soon as reasonable. See the attached copy of 10W225-1.