



February 8, 2012

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Alison M. Rogers  
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US Army Corps of Engineers – Huntington District  
502 Eighth Street Huntington, WV 25701

Re: Consol of Kentucky Inc.  
Buffalo Mountain Surface Mine (S-5018-07)  
Compensatory Mitigation and Stream Restoration Plan  
Responses to Comments of November 8, 2011

Ms. Rogers,

On behalf of Consol of Kentucky Inc., Michael Baker Jr., Inc. is submitting the following responses to comments submitted by the US Army Corps of Engineers (USACE) on November 8, 2011 regarding the Compensatory Mitigation and Stream Restoration Plan (“Mitigation Plan”) for the Buffalo Mountain Surface Mine. USACE submitted comments on the Mitigation Plan as “Attachment C” of a comprehensive list of comments on the entire draft Environmental Information Document (EID) for the project, as submitted to USACE in December 2010. This letter report addresses the eleven comments on the Mitigation Plan.

**1. Identify the Public Service District (PSD) responsible for operation and maintenance of the Delbarton Wastewater Treatment Facility.**

Several years ago the facility was owned and operated by the Mingo County Public Service District. The Town of Delbarton now owns and operates the treatment facility.

**2. Provide a description of the existing condition of the Delbarton Wastewater Treatment Facility. Is it a primary or secondary treatment facility? What is the current treatment capacity of the facility?**

The capacity of the Delbarton Wastewater Treatment Facility is 250,000 gallons per day (gal/day). It currently serves approximately 400 customers and schools, all from the south of the facility. According to preliminary engineering reports (for planned improvements to the system which is detailed in #4 below), the calculated dry weather flow from the existing customers should be approximately 95,000 gal/day. However, deterioration in the 37-year old system leads to infiltration into the receiving pipes, and therefore more demand (i.e., higher volume of liquid) is placed on the treatment plant than would be necessary if upgrades to the system were in place.

The current treatment facility provides secondary treatment of wastewater, which removes the majority (80%-95%) of the biochemical oxygen demand and suspended solids.

**3. If the current facility is a primary treatment facility, would the proposed improvements upgrade the facility to a secondary treatment facility?**

The facility already provides secondary treatment (see #2 above).

**4. If the current treatment capacity of the Delbarton Wastewater Treatment Facility needs to be expanded, what specific improvements are planned?**

Improvements are not currently planned for the treatment facility's capacity in a direct way. Current customers are likely only using approximately 38% of the capacity in dry weather (95,000 gal/day input / 250,000 gal/day capacity). However, because of deterioration in the sewage pipes, infiltration to the system places more demand on the treatment system especially in wet weather and during storm events. Plans are in place (see #6 below) to replace existing service lines to the facility. It is anticipated that this will allow a decrease in the flow from existing connections, therefore allowing more efficient use of the plant's capacity.

**5. Has the PSD applied for grants provided through the USDA Rural Development Program and/or WVDEP Wastewater Improvement Program? If so, did the PSD qualify for one or more of the grants offered through either program?**

The Town of Delbarton has applied for and received the following grants from various agencies including the West Virginia Department of Environmental Protection (WVDEP) Wastewater Improvement Program. Delbarton will receive \$9.5 million from a combination of federal and state sources, as follows:

- \$1.5 million from an Appalachian Regional Commission grant
- \$1.4 million from the Environmental Protection Agency's State Tribal Assistant Grants program
- \$1.5 million from West Virginia's Small Cities Block Grant program; and
- \$5.1 million in loans from the WVDEP.

**6. If the PSD received one or more grants, identify the program, the proposed improvements, and the status of construction/implementation.**

The Town of Delbarton will receive \$9.5 million from a combination of federal and state sources (see #5 above) for improvements to the Town of Delbarton sewage system. Construction will begin in 2012 and will be completed well before development of the post-mining land uses in the mine permit area.

The improvements planned in association with the grant awards include installing more than six (6) miles of sewer pipe, 187 manholes, and 17 grinder pumping stations. Upgrades will improve overall efficiency of the town's water treatment processes. The planned projects also include adding sanitary sewer services to 76 new customers. The upgrades will also expand the system to be able to connect to the planned Mingo County Airport and more residents in the future. All of these planned improvements focus on services to the south and west of the treatment plant.

The Consol mitigation commitment focuses on providing sewer services to customers to the north of the facility. Implementation of the Mitigation Plan will provide a gravity flow sewer to 27 homes in Hell Creek which will connect to a pump station near WV 65 to be pumped in a 1-1/2" force main approximately 2.5 miles to the treatment facility. An additional mitigation commitment will place a 4" force main in the same trench with the 1-1/2" line. The 4" force main will have sufficient capacity to allow other homes/businesses between Hell Creek and Delbarton to connect at some time in the future. Specifically, a 4" force main capacity will allow approximately 228 new households to be connected, as shown in the following calculations:

- i. 4" force main capacity = 100 gal/min X 8 hours/day X 60 min/hour = 48,000 gal/day
- ii. Number of additional homes that could connect = 48,000 (gal/day) / 210 (gal/day/home) = 228 homes.

**7. If the PSD did NOT receive one or more grants, describe the reason they did not qualify. Were the grants denied because of low population densities, or other grant evaluation factors?**

Not applicable (see #6 above).

**8. Are the proposed Delbarton Wastewater Treatment Facility improvements and the potential growth projected for the Delbarton area consistent with the Mingo County Redevelopment Authority Land Use Master Plan?**

**Re. Planning:** The Town of Delbarton experienced a population increase of almost 20% between 2000 and 2010. The Mingo County Redevelopment Authority (MCRA) has been planning for growth, and the highway system and coordination with landowners such as the Cotiga Land Development Company (Cotiga) have been important aspects of that planning. The 980 acres of developed land associated with the Buffalo Mountain Surface Mine post-mining land use is part of the Mingo County Land Use Master Plan, which has been adopted by the County.

CONSOL of Kentucky Inc. coordinated with MCRA as well as Cotiga (landowner for most of the proposed permit area), the Federal Highway Administration, and the West Virginia Division of Highways in developing the plan for the Buffalo Mountain Surface Mine post-mining land use. All of these parties signed a Memorandum of Understanding (MOU) in 2007 for coordinating construction and mitigation. Outreach throughout project planning has also included meetings with the Town of Delbarton to address their concerns and facilitate the planning they may need to conduct.

**Re. Treatment Facility Capacity:** Based on numbers known at this time, the following capacity calculations are offered for consideration. Assuming a household averages approximately 210 gal/day of sewage (3 people X 70 gal/person), then the planned additions of customers would have the following demands on the treatment facility:

- i. Engineering plans from grants: 76 customers = 15,960 gal/day
- ii. Buffalo Mountain Surface Mine Mitigation Plan: 27 customers = 5,670 gal/day
- iii. Potential homes that could connect in the future via the 4" force main provided in Buffalo Mountain Surface Mine Mitigation Plan = 48,000 gal/day

These additional inputs total approximately 70,000 gal/day. Adding this input to the 95,000 gal/day from current customers, the total demand predicted from these calculations is approximately 165,000 gal/day. This demand accounts for approximately 66% of the treatment plant's capacity of 250,000 gal/day. Therefore the treatment plant has sufficient capacity for the immediate and future potential customers identified in the Mitigation Plan.

9. **If known, identify the PSD and/or treatment facility that will receive the influent from the proposed 15-foot utility corridor, and/or outline a future coordination plan to address this issue.**

As part of the MOU, Cotiga is bound to provide MCRA a utility corridor to access/serve Cotiga's post-mining land use development. It is the intention of MCRA to secure funding to provide conveyances for wastewater resulting from that development. Because no such development by Cotiga can occur for over 15 years, no definitive plan can be developed at this time. However, Cotiga and the Town of Delbarton, in coordination with MCRA, are in the process of developing a resolution that would, in part, assure that the Town of Delbarton wastewater treatment facility will accept wastewater from Cotiga's post-mining land use development.

10. **The applicant chose to utilize West Virginia Stream and Wetland Valuation Metric (WV SWVM) version 1.0 to evaluate the proposed mitigation described in the June 2010 Compensatory Mitigation Plan (CMP). The WV SWVM worksheets and supporting information were submitted to this office as an Addendum to the CMP in August 2010.**

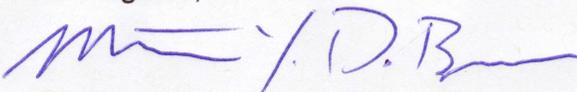
Comment noted.

11. **The applicant has opted to update the WV SWVM valuation to version 2.0 released by the USACE on February 1, 2011.**

An SWVM 2.0 report was produced in August 2011. Because it was understood that the SWVM metric was possibly undergoing changes at USACE, the report was not submitted at that time. One hardcopy and six (6) discs with the digital file of the report are accompanying this letter report. The SWVM 2.0 report is also an addendum to the Mitigation Plan, which is Appendix C of the revised EID.

Sources of the information provided above include E.L. Robinson Engineers, a Sept. 2, 2011 press release from U.S. Representative Nick Rahall's Congressional office regarding the grant awards, and Michael Baker Engineering regarding the Mitigation Plan. If you should have any questions concerning the information provided herein, you may contact me directly at (207) 459-5069.

With Regards,



Martha Y. DoByns  
Technical Manager  
Michael Baker Engineers

Attachments: *West Virginia Stream and Wetland Valuation Metric 2.0 Report for the Buffalo Mountain Surface Mine, August 2011.* 1 hardcopy and 6 CDs.