



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0495
Fax: (304) 926-0463

Joe Manchin III, Governor
Randy C. Huffman, Cabinet Secretary
www.wvdep.org

**ORDER
ISSUED UNDER THE
WATER POLLUTION CONTROL ACT
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 11**

TO: Consolidation Coal Company
ST Rt. 7 and US 19
PO Box 100
Osage, WV 26543

DATE: December 18, 2009

ORDER NO.: M-09-070

INTRODUCTION

The following findings are made and Order issued to Consolidation Coal Company (hereinafter "Consol") pursuant to the authority vested in the Director of the Division of Water and Waste Management under Chapter 22, Article 11, Section 1 et seq. of the Code of West Virginia.

FINDINGS OF FACT

In support of this Order, the Director hereby finds the following:

1. Consol operates various underground mines and associated wastewater treatment facilities in West Virginia including Blacksville No. 2, WV/NPDES Permit No. WV0064602 and Loveridge, WV/NPDES Permit No. WV0040711 which are actively mined and operated in Monongalia County, West Virginia.
2. The discharges from the outlets authorized by the permits flow into Dunkard Creek or a tributary thereof (hereinafter "Dunkard Creek") and have been occurring for many years, providing most of the constituent flow for the immediate receiving waters and providing the water which historically supported the aquatic ecology of the streams. The discharges are primarily a result of the pumping of the Blacksville No. 2 and Loveridge mine pools.
3. Consol entered into WVDEP Order 133 (dated October 26, 2004) and agreed to certain conditions including chloride and benthic monitoring requirements, submittal of a variance application and an appropriate modification application if denied, and waiving its right of appeal.

4. On January 10, 2005, Consol entered into WVDEP Amended Order 133 (dated December 29, 2004) and agreed to certain conditions including chloride and benthic monitoring requirements, submittal of a variance application and an appropriate modification application if denied, and waiving its right of appeal.
5. On June 1, 2007, Consol entered into WVDEP Order 133B (dated June 1, 2007) and agreed to certain conditions including chloride and benthic monitoring requirements, submittal of plans and status reports, and waiving its right of appeal. Consol also agreed that it may decide not to pursue variances for outlets if interim monitoring results indicate that one or more discharges no longer present a significant risk of violating the water quality standards.
6. On September 30, 2008, Consol entered into WVDEP Order 133C (dated September 30, 2008) and agreed to certain conditions including chloride and benthic monitoring requirements, submittal of plans and status reports, presenting an oral and written detailed progress report and waiving its right of appeal. Order 133C also approved Consol's Phase I Plan, except insofar as it provides Consol with time to pursue applications for site specific water quality criteria for chlorides. WVDEP made no commitment to approve, disapprove, or take any particular action on discretionary actions taken by Consol. The Order also specified that Consol shall not include applications for site specific water quality criteria or any other kind of variance in its Phase II Plan.
7. As evidenced by Consol's submittal of an Application for Site Specific Criteria for Chlorides for the West Virginia Fork of Dunkard Creek and Downstream Segments of Dunkard Creek dated June 30, 2008, and other pertinent documentation, chloride as well as other pollutants of concern are elevated downstream of Consol's mining facility discharges from Blacksville No. 2 and Loveridge (St. Leo discharge) mines.
8. On or about September 2, 2009 and extending for several weeks thereafter, a massive and devastating fish and mussel kill was reported in the Dunkard Creek watershed which transects both northern West Virginia and southern Pennsylvania. Upon further investigation and examination, WVDEP determined that the fish and mussel kill was the consequence of toxins released from a species of golden algae (*prymnesium parvum*) associated with and commonly thriving in brackish, briny water or water high in total dissolved solids (TDS).
9. On or about September 17, 2009, Consol voluntarily ceased pumping and discharging water from the Blacksville #2 mine pool.
10. Consol has represented to WVDEP its concern for worker safety resulting from the accumulation of water in Blacksville No. 2, and that water removal is necessary to alleviate this concern and to permit continued mining operations.
11. During the investigation and analysis of conditions associated with the fish and mussel kill on Dunkard Creek, WVDEP determined that chloride concentrations ranged from 1380 mg/l to 6120 mg/l with an average of 4116 mg/l over eleven sampling events at Blacksville No. 2 outfall number 005.

12. During the investigation and analysis of conditions associated with the fish and mussel kill on Dunkard Creek, WVDEP determined that the chloride levels in Dunkard Creek exceeded the acute water quality standard for aquatic life use downstream of Blacksville No. 2 outfall number 005. Specifically, chloride concentrations exceeded the water quality criteria limit of 860 mg/l on September 3, 4, 9, 10, 13, 14, 15, 16, 17, and 19 of the year 2009, a violation of WV Legislative Rules, Title 47, Series 2, Section 8. Additionally, similar violations occurred during this time period downstream of Loveridge outfall number 016.
13. During the investigation and analysis of conditions associated with the fish and mussel kill on Dunkard Creek, WVDEP determined that the chloride levels in Dunkard Creek exceeded the chronic water quality standard for aquatic life use downstream of Blacksville No. 2 outfall number 005. Specifically, chloride concentrations exceeded the four day water quality criteria limit of 230 mg/l on September 13-16, 2009, a violation of WV Legislative Rules, Title 47, Series 2, Section 8. Chloride concentration ranged from 1790 mg/l to 3000 mg/l with a four day average of 2255 mg/l. Additionally, similar violations occurred during this time period downstream of Loveridge outfall number 016.
14. During the investigation and analysis, WVDEP collected samples for toxicity at outfall 005 at Blacksville No. 2 and determined by laboratory confirmation that the discharge was toxic for both *Pimephales promelas* and *Ceriodaphnia dubia*, a violation of WV Legislative Rules Title 47, Series 2, Section 3.2.
15. During the investigation and analysis, WVDEP determined that the macro-invertebrate community immediately downstream of Blacksville No. 2 wastewater discharge number 005 was severely impaired and damaged. This determination was made in accordance with applicable and defensible population density protocols. Specifically, the discharge from Blacksville No. 2 caused conditions not allowed to State Water, a violation of WV Legislative Rules Title 47, Series 2, Section 3.2.
16. During the investigation and analysis of conditions associated with the fish and mussel kill on Dunkard Creek, WVDEP determined high levels of selenium existed in Dunkard Creek as a result of Consol's discharges. Specifically, selenium levels were detected in-stream at concentrations of 107 ug/l and 32.8 ug/l on two separate dates. The chronic and acute water quality criteria limit for selenium is 5 ug/l and 20 ug/l respectfully.
17. Consol has represented to the WVDEP its commitment to construct multiple wastewater treatment facilities capable of achieving final effluent limits and water quality standards for its Dunkard Creek facilities by May 31, 2013. Further, Consol has represented to WVDEP its commitment to construct wastewater treatment facilities capable of achieving final effluent limits and water quality standards for additional Monongahela River facilities that are the subject of WVDEP Order 133C by September 30, 2013.

ORDER FOR COMPLIANCE

And now, this 18th day of December, 2009, Consol is hereby ORDERED by the Director as follows:

1. Consol shall immediately take all measures to initiate compliance with all terms and conditions of its WV/NPDES permits.
2. Within ten days of entry of this Order, Consol shall submit for WVDEP approval a proposed corrective action plan and compliance schedule, outlining its short-term wastewater treatment strategy for Blacksville No. 2 and Loveridge (St. Leo) mines reflecting how and when Consol will achieve compliance with all terms and conditions of this Order. This plan shall include measures to be taken at the St. Leo facility (Loveridge Outfall 016) to reduce the discharge by 50% within six months.
3. No later than twenty (20) days from the effective date of this Order, Consol shall take all necessary steps to re-route the effluent from its Blacksville No. 2 Acid Mine Drainage (AMD) Treatment Plant (currently configured to discharge from Outlet 005) to Outlet 003. Subject to paragraphs 7 and 9 in the Order for Compliance of this Order, Consol may resume discharges of AMD Treatment Plant effluent only from Outlet 003 after this reconfiguration has been completed. Additionally, Consol may take measures to increase its current pumping capacity from its Blacksville No. 2 mine to the AMD treatment plant, Outlet 003. Within seven days of the effective date of this Order, Consol shall file any application form and other associated documents which may be required, and thereafter Consol shall timely take all steps to complete any minor modification which may be necessary for WV NPDES Permit WV0064602 (Blacksville No. 2) to reflect this change in configuration, additional pumps, etc.
4. On or before April 15, 2010 Consol shall submit to WVDEP the draft engineering details and proposed compliance schedule for its chosen wastewater treatment technology or technologies for its Blacksville No. 2 and Loveridge mines (St. Leo discharge 016) which is capable of achieving compliance with final effluent limits and water quality standards in the Dunkard Creek watershed by May 31, 2013. This submittal will also include such information for Consol's additional Monongahela River facilities and must be complete and meet the full satisfaction of WVDEP. This submittal shall be provided to the WVDEP, Division of Mining and Reclamation, 601 57th Street, Charleston, WV 25304 and a copy provided to the Acting Director, WVDEP, DWWM, 601 57th Street, Charleston, WV 25304.
5. Should Consol fail to comply with paragraph 4 of the Order for Compliance of this Order, WVDEP Order 133, Amended Order 133, Amended Order 133B and Amended Order 133C shall become permanently rescinded for NPDES Permit WV0064602 (Blacksville No. 2) and shall remain so upon termination of this Order.
6. From the effective date of this Order until April 30, 2010, Consol shall monitor for chlorides, TDS, total selenium, BOD, ammonia nitrogen and specific conductance twice each month at all permitted outlets for WV/NPDES Permit No. WV0064602 (Blacksville No. 2) and WV/NPDES permit no. WV0040711, outfall 016 (Loveridge, St. Leo). The

monitoring data shall be submitted to the WVDEP, Division of Mining and Reclamation, 601 57th Street, Charleston, WV 25304 and received no later than the 20th day of the following month and shall terminate upon written authorization by WVDEP.

7. In order to prevent or minimize conditions not allowable in waters of the State, real time in-stream interim limits are hereby established, beginning the effective date of this Order and ending April 30, 2010. From the effective date of this Order through April 30, 2010, in-stream chloride and specific conductance levels shall not exceed the following values at the point of compliance subject to the stream temperature reflected below:

| Stream Temp °F | CL (mg/L) | Specific Conductance (µS/cm) |
|----------------|-----------|------------------------------|
| >50 | 860 | 5400 |
| 45-50 | 1000 | 6100 |
| 40-44 | 1200 | 7100 |
| <40 | 1400 | 8200 |

All values shall be measured at the point of compliance by instrumentation pursuant to paragraph 9. Upon the availability of thirty (30) days of in-stream monitoring information obtained while discharges are occurring, Consol may request that WVDEP re-evaluate the in-stream specific conductance values reflected above. The point of compliance for NPDES Permit No. WV0064602 (Blacksville No. 2) shall be located at a point on WV Fork of Dunkard Creek 200 feet upstream of the mouth of the confluence with Pennsylvania Fork of Dunkard Creek. The monitoring data shall be submitted to the WVDEP, Division of Mining and Reclamation, 601 57th Street, Charleston, WV 25304 and received no later than the 20th day of the following month and shall terminate upon written authorization by WVDEP.

8. Within fifteen (15) days of the effective date of this Order, Consol shall provide WVDEP measures to be taken to routinely monitor for compliance with the interim limits to ensure compliance is achieved. These measures shall be submitted to WVDEP, Division of Mining and Reclamation, 601 57th Street, Charleston, WV 25304.
9. Prior to its resumption of the AMD Treatment Plant Discharge at Blacksville Outlet 003, Consol shall establish and begin to continuously monitor in-stream specific conductance and temperature at the point of compliance. The monitors shall be properly calibrated and have the ability to provide instantaneous readings. The monitoring data shall be submitted monthly to the WVDEP, Division of Mining and Reclamation, 601 57th Street, Charleston, WV 25304 and received no later than the 20th day of the following month.
10. Beginning the effective date of this Order and continuing until April 30, 2010, Consol shall simultaneously monitor for total dissolved solids, chloride and specific conductance at the point of compliance a minimum of three times per week while discharges are occurring. Golden Algae shall be monitored at this same location on a weekly basis. The monitoring data shall be submitted monthly to the WVDEP, Division of Mining and Reclamation, 601 57th Street, Charleston, WV 25304 and received no later than the 20th day of the following month.

11. On or before February 1, 2010, Consol shall propose to WVDEP for approval a pilot wastewater treatment system for a portion of its flow from Blacksville No. 2, Outlet 003. This system shall have the capability to reduce chlorides from the discharge.
12. Consol shall collect, handle and properly execute all monitoring requirements in accordance with the recognized protocol established in the latest edition of 40CFR Part 136.
13. This Order and its authorization to discharge any effluent from Consol's Blacksville No. 2 AMD Treatment Plant shall terminate April 30, 2010 at midnight.
14. Monthly written progress reports and copies of any submittals made pursuant to Order for Compliance paragraph nos. 2, 3, 4, 6, 7, 8, 9, 10 and 11 shall be sent to:

Chief Inspector
Environmental Enforcement - Mail Code #031328
WV-DEP
601 57th Street SE
Charleston, WV 25304

OTHER PROVISIONS

1. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Consol of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Consol to additional enforcement action in accordance with the applicable law.
2. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.
3. This Order is binding on Consol, its successors and assigns.
4. This Order shall terminate upon Consol's notification of full compliance with the "Order for Compliance" and verification of this notification by WVDEP.

RIGHT OF APPEAL

Notice is hereby given of your right to appeal the terms and conditions of this Order which you are aggrieved to the Environmental Quality Board by filing a NOTICE of APPEAL on the form prescribed by such Board, in accordance with the provisions of Section 21, Article 11, Chapter 22 of the Code of West Virginia within thirty (30) days after receipt of this Order.

This Order shall become effective upon receipt.

A handwritten signature in blue ink, appearing to read "S. G. Mandirola", is written over a horizontal line.

Scott G. Mandirola, Acting Director
Division of Water and Waste Management

revised January 2009