

IEPA Log No.: **C-0611-06**
CoE appl. #: **2006-1111**

Public Notice Beginning Date: **July 22, 2011**
Public Notice Ending Date: **August 22, 2011**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Facility Evaluation Unit
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: Capital Resources Development Company, Century Minerals Resources, Inc., 222 N. LaSalle Suite 800, Chicago, IL 60601

Discharge Location: Section 12, T7N, R4E & Sections 7 and 18, T7N, R5E of the 4th P.M. in Fulton County near Canton

Name of Receiving Water: Unnamed Tributaries to the West Branch of Copperas Creek

Project Description: North Canton surface coal mine.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Thaddeus Faught at 217/782-3362.

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Fact Sheet for Antidegradation Assessment
Capital Resources Development, LLC – North Canton Mine – Fulton County
IEPA Log #C-0611-06
COE Log #CEMVR-OD-P-2006-1111
Contact: Mark T. Books at 217/558-2012
July 22, 2011

Capital Resources Development, LLC (“Applicant”) has applied for Section 401 water quality certification for impacts associated with their proposed North Canton Mine, located about 3 miles Northeast of Canton. The property is currently mostly agriculturally developed with the remainder being forested stream corridors. The total proposed surface mining permit area is 1084.5 acres of which 310.2 acres will remain undisturbed, leaving a total of 774.3 acres which will be mined. The current land uses within the proposed permit area are cropland (618.9 acres), wildlife areas (442.9 acres), pasture (12.2 acres), residential (1.8 acres), and roads (8.7 acres). Post mining land use will be Cropland (618.9 acres), woody wildlife habitat (337.6 acres), herbaceous wildlife habitat (77.4 acres), water (41.5 acres), and roads (9.1 acres). The proposed mine is located in portions of Sections 12, Township 7 North, Range 4 East of the 4th P.M. and Sections 7 and 18, Township 7 North, Range 5 East of the 4th P.M. The purpose of this project is to extract bituminous coal by surface mining methods. All economically recoverable coal would be removed during excavation of the area, processed, and sold. Extensive surface and underground mining activities have already occurred immediately west of the North Canton Mine proposed mining area.

Surface mining will progress through the permit boundary in a series of long pits for coal recovery. Overburden will be removed to reach the coal seams with a maximum recovery depth of approximately 46 feet. Once the coal is removed, overburden will be replaced and the area will be restored to approximately original contour, covered with stockpiled soil material, revegetated, and returned to an approved post-mine land use through the Surface Mining Control and Reclamation Act (“SMCRA”) of 1977.

The mine will initially produce about 150,000 tons per year of coal until a complete boxcut is open. The mine is then expected to produce approximately 900,000 tons per year of coal. The current projected life of the mine is about 10 years. Total coal extracted is estimated at 6.80 million tons.

Identification and Characterization of the Affected Water Body.

The Middle Branch of Copperas Creek (segment DZHAB) is a General Use water with a zero 7Q10 flow. As Middle Branch leaves the mine site, the stream has a watershed area of approximately 12.3 square miles. The stream has not been evaluated by the Illinois EPA Surface Water Monitoring Unit. The stream is not an enhanced water body pursuant to the dissolved oxygen water quality standard. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the stream is not listed as a biologically significant stream nor has it received an integrity rating. The same information above applies for the West Branch Copperas Creek. The West Branch Copperas Creek (segment DZHA) feeds Canton Lake approximately 2.5 miles below the outfalls. At the downstream end of the proposed mine site the watershed for West Branch is approximately 6.5 miles. Canton Lake is listed as impaired for public water supply and aesthetic quality uses on the Illinois Integrated Water Quality Report and Section 303(d) List-2006. The causes of impairment are given as total phosphorus, total suspended solids, manganese and total dissolved solids. The partially approved 2008 Illinois Integrated Water Quality Report and Section 303(d) List adds fish consumption as an impaired use and mercury as a cause of impairment.

The Applicant conducted a stream study titled, Stream Bioassessment Canton, West Branch Copperas Creek and Middle Branch Copperas Creek and dated August 21, 2010 which gave the results of a macroinvertebrate and fish study on each receiving stream conducted during July, 2010. The streams were identified as having similar macroinvertebrate populations in the 'fair' range. Fish populations were typical of small streams with the Middle Branch having a few more species because of its larger watershed. No threatened or endangered species were found. The streams were found to be typical small, zero 7Q10 flow for west central Illinois streams. The Applicant has also stated that a significant portion of the streams have steep slopes that result in an increased velocity of flow during rainfall events, thereby carrying significant loads of pollutants, such as sediment. This has caused scouring and erosion within the channels.

During the proposed surface mining operations two unnamed tributaries located within the mine permit area that empty into the West Branch of Copperas Creek will be impacted. Approximately 4,010 linear feet of one tributary will be filled in and/or removed during the surface mining operations. Approximately 5,035 linear feet of the other unnamed tributary will be impounded to create permanent sedimentation ponds which will reduce sediments and other pollutants in stormwater discharges prior to entering into the West Branch of Copperas Creek and ultimately Canton Lake. The Applicant used the Draft Illinois Stream Mitigation Guidance Manual to determine mitigation needs for this proposed mine. The Applicant has stated that three methods of compensation are proposed as part of the stream mitigation plan, including drainage channel creation (stream restoration), riparian buffer creation, and riparian preservation. The stream restoration work consists of creation (establishment) of two meandering streams. Riparian buffer creation will accompany the construction of the drainage channels. The channel that will enter Pond #3, with a length of 3,500 linear feet, will have a riparian buffer of 50 feet on both sides consisting of woody vegetation. The buffer will increase an additional 100 feet on both sides as the stream enters this sedimentation pond. Sedimentation Pond #6, with the length of 3,000 linear feet, will have a riparian buffer of 50 feet on both sides, but will also have additional buffer ranging from 50 feet to 250 feet. Woody vegetation will be established on the eastern side of the tributary to Sedimentation Pond #6, while herbaceous vegetation will be established on the western side of the tributary. Riparian preservation will consist of the preservation of approximately 1,700 linear feet of woody vegetation with a width of approximately 175 feet. This area will consist of forested land on both sides of the West Branch of Copperas Creek starting at Pond #6, (page 5 & 6 *Antidegradation Assessment North Canton Mine* report, May 2010.)

The IDNR WIRT System does not list any threatened or endangered species residing in the project area.

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The pollutant load increases that would occur from this project include some possible increases in Total Suspended Solids ("TSS"). As mining progresses stream flows will be diverted thru six separate sedimentation ponds. TSS will settle out within the ponds, but some amount, regulated by permit standards limits will be discharged. It is anticipated that the TSS level will be similar to or lower than what now presently flows off the unmined site. Sulfate and chloride will remain dissolved in the water and will move through the downstream continuum. Small amount of these substances will be removed by organisms as these substances are necessary for life. No adverse impacts to the receiving streams will occur as all water quality standards will be met.

The Applicant has recently submitted a revised stormwater routing plan for the proposed mine site. The Applicant has stated that the alternate plan includes the routing of all stormwater from disturbed coal seam areas to Ponds #1 and #2, which discharges to the Middle Branch of Copperas Creek. As previously indicated, the Middle Branch of Copperas Creek is not listed as impaired by the Illinois EPA in the 2008 Section 303 (d) list. Local stormwater runoff from undisturbed coal seam areas and from areas that are no longer considered disturbed will remain routed to Ponds #3, #4, #5, and #6, which discharge to the West Branch of Copperas Creek. The benefit of the alternate site drainage plan is that the discharge to the West Branch of Copperas Creek will not increase pollutant loading to the existing water quality within the stream and to Canton Lake. This is directly due to eliminating potentially pollutant heavy stormwater runoff water from surface mine disturbed areas from entering Ponds #3, #4, #5, and #6. (Page 2 *No Net Loading Demonstration West Branch of Copperas Creek North Canton Mine* report dated May 2010.)

Fate and Effect of Parameters Proposed for Increased Loading.

TSS discharging from the sedimentation ponds will be incorporated into the natural load in the receiving streams. No adverse impacts on aquatic life or other stream uses are anticipated since the solids concentration will be similar to that now present on the unmined site. Additionally, since the sedimentation ponds will only discharge as a result of a storm event, the receiving stream will have flow that will dilute the effluent whenever it is discharged. Sulfates, chlorides and manganese from the discharges of Ponds #1 and #2 will constitute an increase in loading to the Middle Branch Copperas Creek as a result of the mining activities. Sulfate and chloride will meet water quality standards at end-of-pipe. Manganese will be granted allowed mixing based on effluent quality estimates. Discharges from ponds #3 through #6 will not result in increases in loading to West Branch Copperas Creek.

Purpose and Social & Economic Benefits of the Proposed Activity.

The surface mine will extract the coal resources of the site. According to the Applicant the new mine will provide jobs for 50 local residents with an annual payroll of approximately \$4 million. In addition, other local businesses would also benefit from the business created by the mine operations. Local and state taxes will increase as result of the mine. Property taxes supporting many facets of local government will increase over that now collected from the existing farmland. Fulton County currently has an unemployment rate of 13.3% and in 2008, 9.9% of County residents were living below the poverty level.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The construction of the proposed project will follow conditions set forth by the Agency and USACE. Erosion control measures will be implemented to prevent additional impacts to the remaining streams and wetlands areas. The Applicant has examined other alternative methods of pollution control for application to the mine operation. This review has demonstrated that not using the preferred alternative of properly designed sedimentation ponds would result in increased costs, additional supervision, increased maintenance costs, may be ineffective, hazardous to workers health and safety, overly burdensome in expense and/or unreasonable and technologically not feasible. This review has determined that sedimentation ponds offer the most effective, efficient, cost effective, safest, and economical solution. The Applicant has also submitted documentation which indicates that the efficiency of Pond #1 for TSS removal would be 97.17% and the efficiency of Pond #2 TSS removal would be 96.6%.

The Applicant also considered other techniques to remove the coal from the mine site. These methods were not considered feasible for removing the coal from this site. Applicant has stated that, "surface mining of coal is used when the coal seam is located relatively close to the ground surface, normally less than 200 feet below the surface." At this site the coal seam is located approximately 25 to 60 feet below

the surface. The Applicant has stated that, “At depths greater than 200 feet, the cost to remove and replace the overburden increases to where the operation is unprofitable. Surface mining is generally safer than underground (or deep) mining because the miners are not exposed to such hazards as roof falls, methane gas explosions, etc. It is also a more productive method of mining. Surface mines average 31 tons of coal per worker per day, whereas in underground mines the overall daily productivity per worker is approximately 11 tons. This is due in some part to the removal of the entire coal seam in surface mining, as opposed to underground methods (especially room and pillar) where some of the coal seam always remains. The high cost of infrastructure is also a reason. Ultimately, it would not be feasible to mine the coal at this site using any other method except surface mining”.

The Applicant initially planned to include a total of 1447 acres into the proposed mine footprint; however, in an effort to avoid and/or minimize impact to protected resources the Applicant reduced the proposed permit acreage request to the current 1084.5 acres.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities

The Illinois Department of Natural Resources was consulted on endangered species issues and concluded in an October 8, 2009 letter that adverse impacts on endangered or threatened species are unlikely; therefore, consultation was terminated.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this antidegradation review summary was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving waters will be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this mine activity will benefit the community at large by providing jobs, local and regional development, and coal that will provide electrical energy. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.