



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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## MEMORANDUM

**DATE:** September 9, 2015

**TO:** Sanjay Sofat, BOW – Division Manager WPC

**FROM:** Bill Buscher, BOW – Manager Hydrogeologic and Compliance Unit

**SUBJECT:** Sunrise Coal LLC – Bull Dog Mine, IDNR Permit Application no. 429  
NPDES Permit # IL0080071 (IEPA Log. No. 4280/14)

This memorandum is an additional response to the Sunrise Coal Company, Bull Dog mine permit application letter and permit information, dated January 16, 2015. The information is in response to the Hydrogeology and Compliance Unit (HCU) review of comments concerning Bulldog Mine permit application, dated September 12, 2014. The HCU provides the following comments for your appropriate action:

The Bull Dog Mine plans indicate a closed loop system for production water use on site. An NPDES discharge permit is required for storm events when onsite impoundments would require relief. Buried concrete pipes from a field tile drainage system are planned to be utilized as discharge points for storm water mixed with mine process wastewater. These field tiles discharge to a stream approximately one mile away from the mine site. The condition of the concrete pipes is not known. By design these concrete pipes are jointed and not well sealed in order to allow infiltration of groundwater from the adjacent soils. This system would function in reverse when surcharged with storm water mixed with mine process wastewater. A significant potential exists for storm water mixed with mine process wastewater to migrate from the field tile drainage system into the adjacent soils and impact groundwater. The outfall maximum discharge concentrations in the draft NPDES Permit are well above the Groundwater Class II standards and existing background groundwater concentrations for the following coal related constituents (see table below).

Bull Dog Mine Discharge Limit Data					
Parameters (mg/l)	Iron	pH	Sulfate	Chloride	Manganese
<b>Effluent Limits</b> (outfall)	6.0	6.5-9.0	1515	500	4.0
<b>Class II</b> <b>Groundwater</b> (offsite)	5.0	6.5-9.0	400	200	10.0

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Discharging storm water mixed with mine process wastewater to the field tile drainage system would appear to allow the violation of the Groundwater Standards which would appear to be prohibited by the Environmental Protection Act as follows.

415ILCS 5/12(a) **Actions prohibited** No person shall: (a) Cause or threaten or allow the discharge of any contaminants into the environment in any state so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matter from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board under this Act.

The HCU recommends that the applicant identify and utilize alternate discharge locations.

CC:

Dora Maschhoff

Stefanie Diers

Rick Cobb

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Central File