AGENDA FOR DISCUSSION BETWEEN ROSEBUD AND THE EPA

A. GENERAL DISCUSSION TOPICS

(1) Background on Rosebud Mining Company and its Operations

(2) Challenged Local Plants and DOE's Study of Electricity Markets and Reliability

(3) New Source Performance Standards and New Plant Builds

(4) Paris Accord Discussion

B. SPECIFIC/TECHNICAL DISCUSSION

(1) NPDES Oversight/Reviews

**Issue:** The EPA conducts in-depth reviews of every mining-related NPDES application. This leaves our Pennsylvania DEP ("PA DEP") regulators wary that they may submit a permit that the EPA will deem incomplete or unacceptable. In other words, the EPA's insistence that it constantly look over the PA DEP's shoulders has made our state regulators gun shy. Accordingly, the permits languish, with some of Rosebud's applications sitting at the PA DEP's offices for more than five years.

**Solution:** The EPA, however, does not need to see every permit. Pennsylvania has primacy over its permits and should have the authority to act without undue interference from the EPA. The states know their constituents and the appropriate environmental considerations better than the Federal government. The states alone are therefore best positioned to review the NPDES permits. Allowing the states to solely review the NPDES permits would improve efficiency, streamline the permitting process, and would ultimately leave the decision-making to those with superior knowledge of the issues. The EPA could then conduct general periodic reviews of the state's NPDES program to ensure compliance with federal regulations.

(2) Specific Conductivity (SC) and Whole Effluent Toxicity (WET) Testing

**Issue:** Despite state push back, the EPA recently compelled certain states to incorporate two ineffective testing standards into NPDES Permits. First, the EPA insisted on an SC standard to measure the dissolved ions in the water as an indicator of aquatic toxicity. Varying geology from state to state, however, leads to large inconsistencies of naturally occurring dissolved ions in the water. This makes a uniform SC standard impractical to implement and a poor measure of mine-related aquatic toxicity.

Next, the EPA forced the implementation of WET Testing in certain states. The intent of WET Testing is to identify impacts to aquatic life in streams by testing the survival rate of indicator or surrogate organisms in the water. It, however, is an ineffective test

that is hypersensitive to the point of absurdity. For example, Rosebud has performed WET testing on drinking water, and the drinking water failed the WET Test every time. If drinking water cannot pass the WET Test, how can Rosebud's mine discharge be expected to pass?

**Solution:** The prior administration's efforts to add more regulation through SC and WET testing is unnecessary inasmuch as the current water regulations already require numerous water quality standards. I understand that the new administration is looking for ways to streamline the regulatory process. Tabling these unnecessary and faulty tests is a good start. If the EPA nevertheless determines that it must implement a measure to test the effects of dissolved constituents in water, it should consider Osmotic Pressure. Osmotic Pressure testing more accurately reflects the causes of aquatic life as compared to SC and WET Testing.

**(3) Manganese in TMDL's**

**Issue:** Manganese is not toxic to aquatic life and does not pose a human health concern in drinking water. It is only listed as a secondary contaminant for public water supplies for aesthetic reasons such as taste, color, and odor. The testing for manganese was previously used as an indicator for other toxic metals; however recent NPDES test results do not show a strong correlation to justify this assumption. Yet, many TMDLs, including the PA Kiski-Conemaugh and Casselman require reductions in manganese loading based on the misapplication of public water supply intake limits to effluent from sites where the receiving streams have ample assimilative capacity. Additionally, Federal Regulations require an average concentration of manganese no greater than 2.0 mg/l and a daily max no greater than 4.0 mg/l. Treatment for manganese to this federal level requires three times the amount of chemicals needed to treat other constituents, oftentimes leading to more environmental harm than benefit.

**Solution:** Manganese limits should be removed from TMDL's as Pennsylvania regulations only require limits for public water supply intakes. Moreover, all federal restrictions outside of public water supply intakes should be lifted since there are no human health or aquatic toxicity concerns associated with its presence.

**(4) Effluent Characterization**

**Issue:** In recent years, the EPA has begun requiring testing for constituents listed in 40 CFR 122.21 (k)(5)(iii)(A) (EPA Table III) commonly referred to as effluent characterization (EC) by many state regulators for mining NPDES permit applications. Many of the EC constituents listed are associated with igneous rocks, and are not present in mine water of the Northern Appalachian coal fields, which are comprised exclusively of sedimentary strata. In addition, the required ultra-low detection limits for these EC constituents are measured in concentrations of parts-per-billion and parts-per-trillion. Not a single laboratory in Pennsylvania (including the PA DEP's own equipment) is able to test to such ultra-low concentrations for certain constituents, and yet the required testing remains.

**Solution:** The EPA should only require EC for those constituents reasonably expected to be present in the discharge and at a level that can be detected by customary lab equipment, consistent with the approach already used for 40 CFR 122.21 (k)(5)(iii)(A) (EPA Table IV).

**(5) Army Corps of Engineers**

**Issue:** Obtaining individual 404 Permits and federally oversighted state permits has become an onerous process that is required to address stream and wetland-related impacts. There is a lack of consistency between the various Regional ACOE Offices, with some offices causing extensive time delays in the permitting process. An example of a lengthy delay is an application submitted by Rosebud to the ACOE for a coal refuse disposal area that was to impact a small tributary of an AMD-impaired stream and several wetlands (largely created by previous logging activities). The permit application process was started in January, 2009, with several field meetings occurring in 2013 and 2014. Now, more than eight years later, a decision on the permit has still not been reached.

**Solution**: The Corps should reinstate the Nationwide Permitting process or set a permit decision timeline that must be met to ensure timely reviews.