WN-16J

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

George Elmaraghy, Chief
Surface Water Division
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049

Re: U.S. Environmental Protection Agency Tentative Objection to Draft NPDES Permit, American Energy Corporation/Century Mine (Bennoc Refuse Disposal Area), Alledonia, Ohio, Permit No. OIL00159*AD, Application No. OH0144576

Dear Mr. Elmaraghy:

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The U.S. Environmental Protection Agency (EPA) has reviewed the Draft National Pollutant Discharge Elimination System Permit (Permit) and Public Notice/Fact Sheet, dated October 30, 2012. On December 19, 2012, EPA submitted to OEPA a letter informing the state that EPA did not receive a complete draft permit record and so was unable to complete its permit review. The December 19, 2012 letter also specified the conditions, per the Memorandum of Agreement with OEPA, that OEPA must meet prior to any final issuance of the permit (see enclosed copy of December 19, 2012 letter). In response to EPA's December 2012 letter, OEPA submitted additional permit and supporting documents information regarding the subject facility which we received on December 20, 2012 and January 4, 2013. The additional information included the September 15, 2012, American Energy Corporation's comment documents to Ohio Environmental Protection Agency (OEPA). OEPA on June 12, 2013 issued a 30-day extension to the public comment period for this draft permit, which will expire July 12, 2013.

In accordance with 40 C.F.R. § 123.44, and for the reasons set forth in this letter, EPA has identified the following significant issues which, if not corrected, should prompt the Agency to object to issuance of the permit. As provided by 40 C.F.R. § 123.44(b)(2)(ii), we are indicating the actions that must be taken by the State to eliminate the objections, including conditions which the permit would include if it were issued by EPA. Based on our review, we have the following tentative objections:

1. The draft permit does not contain the appropriate limit for sulfate, in order to be

protective of water quality criterion for the receiving stream. (40 C.F.R. Part 122.44(d))

EPA would include an effluent limitation for sulfate in the permit of 1684 mg/L. This limitation was derived using OEPA's spreadsheet which had the following formula: Acute WQS for Sulfate= [1276.7+5.508(hardness) - 1.457(chloride)]*0.65. EPA used the same inputs as AEC, which were the average of values from the Ohio EPA online water quality map for Piney Creek at State Route 148: hardness = 283; chloride = 168. OEPA proposed a sulfate limit of 2435 mg/L. The Ohio calculation used the effluent hardness and chloride values of 500 mg/L and 195 mg/L, respectively. EPA would consider protecting the tributary as well as Piney Creek, and the more conservative approach in this case is to calculate the limit based on ambient values rather than effluent values.

The sulfate standard of 1684 mg/L will be conservatively applied as the sulfate limit since the permit and supporting information did not contain sufficient basis/information (i.e. flows, flow determination methods, receiving stream water chemistry data) to estimate available dilution and assimilative capacity. Additionally, EPA does not agree with OEPA's use of the 1.3 multiplier for deriving IMZM values from OMZM values, since insufficient information is available to allow for dilution.

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2. The draft permit does not contain a numeric limit for TDS and inadequately limits the length of discharge and therefore does not protect the receiving water regarding chronic exposure. (40 C.F.R. Part 122.44(d))

   EPA would include monthly average and maximum daily water quality based effluent limits for TDS based on Ohio's numeric water quality standard of 1500 mg/L. If the applicant wishes to pursue an intermittent discharge scenario EPA may agree to alternative methods of implementing the TDS standard, in accordance with how the standard is written and federal regulations and guidance, to ensure protection for chronic exposure.

3. The draft permit does not contain a limit for TDS and does not contain an adequate restriction on discharge.

   OEPA's Captina Creek watershed Report DSW/EAS 2010-4-1, which includes the receiving waters for this permit Piney Creek and unnamed tributaries, notes macroinvertebrate communities are significantly less diverse in lower Piney Creek than in similar Captina Creek tributaries and notes the absence of mayflies due to

mine discharges in watershed. OEPA during its consideration of the WLA for TDS in setting this permits' limits and conditions, must include a restriction to discharges during low flow conditions to address existing and future cumulative impacts to receiving waters.

4. The monitoring frequencies for Pond#001, for several parameters, of once every 2 weeks, is insufficient and inconsistent with monitoring frequencies for Pond #002 for same parameters at twice a week. (40 C.F.R. Part 122.44(C)(3)

   EPA would increase Pond #001 frequencies for these parameters to twice a week for; pH, TSS, chloride, sulfate, selenium, iron and manganese.

5. The permit does not contain limits or requirements for Whole Effluent Toxicity (WET) monitoring and testing.

   EPA would include a limit for acute toxicity if the discharge regime is noncontinuous, and for chronic toxicity if a continuous discharge regime is contemplated.

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6. The permit, as currently written, does not sufficiently ensure assessment for effluent impacts to receiving streams' aquatic biota, if the discharge is of a continuous nature.

   In order to ensure that the narrative standard of no toxics in toxic amounts is implemented in the permit EPA would require instream biomonitoring upstream and downstream of the discharge in Piney Creek. The permit would require biological and water quality sampling and monitoring in Piney Creek upstream and downstream of where the Bennoc Area discharges come into Piney Creek. Upstream sampling and monitoring locations would be required downstream of impacts from other discharges. Additionally, sampling and monitoring would be required in accordance with Ohio EPA and EPA procedures and standard methods.

   Sampling and monitoring would include;

   i. Stream Habitat Evaluation,

   ii. Physical habitat evaluation,

   iii. Biological Community Assessment, and

   iv. Surface Water chemistry

Water sample collection would be required to be completed in accordance with appropriate methods, as outlined in Parts II and III of the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices. Water parameters to be sampled for must include; sulfate, total suspended solids (TSS), total dissolved solids (TDS), acidity, alkalinity, conductivity, chloride, pH, dissolved oxygen, hardness, and the following metals; aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium (total), chromium (hexavalent), cobalt, copper, iron, lead, manganese, magnesium, mercury, nickel, potassium, selenium*, silver, sodium, thallium, vanadium, zinc, cyanide (total) and cyanide (amenable). Field measurements of dissolved oxygen, pH, temperature, and conductivity would be required. Analytical methods required would be in accordance with 40 CFR 136 and Ohio EPA's Manual of Laboratory Operating Procedures. *Low level methods shall be used for Selenium, such that the quantification level is 1.0 ug/L.

v. Field Quality Control Samples

Quality control requirements are also found in the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices.

vi. EPA would include a permit condition to require submitting a sampling and monitoring plan, and annual reports documenting findings and results.

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We look forward to working with OEPA as it revises the draft permit to resolve these tentative objections, to ensure that it complies with the CWA and EPA's implementing regulations, with the permit prior to Ohio EPA proposing a permit for final issuance.

When the Proposed Permit is prepared, please forward one copy and any significant comments received during any public notice period to this office at the above address, attention Janet Pellegrini, NPDES Programs Branch. If you have any technical questions related to EPA's review, please contact Janet Pellegrini of my staff. Ms. Janet Pellegrini can be reached by telephone at (312) 886-4298 or by Email at pellegrini.janet@epa.gov.

Thank you for your cooperation during the review process and your thoughtful consideration of our comments.

Sincerely,

Kevin M. Pierard, Chief
NPDES Programs Branch

Enclosure

cc: American Energy Corporation (Certified Mail Return Receipt to: 43521 Mayhugh Road, Beallsville, OH 43716)
Eric Nygaard, Permit Writer, OEPA

bc: Janet Pellegrini
Reading File?
Gary Prichard, Office of Regional Counsel
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