UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 3 2013

REPLY TO THE ATTENTION OF: WN-16J

**CERTIFIED MAIL 7009 1680 0000 7675 1698**
**RETURN RECEIPT REQUESTED**

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

Re: U.S. EPA Comments on Draft National Pollutant Discharge Elimination System (NPDES) Permit, American Energy Corporation/Century Mine (Bennoc Refuse Disposal Area), Alledonia, Ohio, Permit No. OIL00159*AD, Application No. OH0144576

Dear Mr. Elmaraghy:

The U.S. Environmental Protection Agency has reviewed the Draft NPDES Permit (Permit) and Public Notice/Fact Sheet, dated October 30, 2012. As you may recall, on December 19, 2012, EPA notified the Ohio Environmental Protection Agency (OEPA), by the enclosed letter, that EPA did not receive a complete record for the Permit. As a result, we were unable to complete our review of the Permit. The December 19, 2012 letter also specified the conditions, per the Memorandum of Agreement with OEPA, that OEPA must meet prior to final issuance of the Permit. In response, OEPA submitted additional information regarding the subject facility which we received on December 20, 2012 and January 4, 2013. The additional information included American Energy Corporation's (AEC) comments on the Permit. Recently, on June 12, 2013, OEPA issued a 30-day extension to the public comment period for the Permit which expires on July 12, 2013.

EPA has identified the following significant issues which, if not corrected, may prompt EPA to object to the Permit:

1. The Permit does not contain the appropriate limit for sulfate, in order to be protective of the water quality criterion for the receiving stream. (40 C.F.R. § 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 and OEPA, which were the average of values from the OEPA online water quality map for Piney Creek at State Route 148: hardness = 283; chloride = 168. OEPA proposed a sulfate limit of 2435 mg/L, based on applying the water quality criterion to the downstream Piney Creek but not to the unnamed tributaries

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to Piney Creek to which the facility actually discharges. The Ohio calculation used the effluent hardness and chloride values of 500 mg/L and 195 mg/L, respectively. EPA would protect the unnamed tributaries and Piney Creek, but would use the Piney Creek hardness and chloride values. The sulfate standard of 1684 mg/L would be applied as the sulfate limit because the permit and supporting information did not contain sufficient information (i.e., flows, flow determination methods, receiving stream water chemistry data) to estimate available dilution and assimilative capacity of the unnamed tributaries. Additionally, EPA does not agree with OEPA's use of the 1.3 multiplier for deriving Inside Mixing Zone Maximum Criteria (IMZM) values from Outside Mixing Zone Maximum Criteria (OMZM) values, since insufficient information is available to allow for dilution in the unnamed tributaries.

2. The Permit does not contain a numeric limit for TDS, inadequately limits the duration of discharge, and lacks limitations for low-flow conditions and, therefore, does not protect the receiving water regarding chronic exposure. (40 C.F.R. § 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 as an enforceable provision in the Permit, EPA would consider alternative methods of implementing the TDS standard. To ensure protection based on chronic exposure, such an alternative method should be consistent with federal regulations and guidance.

   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 macro-invertebrate 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 the watershed. OEPA, during its consideration of the WLA for TDS in setting this Permit's limits and conditions, must include a restriction to discharges during low flow conditions to address cumulative impacts to receiving waters.

3. 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. § 122.44(C)(3))

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

4. The Permit does not contain limits or requirements for Whole Effluent Toxicity (WET) monitoring and testing. (40 C.F.R. § 122.44(d)(1)(v))

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

5. 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. (40 C.F.R. § 122.44(d)(1))

In order to ensure that the narrative standard of no toxics in toxic amounts is implemented in the Permit, EPA would require in-stream bio-monitoring 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. The upstream sampling and monitoring locations would be required to be downstream of impacts from other discharges. Additionally, sampling and monitoring would be required in accordance with OEPA 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 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 C.F.R. Part 136 and OEPA'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 submittal of a sampling and monitoring plan, and annual reports documenting findings and results.

In addition to the issues described above, EPA could identify additional potential objections if any of the following occurs:

a. Prior to the actual date of issuance of a Proposed Permit, an effluent guideline or standard is promulgated which is applicable to the permit and which would require revision or modification of a limitation or condition set forth in the Draft Permit;

b. A variance is granted and the Permit is modified to incorporate the results of that variance;

c. There are additional revisions to be incorporated into the Permit which have not been agreed to by EPA; or

d. EPA learns of new information, including as the result of public comments, that causes EPA to reconsider its position.

We look forward to working with you to resolve the issues identified above. Our goal is to ensure that the Permit complies with the CWA and EPA's implementing regulations prior to OEPA proposing the Permit for final issuance.

When the proposed Permit is prepared, please forward one copy and any comments received during any public notice period to Janet Pellegrini, of my staff, at NPDES Programs Branch, Mail Code, WN-16J, 77 West Jackson Blvd. Chicago, IL 60604. If you have any questions related to EPA's review please call me or have your staff contact Ms. Pellegrini 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 7009 1680 0000 7678 5587)
Eric Nygaard, Permit Writer, OEPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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DEC 19 2012

REPLY TO THE ATTENTION OF:

WN-16J

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

Re: U.S. Environmental Protection Agency Request for Complete Record Pertaining 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:

The U.S. Environmental Protection Agency has reviewed the draft National Pollutant Discharge Elimination System Permit (Permit) and supporting documents provided for the AEC Century Mine Bennoc Refuse Disposal that were received by EPA on November 26, 2012. Because of the limited amount of information provided to EPA by the Ohio Environmental Protection Agency (Ohio EPA) to date regarding this permit, EPA is unable to complete our review and determine whether the draft permit meets the guidelines and requirements of the Clean Water Act. To enable us to complete our review, we request the complete record of the permit proceedings relative to Permit No. OIL00159. The complete record should include, but is not limited to, information that the permittee provided to Ohio EPA as required by 40 CFR 122.21(g) (1-7). We also request copies of any public comments that Ohio EPA has received on the draft permit.

I encourage your staff to work with Janet Pellegrini of my staff to transmit the complete permit record and resolve any issues that may exist with the draft permit prior to Ohio EPA proposing a permit for final issuance. Please note that, once Ohio EPA decides that it is ready to finalize the permit, Ohio EPA must transmit the proposed permit to EPA in accordance with Sections V.C and V.D of our Memorandum of Agreement (MOA) with Ohio EPA, prior to final issuance of the permit. In accordance with Section V.E of the MOA, Ohio EPA may not proceed to finally issue the permit until it has either received a letter from EPA indicating that it is not objecting to the permit or the time periods specified in the MOA have passed and Ohio EPA has not received any comment from EPA. Finally, EPA can object to the draft permit (i.e., the permit that Ohio EPA public noticed and sought public comment on) at any time prior to the date that Ohio EPA transmits the proposed permit to EPA for final review in accordance with Section V.C and V.D of the MOA.

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Thank you for your cooperation during the review process. If you have any questions related to EPA's review, please contact Patrick Kuefler of my staff. Mr. Kuefler can be reached by telephone at (312) 353-6268 or by Email at *kuefler.patrick@epa.gov*.

Sincerely,

Kevin M. Pierard, Chief
NPDES Program Branch

cc: American Energy Corporation
Eric Nygaard, Ohio EPA