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Paul Novak Manager
Permits Compliance Section
Division of Surface Water
Ohio Environmental Protection Agency
50 West Town Street Suite 700
Columbus Ohio 43215

Dear Mr Novak

Re NPDES permit for American Energy Corporation Bennoc Refuse Area

On September 6 2013 Dan ill of your office sent an email message to Krista McKim and Patrick Kuefler of my staff with a working draft National Pollutant Discharge Elimination System (NPDES) permit for American Energy Corporation s Century Mine Bennoc attached The Clean Water Act (CWA) and the U S Environmental Protection Agency s implementing regulations require that NPDES permits include technology based effluent limitations and any more stringent water quality based effluent limitations (WQBELs) necessary to meet state water quality standards n a letter dated July 3 2013 EPA expressed concern about the adequacy of the WQBELs contained in a draft permit that the Ohio Environmental Protection Agency (OEPA) had public noticed on October 30 2012 A copy of that letter is enclosed EPA is informally reviewing the working dra sent on September 6 2013 We note based on our review to date that the WQBELs for the total dissolved solids and sulfates have been removed from this draf permit We look forward to working with OEPA to ensure that the permit that is ultimately issued is consistent with the water quality based requirements of the CWA

To assist EPA in its informal review of the permit we request that OEPA provide a written explanation as to why it believes that the working draft permit that was sent on September 6 2013 is consistent with the water quality based requirements of the CWA and EPA s implementing regulations The written explanation should include but not necessarily be limited to an explanation as to whether the permit needs to include WQBELs for total dissolved solids and sulfates and if not why not Please also provide an explanation as to how the permit addresses each of the issues listed in EPA s July 3 2013 letter (see enclosure)

As you know Sections V C V E of the NPDES Memorandum of Agreement (MOA) between EPA and OEPA specify the steps that OEPA must take to initiate EPA s 90 day formal review

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period under Section 402(d)(2) of the CWA and 40 C R 123 44(d) before OEPA can finalize any NPDES permit Specifically if OEPA intends to finalize a permit that differs from the draf permit that OEPA public noticed on October 30 2012 then Section V C of the MOA requires that OEPA transmit the proposed NPDES permit to the Region together with a copy of all statements received from the public notice If OEPA intends to finalize a permit that is identical to the public noticed draft permit then Section V D of the MOA requires that OEPA transmit a letter to EPA indicating that OEPA intends to finally issue the dra permit that had been publicly noticed without any changes and must include with the letter a copy of all statements received from the public notice OEPA has not yet taken these required steps.

Once the proposed permit has been prepared we request that OEPA transmit to EPA copies of the clearly identified proposed permit and all public comments in accordance with Section V of the MOA OEPA may transmit the proposed permit to EPA via email rather than nited States Mail provided that any such email transmission also includes all public comments in accordance with Sections V C and V D of the MOA In this regard please inform us in writing whether OEPA has a pro ected date by which it intends to transmit the proposed permit to EPA and if so what that date is

We look forward to receiving the requested information and assisting you in addressing any permit issues If you should have any questions regarding this letter feel free to contact me or Janet Pellegrini of my staff at 312 886 4298 or pellegrini anet epa gov or ary Prichard of the Office of Regional Counsel 312 353 0570 prichard ga epa.gov

Sincerely

evin M. Pierard Chief
NPDES Programs Branch

Enclosure

cc American Energy Corporation (John M Nagel Coordinator Environmental Compliance)
Certified Mail Return Receipt 7009 1680 0000 7648 0215

Eric Nygaard OEPA
Brian all OEPA

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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 (NPDI)
Permit American E ergy Corporation/Century Mine (Bennoc Refuse Disposal Area) Alledonia
Ohio Permit N O I 00159*A Application No O 0144576

Dear r Elmaraghy:

The S Environmental Protection Agency has reviewed the Draft NPDES Permit (Permit) and Public Notice/Fact Sheet dated October 30 2012 s you may recall on December 19 2012 E A notified the Ohio En iro mental Protection Agency (OEPA) b the enclosed letter that EPA did not receive a complete record for the Permit As a resul we were unable to complete our review of the Permit The De ember 19 2012 letter also pecified the conditions per the Memorandum of Agreement with OEPA that OEPA must meet prior to final issuance of the Permit. In response EPA s bmitted additional information regarding the subject facility which e 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 u y 12 2013

PA 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 th permit of 1684 mg/L This limitation was derive using OEPA s spreadshee which had the following formula: Acute W S for Sulfate 1276 7 5 508(hardness) 1 457(chloride 1 0 65 EPA used the same in uts as AEC and OEPA w ich were the average of values from the OEPA online water quality map for Piney Cree at Stat Rout 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 Cree but not to the unnamed tributaries

to Piney Creek to which the facility actually discharges. The Ohio calculation used the effluent hardness and chloride values of 500 mg/L and 1 3 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 1 4 mg/L would be applied as the sulfate limit but because the permit and supporting information did not contain sufficient information (use, flows, flow determination methods, receiving stream water chemistry data) to estimate a valable di o the unnamed tributaries. Additionally, EPA does not agree with OEPA s use of the 1 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.

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 or 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.

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. § 2 44)

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

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.

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 monitori g upstream and do nstream 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 a discharges come into Piney Creek. The upstream sampling and monitoring locations would be required to be downstream of impacts om other disc arges. 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. Biologica 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. ater parameters to be sampled for must include: sulfate, total suspended solids (TSS), total dissolved solids (TDS), acidity, alkalinity, conductivity, chloride, pH, dissolved o ygen, 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*, ilver, sodium, thallium, vanadium, inc, 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. Part 1 and OEPA s Manual of Laboratory Operating Procedures. *Low level methods shall be used for Selenium, such that the quanti ication level is 1.0 ug/L.
v. Field Quality Control Samples.
Quality control requirements are also found in the Manual of Ohio EPA Surve lance Methods and Quality Assurance Pract ces.
vi. EPA would include a permit condition to require submittal of a sampling and monitorin plan, and annual re orts documenting findings and results.

In addition to the issues described above, EPA ould identify additional potential ob ections if any of the following occurs:

a. rior to the actual date of issuance of a Proposed Permit, an effluent g ideline or standard is promulgated wh ch is applicable to the permit and which would re uire revision o modification of a limitation or condition set forth in the Dra Per it;

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) 886-0298 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

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George Elmaraghy Chief
Surface Water Division
Ohio En nonmental Protection Agency
P O Box 1049
Columbus Ohio 43216 1049

Re S Environmental Protection Agency Request for Complete Record Pe aining to Draft NPDES Permit American Energy Corporation Century Mine (Bennoc Refuse Disposal Area) Allodonia Ohio Permit 1 0159 A Application o 144576

Dear Mr Elmaraghy

The S Environmental Protection Agency has reviewed the draft National Pollutant Discharge Elimination Sys n Permit (Permit and supporting documents provided for the AEC Century Mine Bennoc Refu e Disposal that were received by EPA on November 6 20 2 Because of the limited amount of information provided to EPA by t e Ohio Environmental Protection A ency Ohio EPA) to date re arding this permit EPA is una le 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 f the permit proceedings relative to Permit No OH 00 59 he 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 hat Ohio EPA has received on the dra permit

I encourage your staff to wor with Janet Pellegrin of my staff to transmit the complete permit re ord d resolve a y iss es t may exist with the draft pe t prior to EPA proposing a permit for final issuance Please note that once Ohio EPA decides that it is ready to final e the permit Ohio EPA ust transmit t e proposed permit to EPA in acc rdance with Sections V C and V I of our emorandum of Agreement (MOA) with hio EPA prior to final issuance of the permit In accordance with Section V E of the MOA Ohio EPA may not proceed to fi a y issue the ermit until it has received a le er f m EPA indicating that it is not objecting to the permit or the t e per ods specified in the MOA have passed and Ohio EP 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 r inal review in accordance with Section V C and V of the MOA

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hank you for your cooperation during the review process f you have any uestions relate to E A s review plea e c ntact atr c Kuefler of my staff r Kue er can be re ched by te ephone at 3 2 3 3 626 or by Email a *kue er pat ck a epa gov*

Sincerely

Kevin Pie ard h ef
NP S Prog a ranch

cc American Energy orporation
Eric Nygaard hio EP