

PRAIRIE RIVERS NETWORK

1902 Fox Drive, Suite G Champaign, Illinois 61820

> 217 / 344-2371 217 / 344-2381 fax

www.prairierivers.org

BOARD OF DIRECTORS

VIA U.S. mail and fax to (217) 782-9891 Jon McNussen President Charles Goodall March 30, 2009 Treasurer Brian Anderson Mark Liska Clark Bullard Division of Water Pollution Control Dan Deeb Illinois Environmental Protection Agency Permit Section Eric Freyfogle 1021 North Grand Avenue East Jason Lindsey P. O. Box 19276 Ward McDonald Springfield, IL 62794-9276 Joe Petrv Michael Rosenthal

Re: One Earth Energy, L.L.C. NPDES permit

Dear Mr. Liska:

These comments are submitted on behalf of Prairie Rivers Network (PRN) and the Illinois Chapter of the Sierra Club (SC) regarding the above-referenced draft permit for the discharge of wastewater into Drummer Creek in Ford County, Illinois.

Prairie Rivers Network is the state affiliate of the National Wildlife Federation, a non-profit organization that strives to protect the rivers, streams and lakes of Illinois and to promote the lasting health and beauty of watershed communities. Several of our members and members of the Illinois Chapter of the Sierra Club, a statewide organization representing over 26,000 individuals committed to protecting the Illinois environment, live by or recreate in the Wabash Basin of the Vermilion Watershed and would be adversely affected by a discharge of pollutants that unnecessarily degrades water quality.

PRN and SC object to the draft permit for two reasons. One, we believe the Illinois Environmental Protection Agency (IEPA or the Agency) has failed to properly assess, and then protect, existing uses. Two, the antidegradation assessment has been improperly foreshortened by the applicant's decision to pre-construct and also by the Agency's reluctance to enforce the state's antidegradation regulations regarding the showing of necessity.

Draft Permit Fails to Assure that All Existing Uses Will Be Fully Protected

Illinois antidegradation regulations impose a duty upon the IEPA to assure that permitted discharges will not result in the deterioration of the existing aquatic community by, for example, causing a shift from pollutant-sensitive to pollutant-tolerant species or by a loss of species diversity. *35 IAC 302.105 a*). We have heard from the Agency on numerous occasions that the permit need only assure compliance with applicable water quality standards. This conclusion is an overly narrow reading of the regulation and has been explicitly rejected by the Illinois Pollution Control Board (IPCB).

"While the [Illinois Pollution Control] Board's water quality standards provide a yard stick for assessing the protection of existing uses, an assessment to ensure the protection of existing uses in [a] surface water body or water body segment is not limited to a determination of compliance with existing water quality standards. This is particularly true in situations . . . where the constituents of concern do not have an established water quality standard." *Des Plaines River Watershed Alliance v. Village of New Lenox*, 2007 Ill. Env. Lexis 149, PCB No. 04-88 at [*106].

Instead, the Agency must examine the impact of the increased loadings on the receiving stream, and in particular, on the assemblage of species found there. *New Lenox* at [*107]. Like the receiving stream in *New Lenox*, Drummer Creek has historically supported a diverse assemblage of fish and macro invertebrate communities. And, as in *New Lenox*, it appears that IEPA has once again failed to study the impact of increased loadings on those communities. Despite the fact that Drummer Creek is a Biologically Significant Stream (BSS), there is no indication that IEPA has determined what its existing uses are.

A data inquiry by PRN to the Illinois Department of Natural Resources (IDNR) revealed that the Creek supports high fish and macro invertebrate richness. IDNR sampling downstream of the proposed discharge found twenty-nine (29) native fish species, three of which are considered intolerant to pollution. IDNR also found eleven (11) mussel species including the state-endangered Slippershell and the state-threatened Creek Heelsplitter. Based on the data provided by IDNR, it is appears that Drummer Creek supports cool water species.

I.

The administrative record for this permit must show that IEPA has made a full determination regarding what uses are present and that IEPA has studied the impact of the proposed increase in loadings on those uses, including the impact of loadings on threatened and endangered species. The record must also show that permit modifications were made to ensure no degradation of existing uses.

For instance, the draft permit should be modified to reflect the presence of cool water species. As currently written, special condition 3 contains a table of thermal limitations that appear to be insufficiently protective of existing uses. Temperature water quality data available from IDNR for the months of July, August, September and October show the average range of temperatures to be between 56° F and 76° F, indicating that natural temperatures are significantly lower than the temperature limits set in the permit for this same period of months. As you know, maintenance of natural temperatures is vital for the reproduction and growth of fish and mussels. PRN and SC strongly recommend that the table in special condition 3 be removed from the permit and replaced with a condition that provides the range of natural temperatures found in the stream on a month-by-month basis, and in keeping with the Illinois water quality standard for temperature, prohibits exceedances of more than 5° F above this natural range. See 35 IAC 302.211 d).

Additionally, the draft permit allows for the use of several chemical treatment additives that do not have established water quality standards and whose use is based on estimates and assumptions of water quality, mixing and volume that are expected to render the chemicals non-toxic to the receiving stream. These assumptions regarding toxicity, however, have not accounted for the particular diversity of species in Drummer Creek, but instead rest on yet another assumption that all aquatic life uses are equivalent. In order to meet its legal burden under the state's antidegradation regulations to protect existing uses, IEPA must require verification through monitoring and testing, that the discharge of these additives will in fact be non-toxic to the biological integrity and diversity of Drummer Creek.

II.

One Earth Energy Has Failed to Show That Lowering of Water Quality is Necessary to Important Social or Economic Development

While One Earth Energy's antidegradation alternatives analysis is heads above many others we have seen, the analysis still lacks the financial assessment that makes up the very heart of antidegradation policy. Before the Agency may permit an increased loading, it must demonstrate that the increase is "necessary to accommodate important economic or social development." 35 IAC 302.105 c). The IPCB has interpreted the "necessary" element of antidegradation rules to require a showing that the pollution controls needed to avoid the increase in loadings "will interfere with the proposed development. If not, the lowering of water quality is not warranted." *New Lenox* at [*93-94].

One Earth Energy has submitted a document entitled Revised and Supplemental Information to Pending NPDES Water Permit Application that gives general cost estimates for several pollution control alternatives and in a conclusory manner, dismisses each as economically unreasonable because each involves a cost beyond the applicant's preferred alternative. IPCB has explicitly stated that simple cost estimates are not enough. *New Lenox* at [*95]. The record must include information showing the economic impact of installing additional pollution controls. According to the IPCB, the financial analysis should be consistent with US EPA's interim economic guidance for water quality standards. *Ibid.* The interim guidance provides detailed discussion on each step specific to both public-sector and private-sector projects.

One Earth Energy has failed to show that less-polluting control alternatives will interfere with the proposed development, as the record contains no financial impact analysis whatsoever. For instance, while One Earth has claimed that the Zero Liquid Discharge (ZLD) alternative is both technically infeasible and economically unreasonable, it has failed to provide the financial analysis needed to support its claim of unreasonableness. IEPA has information before it that ZLD is in fact technically feasible. In light of Big River Resources' plan to construct a ZLD facility in Henry County, the Agency must assume that the alternative is feasible until the applicant can adequately demonstrate otherwise. Of course this facility has already been built, making a bit of a mockery of the Agency's NPDES permit process and of antidegradation regulations. Nevertheless, the Agency need not continue to allow permit applicants to improperly narrow the range of feasible pollution control alternatives. One permit denial would send a loud and clear message that pre-NPDES construction is not in permit applicants' best interests.

Thank you for your consideration of these comments. We look forward to your responses.

Sincerely,

And

Kim Knowles Water Resources Specialist

cc:

One Earth Energy, LLC P.O. Box 526 Gibson City, IL 60936

Cindy Skrukrud Illinois Chapter of the Sierra Club Cindy.skrukrud@sierraclub.org