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January 27, 2010

Via email to Darren.Gove@illinois.gov, hand-delivered and fax to 217-785-1225

Darren Gove
Illinois EPA
Bureau of Water—Permit Section
1021 North Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276

Re: IEPA Log No.: C-0263-08, CoE Appl #: CEMVR-OD-P-2008-671, Tradition Investments,
Jo Daviess County: REQUEST FOR HEARING

Dear Darren:

Prairie Rivers Network, Illinois Council of Trout Unlimited, Illinois Citizens for Clean Air & Water and the Illinois Chapter of the Sierra Club request that a public hearing be held to discuss the proposal to grant a 401 certification for impacts to a tributary of the South Fork of Apple Creek resulting from the construction of waste storage and detention ponds at a proposed dairy cow livestock management facility in Jo Daviess County. Members of our groups live and recreate in the Apple Creek watershed and depend on clean waters in area streams for activities including fishing, birdwatching and other wildlife viewing.

Objections

As detailed below, we object to the issuance of the 401 certification for the following reasons:

I. Draft Certification is Not in Compliance with Illinois' Antidegradation Rules

a) The IEPA has Failed to Fully Identify and Characterize the Affected Water Body as Required by 35 IAC 302.105 f) 1) A).

Approximately 300 feet of tributary to the South Fork Apple Creek ("Impacted Stream") is proposed to be filled in by construction of waste storage and detention ponds for the proposed dairy. Mitigation is proposed on-site via restoration activities on a tributary to Wolf Creek ("Mitigation Stream"). Per the Antidegradation Assessment, neither the South Fork Apple Creek tributary nor the Wolf Creek tributary have been evaluated by the IEPA. The Antidegradation Assessment also does not describe any stream assessment performed by the applicant. The lack of site-specific studies of the streams on this site has led the IEPA to wrongly assume that both streams are "likely to be completely dry during late summer/early fall."

Contrary to the Antidegradation Assessment, local residents report that the Impacted Stream and Mitigation Site are perennial streams.¹ Samuel Panno of the Illinois State Geological Survey (ISGS) describes the Wolf Creek tributary as a perennial stream based on hydrogeologic observations:

“for example, the stream that flows along the northwest corner of the Traditional South site is only one of two streams in this area that is perennial at elevations greater than 950 feet above msl. The reason for this may be that the stream is spring-fed.”ⁱⁱ

In addition, during a recent telephone conversation,ⁱⁱⁱ Daniel Johnson, P.E., Chief of the Regulatory Branch at the U.S. Army Corps of Engineers (Corps) Rock Island District office stated that the May 15, 2008 wetland delineation report prepared for Tradition Investments identifies both streams on the project site as perennial. Documentation used for the Corps’ Jurisdictional Determination included a USGS quad sheet on which streams on the project site are shown as “blue line” streams. The Impacted Stream is also described as a perennial stream on an aerial map supplied by Maurer Stutz, Inc.^{iv}

The Antidegradation Assessment states that an EcoCAT report was generated on Jan. 4, 2010 and no records of State-listed threatened and endangered species were found. However, when we ran our own EcoCAT report and included downstream reaches of the Impacted Stream, the report indicated that the slippershell mussel is located within the vicinity of the site.^v We confirmed with IDNR that slippershell mussels have been located 5 miles downstream of the Wolf Creek tributary.^{vi} Slippershell mussel habitat includes headwaters.^{vii} A full assessment of the Impacted Stream should have included a biological survey of the stream for mussels, fish and macroinvertebrates.

b) The IEPA Has Failed to Demonstrate Existing Uses Will be Fully Protected in Accordance with 35 IAC 302.105 c) 2) B) i). and ii).

The proposed fill activity and mitigation will result in the loss of 300 feet of headwater stream. The Antidegradation Assessment fails to recognize the value of headwater streams, stating “The tributary is a headwater stream... and has very limited ability to support a balanced aquatic life community.” In contrast, 43 senior aquatic scientists expressed an alternative view in an October 2001 letter to the Army Corps of Engineers.^{viii} They state: “Headwater streams are essential components of river networks, providing ecological goods and services of value to society” and “We question the basis for the argument that a stream ... may provide ‘few, if any aquatic functions.’ That type of stream can support a diverse and sometimes unique community of aquatic organisms.” Local resident Jeffery Graves reports his personal knowledge that minnows, tadpoles, snapping turtles and raccoons make use of the South Fork Apple River tributary.^{ix}

Both the Impacted Stream and the Mitigation Site are tributaries to the Apple River which flows through Apple Canyon State Park on its way to the Mississippi River. The Apple River and its South Fork are recognized as the home to “a renowned smallmouth bass fishery and one where many Illinois youth encountered their first trout.”^x The IEPA has failed to demonstrate that the proposed filling and loss of an Apple River headwater stream will not negatively impact aquatic life found there, the ecosystem and affect sensitive aquatic life downstream.

In addition, the two streams on site are in close proximity to sites being assessed for inclusion in the Illinois Natural Areas Inventory. Randy Nyboer, Illinois Natural History Survey (INHS) Director of Field Surveys for the Illinois Natural Areas Inventory (INAI) Update confirmed^{xi} that initial surveys were done for four potential INAI sites in Jo Daviess County in the fall of 2009. Three of these sites are on segments of Wolf Creek; two are downstream and one is upstream from the Mitigation Stream. These sites were identified as sedge meadows, a natural community type that is dependent on groundwater. The sites ranged from 1 3/4 to 3 miles from the CAFO facility. These sites could be classified as having statewide significance once additional assessments are completed. In Mr. Nyboer’s opinion there is a

high probability of additional similar wetlands being found in the area immediately south of the Impacted Stream as well as the Mitigation Stream. This year, the INHS will be conducting a full survey of Jo Daviess County, including additional assessments of the four sites already mentioned. The surveys should be completed by the end of summer, 2010.

Last, the Antidegradation Assessment states increases in suspended solids during the construction of this project will be minimized through the use of erosion control measures. We are concerned that Tradition Investments will not implement required Best Management Practices for construction stormwater, as Tradition Family Dairies has already been issued a violation notice for failing to comply with their coverage under NPDES Permit No. ILR10 for other construction activities on the site.

c) The IEPA has Failed to Fully Analyze the Purpose and Anticipated Benefits of the Proposed Activity as Required by 35 IAC 302.105 f) 1) C).

The Antidegradation Assessment asserts that “the project will provide the community with additional employment and economic opportunities.” However, Illinois’ Antidegradation Rule also states at 35 IAC 302.105 c) 2) B) iv) that “The activity that results in an increased pollutant loading will benefit the community at large.” There is ample evidence that this is not the case. The Jo Daviess County Board did not recommend that the Illinois Dept. of Agriculture approve this facility.^{xii} Voters in Jo Daviess County approved an advisory referendum calling for a moratorium on concentrated animal feeding operations (CAFOs) in November 2008.^{xiii} The city council of Galena also has called for a moratorium.^{xiv}

The Antidegradation Assessment does not include consideration of how increased pollutant loading will impact the local economies of tourism and fisheries. Tradition Investment’s project is located in Jo Daviess County, which ranks second in Illinois for overnight tourist visits. The popularity of this tourist destination rests in large part on the beauty of its natural areas and the opportunities its rivers and streams provide for a number of recreational activities. As mentioned previously, the Apple River and its South Fork are a haven for smallmouth bass commercial and recreational fisheries. Increased pollutant loads will negatively impact the health of aquatic species and degrade the quality of streams used for paddling, fishing, wildlife viewing and other water-related recreational activities.

In April of 2008, the Union of Concerned Scientists issued a report *CAFOs Uncovered* that analyzes both the policies that have facilitated the growth of CAFOs and the enormous costs imposed on society by CAFOs.^{xv} For example, remediation of leaching under hog and dairy CAFOs in Kansas has been projected to cost tax payers \$56,000,000, and the Appraisal Journal states home values in CAFO areas decline by 50-90% from their original values. The local group *Helping Others Maintain Environmental Standards* (HOMES) does not support this project and is very concerned not only about property values but also well contamination which might come from the waste pond structure; construction of this pond is the primary activity “requiring” destruction of the Impacted Stream.

d) The IEPA Has Failed to Assess Alternatives in Accordance with 35 IAC 302.105 c) 2) B) iii).

The Antidegradation Assessment states that the impacts to the Impacted Stream have been minimized from 670 to 300 feet of impact. However, with the described mitigation plan, this still results in the loss of 300 linear feet of stream. No other alternatives are described; a number of possible alternatives clearly should have been explored. For example, the impacted stream could be relocated to the east of the proposed livestock facility where a tile line already exists. The alternative of not locating a large-scale livestock management facility in this area of Illinois should have also been considered. The karst

landscape of northwestern Illinois (See map and description at <http://www.isgs.uiuc.edu/maps-data-pub/publications/geobits/geobit7.shtml>, named the karst aquifer of the Galena limestone by Panno in Att. ii) makes the groundwater and connected surface water highly vulnerable to contamination from pollutants such as the animal waste planned to be held in the proposed waste storage pond.

II. Project is Not in Compliance with 35 IAC 501.402- Location of New Livestock Management Facilities and New Livestock Waste-Handling Facilities

a) The Proposed Livestock Facility contains a stream within its boundaries in violation of 35 IAC 501.402a).

The presence of both the South Fork Apple Creek tributary and the Wolf Creek tributary make this site unsuitable for the location of a new livestock management facility per 35 IAC 501.402(a) which states:

‘No new livestock management facility or new livestock waste-handling facility shall contain within its boundaries any stream or other surface waters except small temporary accumulations of water occurring as a direct result of precipitation.’

b) The Proposed Livestock Facility is to be constructed on soils that will not allow it to comply with 35 IAC 501.402g).

This site is also unsuitable as a location for a new livestock management facility per 35 IAC 501.402(g) which states:

‘New livestock management facilities or new livestock waste-handling facilities located on soil types or geological formations where the deposition of livestock waste is likely to cause groundwater pollution shall be constructed in such a way that pollution will be prevented, or supplementary measures shall be adopted which will prevent pollution.’

The Illinois State Geological Survey defines portions of the site as containing very highly sensitive aquifers as shown on the attached map of the site.^{xvi} In addition, ISGS’s Samuel Panno states: “in the event of leakage of the waste lagoons, contaminants could enter the karst aquifer and migrate off site to the southwest (for the Traditional South site) and to the southwest and possibly to the northeast (for the Traditional North site). That is why it is important to characterize the hydrogeology in the vicinity of the dairy sites which, in my opinion, should have been done by the dairy owners during their site characterization efforts.”

The waste storage structure is not made of rigid materials as is required of karst areas, and the ISGS contends that the site was not properly sampled to determine the existence of karst even though this area of the state is under laid by Galena limestone, a karst material.

III. Project does Not Meet the Mitigation Requirements of 33 CFR 332.4b)1) and 33 CFR 332.3f)1)

a) The 401 certification notice does not provide sufficient information on the mitigation plan as required by 33 CFR 332.3f)1) and 33 CFR 332.3f)1)

Tradition Investment plans to construct a large dairy cow livestock management facility capable of holding 5000 dairy cows; 300 feet of an unnamed tributary to the South Fork of the Apple River will be filled to construct a waste storage pond and detention pond. Clean Water Act regulations require “[t]he

level of detail provided in the public notice must be commensurate with the scope and scale of the project,” and “the notice must...provide enough information to enable the public to provide meaningful comment on the proposed mitigation.” 33 CFR 332.4b)1). The 401 public notice states that mitigation for the Impacted Stream will consist of constructing “two riffles within the stream channel to improve the habitat within the tributary” in the Mitigation Stream and planting “approximately 300 linear feet of trees and shrubs...along the stream banks in the vicinity of the riffle structures and associated pools”

We have not been able to confirm the existence or extent of Tradition Investment’s mitigation plan. However, Daniel Johnson of the Corp’s Rock Island District stated he did not see a mitigation plan in the Corps’ file for Tradition Investment’s nationwide permit.^{xvii}

As described in the 401 notice, mitigation for the complete loss of 300 linear feet of stream will be limited to enhancement of 300 linear feet of a different existing on-site stream. The 401 notice fails to provide any information on current conditions and habitat of the Mitigation Stream; it does not contain any explanations on where and how the riffles will be constructed or how the enhancements will “improve the habitat within the tributary.”

The notice also does not contain sufficient information on what aquatic resource functions of the Impacted Stream will be lost, and whether the proposed mitigation will sufficiently replace those lost functions as required by 33 CFR 332.3f)1). In the absence of a functional assessment 33 CFR 332.3f)1) requires “a minimum one-to-one acreage or linear foot compensation ratio must be used.” In this case, 300 feet of the Mitigation Stream will be enhanced instead of restored. Due to the lower environmental benefit of enhancement, we request that the mitigation ratio be increased to a minimum of 2:1. A higher mitigation ratio is also supported by the fact the mitigation stream is located upstream of a potential INAI site.

A public hearing is needed to further discuss these issues and the concerns of our members and other citizens who live and recreate in the area. Thank you for the opportunity to comment on this project.

Please contact us if you have any questions. You can reach Cecily Smith at 1902 Fox Drive, Suite G, Champaign, Illinois 61820, (217) 334-2371, csmith@prairierivers.org. Dr. Skrukrud can be reached at 4209 W Solon Rd., Richmond, IL 60071, (815) 675-2594, cindy.skrukrud@sierraclub.org. Edward L. Michael, Chairman, IL Council of Trout Unlimited, can be reached at 223 Barberry Rd., Highland Park, IL 60035, 847 831-4159, emichael@cs.com. Danielle Diamond, Attorney, Illinois Citizens for Clean Air & Water can be contacted at 181 Illinois Street, Crystal Lake, IL 60014, (815) 403-0278, ddiamond@iccaw.org.

Sincerely,



Cynthia L Skrukrud, Ph.D.
Clean Water Advocate

Attachments & References

- ⁱ Todd Sargent statement, Jan. 25, 2010
- ⁱⁱ Panno, ISGS on area hydrology, Oct. 10, 2008
- ⁱⁱⁱ January 26, 2010 telephone call to Mr. Johnson by Cecily Smith, Prairie Rivers Network (For Reference Only, No attachment)
- ^{iv} MaurerStutz Inc. Aerial-Tradition S Dairy
- ^v Tradition S CAFO EcoCAT report, Jan. 26, 2010
- ^{vi} January 26, 2010 telephone call to Karen Miller, Section Manager, IDNR Division of Ecosystems and Environment, By Cecily Smith, Prairie Rivers Network.
- ^{vii} Slippershell mussel characteristics
- ^{viii} Scientists' letter on value of headwater streams, Oct. 5, 2001
- ^{ix} Jeffery Graves statement to Ed Michael, Jan. 26, 2010
- ^x Trout Unlimited letter, Feb. 24, 2008
- ^{xi} January 25, 2010 telephone call to Mr. Nyboer by Cecily Smith, Prairie Rivers Network (For Reference Only, No attachment)

- ^{xii} Jo Daviess County Board letter to Ill. Dept. of Agriculture, Feb. 19, 2008
- ^{xiii} Newspaper articles on Nov. 2008 vote on CAFO moratorium referendum
- ^{xiv} City of Galena Resolution R-08-10, Sept. 8, 2008
- ^{xv} CAFOs Uncovered (Electronic copy only)
- ^{xvi} Aquifer Sensitivity Map
- ^{xvii} January 26, 2010 telephone call to Mr. Johnson by Cecily Smith, Prairie Rivers Network (For Reference Only, No attachment)