

K Turner comment to IPCB; updated 11/10

PC#14  
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11/14/12

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I am here to talk to you about the minimal required distance separating the aquifer and the bottom of a manure pit. There is none. Right here in Jo Daviess County, the CAFO that was proposed that would have placed the manure pit an average of 7 feet above the aquifer and as close as 3 feet (according to testimony by the senior engineer for the project). Is it prudent to place leakage of 40,000 gallons per day within 3 feet of the aquifer that serves thousands?

I am here to talk to you about safety nets that do not exist. Karst. It is a characterization of the geology, under the soil and difficult to determine by features above the ground. Yet, its presence allows any contamination to travel as fast as miles per hour instead of inches per year. Dangerous enough to be mentioned in the LMFA; we need experts to determine whether there is karst or not. In the case I've been referring to, six different regional to international experts on karst sent letters to the IDOA stating that the area in Jo Daviess County was karst. A sink hole formed near the manure ponds of the large CAFO during construction (Please refer to the pictures that I am providing you that I would like to submit into the record.) Despite the advice of experts and all of the evidence, the IDOA permitted the construction of the facility and its waste ponds with no additional safeguards. I guess it is anticlimactic to state that it ultimately discharged.

I am certainly here to talk to you about current regulations- they are insufficient. I wrote many letters to the IEPA detailing my concerns about the proposed CAFO in our area. I wrote about the two streams on-site and the conduits built from the manure holding ponds directly to those streams. I wrote of the local geology, the expected waste leakage into the site's underlying karst aquifer, and the significant nexus between the aquifer and the leaking manure ponds that would result in the contamination of Illinois surface waters- our waters; our beautiful Apple River- a biologically significant stream and a prized tourist attraction. In addition to contributing to our quality of life, it is an economic engine for the county. I requested the facility be investigated to determine if it should be required to have a CWA NPDES permit. I finally received a letter back from the director of the IEPA stating that no action would be taken until after the facility polluted. There was no evaluation, no investigation. So I turned to the USEPA and provided them the information I provided the IEPA. The USEPA found merit to my concerns and determined that a significant risk was present and proceeded with a CWA Section 308 action on the facility. I still wonder why I had to turn to the federal EPA to do the state's job. A citizen should not have to take these extraordinary measures to protect their children's rights to clean air and water. I spent hours writing letter after letter to the IEPA with no tangible result. As it turned out, the facility was designed to discharge from one of its manure storage ponds, through a pipe, to the stream. In one of USEPA's investigations in March of 2009, it was found this pipe was discharging to the stream from one of the large manure storage structures being built. The facility discharged from other areas of the site on several other occasions as well.

That pollution could have been avoided. I am sensitive to the fact that our state agencies have excellent people working with limited resources in stressful times. My point is to show that the regulatory system is flawed and the state needs stronger regulations to equip the agency to protect the citizens. I know there has been a pattern of regulatory failures beyond my case. The IEPA noted 244 regulatory violations in 2011; including water pollution problems from: 12 pit discharges, 12 field applications, 6 lagoon overflows, 7 intentional discharge/dumpings and others. These kinds of problems could be prevented.

I am here to talk to you about a wiser choice. Wouldn't it be wiser to place the manure farther from the aquifer? Wouldn't it be wiser to place the manure farther from the river? Wouldn't it be wiser to require a registration of large CAFOs? Wouldn't it be wiser to know how many animals were on-site? Wouldn't it be wiser to know if a CAFO has an adequate nutrient management plan? The Illinois EPA needs to have the ability to better regulate these things. There needs to be another check in place besides the LMFA and before pollution occurs.

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So...CAFOs are built too close to rivers. They are built too close to aquifers. They claim no discharge, but they do and often don't get caught or punished. They increase poverty and decrease property values. Heed the plea of the rural areas. Provide us with protection: We require registration; we require greater set-backs from rivers and aquifers, and the next time you hear "zero discharge," please remind yourself "...1,000 gallons per acre per day"...

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## HELPING OTHERS MAINTAIN ENVIRONMENTAL STANDARDS

November 11, 2008

*Via certified mail and email*

Administrator Stephen Johnson  
johnson.stephen@epa.gov  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Regional Administrator Lynn Buhl  
buhl.lynn@epa.gov  
U.S. Environmental Protection Agency  
77 W. Jackson Boulevard  
Chicago, IL 60604

RE: Complaint Regarding NPDES Permit for the Traditions South Dairy of Jo Daviess County, Illinois

Dear Administrators Johnson and Buhl:

On the behalf of Helping Others Maintain Environmental Standards (HOMES) we request that the United States Environmental Protection Agency (EPA) evaluate the Traditions South Dairy facility, located west of Nora in Jo Daviess County, Illinois, to determine whether the facility should be required to apply for a Federal Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permit for its proposed discharges into waters of the United States.

If it is determined that the Traditions South Dairy proposes to discharge into waters of the United States, we request the EPA require the facility to apply for an NPDES permit pursuant to its authority under Section 308(a) of the CWA, 33 U.S.C. §1318 (a).

Should the Traditions South Dairy fail to comply with this requirement, we ask that the EPA seek injunctive relief pursuant to its authority under Section 504(a) of the CWA, 33 U.S.C. 1364 (a), and Sections 309(a)(1) and 309(b) of the CWA, 33 U.S.C. §1319(a)(1),(b), to halt further construction and operation of the facility until an NPDES permit is applied for and all applicable requirements of the NPDES program have been met.

### **BACKGROUND AND BASIS FOR REQUEST**

On or about October 31, 2007 A.J. Bos of Tradition Family Dairies filed with the Illinois Department of Agriculture (IDOA) a Notice of Intent to Construct (NOI) two livestock management mega-dairy facilities, "Traditions North" and "Traditions South," each with 6,850 "animal units" to be located across the street from each other along Mahoney Road in Nora Township, Jo Daviess County, Illinois (hereinafter referred to as the "facility" and/or "proposed operation").

On February 11, 2008, pursuant to procedures set forth in the Illinois Livestock Management Facilities Act (LMFA) (510 ILCS 77 et seq.), the Jo Daviess County Board voted to recommend that the IDOA deny the proposal. This decision was largely based on the threat the facility would pose to surface and related ground water. This was due to the proximity of the facility to biologically significant surface waters and the likelihood that contaminants from manure/urine holding ponds will discharge into them. The negative recommendation by the County Board was consistent with concerns raised by the Illinois Attorney General (*see* Exhibit A), the State Geological Survey (*see* Exhibit B, full report available at: <http://www.isgs.uiuc.edu/education/free-4dl.shtml>), Trout Unlimited (*see* Exhibit C), and the Illinois Lieutenant Governor (*see* Exhibit D).

The CWA and its corresponding NPDES permit program require proposed point source dischargers to apply for and obtain NPDES permits. *See* 40 C.F.R. § 122.21(a), *see also* EPA, Pre-publication Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the Waterkeeper Decision, at 222 (October 31, 2008), to be codified as 40 C.F.R. § 122.23 (d)(1), available at: [http://www.epa.gov/npdes/regulations/cafo\\_final\\_rule\\_preamble2008.pdf](http://www.epa.gov/npdes/regulations/cafo_final_rule_preamble2008.pdf) [hereinafter EPA Revised 2008 CAFO Rule]. The Traditions South Dairy is a point source that proposes to discharge into waters of the United States, but has failed to seek permit coverage.

The facility will confine over 5,000 dairy cows, producing millions of gallons of waste per year. This waste will be discharged through the facility's containment structures, production area, and land application fields into a Tributary of the Apple River and the Wolf Creek, which in turn feed into the Apple River. The Apple River flows through Apple Canyon State Park and empties into the Mississippi River.

According to an analysis of the design specifications, the facility's manure containment structures will have compact clay soil liners with an expected leakage rate of 400 to 600 gallons per acre per day when half full (*see* Exhibit E). The estimated leakage of the Dairy's 40 acres of manure containment structures will amount to millions of gallons per year when the operation commences. This manure is expected to discharge into the underlying karst aquifer, which is documented to have a direct hydrologic connection to surface waters, ensuring the migration of contaminants from the leaking waste lagoons to waters of the United States. The facility also appears to be engineered so that pollutants will be directly discharged into surface waters through an underground pipe or conduit connected to its containment structures and production area.

Because of the size and design of the facility, the hundreds of millions of gallons of waste it will produce, and its location in close proximity to surface waters and atop an environmentally sensitive karst aquifer, discharges from the facility are inevitable and will cause catastrophic damage to the area. It is essential that the EPA take immediate action to evaluate and require an NPDES permit application from the facility to avoid jeopardizing the fragile local ecosystem and the ground and surface waters from which the entire surrounding population depends. Because the proposed facility poses an imminent and substantial risk to the health and welfare of the surrounding population, the EPA is



justified in halting its construction until adequate measures to protect the public have been taken.

## **ALLEGATIONS & FACTUAL SUPPORT**

### **Allegation 1**

#### **The Traditions South Dairy is a “Point Source”**

Under 40 C.F.R. § 122.1, a NPDES permit is required for any point source that discharges or proposes to discharge into waters of the United States. Under 40 C.F.R. § 122.2, a “point source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, **concentrated animal feeding operation**...from which pollutants are or may be discharged.

“Concentrated animal feeding operation” or “CAFO” is defined by 40 C.F.R. § 122.23(b)(2) as an animal feeding operation that is defined as a Large CAFO in accordance with 40 C.F.R. § 122.23(b)(4).

An “animal feeding operation” or “AFO” is a lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any twelve-month period, and where crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility. 40 C.F.R. § 122.23(b)(1).

A “Large CAFO” is defined as an AFO that stables or confines as many or more than “700 mature dairy cows, whether milked or dry.” 40 C.F.R. § 122.23(b)(4)(i).

The Traditions South Dairy is a Concentrated Animal Feeding Operation and therefore is a “point source.”

### **Factual Support**

The Traditions South facility is an AFO where animals will be confined in a free stall barn for a total of 45 days or more in any twelve-month period, and where crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the facility. The facility is a Large CAFO in that it will confine 4,464 adult and 1000 young dairy cows. This constitutes a “point source” under 40 C.F.R. § 122.2.

### **Allegation 2**

**The Traditions South Dairy “Proposes to Discharge” and may Already be Discharging into Waters of the United States. As such, the Facility should be Evaluated by the EPA and Required to Apply for an NPDES Permit.**

According to 40 C.F.R. § 122.21(a)(1) “Any person who discharges or proposes to discharge pollutants must submit a complete application to the Director in accordance with this section and part 124 of this chapter...” It should be noted that this requirement is not limited to the existence of an actual discharge or an in-fact proposal by a person to discharge. *See Service Oil, Inc.*, 2007 EPA ALJ LEXIS 21 (August 3, 2007), *Alaska Placer Mines*, 1980 EPA App. LEXIS 7; 1 E.A.D. 616 (March 10, 1980).

The EPA has offered guidance in determining when a CAFO “proposes to discharge.” In the EPA Revised 2008 CAFO Rule, 40 C.F.R. § 122.23(d)(1), a CAFO “proposes to discharge if it is designed, constructed, operated, or maintained such that a discharge will occur.” Such facilities may include those that pose a higher likelihood of discharges due to certain hydrologic, geographic, and physiographic conditions. Such conditions include: 1) when production areas or containment structures not designed or operated for zero discharge, and 2) failure to have or to implement a nutrient management plan that ensures appropriate agricultural utilization of nutrients. *See EPA*, Proposed NPDES CAFO Rule, 71 Fed. Reg. 37,744, at 37,749 (2006), *see also* EPA Revised 2008 CAFO Rule Preamble, at 24 and § 122.23 (i),(j).

The Traditions South Dairy meets the above criteria. As such, the facility “proposes to discharge” and therefore should be required to apply for an NPDES permit.

### **Factual Support**

The Traditions South Dairy proposes to discharge in that it poses a higher likelihood of a discharge due to hydrologic, geographic and physiographic conditions. In evaluating such conditions, the EPA takes into consideration sensitive geologic and hydrologic settings, which include areas “such as karst, fractured bedrock or other shallow/unconsolidated aquifers.” *See* Pre-publication Proposed CAFO Preamble and Rule for the National Pollutant Discharge Elimination System Permit Regulations and the Effluent Guidelines and Standards for Concentrated Animal Feeding Operations, at 138-142 (December 15, 2000).

In evaluating the Traditions South’s proposed discharge, it should be kept in mind that that the bedrock underlying and surrounding the facility is made up of Galena Group Carbonate Rock, which constitutes a karst aquifer (*see* Exhibit B). Further, the site is located in an environmentally sensitive area. According to the Illinois State Geological Survey (ISGS), portions of the site are located within an area denoted as “VERY HIGH SENSITIVITY” (*see* Exhibit F). According to Sam Panno of the ISGS, because of the karstic nature of the site, any areas currently denoted as “LOW SENSITIVITY” would qualify as “HIGH SENSITIVITY” should excavating, trenching, or sediment removal occur on-site.

### The Traditions South Dairy Proposes to Discharge because its Containment Structures and Production Area are Designed to Discharge.

The confinement facility will house approximately 5,500 cows. Its manure holding ponds will cover an area totaling 43 acres (*see* Exhibit G). The design specifications call for a two foot compacted clay soil liner with a saturated hydraulic conductivity of less than  $1 \times 10^{-7}$  cm/sec. *Id.*

An analysis of the facility's design specifications was provided by Dr. Peter J. Huettl, President of Applied Science, Inc. Consultants, Engineers, Surveyors, Scientists (*see* Exhibit E). According to Dr. Huettl's analysis, the facility is designed for a leakage rate of 400 to 600 gallons per acre per day when the containment structures are half full and 800 to 900 gallons per acre per day when the containment structures are full. *Id.* The estimated leakage of over the 40 acres of waste containment structures is 7 million gallons per year when the operation commences. This annual leakage rate is expected to increase over time as the liner permeability degrades. *Id.*

The facility's containment structures are thus not designed to contain all manure and therefore do not meet the federally mandated standard of zero discharge as set forth in 40 C.F.R. § 412.31. According to an analysis provided by Dr. Eric W. Peterson of the Illinois State University Department of Geography-Geology, the karst aquifer underlying the proposed sites would be highly susceptible to groundwater contamination by spills/seeps of animal waste (*see* Exhibit H).

The EPA interprets the CWA to apply to discharges from a point source via ground water that has a direct hydrologic connection to surface water. *See* Proposed NPDES CAFO Rule, 66 Fed. Reg. 2960, 3015 (2001). It is within the scope of the CWA to regulate the discharge of pollutants from a large dairy operation which infiltrate and pollute groundwater that is hydrologically connected to waters of the United States. *See Coldani v. Hamm*, F. Supp.2d (E.D. Cal. 2007).

The underlying karst aquifer of the Traditions South Dairy is hydrologically connected to the Wolf Creek and the Tributary of the Apple River. A water table map prepared by Samuel V. Panno of the ISGS readily identifies the distinct connection between surface waters and groundwater from the site (*see* Exhibit I). The map shows the groundwater flow as it hydrologically connects to the Wolf Creek and the Tributary of the Apple River at corresponding stream elevations on or near the site. The direction of ground water flow, in conjunction with the elevation of the water table, ensures the migration of contaminants from the leaking waste lagoons to these surface waters.

To summarize, the containment structures are designed to leak millions of gallons of manure per year from the very moment the facility becomes operational. This manure is expected to discharge into the underlying karst aquifer and then into waters of the United States via a direct hydrological connection.

Beyond the anticipated leakage from the containment structures, it appears the facility is being engineered so pollutants will be collected and directly discharged into the Tributary of the Apple River. Construction photos from the site indicate the existence of an underground pipe originating from underneath the facility and connecting to the Tributary of the Apple River (*see* Exhibit J, parts 1-4). It is suspected that this will serve as a conduit to drain waste from either the production area and/or containment structures. **This conduit is currently discharging** construction storm water into the Tributary based upon samples taken by neighbors.

Beyond the current construction storm water discharge, it is suspected that **silage run-off is currently being diverted and discharged through a newly constructed drain line into an additional tributary located just east of the Tributary of the Apple River** (*see* Exhibit K, parts 1-3).

In summary, the Traditions South Dairy proposes to discharge from its production area and containment structures, into ground water, and then into surface waters via a hydrologic connection, and possibly via an underground pipe, conduit or drain line.

The Traditions South Dairy  
Proposes to Discharge because it does not have a Nutrient  
Management Plan to Ensure Appropriate Agricultural Utilization of Nutrients.

Spreading of animal waste on land adjacent to this facility and on nearby agricultural areas will lead to both surface and ground water contamination.

As noted by Trout Unlimited (*see* Exhibit B):

It is projected that the intentions to spread the product of the estimated 162,000 tons of manure generated annually on fields adjacent to the facility and on nearby fields. Soil depths in this area are inadequate to buffer the migration to ground and surface water of animal waste products not already assimilated by crops at the time of any significant precipitation event. Cautious best management practice statements suggest that little or no liquefied manure be spread in karst areas. Inadequate regulation will likely assure that the manure from the facility will be applied locally as planned. This will likely assure periodic and potentially devastating nutrient flushes into the ground and surface water of this area.

Wolf Creek upstream of the projected CAFO is already assessed at partial attainment for the support of aquatic life due to elevated phosphorus levels. Tile drainage systems in area fields already accelerate the flow of precipitation and its pollutants out of the thin soil layer and into surface waters. To whatever extent any new manure application volumes were to be calculated on the agronomic rate for nitrogen (about six times the agronomic rate for phosphorous) [Hodne, 2005], such applications would certainly exacerbate the phosphorus problem in Wolf Creek, possibly reducing dilution factors enough to extend its impact into the South Branch of the Apple and beyond.

Beyond the risks imposed by land applying manure on karst topography outlined above, it is suspected that the facility does not have a land application area large enough to allow for the appropriate agricultural utilization of nutrients. Under Illinois' current regulatory framework for CAFOs, nutrient management plans are not made publicly available. However, it is estimated that the waste generated by the Traditions South facility will require a 4,000 to 6,000 acre land application area. The amount of land in the surrounding area under the control of Traditions South only amounts to 1401.12 acres (*see* Exhibit L

parts 1 and 2). Much of this land consists of sloping farmland, crisscrossed by sensitive streams that feed into the Apple River and the state park only 3.5 miles away. Hence, based on publicly available information, the facility proposes to discharge because it does not have an adequate land-base to allow for the appropriate agricultural utilization of nutrients.

The EPA Revised 2008 CAFO Rule allows for facilities to “self-certify” that they do not “propose to discharge.” However, the Traditions South Dairy cannot meet this test. Its containment structures are designed to leak into groundwater that is hydrologically connected to waters of the United States. In addition, it appears the facility may already be discharging into these waters. Furthermore, the facility does not have an adequate nutrient management plan that ensures appropriate agricultural utilization of nutrients. In fact, on October 20, 2008, the Jo Daviess County Circuit Court found the conditions at the CAFO so dangerous that it enjoined the facility from operating. It stands to reason the facility would be unable to “self-certify” that it will never have a discharge when an Illinois Court found that water pollution from the “proposed livestock management facility would constitute a substantial future harm and... a high probability of creating a public and private nuisance by creating an environment injurious to the health and welfare of surrounding neighbors and the public at large.” *See Jo Daviess County Circuit Court, 2008 CH 42, Preliminary Injunction Order (October 20, 2008).*

In summary, the Traditions South Dairy proposes to discharge because its production area and containment structures are not designed for zero discharge and it does not have a nutrient management plan that ensures appropriate agricultural utilization of nutrients. As such, the facility is required to have an NPDES permit pursuant to 40 C.F.R. § 122.21(a)(1) and EPA Revised 2008 CAFO Rule, 40 C.F.R. § 122.23(d)(1).

### **Allegation 3**

#### **The Traditions South Dairy Proposes to Discharge into “Waters of the United States.”**

The Traditions South Dairy proposes to discharge into “waters of the United States.” “Waters of the United States” are defined in 40 C.F.R. § 122.2 to include intrastate rivers, streams (including intermittent streams), tributaries, mudflats, sand flats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters, which are or could be used by interstate travelers for recreational or other purposes, or from which fish or shellfish are or could be taken and sold in interstate or foreign commerce...”

#### **Factual Support**

The north side of the Traditions South Dairy contains and adjoins the Wolf Creek. The Wolf Creek is a perennial stream that feeds into the Apple River. The south side of the facility abuts another stream, which is a tributary of the Apple River. The Apple River flows through Apple Canyon State Park on its way to the Mississippi River. The Apple River, including the South Fork of the Apple downstream from Wolf Creek, is one of

Illinois' few Biologically Significant Streams and forms the nucleus of one of the State's best-known state parks (*see* Exhibit C).

The Apple River and its South Fork are recognized as the "home to a renowned smallmouth bass fishery" of great importance to Trout Unlimited, which is a multi-state not-for-profit conservation organization of some 180,000 members with a mission to conserve, protect, and restore North America's coldwater fisheries and their watersheds (*see* Id). The destruction or degradation of these waters will negatively impact the ecosystem and affect aquatic life which, in turn, will impact the recreational value of the Apple River and its appeal to interstate travelers.

The EPA interprets the CWA to apply to discharges from a point source via ground water that has a direct hydrologic connection to surface water. *See* Proposed NPDES CAFO Rule, 66 Fed. Reg. 2960, 3015 (2001). It is within the scope of the CWA to regulate the discharge of pollutants from a large dairy operation, which infiltrate and pollute groundwater that is hydrologically connected to waters of the United States. *See Coldani v. Hamm*, F. Supp.2d (E.D. Cal. 2007).

The underlying karst aquifer of the Traditions South Dairy is hydrologically connected to the Wolf Creek and the Tributary of the Apple River. A water table map prepared by Samuel V. Panno of the ISGS readily identifies the distinct connection between surface waters and groundwater from the site (*see* Exhibit I). The map shows the groundwater flow as it hydrologically connects to the Wolf Creek and the Tributary of the Apple River at corresponding stream elevations on or near the site. The direction of ground water flow, in conjunction with the elevation of the water table, ensures the migration of contaminants from the leaking waste lagoons to these surface waters.

The report accompanying the map discusses the hydrological connection between the Traditions South Dairy site and waters of the United States. According to the report, "the water table map suggests groundwater flow directions and those areas down gradient of the dairies that would be susceptible to groundwater contamination in the event of a spill or leakage from waste lagoons." Panno emphasizes that, "water level elevations indicate that trenches constructed in June and July of 2008 (assumed to be about 20 feet deep)...would come close to intersecting groundwater flowing through the karst aquifer of the Galena Limestone, especially if groundwater beneath Maquoketa shale is under pressure."

It deserves to be mentioned that that the 7<sup>th</sup> Circuit follows Justice Kennedy's "significant nexus" standard in determining EPA's CWA jurisdictional reach following the Supreme Court's decision in *Rapanos v. United States*, 126 S. Ct. 2208 (2006). *See United States v. Lippold*, No. 06-3000, at 6 (C.D. Ill. filed October 31, 2007); *United States v. Gerke Excavating, Inc.*, 464 F.3d 723, 724 (7<sup>th</sup> Cir. 2006). A "significant nexus" hinges on whether the waters in question have a significant effect on the "the chemical, physical, and biological" integrity of downstream navigable waters. *Rapanos*, at 2248. Because millions of gallons of pollutants that will be discharged from the Traditions South Dairy into waters of the United States, there is little doubt these pollutants will have a significant effect on the integrity of downstream navigable waters such that the "significant nexus test" under *Rapanos* is satisfied.

#### Allegation 4

### **The Traditions South Dairy Poses an Imminent and Substantial Threat to the Health and Welfare of Surrounding Citizens, which Justifies Enjoining Further Construction of the Facility until Adequate Protections are in Place.**

“Upon receipt of evidence that a pollution source or combination of sources is presenting an imminent and substantial endangerment to the health of persons or to the welfare of persons where such endangerment is to the livelihood of such persons, such as inability to market shellfish,” section 504(a) of the CWA, 33 U.S.C. § 1364(a), grants the Administrator emergency powers to “bring suit on behalf of the United States in the appropriate district court to immediately restrain any person causing or contributing to the alleged pollution to stop the discharge of pollutants causing or contributing to such pollution or to take such other action as may be necessary.” Bravos v. Green, 306 F. Supp. 2d. 48 (D.C. 2004), Travelers Indemnity Co. v. Douglasville Dep’t, No. 1:07-CV-0410-JOF (N.D. Ga. 2008).

The EPA considers the following when assessing whether a discharge poses an imminent and substantial endangerment to the public health: 1) Both permitted and unpermitted dischargers fall within the scope of Section 504; 2) Evidence need not be proof with certainty; 3) No actual discharge is required in order to invoke Section 504--a threat to the health or welfare of persons is sufficient; 4) Endangerment need not be immediate or quantifiable, and 5) The so-called permit shield defense is vulnerable to attack under the Section 504 emergency powers. *See* EPA, Guidance on Use of Section 504, the Emergency Powers Provision of the Clean Water Act, at 6, 9, 11-12, and 15-16 (July 30, 1993). The EPA may keep these criteria in mind when assessing the below facts.

The unregulated water pollution generated by the Traditions South Dairy will have a catastrophic impact on the surrounding area. Because overwhelming evidence suggests that the Traditions South Dairy presents an imminent and substantial endangerment to our health and welfare, endangering our livelihoods, the EPA’s immediate action in enjoining further construction of the facility is justified.

#### **Factual Support**

#### The Traditions South Dairy Poses an Imminent and Substantial Threat because it Threatens the Health of Neighboring Residents

Today Jo Daviess County residents face the construction of what will be the State’s largest industrial dairy. The facility will produce massive volumes of feces, urine, blood, and other waste, which upon commencement of operations, will be discharged to both surface and groundwater. This poses an imminent and substantial endangerment to public health and welfare, as well as the livelihoods of nearby residents.

The proposed discharges from the facility threaten human health. The facility poses an immediate and imminent threat of contamination of our drinking water supply. The Institute for Agriculture and Trade Policy acknowledges the health risks from water pollution caused by CAFO manure. *See* Wallinga, David, M.D., Concentrated Animal

Feeding Operations: Health Risks from Water Pollution, Institute for Agriculture and Trade Policy: Food and Health Program (August 2004). The Institute highlights five different substances found in manure that can cause serious illness and fatal harm to citizens of Illinois who drink out of their private wells. E-coli, Campylobacter, and Cryptosporidium can cause "life-threatening kidney failure, acute paralysis (Guillain-Barre syndrome)," and gastrointestinal complications such as "diarrhea, abdominal cramps, fever and vomiting," respectively. *Id.* In particular, "A 1993 study found Cryptosporidium on about 90% of U.S. dairy farms." Please note that the fatalities listed by the Institute are alarming. Cryptosporidium in Milwaukee was responsible for the largest waterborne disease event in the nation, injuring 403, 000 people and resulting in 54 deaths. The health risks posed to drinkers of Illinois well water should not be underestimated. *Id.*

The high potential for contamination of surface water and drinking water wells located near the Traditions South Dairy is not only dangerous, but it is imminent and substantial. State geologists have warned against placing this facility in this location. The karst bedrock found in Jo Daviess County will allow even the smallest spill, leak or seepage to quickly move into the aquifer and, in the words of Sam Panno (20 plus year karst expert for the ISGS) "will contaminate wells miles way in a matter of hours" (*see* Exhibit B). In fact, in May of 2000 manure spread on fields over karst in Walkerton, Ontario sickened thousands and killed seven. Similarly, this year water pollution from a mega-dairy in Walkersville, Maryland forced the local municipality to close its well and "import" water from a nearby town.

It should be noted that every home within a two mile radius of the proposed Traditions South Dairy uses a private well. It is estimated that there are at least 45 individual residences located within a half mile of the proposed facility. The town of Nora, which is located approximately 5,000 feet south east of the facility, is also dependent upon private wells for its drinking water supply. The location of the Traditions South facility on the karst aquifer places an imminent and substantial threat to these residents, which are dependent on ground water from their private wells.

The potential health effects of factory farms are so great that the Canadian Medical Association, the Michigan State Medical Society, the Union of Concerned Scientists, the American Public Health Association, and most recently (in April of 2007) the Missouri Association of Osteopathic Physicians and Surgeons called for a moratorium on CAFOs. In fact, on September 8, 2008 the Galena City Council passed a Resolution calling for a moratorium on CAFOs in direct response to the Traditions South Dairy proposal. *See* Resolution No. R-08-10, A Resolution to Protect the Citizens of Galena and Jo Daviess County in Maintaining their Rights to Clean Water and Clean Air as set forth in the Illinois Constitution, *available at*:

<http://www.cityofgalena.org/FileUploads/R.08.10%20Mega%20Dairy%20Resolution.pdf>.

The Traditions South Dairy Poses an Imminent and Substantial Threat because it Threatens the Welfare and Livelihoods of Persons Living Near the Proposed CAFO.

Beyond posing an imminent and substantial threat to public health, the facility substantially endangers the public welfare, and the livelihoods of neighboring residents, as well as the community at large. Large, multi-year studies of factory farms show these



negative impacts, including local health impacts, community well being, and reductions in property values. *See e.g.*, C. W. Stofferahn, *Industrialized Farming and Its Relationship to Community Well-Being* (2006). In April of 2008, the Union of Concerned Scientists issued a report that analyzes both the policies that have facilitated the growth of CAFO's and the enormous costs imposed on society by CAFO's. Remediation of leaching under hog and dairy CAFO's 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.

Below is a snapshot of additional imminent and substantial costs that neighboring residents face:

- Infrastructure costs – improvement of roads, increased wear and tear on public roads from additional dairy trucks traffic, placement and digging of new wells, treating the well water if there is contamination of the aquifer, remediation from lagoon or groundwater contamination;
- Health care costs – increased air and water pollution, medical costs of both acute and chronic health problems caused by pollutants from the facility;
- Residential property value decline – decrease of 50-90% of market value in homes in the vicinity;
- Business value decline – it is suspected that business value decline will coincide with residential property value decline. Businesses in the immediate vicinity of the facility will not only be impacted by the reduction of property values, but also reduced revenue generated from the loss of tourism desirability of the area;
- Tourism decline - Jo Daviess County is the second largest overnight tourist destination in Illinois, largely because of its pristine natural setting and rolling landscapes. The presence of the Traditions South Dairy in this setting will result in a loss to the essential character of the county and a reduction in the tourism trade. Damage to the watershed, aquatic life and natural beauty of the area caused by pollution, will lead to a decline in the desirability of the Apple River Canyon State Park and surrounding area as a prime destination for ecotourism, and
- Damage to fisheries used for commercial/recreational use - The Apple River and its South Fork are the nucleus of one of Illinois' best-known state parks with a renowned smallmouth bass fishery. Increased loading of pollutants to these waters will have a negative impact on bass populations, which will in turn have an impact on the local economy.

As outlined above, the Traditions South Dairy poses an imminent and substantial endangerment to the health, welfare and livelihoods of Jo Daviess County citizens. Hence, the EPA is justified in using its emergency powers under Section 504 of the CWA, 33 U.S.C. § 1364(a), as may be necessary and appropriate to protect the public. Should the

facility fail to comply with the requirements of the CWA, we request that the EPA take immediate action to enjoin further construction of the facility.

## CONCLUSION

In conclusion, public and government attention have increasingly focused on regulating the environmental impacts of CAFOs. As recently as September 24, 2008, the Government Accountability Office released a study warning Congress of deficiencies in existing programs for regulating waterborne pollutants from CAFOs. The Traditions South Dairy is a clear illustration of this deficiency. It is a point source that proposes to discharge into waters of the United States and should thus be regulated under the CWA.

We request that the EPA evaluate the facility and require the facility to apply for an NPDES permit pursuant to its authority under Section 308(a) of the CWA, 33 U.S.C. §1318 (a). Should the Traditions South Dairy fail to comply with this requirement, we ask that the EPA seek injunctive relief pursuant to its authority under Section 504(a) of the CWA, 33 U.S.C. 1364 (a), and Sections 309(a)(1) and 309(b) of the CWA, 33 U.S.C. §1319(a)(1),(b), to halt further construction and operation of the facility until an NPDES permit is applied for and all applicable requirements of the NPDES program have been met.

As neighboring residents being directly impacted by the Traditions South Dairy, and as representatives of HOMES, we desire to participate in the enforcement of the CWA. We request to be notified as EPA moves forward with appropriate action on this matter.

Respectfully,

Helping Others Maintain Environmental Standards

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Danielle Diamond, Counsel for ICCAW  
Kendall Thu, ICCAW  
Eric Schaeffer, Director of EIP  
Jessica Werber, Counsel for EIP

## LIST OF EXHIBITS

### Exhibit

- A Letter from Jane E. McBride, Senior Assistant Illinois Attorney General to the Bureau Chief and General Counsel of the Illinois Department of Agriculture, February 21, 2008.
- B Technical Report, Illinois State Geological Survey, Samuel V. Panno and Donald E. Luman, *Assessment of the Geology and Hydrogeology of Two Sites for a Proposed Large Dairy Facility in Jo Daviess County Near Nora, IL*, 2008, Open File Series 2008-2.
- C Open Letter from Edward L. Michael, Chairman of Illinois Council of Trout Unlimited, February 24, 2008
- D Letter from the Pat Quinn, Illinois Lieutenant Governor to Marvin Schultz, Chair of Jo Daviess County Board, February 10, 2008.
- E Draft presentation analysis of the design specifications by Dr. Peter J. Huettl, President of Applied Science, Inc. Consultants, Engineers, Surveyors, Scientists, August 5, 2008
- F Illinois State Geological Survey Aquifer Sensitivity Map, February 7, 2008.
- G Traditions Dairies – Notice of Intent to Construct, Illinois Department of Agriculture, October 31, 2007
- H Analysis provided by Dr. Eric W. Peterson of the Illinois State University Department of Geography-Geology, *Summary and Analysis of the Soil Boring Information, Reports, and Communications for the Proposed Tradition Dairy Farms*.
- I Preliminary Water Table Map of the Mega-Dairy Sites Near Nora, IL by Samuel V. Panno, Illinois State Geological Survey, October 10, 2008
- J Construction photos from the site indicate the existence of an underground pipe beginning from beneath the facility running to the Tributary of the Apple River
  - Part 1 – photo image (IMG\_2151): July 9, 2008
  - Part 2 – photo image (IMG\_3496): September 23, 2008
  - Part 3 – photo image (IMG\_3497 line to SCreek): September 23, 2008
- K Photos of conduit where construction storm water run-off and silage leachate are currently being diverted and discharged into an additional tributary located just east of the Tributary of the Apple River
  - Part 1 – photo image (IMG\_3634): September 27, 2008

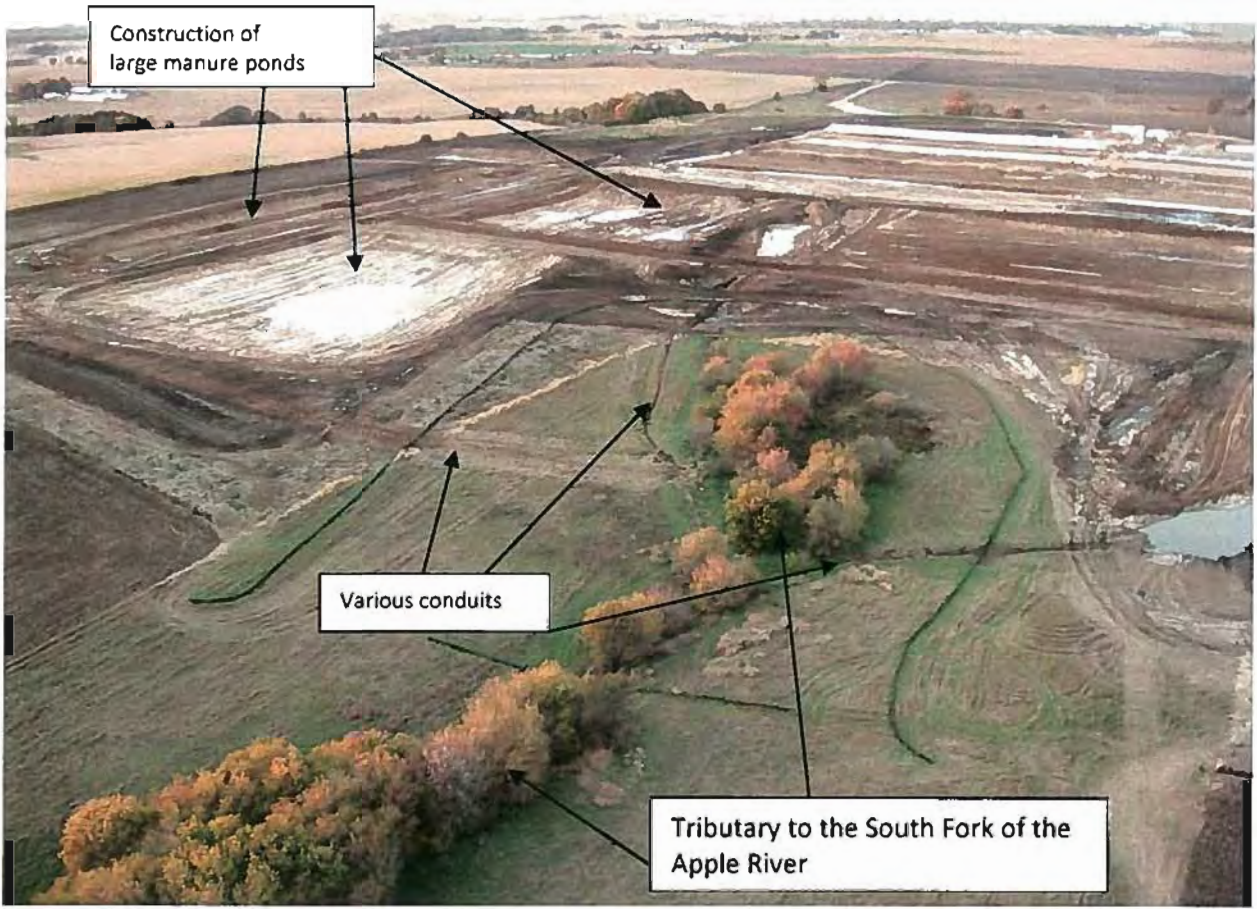
Part 2 – photo image (IMG\_3623): September 27, 2008

Part 3 – photo image (IMG\_3644): September 27, 2008

L Traditions South Property Holdings

Part 1 – List of parcel PIN numbers

Part 2 – Map of land under control of Traditions South



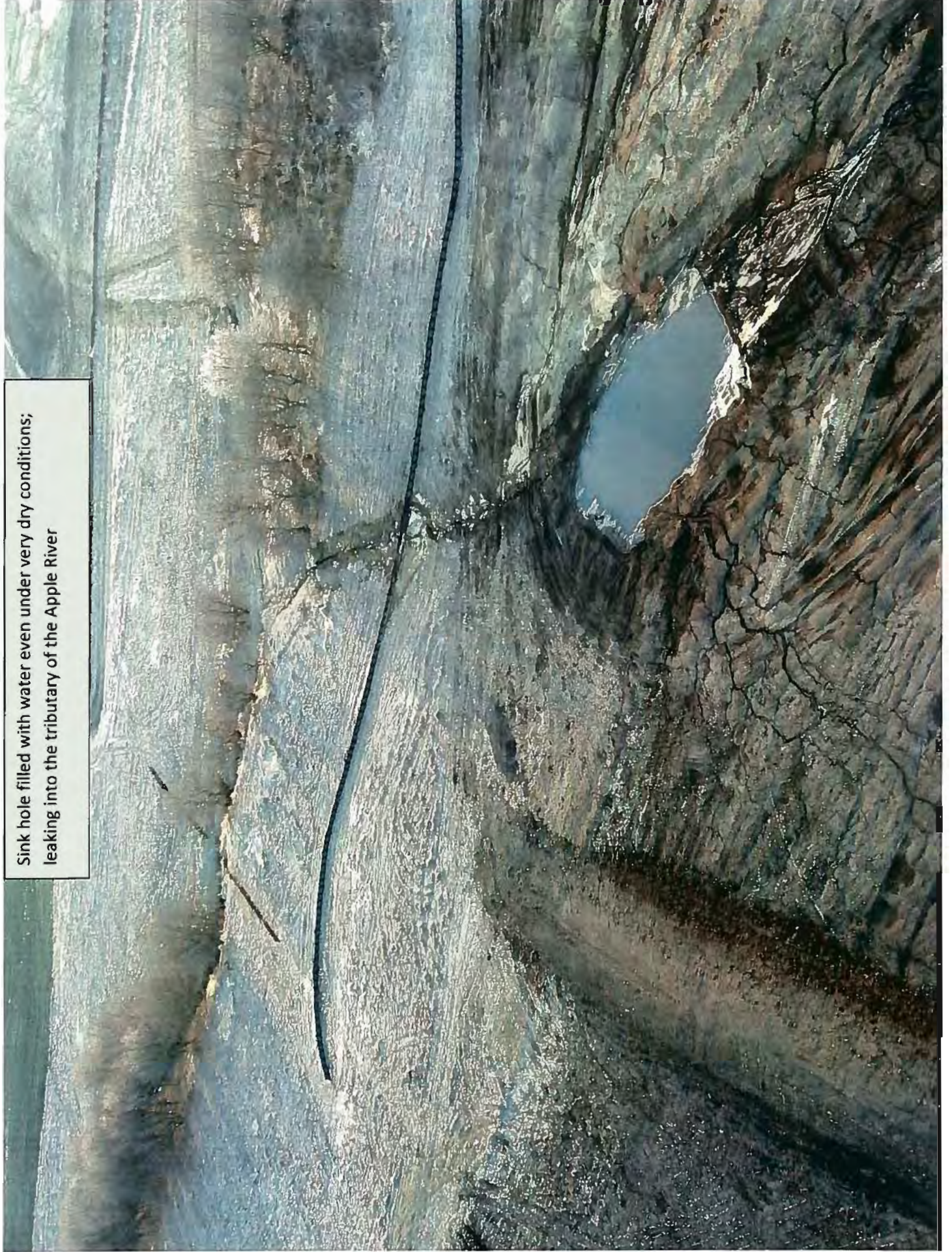
Construction of large manure ponds

Various conduits

Tributary to the South Fork of the Apple River



Tributary to the Apple River



Sink hole filled with water even under very dry conditions; leaking into the tributary of the Apple River