Blackberry Creek Watershed Planning

Subject: Class B Biosolid Distribution on Farmland.

Background: IEPA has issued it Section 303(d) listing of the Blackberry Creek as being in non-support of primary "Swimmable" contact due to fecal coliform bacteria from *unknown causes*. Primary Contact is 200 to 400 coliform colony units per 100 ml of water.

Brainstorming some possible unknown causes:

Wildlife – Fish, Waterfowl, Raccoons, Opossums, Deer, Birds, Beaver, Muskrats, and Mink.

Domestic Animals – Cattle, Pigs, Sheep, Goats, Chickens, Horses, Dogs, and Cats.

Humans – Water Reclamation Districts and Private Septic systems.

Estimations of Fecal Waste tonnage produced:

Raccoons – Estimate 190 tons/year within watershed. Geese – Estimate 958 tons/year within watershed. Humans – Class B Biosolids – Estimate 7,300 dry tons/year within the watershed. State wide is 380,000 dry tons/year or 845,000 Cubic yards/year as per Division of Water Pollution Control, IEPA.

Clearly, the greatest *unknown cause* contributors of fecal coliform bacteria are Humans. Humans process their wastes. The byproducts are wastewater and biosolids. See *Water Reclamation processes described* in the April 1, 2011 Fox Metro Water Reclamation District Tour Report by Jerry Elliott (handout).

Wastewater is chlorinated/dechlorinated and discharged into the Fox River.

Biosolids are spread on farmland or sent to landfill facilities.

Class B Biosolid Distribution on Farmland

Biosolid Spreading Companies spreading in Kane and Kendall Counties:

<u>Stewart Spreading, Inc.</u> -- Servicing Metropolitan Water Reclamation District of Greater Chicago.

<u>Ag-Tech Services, Inc.</u> – Servicing Fox Metro Water Reclamation District.

Spreading Procedures were explained during the Yorkville March 9th, 2011 "Understanding Bio-solids Land Application" presentation sponsored by the Kendall County Health Department.

Speakers:

*Dan Reedy, Farm Bureau Manager and Chair, Kendall County Environmental Health Advisory Committee.

*Greg Firratello, Agronomist and Certified Crop Advisor, Stewart Spreading, Inc.

*Jeff Hutton, Environmental Protection Specialist, Illinois Environmental Protection Agency.

*Dr. Lakhwinder S. Hundal, Senior Environmental Soil Scientist, Metropolitan Water Reclamation District of Greater Chicago.

Summary of Biosolid Quality Field Operations – Farmland Application revealed:

Wastewater Treatment Plants provide USEPA PART 503"notice and necessary information" to the land application contractor certifying compliance to Class B Biosolid standards. *Fecal coliform colony units present are not a constituent of this Notice & Necessary Information*.

The IEPA permit requires monthly monitoring of Wastewater Treatment Plants during biosolid land application season. Field application by spreader companies is monitored by IEPA field personnel to IEPA PART 391 rule. Fecal coliform colony units present are not a constituent of this rule or permit. Note: County Boards sign off on these permits.

A person could conclude, the single truckload (23 Tons) delivery of Class B Dry Biosolid to a farm field in the Blackberry Creek

Watershed will apply (2,000,000 units/gram x 454gram/lb x 2000lb/ton x 23ton/truckload = 41,768,000,000,000) fecal coliform units of runoff exposure to the impairment of the creek water. (*See Biosolids handout*)

On March 19, 2011, Jerry Elliott made a FOIA request to the IEPA, Bureau of Water, asking "From Jan 1 2001 to Jan 1 2011, how many state permits and quantities have been issued for the land application of treated municipal sludge to cropland in Kane and Kendall Counties?" A listing of permit numbers and associated quantities permitted was received for the entire state by treatment facility by county.

Cook County = 223,296 dry tons Kane County = 5,107 dry tons Kendall County = 353 dry tons

These numbers do not appear to represent actual application rates within Kane and Kendall County since Fox Metro reported 6,800 dry tons/year being applied and Stewart Spreading reported spreading additional tonnage from Cook County. More research must be done to more accurately estimate the total quantity of Class B Biosolids is being applied in the Blackberry Creek Watershed each year.

On April 11, 2011, Jerry Elliott issued an email to Kelsey Musich, Kane-DuPage Soil and Water Conservation Dept. requesting an answer to the question: "Will the Kane-DuPage Soil and Water Conservation Dept. be enforcing only Class A Biosolids distribution on farmland within the County"? "What would be the timing of such actions"? The answer has not been provided to date.

In Summary:

- 1) The *Unknown Cause* for the presence of fecal coliform in the Blackberry Creek is predominately contributed to Human sanitation processing and Wildlife feces.
- 2) Environmental Protection Biosolid Governing Rules are poorly managed and inconsistent. IEPA PART 391 Rules do not agree with USEPA PART 503 Rules constituent measurement and

- neither measure IEPA 303(d) fecal coliform colony units being deployed into the environment.
- 3) Fox Metro Water Reclamation District Class A Biosolid Process Upgrade promises an environmental breakthrough within Kane County. Question remains: Will other Waste Treatment facilities follow with similar improvements or will local officials enact rules of <u>only</u> Class A Biosolid spreading within Blackberry Creek Watershed?
- 4) Additional review is appropriate as to the "Overreach" of IEPA Section 303 (d) Blackberry Creek impairment listing as non-supporting of Primary Contact. Punitive rulings of Best Management Practices to local rural sectors of the Blackberry Watershed population and resultant permitting fees are divisive. Example: Employ the Nippersink Study BMP in farming areas: "It is important to identify functional drain tile systems to determine opportunities for their removal or reconfiguration for the purposes of restoring valuable wetland habitat, and water quality benefits." Note: This can be a reckless action by any governmental body when infringing on drainage statutes.

Possible "Best Management Practices to be employed"

- 1) Recommend IEPA Removal of Section 303(d) impairment listing of the Blackberry Creek as non-supporting of Primary Contact designation.
- 2) Recommend only Class A Biosolids be applied to farmland within the Blackberry Creek Watershed.
- 3) Recommend Blackberry Creek water be chlorinated and dechlorinated before discharge to the Fox River. *Estimates of untreated wildlife fecal contamination surpasses the IEPA Section 303(d) impairment standards of Primary Contact.*

This concludes my presentation. Questions?

Thank you,

Jerry Elliott Home owner and Stakeholder.