BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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Wesley J. Brazas, Jr.
Petitioner
V .
Mr. Jeff Magnussen, President
Village of Hampshire
and the
Illinois Environmental Protection Agency
Respondents

PCB 06-131 (Appeal from IEPA decision granting modified NPDES permit)

NOTICE OF FILING

RECEIVED CLERK'S OFFICE

JUN 0 6 2006

STATE OF ILLINOIS Pollution Control Board

TO: Mr. Mark Schuster Schnell, Bazos, Freeman, Kramer, Schuster & Vanek 1250 Larkin Ave., Suite 100 Elgin, IL 60123

Mr. James Day Division of Legal Counsel Illinois Protection Agency 1021 North Grand Avenue East Springfield, IL 62794-9276

PLEASE TAKE NOTICE that on June 6, 2006, I filed with the Clerk of the Office of the Pollution Control Board, and original and nine (9) copies of *Petitioner's Memorandum of Law in Support of Petition for Review of a Decision by the Illinois Environmental Protection Agency*, a copy of which is attached hereto and hereby served upon you.

Wesley Jaraeas, Jr., Petitioner. Pro se

PROOF OF SERVICE

I, the undersigned, on oath state that I have served on the date of June 6, 2006, the attached *Petitioner's Memorandum of law in Support of Petition for Review of a Decision by the Illinois Environmental Protection Agency* upon each person/agency to whom it is directed by placing a copy of same into an envelope correctly addressed as aforesaid and bearig sufficient first class postage prepaid, and despositing same with the United States Post Office before 5:00 p.m. on June 6, 2006.

Subscribed and Sworn to me this O 6 day of O 6 2006

eand Ar

Notary Public



Wesley J/Bra Petitioner, pro se

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STATE OF ILLINOIS Pollution Control Board ppeal from IEPA decision inting modified NPDES permit)

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PETITIONER'S MEMORANDUM OF LAW IN SUPPORT OF PETITION FOR REVIEW OF A DECISION BY THE ILLINOIS ENVIRONMENTAL **PROTECTION AGENCY**

NOW COMES THE PETITIONER, Wesley J. Brazas, Jr., and as for his Memorandum of Law in Support of Petition for Review of a Decision by the Illinois Environmental Protection Agency,

argues as follows:

NATURE OF THE CASE

This matter comes before the Board on the IEPA's December 9, 2005 modification of NPDES Permit No. IL 0020281 to permit the Village of Hampshire to more than double the discharge of its wastewater treatment plant to 1,500,000 gpd (DAF) / 4,170,000 gpd (DMF) into the Section 303(d) listed Hampshire Creek from the currently permitted 750,000 gpd (DAF) / 1,880,000 gpd (DMF) issued on July 21, 2004. Petitioner argues that said modified permit was not issued in compliance with the IEPA's statutory duty to protect the environment and asks that the Illinois Pollution Control Board set aside said modified permit and remand to the Illinois Environmental Protection Agency for issuance of a permit denial letter.

STATEMENT OF FACTS

The Village of Hampshire is a small farming community located in northwest Kane County and is wholly located within the Chicago Ozone Non-attainment area. The Village has grown over the years requiring an increase in wastewater treatment plant (WWTP) capacity from 136,000 gpd (DAF) in 1956 to 456,000 gpd (DAF) in 1979.¹ The historical trend of increases in wastewater treatment plant discharges is shown in the graph below:

8.00 7.00 6.00 Discharge (mgd) 5.00 4.00 3.00 2.00 1.00 0.00 ,310 ,090 200 ,05⁶ , ogo 'de Year Projected DMF — Historical DMF 🛥 😐 Projected DAF 🛥 ----- Historical DAE -----

Hampshire WWTP Discharges

In 2004, the Village of Hampshire adopted a comprehensive land use plan which calls for the conversion of over 15,000 acres of agricultural farmland into non-farmland uses, such as housing, condominiums and parking lots, with a corresponding explosion in population from the current 3,805ⁱⁱ to an estimated 28,275 by 2023 – far in excess of the NIPC 2020 estimate of 5,143. Prior to adopting the 2004 Comprehensive Plan, the Village of Hampshire failed to perform an environmental impact study to quantify the environmental impacts of such a large conversion of farmland to rooftops will have on air quality, water quality, groundwater quality and flooding.

To support this explosion in population, Hampshire has been piecemealing the exponential increase of the discharge of its wastewater treatment plant by nearly doubling the 1979 discharge to 750,000 gpd (DAF) / 1,880,000 gpd (DMF) in 2004; then less than 17 months later, again doubling the discharge to 1,500,000 gpd (DAF) / 4,170,000 gpd (DMF); and, approximately a year later, will nearly double the discharge with a proposed increase to approximately 2,760,000 gpd (DAF) and 7,700,000 gpd (DMF) pending for 2006.

However, while planning for exponentially increasing wastewater treatment plant capacity, Hampshire has failed to plan for the water supply to flush the tens of thousands of new toilets.ⁱⁱⁱ One of the sources of water supply Hampshire still continues to study is the shallow Bloomington Aquifer.^{iv} But while continuing to study the shallow Bloomington Aquifer, Hampshire has already changed the land use over the most sensitive aquifer recharge area from agricultural to condominiums and parking lots *without a determination of the aquifer degradation such a change in land use will cause.*^v

The outfall for Hampshire's WWTP is Hampshire Creek with a 7Q10 flow value of zero. Under the existing policies, procedures and enforcement mechanisms of the IEPA, the water quality of Hampshire Creek has been on a precipitous decline, causing Hampshire Creek to be listed by the IEPA in 2004 as a 303(d) listed stream.^{vi} Although a TMDL study has not been preformed on Hampshire Creek, one of the suspected sources of impairment is the effluent from Hampshire's WWTP.

ISSUES PRESENTED FOR REVIEW

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IS THE IEPA'S ACTION IN ISSUING THIS MODIFIED NPDES PERMIT IN ACCORDANCE WITH THE CLEAN AIR ACT?

"The General Assembly finds that pollution of the air of this State constitutes a menace to public health and welfare, creates public nuisances, adds to cleaning costs, accelerates the deterioration of materials, adversely affects agriculture, business, industry, recreation, climate, and visibility, depresses property values and offends the senses."

-Environmental Protection Act, 415 ILCS 5/8

The cause and effect relationship from the conversion of farmland into rooftops into increased motor vehicle emissions into unhealthful air is well settled. To illustrate how difficult it is to clean up our air once it is polluted, in the ten year period from 1994 to 2003, ozone pollution has shown only a 2% decrease.^{vii} The Chicago Area Transportation Study (CATS) is responsible for the preparation of the Regional Transportation Plan (RTP) and corresponding Transportation Implementation Plans (TIPs) which are used to program and prioritize transportation projects to improve air quality by, for example, relieving congestion on roadways which are designed to reduce the duration motor vehicles are emitting pollutants. The TIP is based upon NIPC population and employment projections which are used in computer modeling to determine Motor Vehicle Emission Budgets (MVEBs). If a municipality grossly exceeds the population budget used in the TIP, the TIP will underestimate the motor vehicle emissions generated by that municipality and air quality for the Chicago region appears to be backsliding in air quality since last year (2005) there were 15 days exceeding the Ozone NAAQS as compared to 10 days in 2003, a 50% *increase* in NAAQS violations in two years.^{viii}

IEPA's statutory duty to protect the air we breathe is found at 415 ILCS 5/9 which states:

"No person shall:

(a)

Cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the Board under this Act;" The IEPA is a "person" as defined by 415 ILCS 5/3.315^{ix}, and therefore, when making NPDES permitting decisions, the IEPA must affirmatively determine that the increase in population necessitating an increase in WWTP discharge is within the population projections used in the current approved TIP, or in the alternative, the IEPA must independently determine the motor vehicle emissions and other emissions generated by the conversion of farmland into rooftops in order for the TIP to remain valid.

Unfortunately, in the case at bar, the IEPA has done neither. The NIPC 2020 population projection for the Village of Hampshire is 5,143.^x Using a standard rule of thumb of 1 person, or population equivalent (P.E.) will discharge 100 gallons of wastewater per day^{xi}, Hampshire's proposed WWTP discharge of 1,500,000 gpd would support a population increase to approximately 13,500 (@ 90% WWTP capacity), or more than 2 ½ times the NIPC 2020 estimate. Even the prior permitted discharge of 750,000 gpd would support a population of approximately 6,700 (@ 90% WWTP capacity), or 30% more than the NIPC 2020 estimate. Throughout these proceedings before the Board, the IEPA's position on the issue of degradation to air quality caused by the increase in motor vehicle emissions caused by the conversion of farmland into rooftops has been "it is not a factor in the issuance of an NPDES permit."^{xii}

Therefore, for IEPA's failure to demonstrate the increase in Hampshire's population to 2 ¹/₂ times the NIPC 2020 estimate conforms to the MVEB established in the current SIP and will not delay nor backslide in the attainment of the NAAQS for the Chicago ozone non-attainment area, said modified permit was not issued in compliance with the IEPA's statutory duty to protect the air quality of Illinois and asks that the Illinois Pollution Control Board set aside said modified permit and remand to the Illinois Environmental Protection Agency for issuance of a permit denial letter.

IS THE IEPA'S ACTION IN ISSUING THIS MODIFIED NPDES PERMIT IN ACCORDANCE WITH THE ILLINOIS GROUND WATER PROTECTION ACT?

"[I]t is the policy of the State of Illinois to restore, protect, and enhance the groundwaters of the State, as a natural and public resource. The State recognizes the essential and pervasive role of groundwater in the social and economic well-being of the people of Illinois, and its vital importance to the general health, safety, and welfare. It is further recognized as consistent with this policy that the groundwater resources of the State be utilized for beneficial and legitimate purposes; that waste and degradation of the resources be prevented; and that the underground water resource be managed to allow for the maximum benefit of the people of the State of Illinois.'

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Illinois Groundwater Protection Act, 415 ILCS 55/2.(b)

Today, it is gross negligence to issue a permit to increase the discharge of a wastewater treatment plant, when, as in the case at bar, the municipality has not identified the source of municipal water supply needed to supply the households generating the wastewater to be treated at the expanded wastewater treatment plant. The IEPA has not learned the lessons of the crisis caused by the overmining and degradation of the deep aquifer system due to the uncontrolled expansion of the northwest suburbs. That crisis was "solved" by the construction of tens of millions of dollars of very large watermains and pumping stations capable of delivering over 60,000,000 gallons per day of Lake Michigan water to the water starved suburbs.

Today, as the next ring collar suburbs currently dependent on the deep aquifer system for municipal water supply rush to "grow", regional planning agencies, such as NIPC, warn of a looming second crisis of overmining and degradation of the deep aquifer system. However, the prior "solution" of substituting Lake Michigan water for deep aquifer water is not available for this second crisis as the allowable Lake Michigan withdrawals have been fully allocated for years.

The Village of Hampshire freely admits they have not identified the source of municipal water supply needed to supply the households generating the wastewater to be treated at the expanded wastewater treatment plant permitted by this modified NPDES permit. The Village of Hampshire states it is studying the possibility of utilizing the shallow Bloomington Aquifer as a municipal water source, but unwisely has changed the land use over the most sensitive aquifer recharge areas to permit the construction of condominiums and parking lots *without completing the study Hampshire states is in progress to determine if such a change in land use will adversely impact the aquifer yield and water quality!*

Therefore, for the failure of the IEPA to identify a sustainable source of municipal water supply needed to supply the households generating the wastewater to be treated at the expanded wastewater treatment plant permitted by this permit, said modified permit was not issued in compliance with the IEPA's statutory duty to protect the groundwater resources of Illinois and asks that the Illinois Pollution Control Board set aside said modified permit and remand to the Illinois Environmental Protection Agency for issuance of a permit denial letter.

III IS THE IEPA'S ACTION IN ISSUING THIS MODIFIED NPDES PERMIT IN ACCORDANCE WITH THE REQUIREMENTS OF THE NPDES PROGRAM?

The cause and effect relationship from the conversion of farmland into rooftops into increased point source pollution, such as the outfall of a wastewater treatment plant, and non-point source pollution, such as, multiple stormwater detention basin outfalls, is well settled. A review of the criteria pollutants of concern for 303(d) listed streams, such as, the Du Page River, lists non-point source pollutants, such as, road salt, as exceeding the TMDL permitted for this stream. Thus, when the IEPA evaluates a request for an increase in wastewater treatment plant

capacity caused by the conversion of farmland into non-farm uses, it is incumbent upon the IEPA to perform a TMDL study which includes all of the non-point source pollutants to certify that non-point source pollutants will not exceed the TMDL values for the receiving stream.

In the case at bar, the receiving stream, Hampshire Creek, is already listed as a 303(d) stream prior to the issuance of this permit, yet the IEPA failed to perform a TMDL study prior to determining the permitted discharges of pollutants for this permit. In addition, the IEPA only requires sampling at the outfall of the plant itself, prior to the wastewater being additionally treated by the proposed wetland prior to discharge into Hampshire Creek.

The Village of Hampshire's proposed wetland can be poorly designed, poorly constructed, and poorly maintained just as easily as the tanks, clarifiers and digesters of the "mechanical" components of the wastewater treatment plant. Thus to comply with NPDES requirements, the IEPA must require sampling *at the point of the wetlands discharging into Hampshire Creek* to ensure the wetland has been designed, constructed, operated and maintained in accordance with the permitted discharges of pollutants.

Therefore, for the failure of the IEPA to require sampling of the effluent after being treated by the wetland and failure to determine TMDL limits of all point source and non-point source pollutants prior to determination of the permitted concentration of pollutants allowed by this permit, said modified permit was not issued in compliance with the IEPA's statutory duty to protect the groundwater resources of Illinois and asks that the Illinois Pollution Control Board set aside said modified permit and remand to the Illinois Environmental Protection Agency for issuance of a permit denial letter.

CONCLUSION

Therefore, for the reasons stated above, Petitioner has demonstrated IEPA has failed in its statutory duty to protect the air quality and water quality of the Hampshire area by the issuance of this modified permit and asks that the Illinois Pollution Control Board set aside said modified permit and remand to the Illinois Environmental Protection Agency for issuance of a permit denial letter.

Respectfully submitted,

Wesley azas, Jr*L* tioner, pro se

Dated: June 6, 2006

See Record, page 433.

ⁱⁱ Hampshire's Estimated 2004 population. See Record, page 16.

ⁱⁱⁱ "The Agency does not address water supply issues during the approval of an application for an NPDES permit. The Village of Hampshire has been studying, and continues to study, the availability of adequate water sources for the Village ..." Record, page 508.

^{iv} '[T]he Village has been actively studying alternatives to its reliance on the deep aquifer system, such as conducting two studies that have reviewed the possibility of utilizing shallow groundwater supply." Record, page 377.

^v See Record, page 442 for Hampshire's proposed developed land use map and overlay it with the existing agricultural land use map and aquifer sensitivity shown in Exibits 5 and 6 of the Amended Petition for Review.

vi See Record, page 438, 444.

vii See Illinois Annual Air Quality report 2003, Executive Summary, page ix.

viii See http://www.epa.state.il.us/air/ozone/exceedances.html

^{ix} 415 ILCS 5/3.315 defines a "person" as "any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, *state agency*, or any other legal entity, or their legal representative, agent or assigns." Emphasis added.

^x See NIPC's 2020 regional population projections at <u>http://www.nipc.org/test/revised_2020_table.htm</u>

^{xi} See Record, page 433 for 1 P.E. = 100 gpd rule of thumb.

xii See Record, page 509.