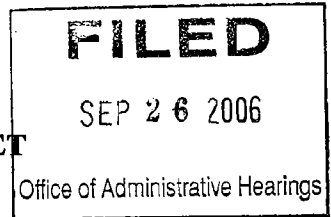


COMMONWEALTH OF KENTUCKY
ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
FILE NO. _____



PETITIONER

THE CITY OF CINCINNATI

v.

PETITION FOR HEARING

ENVIRONMENTAL AND PUBLIC
PROTECTION CABINET
Serve: Office of Legal Services
Fifth Floor, Capital Plaza Tower
Frankfort, KY 40601

RESPONDENTS

and

SANITATION DISTRICT NO. 1 OF
NORTHERN KENTUCKY
Serve: 1045 Eaton Drive
Fort Wright, KY 41017

* * * * *

Pursuant to KRS 224.10-420(2), Petitioner, The City of Cincinnati, by counsel, hereby petitions the Environmental and Public Protection Cabinet ("Cabinet") for a hearing to contest the August 28, 2006, approval by the Cabinet's Division of Water ("DOW") of the facility plan update titled Facilities Plan Update for the Eastern Regional Wastewater Treatment Plant, Sanitation District No. 1 of Northern Kentucky, November 2005 ("Facilities Plan"), and the associated State Planning and Environmental Assessment Report ("SPEAR").

PARTIES AND BACKGROUND

1. The City of Cincinnati is a municipal corporation organized and existing pursuant to the laws of the State of Ohio. The City is located across the Ohio River from the Commonwealth of Kentucky. The City owns property in Kentucky that includes areas adjacent to and under the Ohio River. The Greater Cincinnati Water Works, a department of the City of Cincinnati, is a

public utility which withdraws water from the Kentucky side of the Ohio River through intakes located on property owned by the City. After treating the water at the Miller Plant, the Water Works provides an average of approximately 115 million gallons and up to 220 million gallons of drinking water a day through 3,000 miles of water lines. The Water Works serves over 1 million citizens in most of Hamilton County and parts of Butler, Clermont and Warren Counties in Ohio, as well as in Boone County, Kentucky and the City of Florence. Its address is 4747 Spring Grove Avenue, Cincinnati, Ohio 45232. Hereinafter the Petitioner, the City of Cincinnati, will be referred to as the Greater Cincinnati Water Works ("GCWW") (Tel. 513-591-7970; Fax. 513-591-6519).

2. Sanitation District No. 1 of Northern Kentucky ("SD#1") is an entity responsible for operating and maintaining the wastewater collection and treatment system in the Northern Kentucky counties of Boone, Campbell, and Kenton. The address of SD#1 is 1045 Eaton Drive, Fort Wright, Kentucky 41017. SD#1 is building and proposes to operate a new wastewater treatment facility, the Eastern Regional Waste Water Treatment Plant ("ERWWTP") in Campbell County, Kentucky. SD#1 proposes to discharge effluent from the ERWWTP into Brush Creek at milepoint 1.6 (the "Brush Creek Discharge").

3. The Cabinet is charged with implementing and enforcing KRS Chapter 224 and administrative regulations promulgated pursuant thereto. The Cabinet is charged by KRS Chapter 224 and its accompanying regulations with the duties to provide for the prevention, abatement and control of water pollution and review and approval or disapproval of applications for permits to discharge pollutants into streams of the Commonwealth. Pursuant to KRS 224.16-050 the Cabinet may issue federal permits pursuant to the Federal Water Pollution Control Act/Clean Water Act, 33 U.S.C. Section 1251, et seq. Pursuant to KRS 151.630 and KRS

151.636, the Kentucky General Assembly has mandated that the Cabinet administer the Safe Drinking Water Act ("SDWA") and conduct a source water assessment and delineation program under the SDWA.

4. Kentucky has approved, ratified, adopted and enacted into law the Ohio River Valley Sanitation Compact. KRS 224.18-760 ("Compact"). Article I of the Compact recognizes the important use of the Ohio River as a public water source and drinking water supply. Article VI of the Compact states, in pertinent part, "[t]he guiding principle of this compact shall be that pollution by sewage or industrial wastes originating within a signatory State shall not injuriously affect the various uses of the interstate waters as hereinbefore defined." The Ohio River Valley Water Sanitation Commission ("ORSANCO") has adopted pollution control standards for discharges to the Ohio River to protect the designated uses of the Ohio River, including the use as a public water supply. In 1997, ORSANCO, along with representatives from the drinking water agencies from the six states bordering the Ohio River, including the Kentucky Division of Water ("DOW"), USEPA Regions 3, 4, and 5, and ORSANCO's Water Uses Committee (Ohio River Drinking Water Utilities), formed a work group for source water assessment. The group developed a tiered delineation system for the Ohio River Basin, consisting of three source water protection zones. Zone 1, the Zone of Critical Concern, extends from one-fourth mile below to 25 miles upstream from the water intakes at GCWW's Miller Plant, on the main stem and major tributaries of the river, which include Twelvemile Creek, into which the Brush Creek Discharge will flow. The Zone of Critical Concern also extends one-fourth mile on both sides of the river band and the major tributaries.

5. In August 2001 SD#1 submitted to the Cabinet a facilities plan which proposed a discharge directly to the Ohio River. Neither SD#1 nor the Cabinet published notice of the 2001

plan in any newspaper north of the Ohio River, so GCWW was, in effect, denied the opportunity to comment on that plan.

6. On May 12, 2004, DOW issued KPDES Permit No. KY0105031 to SD#1 (the “Original Permit”). On June 7, 2004, GCWW filed a petition for hearing to protest the issuance of the Original Permit and Construction Permit No. 523 (Activity ID No. APE20020001). City of Cincinnati v. EPPC and Sanitation District No. 1 of Northern Kentucky, File No. DOW-26727-039, Office of Administrative Hearings. While that administrative challenge was pending, SD#1 proposed to investigate alternative locations to discharge effluent from the ERWWTP. The Hearing Officer and Counsel for all parties agreed to hold the case in abeyance pending developments on alternative discharge sites, including the necessary updating of the 2001 facilities plan.

7. In September 2005 SD#1 made public a draft facilities plan update. GCWW submitted comments to and questions regarding the draft plan. SD#1 prepared responses to some of GCWW comments and included those responses in the final form of the Facilities Plan, which SD#1 submitted to the Cabinet in November 2005.

8. In February 2006 the Cabinet’s Division of Water (“DOW”) issued a State Planning and Environmental Assessment Report (“SPEAR”) regarding the Facilities Plan. (See Exhibit 1). The SPEAR stated that the Brush Creek Discharge was the selected alternative because it was the most cost-effective and “it has the least construction impact, no stream crossings, no property easements, no impacts to existing or future land use, minimal riparian forest loss, no landslide risk, no archaeological impacts, and no aesthetic impacts.” The Cabinet did not mention public health concerns related to the discharge’s impact on drinking water, nor did the Cabinet consider the impact of increased cost of additional treatment to the drinking water sources affected by the discharge. GCWW submitted comments to the SPEAR.

9. By letter dated August 28, 2006, the Cabinet approved the Facilities Plan. (See Exhibit 1).
10. The Facilities Plan provides for discharge of effluent from the ERWWTP into Brush Creek, a tributary of Twelvemile Creek, which flows into the Ohio River approximately 11 miles upstream from the GCWW drinking water intakes. The existing water flow in the Brush Creek/Twelvemile Creek conduit is so low in comparison to the predicted effluent discharge that for much of the year most of the stream flow will be composed of the effluent, thus making the Brush Creek/Twelvemile Creek conduit little more than an open conveyance of effluent from the ERWWTP to the Ohio River.
11. On September 8, 2006, the Cabinet issued a Draft KPDES Permit No. KY0105031, which has been characterized as a modification of the Original Permit (the "New Permit"). The draft New Permit authorizes the Brush Creek Discharge and provides certain effluent limitations and permit conditions.
12. To approve a regional facility plan, the Cabinet must find that the plan is "in the best interest of the environment and the public," 401 KAR 5:006 Section 6(2). The contents of the plan must include necessary information to allow for an environmental assessment. 401 KAR 5:006 Section 4.
13. The Cabinet's approval of the Facilities Plan is arbitrary and capricious, contrary to law and fact, and an abuse of discretion, and is injurious to GCWW.
14. Approval of the Facilities Plan is a final determination.
15. Petitioner is aggrieved by the Cabinet's approval of the Facilities Plan.
16. Pursuant to KRS 224.10-420(2), Petitioner demands a formal hearing in this matter for the reasons set forth herein.

17. State and federal law, including but not limited to KRS Chapter 224, the Clean Water Act, the SDWA, and the Compact, protect human health, environmental quality, and use of the Ohio River as a domestic water supply. The United States Congress has declared that “safe drinking water is essential to the protection of public health” and that “protection of public health requires . . . prevention of drinking water contamination through . . . enhanced protection of source waters of public water systems.” Section 3 of Pub.L. 104-182. The SDWA is intended to protect public health, and the Kentucky General Assembly has commanded the Cabinet to administer a program that is consistent with the SDWA. GCWW provides treated drinking water to over 1,000,000 residents of southern Ohio and northern Kentucky and is charged with protecting the health of its drinking water consumers by providing safe drinking water. If the Brush Creek Discharge is constructed and used in accordance with the Facilities Plan, GCWW will spend millions of dollars in additional treatment to protect public health from the impact of the discharge.

18. The Cabinet’s failure to protect the Ohio River as a source of drinking water and to protect human health and the environment from harmful contaminants that survive SD#1’s treatment processes impermissibly increases the risk of significant and costly waterborne disease to nearby downstream users of drinking water and impermissibly shifts all of the cost of treatment for these contaminants to GCWW and the water users of southern Ohio and northern Kentucky.

19. The Cabinet’s action of approving the Facilities Plan is arbitrary and capricious and an abuse of discretion because its finding that the Facilities Plan is in “the best interest of the environment and public” lacks a rational basis and is not supported by substantial evidence. Among other errors, the Cabinet improperly approved the Facilities Plan:

(a) without considering the public health issues related to protozoan parasites such as *Cryptosporidium* and *Giardia*, enteric and other viral pathogens, pharmaceutical and personal care product residues (especially those that may disrupt endocrine function), and refractory contaminants such as synthetic organic chemicals that are known to have a negative affect on human health and the environment;

(b) without considering the impact of the Facilities Plan on use of the Ohio River as a domestic water supply;

(c) without considering the impact of peak or acute pollutant concentrations on nearby downstream drinking water users since the risks that these events present are not adequately represented by average effluent limits;

(d) without requiring SD#1 to examine any data on the anticipated performance of the UV treatment offered by the Facilities Plan with respect to the removal or inactivation of *Cryptosporidium* and other microbial and viral contaminants of concern to human health in effluent with high levels of particulate matter, especially considering the levels of total suspended solids proposed for the average effluent limitations and the effects of shielding and shading of microorganisms due to suspended solids that have not been evaluated;

(e) without requiring SD#1 to provide or analyze data on the efficacy of natural removal mechanisms available in the Brush and Twelvemile Creeks such as settling in stream sediments, additional biodegradation, predation, etc.;

(f) without requiring SD#1 to evaluate the potential impact of deposition of pollutants during low stream flow conditions in the Brush Creek and Twelvemile Creek conduit and resuspension and transport of pollutants and solid particulate matter during conditions of high stream flow;

(g) without requiring SD#1 to evaluate the ability of the streams to assimilate non-settleable solids such as endocrine-disrupting compounds and synthetic organic compounds;

(h) without considering health impacts to recreational users of the streams when the streams are composed largely of effluent; and

(i) without considering that the effluent discharged to the Ohio River from the Brush Creek/Twelvemile Creek conduit will remain concentrated near the Kentucky bank, which is the site of the drinking water intakes, all of which should have been required under 401 KAR 5:006.

20. The Cabinet's action of approving the Facilities Plan is contrary to fact, among other reasons, because:

(a) The Cabinet accepted SD#1's conclusion that dilution of the discharge will be greater due to the Brush Creek Discharge's greater distance from GCWW's drinking water intakes despite monitoring data in Twelvemile Creek that show that the effluent from the ERWWTP would comprise the majority of the flow in Twelvemile Creek over a sizable portion of the year. As a result, the Brush Creek and Twelvemile Creek conduit is little more than an open conveyance of effluent from the Brush Creek Discharge to the Ohio River at the mouth of Twelvemile Creek and often will not result in significant dilution.

(b) Modeling of flow in the Ohio River from the mouth of Twelvemile Creek to the GCWW drinking water intakes and dye studies performed by the United States Geological Survey ("USGS") show that pollutants discharged into the Ohio River at Twelvemile Creek remain concentrated near the Kentucky bank and generally are not completely dispersed and mixed in the river. This evidence is contrary to assertions made by SD#1 and accepted by the Cabinet without explanation or evaluation. The Cabinet did not conduct its own independent mixing and dilution analysis but rather relied on the statements of SD#1.

(c) The Cabinet accepted SD#1's conclusion that discharge to Brush Creek resulted in the "highest level of treatment," when in fact the TSS and BOD limits discussed in the Facilities Plan and proposed in the draft New Permit exceed levels that can be achieved consistently by using more effective treatment processes.

21. The Cabinet's approval of the Facilities Plan is contrary to law, among other reasons, because:

(a) The Cabinet failed to impose conditions more stringent than effluent limitations and numeric standards as it is required to do to achieve the water quality standards, including protecting the designated uses. See, e.g., 40 CFR § 122.44(d) (states shall include requirements "in addition to or more stringent than promulgated effluent limitations guidelines or standards under sections 301, 304, 306, 307, 318 and 405 of CWA necessary to (1) Achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality."); 401 KAR 5:065 Section 2 (4). Among the state narrative criteria ignored by the Cabinet is the one that prohibits discharges that "[i]njure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans." 401 KAR 5:031 Section 2(1)(d). The Facilities Plan and SPEAR do not demonstrate that the ERWWTP and the proposed discharge site have been designed and located to protect surface waters from being degraded by emerging contaminants (including pathogens or pharmaceutical and personal care products or other chemicals that act as endocrine disruptors) that injure, are chronically or acutely toxic to, or produce adverse physiological or behavioral responses in humans, animals, fish, and other aquatic life, in violation of 401 KAR 5:031 Section 2(1)(d); 40 CFR § 131.11; 33 U.S.C. § 1313. By approving the Facilities Plan without such conditions, the Cabinet initiated a series of steps that will result in a KPDES permit that will not comply with the Clean Water Act.

See, e.g., 401 KAR 5:006 Section 7.

(b) The Cabinet failed to ensure compliance with the applicable water quality requirements of Kentucky and Ohio. See, e.g., 401 KAR 5:055 Section 2(3).

(c) The Facilities Plan and SPEAR do not assure that the designated use of the Ohio River as domestic water supply will be preserved. See, e.g., 401 KAR 5:026; 401 KAR 5:029.

(d) The Cabinet and SD#1 failed to consider all reasonable alternatives without adequate explanation. GCWW has advocated and continues to advocate a discharge that would enter the Ohio River downstream of GCWW's drinking water intakes – either by discharge directly to the Ohio River or by discharge into a tributary of the Licking River that would eventually flow into the Ohio River downstream from the intakes (the “Licking River Alternative”). SD#1's discussion of a Licking River Alternative contained no details as to cost, long-term advantages, or feasibility and is thus contrary to 401 KAR 5:006 Section 4. Under this section, the “regional facility plan shall include the necessary information to allow for an environmental assessment and to assure that the most cost-effective and environmentally sound means of achieving the established water quality goals can be implemented.” Without an appropriate discussion of the Licking River alternative, the Cabinet could not properly evaluate that option.

(e) The Facilities Plan and SPEAR do not adequately address long-term impact as required by 401 KAR 5:006 Section 4 because they do not consider the potential growth of surrounding areas that are expected to use the system in the future and how that growth will increase the impact on downstream water users.

(f) The Facilities Plan and SPEAR contravene the purpose of public participation required under 401 KAR 5:006 Section 5 because SD#1 frustrated meaningful public comment

and review by providing misleading statements, including the following statements made at public meetings:

(i) stating that the Facilities Plan addresses several of GCWW's concerns when there is no available data to support that conclusion;

(ii) attributing the improvement in water quality of Brush Creek to the proposed discharge instead of recognizing the impact of replacing the old and poorly-functioning Alexandria plant; and

(iii) suggesting that the savings attributable to moving the discharge to Brush Creek from the Ohio River would be used to improve the environment in the Twelvemile Creek valley or for watershed planning when no such promises or guarantees are part of the Facilities Plan;

(g) SD#1 did not allow meaningful public comment on a regional matter and cannot, therefore, conclude that there is public support for the discharge to Brush Creek because SD#1 convened only local groups to discuss use of the Brush and Twelvemile Creeks for discharge.

(h) The Facilities Plan and the Cabinet failed to consider *Cryptosporidium* a toxic pollutant under the Clean Water Act, 33 U.S.C. § 1362 (13), and failed to set an appropriate effluent limitation as required by 401 KAR 5:065 Section 2(4) and 40 CFR 122.44(d), even though *Cryptosporidium* is identified by state and federal regulatory authorities as a threat to human health, as evidenced by Long Term 2 Enhanced Surface Water Treatment Rule, 71 Fed. Reg. 653 – 786 (January 5, 2006) (“LT2”), among others.

(i) The Facilities Plan does not provide adequate protection for downstream water supply users as provided by the ORSANCO Compact in the event of bypass or system upset, a problem worsened because the plan does not provide for continuous monitoring.

