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April 5, 2006

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Lloyd R. Cress, Commissioner
Environmental and Public Protection Cabinet
c/o Jill Bertelson
Municipal Planning Section
Division of Water
14 Reilly Road, Frankfort Office Park
Frankfort, KY 40601

RE: Comments on State Planning and Environmental Assessment Report (SPEAR)
Sanitation District #1 of Northern Kentucky (SD#1)
Eastern Regional Wastewater Treatment Plant (ERWWTP),

Dear Mr. Cress:

Attached are comments filed on behalf of the Greater Cincinnati Water Works (GCWW) in response to the State Planning and Environmental Assessment Report (SPEAR) for the Eastern Regional Wastewater Treatment Plant dated February 7, 2006. This SPEAR approves SD#1's Regional Facility Plan Update ("Plan Update") of November 2005. GCWW continues to object to SD#1's selection of Brush Creek as the discharge point for ERWWTP effluent, which the SPEAR adopts, and continues to believe that additional treatment requirements should be imposed if wastewater is discharged at that point. GCWW incorporates by reference the comments that it submitted on November 7, 2005, to the draft Plan Update, as well as the comments submitted at the public hearing on December 4, 2003, concerning the KPDES permit issued by the Cabinet to SD#1.

GCWW recognizes the need for an efficient regional wastewater treatment facility in Northern Kentucky, with increased capacity to handle development in the area. GCWW would endorse the project wholeheartedly if the plans did not present a threat to GCWW's provision of safe drinking water to its 1.3 million customers. We believe the Cabinet is being short-sighted in failing to ensure the continued suitability of the affected stretch of the Ohio River for domestic water supply. GCWW continues to believe that the remark made at a meeting several months ago by a state water official was correct -- that it is wiser to *plan* our way to *avoid* problems than to deal after the fact with problems we created. Once the plant outfall is built and the plant begins discharging effluent that opportunity will be lost.

The Cabinet and SD#1 seem to believe that the new discharge point for SD#1's wastewater solves all of GCWW's concerns, or that GCWW is being unreasonable in continuing to ask for better wastewater treatment and a discharge point downstream of its intakes.

GCWW's comments explain why a discharge downstream of the drinking water intakes and additional treatment are needed to protect human health and the environment. These comments show why GCWW is so persistent in its challenge to SD#1's current plan.

We implore Cabinet officials to plan for the future, to plan for full watershed protection for all designated uses, including domestic water supply. We request that the Cabinet put the Plan Update on hold and not approve the Brush Creek discharge location until the alternative of discharging to the Licking River or one of its tributaries is explored in detail or until additional wastewater treatments are evaluated.

Sincerely,

Laura D. Keller by WBE

Laura D. Keller

Attachments

LDK:mch

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COMMENTS BY GREATER CINCINNATI WATER WORKS ON THE STATE PLANNING AND ENVIRONMENTAL ASSESSMENT REPORT ISSUED BY THE KENTUCKY DIVISION OF WATER ON FEBRUARY 7, 2006 (COMMENTS FILED APRIL 5, 2006)

Greater Cincinnati Water Works (GCWW) appreciates the opportunity to comment on the State Planning and Environmental Assessment Report (2006 SPEAR) for the Eastern Regional Wastewater Treatment Plant (ERWWTP), dated February 7, 2006, prepared by the Environmental and Public Protection Cabinet (Cabinet). Sanitation District No. 1 (SD#1) submitted its final Regional Facility Plan Update ("Plan Update") in November 2005, along with its Response to Comments, including those of GCWW, in Appendix H. The Cabinet has summarized the Plan Update and accepted SD#1's chosen alternative, without itself addressing GCWW's comments, relying instead on SD#1's responses. Accordingly, commenting on the SPEAR is virtually the same as commenting on the Plan Update/draft Plan Update. GCWW has already filed comments to the draft plan dated November 7, 2005, and incorporates them by reference herein. GCWW also incorporates by reference its earlier comments concerning the KPDES permit, submitted at the public hearing on December 4, 2003.

GCWW continues to advocate locating the discharge from the ERWWTP at a point downstream from the GCWW and northern Kentucky drinking water intakes. GCWW also believes that the proposed levels of treatment and effluent limitations are not adequate to protect public health and the environment. The comments begin with several general observations. Comments on specific Kentucky Division of Water (KDOW) observations in the 2006 SPEAR are set forth after the general observations. Finally, the comments describe specific critical issues and some potential solutions to those issues.

A. GENERAL COMMENTS

1. Matters addressed in the 2002 SPEAR concerning siting and construction of the ERWWTP are not settled as the Cabinet suggests in the 2006 SPEAR.

The 2006 SPEAR makes a point of limiting its scope to the changed outfall sewer location (from the Ohio River to Brush Creek) and any modifications required by the Cabinet to meet water quality standards for the smaller receiving stream, as opposed to the entire plant location or design. It refers to a previous state planning and environmental assessment report of November 1, 2002 (2002 SPEAR) that approved SD#1's district-wide Regional Facilities Plan (RFP) and relies on that report -- not the 2006 SPEAR -- for its evaluation of environmental consequences and mitigative measures concerning siting and construction of the ERWWTP. *See, e.g.*, 2006 SPEAR at pp. 5, 7. Similarly, SD#1's responses to comments opined that "the issues relating to the ERWWTP discharge and its potential to cause adverse impacts on GCWW's water intake due to such pollutants were already determined and resolved as part of the original Regional Facilities Plan Update and KPDES permit." Plan Update at 1.

GCWW believes, to the contrary, that the "environmental consequences and mitigative measures" associated with the plant are not matters excluded from current review, and the potential for adverse impacts from ERWWTP's discharge is not "resolved." GCWW was not

informed of the district-wide RFP because public notice was not published on the northern side of the Ohio River or mailed to GCWW, despite its express interest in the new discharge. GCWW therefore was unable to file comments on the RFP or the 2002 SPEAR. It did, however, comment on the KPDES permit at the public hearing on December 4, 2003, and filed an administrative appeal of the permit, which remains unsettled. GCWW's concerns about environmental consequences and mitigative measures remain viable and relevant to this recent analysis, and apply to the Brush Creek location just as much as to the Ohio River discharge.

2. The Cabinet cannot accept the Plan Update unless it finds that the Plan Update is in the "*best* interest of the environment and the public," and it cannot make that determination unless the Plan Update contains a detailed evaluation of the Plan Update's impact on the continued use of the Ohio River as a domestic water supply.

The Ohio River, which would receive the proposed discharge via Brush Creek and Twelve Mile Creek, is designated by Kentucky as a domestic water supply and by ORSANCO as a drinking water source. The existing use of the Ohio River as a domestic water supply is protected by law. The proposed discharge will include treated wastewater from communities and the replaced treatment plants that currently discharge downstream from the GCWW water intakes. The SPEAR is devoid of any evaluation or discussion of the Plan Update's impact on how the proposed discharge will impact the important use of the Ohio River as a drinking water source.

3. The Cabinet cannot accept the Plan Update unless it finds that the Plan Update is in the "*best* interest of the environment and the public," and it cannot make that determination unless the Plan Update contains a detailed evaluation on the Licking River watershed or other alternatives for discharge sites downstream of the GCWW water intakes.

The scope of the 2006 SPEAR is limited to the specific discharge locations proposed by SD#1 in the Plan Update, omitting consideration of other potential sites on other streams. GCWW's primary concern has always been the location of the discharge point, in light of the uncertainties about monitoring and treating for protozoan and viral pathogens, pharmaceutical and personal care product residues ("emerging contaminants"), and refractory contaminants such as synthetic organic chemicals (SOC). These uncertainties could be entirely resolved by the single step of moving the discharge point from Brush Creek (discharging into the Ohio River *upstream* of GCWW's water intake) to the Licking River or a tributary thereof or other discharge site that would discharge into the Ohio River *downstream* of the GCWW intake, and would not meet another major municipal drinking water intake until Louisville, more than one hundred miles downstream.

SD#1 claims that GCWW's concerns about the discharge site were considered "on a comparative basis" among the viable alternatives. Response to Comments at page 3. This statement appears to mean that SD#1 merely compared GCWW's concerns with the Brush Creek outfall against those with the Ohio River outfall. They did not compare the environmental consequences of the Brush Creek discharge with a discharge to the Licking River or one of its tributaries.

Both SD#1 and the Cabinet have in the past stated that SD#1 considered the Licking River tributaries alternative offered by GCWW and rejected it because of financial reasons and because of the intake for the Taylor Mill water treatment plant on the Licking River. Yet neither the Plan Update nor the SPEAR evaluate in any detail the costs complained of, or whether the Taylor Mill plant will continue to operate where it is, or the effects on the 1.3 million GCWW customers compared to those on the 10,000 customers served by the Taylor Mill Plant.

GCWW is not merely advocating its favored alternative as the proper *result*; it is arguing for a more thorough *process*. The Plan Update should evaluate the Licking River/tributary option in detail, rather than dismissing it out of hand. The Cabinet cannot meet the regulatory requirement of finding that the plan is "in the *best* interest of the environment and the public" unless it has reviewed such an evaluation. We have at this time – and never will have again – the opportunity to plan for an approach that will avoid battles in the future about who is responsible and what must be done to protect downstream drinking water.

4. The Cabinet cannot accept the Plan Update unless it finds that the Plan Update is in the "best interest of the environment and the public," and it cannot make that determination unless the Plan Update demonstrates that the ERWWTP has been designed to fully address the emerging pollutants.

We applaud the upgrades to the ERWWTP system, including phosphorus reduction and more stringent limits for chlorides and total suspended solids. GCWW's continuing concern about the design of the plant relates to the fact that neither SD#1 nor the Cabinet has concerned itself with emerging contaminants for which there are no numerical standards under the Clean Water Act. These pathogens and pharmaceuticals have the potential to harm hundreds of thousands of downstream consumers of GCWW's water, as GCWW has previously pointed out in the earlier comments incorporated by reference herein. Since those comments were submitted, the United States Environmental Protection Agency has released the Final Rule for the Long Term 2 Enhanced Surface Water Treatment Rule. 71 Fed. Reg. 653 – 786 (January 5, 2006). The Final Rule and related preliminary documents detail the importance and justification for imposing additional requirements based on *Cryptosporidium* abundance in source water. The importance of this pathogen to human health is recognized and, in light of this recognition, the Cabinet at SD#1 cannot ignore it merely because of the absence of a numerical water quality standard.

5. The Cabinet must perform a NEPA or NEPA-like assessment for the project if it receives federal funds or financial support through the State Revolving Fund.

To the extent that the ERWWTP and its proposed outfall to the Brush Creek involve funding by the federal government or the State Revolving Fund a detailed NEPA or NEPA-like environmental analysis is required.

B. SPECIFIC COMMENTS

Page 1, Part A, *Proposed Facilities*

1. Total Suspended Solids. The parameter which has not been significantly revised in the proposed Brush Creek discharge permit (as compared to the Ohio River discharge permit)

is total suspended solids (TSS). Why has the TSS limit not been reduced for the Brush Creek discharge? Having a low level of solids in the plant effluent is critical to proper operation of the UV disinfection system. Since inadequate disinfection poses an acute public health risk to downstream water users, on-line water quality monitoring (such as turbidity) and more stringent TSS limits and reporting requirements should be considered in the NPDES permit.

2. Sampling Frequency. The permit limits listed in the SPEAR are monthly average limits. All other limits (such as weekly averages) should also be listed, along with the required sampling frequency.

3. Peak Discharges and Acute Effects. Neither the Plan Update nor the 2006 SPEAR makes any attempt at evaluating the effects of peak discharges that may average out to meet the weekly and monthly limitations set out in the KPDES permit, yet still have acute effects on downstream users and the environment.

Page 2, Part A, *Project Need*, Paragraph 3

1. Health Risks are the Issue. Under *Effluent water quality; **perceived** public water supply concerns*, (emphasis added), it is stated that GCWW objects to the Ohio River discharge because it is 11 miles upstream of the drinking water intakes. This is not a complete statement of GCWW's objections, and it says nothing of the acute and chronic health risks presented to the large regional population served by the three drinking water treatment plants with intakes in the area. The effects of these risks are not perceived, but rather have been documented in Milwaukee (1993 *Cryptosporidium* outbreak), among other locations, and recent ORSANCO data suggesting endocrine disrupting effects in Ohio River aquatic life.

Page 3, Part A, table showing flow projections

1. Flow Projections. The projections shown in the table go up through a 20 year planning period. What are the population/flow projections beyond the 20 year time frame? Page 6 of the SPEAR Update mentions 8 mgd as average flow for complete build-out (is there a source for this number?). What is the environmental impact of the flow into Brush and Twelve Mile Creeks from the increased development which will no doubt occur due to the new wastewater treatment plant capacity? Moreover, the SPEAR does not evaluate the relative contribution that the proposed discharge will make to the existing flow in Brush and Twelve Mile Creeks.

Page 4, Part B, *Surface Waters*

1. Siltation. The 2006 SPEAR notes the problem of siltation from land development as a contributor to stream impairment. The ERWWTP will allow for new development, thus an increase in impervious area. Has the effect of siltation been considered for Brush Creek in conjunction with the increased flow from the ERWWTP?

2. Domestic Water Supply. Drinking water has again been omitted as a designated use of the Ohio River (see table on page 4). Although it appears that this section of the SPEAR involves only impaired uses, and it appears that the Cabinet does not consider the Ohio

River impaired regarding domestic water supply, the Cabinet has ignored this recognized and protected use of the Ohio River.

Page 5, Part B, *Groundwater*

1. Recharge. The statement on maintaining groundwater recharge quantities due to the increased flow into Brush Creek should be verified. On page 6, the stream is said to be primarily a bedrock stream with bedrock banks.

Page 6, Part D, *Alternative No. 2 – Discharge to Brush Creek*

1. Total Suspended Solids. The second paragraph of this section notes that all permit limitations are more stringent for the Brush Creek discharge as compared to the Ohio River discharge, except for TSS. No reason is given for the decision not to tighten the TSS limitation significantly.
2. Nitrogen. The second paragraph of this section states that nitrogen removal is included in the plant modifications, along with phosphorous removal. Nitrogen removal is not required by the permit, although intermittent phosphorous reduction is required to 1 to 2 mg/L, depending on the time of year.
3. Projected Flow. The third paragraph of this section states that the base flow in Brush Creek will increase as the ERWWTP flow increases to an "ultimate build-out capacity of 8 mgd daily average flow (beyond the 20-year planning period)." This statement suggests that the plant will never expand beyond 8 mgd, although no reference is given for this flow rate, only the 6 mgd.
4. Sediment and Re-suspension. The same paragraph states that the stream bed and banks are primarily rock, an observation that indicates that the stream is similar to the concrete conduit that was originally proposed. At low stream flows, solids will settle out, but under higher stream flows, these solids will be re-suspended and washed into the Ohio River as a slug load. What are the effects of increased flow into Brush Creek (due to additional flow from the plant and runoff from new development) on the transport of solids through the creeks and ultimately into the Ohio River as stream flows increase over the years? How will the higher stream flow rates affect contaminant degradation and microbial die-off?
5. Extent of Mixing. A dye study conducted by the USGS and modeling of river flow by Dr. Forrest Holly show that mixing of a discharge into the Ohio River near the mouth of Twelve Mile Creek is not complete by the time it reaches the water intakes of GCWW and, in fact, the discharge tends to be more concentrated toward the Kentucky bank of the river. Therefore, contrary to what SD#1 reported during the public hearing and in subsequent commentary, flow into the Ohio River from Twelve Mile Creek hugs the Kentucky bank. Based on predictions of pathogen (*Cryptosporidium*) content of municipal wastewater, GCWW has shown potential acute microbial risks even with complete mixing. Recent findings from the dye study clearly demonstrate a pronounced increase in the potential public health risks due to lack of complete mixing and the intakes receiving higher contaminant concentrations. The lack of complete mixing of the

discharge and the re-suspension of pathogens from sediment in the Brush/Twelve Mile Creek conduit may result in slugs of high concentrations of contaminants reaching GCWW intakes.

6. Level of Treatment. The fourth paragraph of this section (page 7) states that Alternative 2 (discharge to Brush Creek) results in the "highest level of treatment". The discharge permit proposed for Brush Creek by the KDOW does not result in the highest level of treatment. The TSS and BOD limits are above what can consistently be achieved if the proper treatment processes are employed (for example, filtration), nitrogen removal is not being required, and microbial contaminants and synthetic organics are not being adequately considered in the proposed process design and permit. The technology to treat for these contaminants is not new; it is well-established and available for achieving a higher degree of treatment than what the Brush Creek permit is requiring.

   The same paragraph also mentions that a high level of treatment and private property disturbances are "the two issues that appear to rate as the highest level of public concern, based upon recent preliminary public meetings". According to the 2006 SPEAR, three public meetings were held: two in June and one in October of 2005 (as detailed on page 9, Part F). GCWW was not informed of the June meetings, and therefore, was not given an opportunity to comment on the proposed discharge permit or plant process re-design at that time. SD#1 did not apparently mention at those meetings that relocating the discharge to a point downstream of the drinking water intakes had been raised by GCWW as an issue of high public concern.

C. CRITICAL ISSUES OF CONCERN

Although the proposed relocation of the wastewater discharge point has resulted in the incorporation of a higher level of treatment for the ERWWTP, the proposed changes do not replace the optimal solution of relocating the discharge to a point downstream of the drinking water intakes. There are still many critical issues that the proposed changes do not adequately address:

- Removal/inactivation of pathogens that survive in the environment,
- Refractory contaminants, such as synthetic organic chemicals and chlorinated solvents
- Endocrine disrupting compounds,
- Contaminants with potential for future regulation,
- Extent of mixing between ERWWTP effluent and Ohio River,
- Discharge pipe and volume issues,
- Plant upsets.

1. Removal/Inactivation of Pathogens

Concern: The proposed pathogen removal/inactivation processes may not be effective under all operating conditions.

Is this concern still valid? Yes. The UV disinfection system design is not changing in the proposed plant upgrade, although with the addition of biological and chemical phosphorous

removal, the solids load in the final effluent should be lower (equating to higher UV transmissivity). However, the proposed Brush Creek NPDES permit level for TSS has not changed from the Ohio River discharge permit (both specify 30 mg/L), thus the higher level of treatment that is achievable is not being required to be met from a regulatory perspective. The use of chemical precipitation for phosphorous removal will only be used intermittently, and thus the benefit of additional solids removal through chemical coagulation will not be consistent. Even if a higher effluent quality is achieved, plant upsets have still not been adequately addressed, which can profoundly affect UV disinfection efficiency.

Potential Solutions to Protect Public Health and the Environment: Since the ramifications of improper and/or substandard disinfection may result in acute public health risks, the following are possible remedies which may help mitigate the risk presented by the proposed plant design and discharge location.

- Lower the TSS limit entering the UV system by technologies such as filtration.
- Require on-line turbidity monitoring of UV disinfection influent flow (to insure the influent is consistently below a maximum allowable turbidity that has been shown to produce properly disinfected water).
- The UV system should be designed with a dose appropriate to inactivate *Cryptosporidium* and other types of microorganisms (such as viruses). This will require a higher dose than that being provided. Validation should be required similar to drinking requirements.
- Require immediate notification of plant upsets to GCWW, with an upset being defined as any period when instantaneous analysis of regulatory parameters are greater than the 30-day average specified in the NPDES permit. Notification should be by phone.

2. Refractory Contaminants

Concern: A number of injurious chemicals have been found in the effluents of municipal wastewater treatment plants.

Is this concern still valid? Yes. There are many synthetic organic compounds in wastewater which are not amenable to biodegradation under the conditions present in most wastewater treatment plants, and pose environmental and human health problems. Some organic compounds may only be partially degraded, resulting in a compound that may be more harmful than the parent compound. Although some removal can occur in activated sludge processes (due to floc adsorption and volatilization), toxic organic compounds can still remain in the plant effluent. Processes which target removal of refractory organics include reverse osmosis, electrodialysis, carbon adsorption, advanced oxidation processes, and distillation, none of which are being offered in the upgraded design.

Potential Solutions to Protect Public Health and the Environment:

- Require periodic SOC scan of plant effluent, e.g., quarterly. The compounds analyzed should include at a minimum those listed in the Ohio Administrative Code Section 3745-81-12, plus any additional that may be required by Kentucky Administrative Regulations. This information should be passed on to the KDOW, GCWW, as well as any other interested parties (ORSANCO, etc.).
- Grant plant access to drinking water systems for special monitoring when contamination is detected in drinking water intakes.

3. **Endocrine Disrupting Compounds (EDC's)**

Concern: Personal care products, pharmaceuticals, hormones and hormone analogues have been found in wastewater treatment plant effluents. Additionally there are new reports of trace EDC compounds being detected in the fish tissues samples in our area. Many of these substances have been shown to have endocrine disrupting effects, and some EDC's are listed on the USEPA CCL for potential future regulation. We do not wish to see these levels increase.

Is this concern still valid? Yes. Same comments apply as listed for refractory contaminants, above.

Potential Solution to Protect Public Health and the Environment:

- There are currently no drinking water regulations specifically for EDC's (although some compounds classified as EDC's are monitored and/or regulated under other programs). Methods for analysis of many of these compounds are still in development. It is recommended that a monitoring program for EDC's be developed by the KDOW in conjunction with other interested parties (GCWW, ORSANCO, medical organizations, etc).

4. **Potential Contaminants**

Concern: The potential that more contaminants will be found to have adverse human health effects at low concentrations is of concern (latest concerns appear in Contaminant Candidate List, Second Draft ("CCL2")).

Is this concern still valid? Yes. CCL2 contaminants include substances from both chemical and microbial sources. Some removal and/or inactivation of these compounds may occur in the proposed processes, but the degree of removal/inactivation and the possibility of biotransformation to more harmful substances are not known.

Potential Solutions to Protect Public Health and the Environment:

- Monitor plant effluent for current USEPA UCMR compounds on an annual basis.
- Grant plant access to drinking water systems for special monitoring when contamination is detected in drinking water intakes.

5. **Extent of Mixing between ERWWTP effluent and Ohio River**

Concern: Dilution of effluent by Ohio River water and Twelve Mile Creek does not eliminate risk to GCWW's source water.

Is this concern still valid? Yes. Although the proposed plant effluent will not be directly discharged to the Ohio River, it will still end up in the river at essentially the same location. The plant location has not changed; only the transport mechanism has changed (from a pipe to a stream). We know that during low flow periods of the year, essentially all of the flow into Twelve Mile Creek from Brush Creek will be from the ERWWTP (the creeks, therefore, become the conduit to the Ohio River). Under normal environmental conditions, the stream discharge may provide some reduction in the amount of contaminants that reach the eventual discharge to the Ohio River (due to settling in stream sediments, additional biodegradation,

predation, etc.), although these removal mechanisms have never been quantified by SD#1. However, two important factors remain a concern: the re-suspension of contaminants from sediment in the conduit creeks and lack of mixing in the Ohio River.

The first concern with regard to contaminants in the sediment involves intense rainfall events during which stream flows and velocities increase, and scour of streambed sediment occurs. Particle settling and streambed deposition of *Cryptosporidium* oocysts in surface water transport has been documented in a recent publication entitled *Deposition of Cryptosporidium Oocysts in Streambeds* (Searcy et al., Applied and Environmental Microbiology, March 2006). The authors found, under controlled laboratory flume experiments, high levels of surface water to sediment exchange of oocysts under normal stream flow conditions. They also noted, however, that this results in a "reservoir for pathogens that can be released during high-flow events". (emphasis added). This work is very relevant to the ERWWTP.

The second factor is the degree of mixing of the effluent. A dye study conducted by the USGS and modeling of river flow by Dr. Forrest Holly show that a discharge into the Ohio River near the mouth of Twelve Mile Creek is not completely mixed by the time it reaches the water intakes of GCWW and, in fact, the discharge tends to be more concentrated toward the Kentucky bank of the river. Therefore, contrary to what SD1 reported during the public hearing and in subsequent commentary, flow into the Ohio River from Twelve Mile Creek hugs the Kentucky bank. Based on predictions of pathogen (*Cryptosporidium*) content of municipal wastewater, GCWW has shown potential acute microbial risks even with complete mixing. Recent findings from the dye study clearly demonstrate a pronounced increase in the potential public health risks due to lack of complete mixing and the intakes receiving higher contaminant concentrations.

Significance: The lack of complete mixing of the discharge and the re-suspension of pathogens from sediment in the Brush/Twelve Mile Creek conduit may result in slugs of high concentrations of contaminants reaching GCWW intakes.

6. **Discharge Pipe and Volume Issues**

Concern: The original 42 inch discharge outfall pipe to the Ohio River appears to have been designed for significantly larger flows than indicated by SD1. Once a discharge permit is granted, it is hard to relocate the discharge point or deny an expanded discharge permit in the future, and existing flows will normally be covered under grandfather clauses. There is a concern that the plant could become a true "regional" facility, and in the future, additional wastewater flow from various sources (including industrial) would be treated there to volumes well beyond those predicted at this time.

Is this concern still valid? Yes. The proposed plant upgrades do not address this concern.

Potential Solutions to Protect Public Health and the Environment:

- Limit ultimate average day plant capacity to 6 mgd.

7. **Plant Upsets and Other Acute Events**

Concern: KPDES permit levels are set for 30-day and 7-day averages, and do not account for the short-term plant upset that will occur. No operational plan has been developed for a plant upset condition. The notification requirement in the original ERWWTP permit (to notify ORSANCO) does not sufficiently protect downstream users of the water resource.

Is this concern still valid? Yes. The proposed plant upgrades do not address this concern.

Potential Solutions to Protect Public Health and the Environment:

- Require immediate notification of plant upsets to GCWW, with an upset being defined as any period when regulatory parameters are greater than the 30-day average specified in the NPDES permit. Notification should be by phone.

Again, we appreciate the opportunity to comment. We ask that the Cabinet put the Plan Update on hold and not approve the Brush Creek discharge location until the alternative of discharging to the Licking River or one of its tributaries is explored in detail, and until the Cabinet has performed the evaluations necessary to answer the questions raised in these comments.

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