ILLINOIS POLLUTION CONTROL BOARD
March 21, 2002

IN THE MATTER OF:	)	
	)	
PETITION OF THE CITY OF BELLEVILLE	)	AS 99-1
FOR AN ADJUSTED STANDARD FROM 35	)	(Adjusted Standard - Water)
ILL. ADM. CODE 306.305	)	
	)	

ROBERT J. SPRAGUE, SPRAGUE AND URBAN, APPEARED ON BEHALF OF PETITIONERS; and

SANJAY K. SOFAT, ASSISTANT COUNSEL, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by G.T. Girard):

On July 20, 1998, the City of Belleville (Belleville) located in St. Clair County, filed a request for an adjusted standard (Or. Pet.) from the Board's combined sewer overflow (CSO) disinfection requirements. Belleville is requesting the adjusted standard for CSOs at the 88th Street Lift Station that discharges into an unnamed tributary of Powdermill Creek.

On August 3, 1998, Belleville filed the certificate of publication. On August 6, 1998, the Board directed Belleville to file an amended petition. On September 2, 1998, Belleville filed a motion to amend the petition, which the Board denied as the amended petition had not adequately addressed the informational requirements of 35 Ill. Adm. Code 106.705.[1] The Board extended the time to file the amended petition in an order on October 15, 1998. On October 28, 1998, Belleville filed an amended petition, which the Board accepted on November 19, 1998. On April 5, 1999, Belleville filed a second amended petition and on August 27, 1999, a third amended petition (Pet.) was filed. The Illinois Environmental Protection Agency (Agency) filed a recommendation (Ag. Rec.) on August 18, 2000.

On December 21, 2000, the Board found that there was insufficient information in the record to grant Belleville's request for an adjusted standard from the Board's regulations at 35 Ill. Adm. Code 305.306(b). The Board sent the matter to hearing so that deficiencies in the record could be cured. Hearing was held before Board Hearing Officer Steven Langhoff on January 8, 2002, in Belleville.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 *et seq.* (2000)). The Board is charged to "determine, define and implement

[1] Effective January 1, 2001, the Board amended the procedural rules. The new procedural rules for adjusted standard requirements are found at 35 Ill. Adm. Code 104.Subpart D with the specific informational requirements at 35 Ill. Adm. Code 104.406.

the environmental control standards applicable in the State of Illinois" (415 ILCS 5/5(b) (2000)) and to "grant . . . an adjusted standard for persons who can justify such an adjustment" (415 ILCS 5/28.1(a) (2000)).

For the reasons discussed below, the Board will grant the City of Belleville an adjusted standard subject to certain conditions.

STATUTORY AND REGULATORY BACKGROUND

Belleville seeks an adjusted standard from the Board's CSO disinfection requirements at 35 Ill. Adm. Code 306.305(b). Specifically, Section 306.305(b) provides:

> All combined sewer overflows and treatment plant bypasses shall be given sufficient treatment to prevent pollution, or the violation of applicable water quality standards unless an exception has been granted by the Board pursuant to Subpart D. Sufficient treatment shall consist of the following:
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> * * *
>
> b) Additional flows, as determined by the Agency but not less than ten times the average dry weather flow for the design year, shall receive a minimum of primary treatment and disinfection with adequate retention time.

The general procedures that govern an adjusted standard proceeding are found at Section 28.1 of the Act (415 ILCS 5/28.1 (2000)) and the Board's procedural rules at 35 Ill. Adm. Code 104.Subpart D. Section 28.1 of the Act requires that the adjusted standard procedure be consistent with Section 27(a). Under Section 27(a) of the Act, the Board is required to take the following factors into consideration: the existing physical conditions, the character of the area involved, including the character of the surrounding land uses, zoning classifications, the nature of the receiving body of water, and the technical reasonability and economic reasonableness of measuring or reducing a particular type of pollution. 415 ILCS 5/27(a) (2000).

Since the Board's CSO disinfection requirements at Section 306.305(b) do not specify a level of justification from an adjusted standard, the petitioner must justify the adjusted standard in accordance with the requirements of Section 28.1(c)(1) through (c)(4) of the Act, (415 ILCS 5/28.1(c) (2000)). Section 28.1(c)(1) through (c)(4) provide:

1. factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;

2. the existence of those factors justifies an adjusted standard;

3. the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and

4. the adjusted standard is consistent with any applicable federal law.

ADJUSTED STANDARD PETITION

Belleville is requesting an adjusted standard for its CSOs at the 88th Street Lift Station that discharges to an unnamed tributary of Powdermill Creek, which Belleville characterizes as a dry ditch. Powdermill Creek is a small stream with a drainage basin of approximately five miles that flows into the Harding Ditch, then into Prairie du Pont Creek and finally the Mississippi River. Ag. Rec. at 2.

Currently, Belleville is in the process of replacing the original 88th Street Lift Station, which serves an estimated population of 3,400 in western Belleville. Pet. at 7. As a part of the replacement, in January 1999 Belleville completed construction of a swill concentrator for primary treatment of wet weather flows. Pet. at 3-4. The requested relief would allow Belleville to forego disinfection of the discharge from the 88th Street Lift Station swill concentrator during excessive wet weather conditions. Pet. at 1. While Belleville has completed the construction of the concentrator, it has decided not to begin operation until the Board rules on its adjusted standard request. Pet. at 4.

Belleville maintains that the swill concentrator will not be put on line until the Board rules on this adjusted standard petition because of language in the Agency construction permit for the swill concentrator. Pet. at 6. Specifically, Belleville cites special condition 4 of the existing Agency construction permit which states:

> The permittee to construct and own shall submit an acceptable petition to the Pollution Control Board for relief from disinfection or submit plans and specifications along with a request for a supplemental permit to include a disinfection system to the Agency within 90 days of the date of this permit. Should the Board deny the permittee's petition for relief, the permittee shall submit an application for a permit to construct disinfection equipment within 90 days of relief denial, and the permittee shall begin construction within 90 days of permit approval. Pet at 6-7.

At present, Belleville discharges untreated effluent from the 88th Street Lift Station to an unnamed tributary to Powdermill Creek during wet weather flows. Belleville's petition identifies Powdermill Creek as a usually dry ditch less than one foot in depth during average flow. Pet. at 26. Powdermill Creek traverses through a residential neighborhood, more than 400 feet from the nearest house. Belleville describes the area along the creek as sparsely populated, heavily wooded, and not easily accessible. Pet. at 28. Appendix A and Exhibit C of Belleville's August 27, 1999 amended petition include partial maps and annotated photos of the outfall and nearby Powdermill Creek.

Based on a recreational assessment survey conducted on the receiving stream for the 88th Street Lift Station effluent discharge, Belleville states that the receiving stream does not support

and does not have the potential to support primary full body or recreational contact activities. Pet. at 26-28. Belleville notes that in the first adjusted standard petition filed

July 20, 1998, Belleville reported a citizen complaint about the outfall. In the summer of 1997, Mr. Gompers, a property owner who resides adjacent to the 88th Street Lift Station site, complained to both the Agency and the United States Environmental Protection Agency about potential health hazards to his children from the CSO outfall discharge. Mr. Gompers claimed that his children play in the ditch where the CSO discharges during wet weather (Or. Pet. at 3).

Belleville has investigated two types of disinfection. The first, ultraviolet disinfection, was not viable because the effluent from the swill concentrator would be too turbid to allow for proper light penetration, according to Belleville. Pet. at 17. Secondly, Belleville examined chlorine disinfection and two types of chlorine were considered. The first alternative was chlorine gas stored on site in one-ton cylinders. This option was considered not viable by Belleville because the area is zoned for single family residences and might be considered a potential safety hazard. The second option utilized sodium hypochlorite which was considered safer to use. The estimated cost for constructing a sodium hypochlorite disinfection system is $293,437 with an annual estimated cost for operation and maintenance of $7,000. Pet. at 17-18.

Belleville argues that the cost of disinfection is not justified based on the negligible benefit it would provide to the surrounding area. Pet. at 29. Belleville further claims that the economic and technical hardship of installing a disinfection system, in addition to the swill concentrator, outweighs any benefit to the environment given the limited use and accessibility of the receiving waters.

In summary, Belleville argues that three factors weigh in favor of granting an adjusted standard. First, the receiving stream does not have potential for primary contact activities. Second, designing, constructing and operating a fully automated chlorine disinfection system at an unmanned location is technically difficult. Third, the high costs of building, operation and maintaining the disinfection facilities to achieve the disinfection requirements do not justify the benefit of following the disinfection requirement. Pet. at 32.

Belleville proposes that the Board adopt the following language for the adjusted standard:

> Either: the City of Belleville, Illinois, is granted an adjustment to the Disinfection Requirements of 35 Ill. Admin. Code 306.305 (b). This adjustment allows the City of Belleville to discharge combined sewer overflow during wet-weather conditions at it's 88th Street Lift Station, which will be given primary treatment via a swill concentrator, without disinfecting such flows; or,
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> the City of Belleville is granted a temporary adjustment to the Disinfection Requirements of 35 Ill. Admin. Code 306.305(b). This adjustment allows the City to put the swill concentrator into operation for a period of 12-months without disinfecting the discharge yet gather BOD, Suspended Solids, E-Coli, Fecal Coliform, Total Bacteria and Dissolved Oxygen Concentrations during wet-weather events. Pet. at 23.

AGENCY RECOMMENDATION

The Agency recommends that the Board grant the requested relief subject to certain conditions. Ag. Rec. at 4. These conditions include limiting the adjusted standard to a five-year period, and requiring Belleville to submit to the Agency a long-term CSO control plan to achieve compliance with applicable standards at the expiration of the temporary adjusted standard. Ag. Rec. at 7. In addition, the Agency suggests that the Board require Belleville to create a barrier along the receiving stream to limit public access and to educate nearby residents on the hazards associated with the CSO. *Id*.

Regarding the five-year limitation, the Agency states that Belleville is required to comply with the generally applicable CSO regulations under the national CSO Policy promulgated by the United States Environmental Protection Agency (USEPA). Ag. Rec. at 12-13. The CSO Policy establishes a consistent national approach for controlling discharges from CSOs through the National Pollution Discharge Elimination System (NPDES) permit program to meet the health and environmental objectives of the Clean Water Act (CWA). *Id*. The CSO Policy states that permittees should submit their long-term CSO control plan generally within two years of the inclusion of the NPDES permit provision pertaining to the National CSO Policy.[2] However, the policy allows NPDES authorities to establish longer timetables when site-specific factors complicate the planning process, such as in this case where the Agency has allowed Belleville a five-year period. Further, the CSO Policy allows the permittees and permit authorities to consider innovative and alternative approaches and technologies to ultimately achieve compliance with the applicable standards. *Id*.

In addition, the Agency believes that creation of barriers to limit public access to the receiving stream, and education of local residents on risks associated with CSOs are necessary to minimize human risks associated with disinfection exemptions in residential areas. Ag. Rec. at 8-9. In this regard, the Agency notes that the recreational assessment survey conducted by Belleville documents that two out of five respondents have indicated that they use the receiving stream for some type of recreational activity. Ag. Rec. at 8. Belleville responded to the conditions recommended by the Agency at hearing.

The Agency proposes that the Board adopt the following language for the requested adjusted standard:

> The City of Belleville is granted temporary adjustment to the disinfection requirement of 35 Ill. Admin. Code 306.305(b). This adjustment allows the City of Belleville to discharge combined sewer overflows during wet weather conditions from its 88th Street Lift Station in excess of the first flush without disinfecting such flows for the next five years. The City of Belleville shall submit

[2] Special condition 11 of the Belleville's NPDES permit (IL0021873) requires the permittee to comply with the nine minimum controls contained in the USEPA's National CSO Policy. One of the objectives of this policy is to bring all wet weather CSO discharge points into compliance with the CWA, including compliance with water quality standards and protection of designated uses.

a long-term control plan to the Illinois EPA that will achieve compliance at the expiration of this temporary period of five years with the applicable water quality standards. The City of Belleville may use innovative and alternative approaches and technologies to achieve this compliance. Ag. Rec. at 7.

DECEMBER 21, 2000 ORDER

On December 21, 2000, the Board found that Belleville had not provided sufficient information to demonstrate that the requested adjusted standard would not result in environmental or health effects more adverse than the effects considered by the Board in adopting the rule of general applicability. 415 ILCS 5/28.1(c)(3) (2000). In addition, the Board had questions that relate to Section 28.1(c)(4) which requires consistency with federal law. For these reasons, the Board sent the matter to hearing.

HEARING

At hearing, Belleville and the Agency provided additional information. In general, Belleville supplemented the record regarding water quality impacts, provided additional recreational assessment, and amended the description of the affected area. The Agency and Belleville also clarified the consistency with federal law. The following discussion will summarize the information that was in the record prior to the hearing and indicate how the record has been supplemented at hearing.

The Requested Standard Will Not Result in Environmental Or Health Effects Substantially and Significantly More Adverse Than the Effects Considered by the Board in Adopting the Rule of General Applicability (Section 28.1(c)(3))

The first area of discussion will involve the concerns regarding potential health and environmental effects of the adjusted standard. The following is a summary of the information provided by Belleville and the Agency.

Water Quality Impacts

Prior to hearing, Belleville did not provide any scientific data on the water quality impacts of the CSO discharge on the receiving streams. Belleville did provide estimated improvements in water quality parameters, such as suspended solids, based on the design of the swirl concentrators. Pet. at 4-5. Belleville supplied some effluent data prior to hearing, (Pet. at 5), however, there was no data from the unnamed tributary, the five to six mile stretch of Powdermill Creek or other downstream areas. The pictures in Appendix A and Exhibit C of the petition clearly show pools of water that remain after portions of the channel are dry.

On May 15-16, 2001, Belleville conducted another more extensive stream survey for a five-mile distance from the CSO outfall down the drainage ditch, Powdermill Creek and Canal No. 1. Hearing Exh.1 at 1. Several photographs with corresponding maps and written descriptions were provided along the survey route. Exh. C and E of Hearing Exh. 1. The survey indicated that the stream characteristics are such that the CSO initially discharges into the

unnamed tributary of Powdermill Creek. This is "[m]ore or less a ditch. During dry weather there is very little water in it." Tr. at 19. At the time of the 5-mile photographic survey, "it had not rained for about eight or nine days." Tr. at 44. The average depth of the creek was six inches. There were pools that were up to a foot deep. This first deep hole over two-feet deep is about two miles from the CSO outfall and about a half mile from any house. Tr. at 16, 36; Exh. C, D and E of Hearing Exh. 1.

Royce Carlisle, Systems Coordinator at the Belleville Wastewater Treatment Plant, walked the five-mile stretch for the photographic survey. He noted, "We noticed no odors, no sanitary sewage indicators at all. There were no paper products, rubber products, anything of that sort, other than right at the discharge itself on the [riprap].[3] But anything in the ditch less than 100 foot down from the discharge itself, there was no indication. And we walked in the center of the creek and we stirred it up as we went and we never noticed any odor of any sort." Tr. at 17.

Belleville's CSO operator runs a dry inspection of each CSO once a week as well as after each rain event. Tr. at 13. The CSO operator inspects the stream from the CSO outfall to approximately 1000 feet downstream. He looks for pools, odors, decomposed materials, sewage sludge, floatable sanitary debris, and other signs of pollution. Tr. at 23; Exh. F of Hearing Exh. 1. An example CSO Stream Inspection report from June 19, 2001, was provided as Exh. F of Hearing Exh. 1. The June 2001 report indicates there was no evidence of odors or colors indicative of sewage although sanitary and paper products were found. Exh. F of Hearing Exh. 1. Past the first 100 feet down the drainage ditch, no indications of sanitary sewage overflow (floating debris or sludge) were noticed during either the June 2001 CSO or May 2001 photographic inspections. Hearing Exh. 1 at 2. "Access to the first 100 feet of the drainage ditch has very limited access and is on city property." Hearing Exh. 1 at 2.

The Board also had additional concerns about the effluent characteristics and at hearing Belleville provided additional information regarding the lift station improvements. Specifically, Belleville indicated that prior to 1996, there were two 300 gpm pumps operating at the lift station. In October 1996, Phase I of the upgrades to the lift station began construction and the pumps were replaced with two 500 gpm pumps and one 200 gpm pump by the end of the year. Hearing Exh. 1 at 1; Tr. at 12. "This has reduced the frequency of discharges [from the CSO]." Hearing Exh. 1 at 1.

Then on July 2, 1999, Belleville put into service a swill concentrator at the lift station. Tr. at 24. "The swill concentrator further reduced the frequency of discharge as well as reduced effects of the discharges." Hearing Exh. 1 at 1; Tr. at 25. Previously, Belleville's petition stated that the swill concentrator would not be placed on line until the Board granted the adjusted standard. Pet. at 6. To demonstrate the reduction in frequency of discharges from the CSO, Belleville provided a record log of alarms at its South 88th Street Lift Station where the CSO is located. Exh. A of Hearing Exh. 1. The record log covers events from fall 1987 to summer

[3] "The CSO discharges into a drainage ditch that has approximately 100 feet of [riprap]." Tr. at 14. Riprap is "a loose assemblage of broken stones erected in water or on soft ground as a foundation." *The American Heritage Dictionary*, 1982.

2001. Belleville also provided a record of overflow events and their duration from October 1997 to December 2001. Exh. B of Hearing Exh. 1. The records show how the frequency of discharges decreased once the new larger pumps were brought on line during the end of 1996. Tr. at 12. After the swill concentrator was put into service in July 1999, it "further reduced the frequency of discharge as well as reduced effects of the discharges." Hearing Exh. 1 at 1.

Based on the swill concentrator design data, Belleville expected reductions in the CSO effluent of 30% in Biochemical Oxygen Demand (BOD), 40% in Suspended Solids (SS), and 45% in Volatile Suspended Solids (VSS). Pet. at 4-5. At hearing, Belleville presented all the Discharge Monitoring Reports (DMR) for the CSO effluent from July 1999 to December 2001. Hearing Exh. 2. According to Randy Smith, Belleville's Superintendent of the Sewer Division, the impact the CSO effluent has on the receiving stream has been lessened in terms of BOD and suspended solids since the swill concentrator was installed. Tr. at 25.

Since fecal coliform is used as an indicator for the suitability of a water for human exposure in primary contact activities under the general use water quality standards 35 Ill. Adm. Code 302.209, the Board questioned the effect of the swill concentrator in removing fecal coliform. December 21, 2000 at 6. Mr. Smith testified that the fecal coliform still passes through. Fecal coliform results are reported on the DMR as "too numerous to count." Tr. at 25.

The petition suggested that operation of the swill concentrator be limited to 12-months without disinfection of the discharge. Pet. at 23. Mr. Smith testified that the 12-month time limit was initially proposed because Belleville did not have any performance data from the swill concentrator to indicate how well it would work. Since then, Belleville has accumulated two and a half years worth of discharge data which was submitted to the Agency. With this discharge data available, the proposed 12-month limit on operation of the swill concentrator can be eliminated from the petition. Tr. at 28-29.

Belleville is continuing to modify the swill concentrator to make it more effective. Mr. Smith described, "On the swill concentrator we have installed a makeshift screen to try to capture any floatable, objectionable material that could discharge. In doing so, we have reduced that factor. Since then we have purchased an auger that will actually extract the floatable material that enters into the swill concentrator, not only during wet weather but also during dry weather. That material will be dumped into a dumpster and then landfilled properly." Tr. at 29. With the added features of the screen and auger, floatable material would not be allowed to pass through except in the event of a mechanical failure. If this did happen, the alarm would notify the Sewer Division. Tr. at 29.

Public Recreational Assessment

In the December 21, 2000 order, the Board further noted that it appeared that the public recreational assessment survey was only mailed to a limited number of residents near the CSO. AS 99-1, Dec. 21, 2000 at 6. Belleville's attorney Robert Sprague responded at hearing, " . . . the access was so bad [to those other houses from the creek] that they didn't feel it was necessary to survey those particular streets." Tr. at 26. Robert Garegnani of KBR Engineering followed up by stating that Belleville conducted the public recreational assessment survey within

the City limits, within the vicinity of the people closest to the actual overflow and where there would be the most effect on children. Tr. at 31. The City does not plan to conduct further surveys to include these residents. Mr. Sprague commented at hearing, "We don't have any current demands to do any more surveys, but if we are told to do so, we will be happy to do so." Tr. at 26.

Additionally, the Board's December 2000 Order noted that the survey questions appeared vague and misleading. In part, the survey stated, "the creek could be used only to handle ***stormwater*** overflows" [emphasis added] rather than acknowledging in the wording that there is a ***sanitary*** component from the combined sewer overflow. The Board felt that neglecting this information could have elicited fewer responses to the survey since residents would have been unaware of the importance of the hazards and their responses to the survey. Only five responses were received out of the 23 surveys mailed. Mr. Sprague stated at hearing, ". . . we don't know why we used that language in the survey." Tr. at 26. Mr. Garegnani added that "maybe it was just a bad choice of words . . .". Tr. at 30.

In May 2001, following up on the 1999 public recreational assessment survey, Belleville looked for signs of recreational activity during the five-mile photographic survey. The photographic survey did not reveal any evidence of recreational activities. Belleville believes that not until Powdermill Creek crosses Route 13 is the creek deep enough for recreational activities. Tr. at 17. The Route 13 crossing is approximately two and a half miles downstream from the CSO. Exh. D of Hearing Exh. 1.

Belleville further described the proximity of the creek to nearby homes. The area in the vicinity of the CSO 88th Street Lift Station is residential. Pet. at 26. Approximately 32 homes abut the drainage system, of which, about 23 are located within the first half mile of the CSO drainage ditch and Powdermill Creek. Hearing Exh. 1 at 1. The first place where the creek or ditch gets close to a home is where it runs under County Highway 42 where there is a group of houses. Less than an inch of water was present in the ditch at the time of the five-mile photographic survey. Tr. at 19. Descriptions of the photographs noted the creek runs through a culvert under the lawn of a residence at #18 Powdermill Dr. and under the driveways of #22, #26, #30 Powdermill Dr. Exh. C of Hearing Exh. 1; Pet. Appendix A. The nearest house is over 400 feet from the receiving stream. Ag. Rec. at 8. In addition, the closest school is estimated to be about one and a half to two miles away from the CSO. Tr. at 26.

Based on the photographic survey, Belleville concluded, "Access to the drainage ditch and most of Powdermill Creek is difficult due to the terrain and vegetation, however, there are access points available. With the exception of Canal No. 1, heavy foliage and woods flank the majority of the drainage ditch and Powdermill Creek. The banks range from steep to moderate." Hearing Exh. 1 at 2. During the photographic survey, "At a point two and a half miles downstream it got to where you couldn't walk in the creek anymore because it got extremely muddy . . . And the banks were getting too high so that we couldn't crawl up it . . .". Tr. at 15.

Belleville concluded that based on a public recreational assessment survey, "the receiving stream ([the unnamed tributary and] Powdermill Creek) cannot now, or in the future, support

human primary contact activities." Pet. at 29-30. Based on the more recent five-mile photographic survey, Belleville concluded that access to the ditch and most of Powdermill Creek is difficult, that there was no evidence of recreational activity, and that there are no indications of sanitary sewage overflow past the first 100 feet which is located on City property. Hearing Exh. 1 at 1-2. Therefore, Belleville feels the technical difficulty and cost to construct a new disinfection system is not justified based on the negligible benefit it would provide to the surrounding area. Pet. at 29-30; Tr. at 8.

Correction to Affected Area at Hearing

Previously in the Amended Petition, Belleville described the affected area as the unnamed tributary draining into Powdermill Creek leading to Harding Ditch then flowing into Prairie du Pont Creek then into the Mississippi River. The Amended Petition stated that Powdermill Creek runs for a distance of 3.5 miles before its confluence with Harding Ditch. Pet. at 26. At hearing, Belleville indicated that Powdermill Creek actually does not discharge into Harding Ditch but rather discharges into Canal No. 1. Tr. at 14, 22. Belleville indicated that:

> The discharge from our 88th Street Lift Station C.S.O. 035 (D-13), enters a drainage ditch that flows into Powdermill Creek. Powdermill Creek flows into Canal No. 1. Canal No. 1 enters Prairie du Pont Creek at a point approximately six and a half miles downstream of our 88th Street Lift Station. [Prairie] du Pont Creek flows another six miles from there until reaching the Mississippi River. Hearing Report Addendum, 2-5-02. Canal No. 1 does not enter Harding Ditch. It combines with Prairie du Pont Creek and then on to the Mississippi River. Hearing Report Addendum, 2-5-02.

With regards to the downstream impacts of the CSO/swill concentrator effluent, Randy Smith testified, "The only impact that discharge could have would be [on] the Powder Mill Creek." Tr. at 27. Belleville presented Exh. D of Hearing Exh. 1 which is a topographical map showing the tributaries that run into the creek before it converges into Canal No. 1. Tr. at 18. "There is quite a few tributaries from the surrounding drainage emptying into it, so it starts picking up some flow. But mainly it is very shallow." Tr. at 16.

Agency Recommendation and Belleville's Response

The Agency recommends that the adjusted standard should be conditioned on Belleville minimizing the possibility of human exposure to the CSO during wet weather conditions. Ag. Rec. at 8-9; Tr. at 10. To this end, the Agency suggested that Belleville could provide "public education to homeowners along the receiving stream, or post warning signs along the receiving stream regarding the conditions that could exist during the wet weather conditions, or erect barriers to preclude public access to the receiving stream." Tr. at 10. The Agency later added, "The precautionary measures enumerated in the Agency's response are only examples of the measures that the City of Belleville could adopt. In no manner were these measures exhaustive." Tr. at 43-44.

Belleville's Randy Smith testified about the efforts to post signs and educate the public. "We have looked at where we could put posting, and with the majority of this being on private property there is only one area parallel on Foley Drive where we feel that we could put posting. Putting in any type of barrier would hamper the possibility of any traffic, also. So we would probably put signage on the public right-of-way there." Tr. at 27. Where the creek runs through private residential areas, Belleville feels that they can send a letter directly to the residents. The letter would inform homeowners that during a rainfall event, there could be discharge from the swill concentrator that contains untreated sanitary wastewater. Belleville is considering doing this once a year as a reminder to the residents on Powdermill Creek within a reasonable distance. Tr. at 28. Belleville indicated that they could accomplish the public education and sign posting in three months time. Tr. at 28.

Belleville testified that a long-term CSO Control Plan is currently being developed that would achieve compliance with the applicable water quality standards at the end of the temporary adjustment period of five years. Belleville maintains that with the plan development underway, a chlorination facility would be expensive to build and operate at this time since Belleville believes it would be unnecessary in five years. Tr. at 8, 10.

Consistency With Federal Law (Section 28.1(c)(4))

The Board had questions that relate to Section 28.1(c)(4) which requires consistency with federal law. Both Belleville and the Agency indicated that they intend to seek a change in water use designation from the USEPA if the Board grants the requested relief. However, neither Belleville nor the Agency had provided any information as to why it is necessary to seek a change of water use designation, and whether USEPA's approval of such a change is predicated on the petitioner obtaining an adjusted standard from the CSO disinfection requirement.

Scott Twait of the Agency provided additional information. Mr. Twait indicated that "A change in water use designation would not be necessary for the relief requested. However, a change in the water use designation would be necessary if a long-term control plan indicates that the fecal coliform water quality standards, 35 IAC 302.209, would be violated and [Belleville] requested relief of the water quality standards. The U.S. EPA reviews all changes to the water quality standards." Tr. at 42. Once Belleville develops its long-term CSO Control Plan, "In the future if the fecal coliform water quality standards are not met, the use designation [of the creek] would be changed to indicate that human health is not protected." Tr. at 43. All general use water quality standards would still apply except for fecal coliform. Tr. at 43. However, Mr. Twait added, "regardless of the stream designation, Belleville must meet the 306.305(b) requirements for disinfection of the discharge." Tr. at 43.

DISCUSSION

For the Board to grant an adjusted standard, the petitioner must demonstrate that pursuant to Section 28.1(c) of the Act as well as 35 Ill. Adm. Code 104.Subpart D, an adjusted standard is warranted. Section 28.1(c) contains four factors which must be examined to determine if Belleville has demonstrated that an adjusted standard is warranted. The Board will examine each of those factors in the discussion that follows.

Factors Relating to the Petitioner are Substantially and Significantly Different from the Factors Relied Upon by the Board in Adopting the General Regulation Applicable to that Petitioner

The Board finds that the factors relating to Belleville are substantially and significantly different from the factors relied upon by the Board in adopting the CSO regulations. The Agency points out that the CSO regulations were developed to be "sufficiently protective of aquatic life and public water supplies." Ag. Rec. at 11. The receiving stream at issue in this proceeding is not used as a source of drinking water. *Id*.

Belleville investigated compliance options including ultraviolet disinfection and chlorine disinfection. Ultraviolet disinfection will not work due to the turbidity of the discharge. The Agency agrees with Belleville that chlorine disinfection is technically difficult to install and operate. Furthermore, the cost of the system would substantially increase annual capital, operational, and maintenance costs and the Agency believes this too is a fundamentally different factor. Ag. Rec. at 11.

In addition to the feasibility of alternatives, the record indicates that the contact with the stream where the discharge takes place is minimal and Belleville has committed to taking steps to notify persons who may come into contact of the potential problems. There has been a declining trend in the amount and frequency of discharges; however, fecal coliform may continue to be a health issue. The conditions proposed by the Agency would help to address this health concern until the long-term CSO Control Plan is implemented.

The Existence of Those Factors Justifies an Adjusted Standard

The Board finds that the existence of the above factors justifies the adjusted standard with conditions as recommended by the Agency.

The Requested Standard Will Not Result in Environmental or Health Effects Substantially and Significantly More Adverse Than the Effects Considered by the Board in Adopting the Rule of General Applicability

The Board finds that the requested standard will not result in environmental or health effects substantially and significantly more adverse than those considered by the Board in adopting the CSO regulations. The record, as supplemented at hearing, demonstrates that the number and frequency of overflow events have been decreasing. Furthermore, the survey of the stream indicates minimal human contact and Belleville has agreed to take additional steps to minimize the risk.

The Adjusted Standard is Consistent with any Applicable Federal Law

Based on the clarification given by the Agency at hearing, the Board finds that the adjusted standard will be consistent with federal law.

CONCLUSION

The Board believes that the record is sufficient at this time to grant an adjusted standard from 35 Ill. Adm. Code 306.305(b). Therefore, the Board grants the adjusted standard with the conditions suggested by the Agency in the recommendation and at hearing.

ORDER

The Board hereby grants City of Belleville adjusted standard to the disinfection requirement of 35 Ill. Adm. Code 306.305(b) by allowing the City of Belleville to discharge combined sewer overflows during wet weather conditions from its 88th Street Lift Station in excess of the first flush without disinfecting such flows subject to the following conditions:

1) The adjusted standard will expire on March 21, 2007.

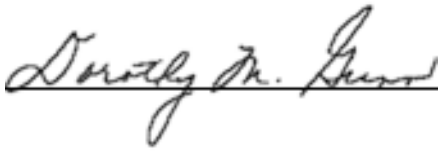
2) The City of Belleville shall submit a long-term control plan to the Illinois Environmental Protection Agency that will achieve compliance with the applicable water quality standards by March 21, 2007. The City of Belleville may use innovative and alternative approaches and technologies to achieve this compliance.

3) During the period of this adjusted standard, the City of Belleville shall mitigate the possibility of human exposure to the discharge. The City of Belleville shall take steps including public education, and postings along the stream. In the future, Belleville shall create barriers which would preclude public access to the receiving stream if parks or playgrounds are created along the stream.

IT IS SO ORDERED.

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2000); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on March 21, 2002, by a vote of 7-0.



Dorothy M. Gunn, Clerk