ILLINOIS POLLUTION CONTROL BOARD
June 5, 1986

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Complainant,	)	
v.	)	PCB 86-37
BLAKE WATER CORPORATION, an Illinois corporation, Respondent.	)	

MR. JOSEPH J. ANNUNZIO, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF THE COMPLAINANT.

MR. AND MRS. BLAKE APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by W.J. Nega):

This matter comes before the Board on an eight-count Complaint filed on March 12, 1986 by the Illinois Environmental Protection Agency (Agency) pertaining to the Respondent's operation of a public water supply system doing business near the City of Galesburg in Knox County, Illinois.

Count I of the Complaint alleged that water samples of the Respondent's potable water taken by the Agency between June, 1984 and February, 1985 indicated that the concentration of coliform bacteria was in excess of one coliform colony per 100 milliliters (ml) and at least one sample during this time period showed a concentration in excess of four coliform colonies per 100 ml, and that this presence of total coliform bacteria in the aforementioned concentrations rendered the Respondent's potable water less than assuredly safe in quality, and that these bacteria concentrations above that which the regulations allow was in violation of 35 Ill. Adm. Code 604.102(a) and Section 18 of the Illinois Environmental Protection Act. (Act).

Count II alleged that, from June, 1984 through February, 1985, the Respondent failed to give the required public notice of exceeding total coliform maximum allowable concentrations (MAC) and failed to provide public notice of potable water that is less than assuredly safe in quality in violation of 35 Ill. Adm. Code 606.201 and 35 Ill. Adm. Code 606.202 and Section 18 of the Act.

Count III alleged that, from January, 1983 through September, 1984, the Respondent failed to provide the required public notice regarding its variance from the 2.0 mg/l maximum allowable fluoride concentration standard (see: Opinion and Order of the Board dated December 3, 1981 in PCB 81-137, Blake Water Corporation v. IEPA which granted the Respondent a five-year variance) in violation of item #1(c) of the Board's December 3, 1981 Order in PCB 81-137, 35 Ill. Adm. Code 602.201 and Section 18 of the Act.

Count IV alleged that, from February 11, 1982 until March 12, 1986, the Respondent failed to maintain a minimum free chlorine residual of 0.2 mg/l or a minimum combined residual of 0.5 mg/l in all active parts of the distribution system at all times, and that this failure to maintain residuals of free or combined chlorine at levels sufficient to provide adequate health protection rendered the potable water provided less than assuredly safe in quality in violation of 35 Ill. Adm. Code 604.401(a) and Section 18 of the Act.

Count V alleged that, from August 28, 1984 until May 21, 1985, the Respondent failed to have a properly certified operator in responsible charge of its public water supply in violation of Section 1 of "An Act to Regulate the Operating of a Public Water Supply", Ill. Rev. Stat., ch. 111½, par. 501 (1985) (hereinafter "Water Supply Act"); 35 Ill. Adm. Code 603.102; 35 Ill. Adm. Code 603.103(a); and Section 18 of the Act.

Count VI alleged that, from December 30, 1981 until June 1. 1985, the Respondent failed to submit the necessary monthly operating reports to the Agency in violation of 35 Ill. Adm. Code 606.101 and Section 18 of the Act.

Count VII alleged that, from June 5, 1984 until March 12, 1986, the Respondent failed to adopt an appropriate program for the control of unsafe cross-connections in violation of 35 Ill. Adm. Code 607.104(d) and Section 18 of the Act.

Count VIII alleged that the Respondent, from June 5, 1984 until March 12, 1986, failed to maintain the continuous operation and maintenance of its water supply facilities so that the water would be assuredly safe in quality, clean, and adequate in quantity in that there was a potential for contamination of the potable water because: (1) it did not have an operable air compressor on-site to pump air into the pressure tank to maintain pressure in the distribution system; (2) the capacity of its high service pump was as low as 11 gallons per minute, and (3) it failed to adopt a program for the control unsafe cross-connections in violation of 35 Ill. Adm. Code 601.101 and Section 18 of the Act.

A hearing was held on May 1, 1986 at which two members of the public were present. (R.2-3). The parties filed a Stipulation and Proposal for Settlement on May 7, 1986.

On June 2, 1986, the Assistant Attorney General, on behalf of the Agency, filed a series of microbiological analysis report forms from the Agency (covering water sample testing on various specified dates between June 9, 1984 and October 16, 1984) which have been designated as "Attachment A" to the Stipulation and Proposal for Settlement. The aforementioned "Attachment A" was inadvertently omitted when the original settlement agreement was filed with the Board.

The Respondent, the Blake Water Corporation, owns and operates a public water supply system which serves a population of about 160 persons in the Windcrest Subdivision, Cedar Township, about 3½ miles south of the City of Galesburg in Knox County, Illinois. The Respondent is an Illinois corporation which is engaged in the business of supplying potable public water pursuant to a certificate of convenience and necessity issued by the Illinois Commerce Commission. The official custodians and owners of the Blake Water Corporation are Mr. Russell Blake and his wife (Mrs. Irene Blake). The Respondent's facilities include one well drilled 520 feet deep into rock, an aeration installation for the removal of hydrogen sulfide, a collecting tank, a chlorination installation, a pressure tank and a water distribution system.

The Respondent's single 520 feet deep well presently provides water with fluoride concentrations ranging from 2.0 mg/l to 4.3 mg/l (and averaging 3.3 mg/l) and, accordingly, the Respondent received in PCB 81-137 a five-year variance from the 2.0 mg/l fluoride drinking water maximum allowable concentration standard set forth in 35 Ill. Adm. Code 604.203(a)*. (See Opinion and Order of the Board dated December 3, 1981 in PCB 81-137, Blake Water Corporation v. IEPA).

Pursuant to applicable regulations, the Respondent has submitted monthly bacteriological samples to the Agency for subsequent laboratory analysis. The Agency has indicated that the results of the sampling of the Respondent's finished water are as follows:

*Formerly, Rule 304(B)(4) of Chapter 6: Public Water Supply Regulations.

Monthly Sampling Period	Number of Samples	Total Coliform (n/100 ml)
June, 1984	5	G+ (1 sample)
July, 1984	6	G+ (1 sample)
September, 1984	7	G+ (1 sample)
		2+ (1 sample)
October, 1984	5	G+ (1 sample)
February, 1985	5	5+ (1 sample)

(Stip. 2).

In reference to interpreting the previously shown sampling results, the Agency has stated that:

> "The notation "+" indicates the sample was confirmed positive for coliform bacteria. The notation "G+" is to be counted as 80/100 ml for purposes of averaging to determine compliance with the total coliform MAC pursuant to 35 Ill. Adm. Code 654.303(a)(2). All samples analyzed using a different technique than membrane filter (MF) were counted as zero for purposes of averaging to determine compliance with the total coliform MAC." (Stip.2).

Moreover, the Agency has asserted that the average of all samples of potable water (which includes finished water or distribution system water) taken during the previously delineated monthly sampling periods exceeded 1/100 ml. Additionally, the Agency pointed out that less than twenty samples were taken during each of the monthly sampling periods in question, and that at least one sample result was greater than 4/100 ml. (Stip. 3). Nonetheless, the Respondent has denied that it has ever provided potable water which exceeded the total coliform maximum allowable concentration.

The Agency has also contended that the Respondent improperly failed to provide appropriate public notice following the apparent violations listed below:

Month	Nature of Violation
January-March, 1983	Exceeding fluoride MAC*
June, 1984	Exceeding total coliform MAC
July-September, 1984	Exceeding fluoride MAC
July, 1984	Exceeding total coliform MAC
September, 1984	Exceeding total coliform MAC
October, 1984	Exceeding total coliform MAC
February, 1985	Exceeding total coliform MAC

(Stip. 3).

* MAC = maximum allowable concentration

It is undisputed by the parties that public notice pertaining to any exceedance of the fluoride maximum allowable concentration standard was required pursuant to the Board's December 3, 1981 Order in PCB 81-137. However, the Blake Water Corporation has denied that any public notice of the exceedance of the total coliform maximum allowable concentration limits was required, because it denies that any violation occurred. Nevertheless, the Agency provided public notice in each of the above instances following the Respondent's failure to do so. (Stip. 3).

On February 11, 1982 and September 18, 1984, the Respondent's public water supply was inspected by Agency employees. These Agency inspectors tested chlorine residual at two locations in the Respondent's distribution system, and ascertained that the chlorine residual was less than 0.2 mg/l of free chlorine or a minimum combined residual of 0.5 mg/l, thereby indicating a violation of the applicable standard for chlorine residuals. (Stip. 3).

The Respondent's public water supply is required to be under the supervision of a Class C (or higher) certified public water supply operator. Although a properly certified Class C operator named Mr. G.L. Porter was supervising the Respondent's public water supply operations up to, and including, August 27, 1984, during the interim time period between August 28, 1984 and May 21, 1985, the Agency alleges that the supply was not under the active supervision of a properly certified operator. (Stip. 4). Active supervision of the facility was taken over by Mr. Jeffrey M. Moore, a properly certified Class C operator, on May 22, 1985. Both Mr. Potter and Mr. Moore filed the requisite "Certified Operator in Responsible Charge" forms with the Agency, so the allegation in Count V of the Complaint only relates to the interim time period in question. (Stip. 4).

During the Agency inspection of September 18, 1984, the Agency inspector observed: (1) there were openings around the top, under the eaves, and in the joint opening in the middle of the aerator roof, thereby noting that the aerator roof needed to be covered or screened to prevent the possible entry of insects, dust, dirt, debris, or animals into the aerator which could possibly result in system contamination; (2) the high service pump capacity was only 11 gallons per minute* based upon a reading from the master meter, thereby indicating a pump insufficient to provide an adequate quantity of water during peak usage periods, which in turn would help to maintain adequate

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*The Agency calculates that the high service pump should have a minimum output of 33 gallons per minute, based upon the user population and assumption that each person uses approximately 50 gallons of water per day. (Stip. 4).

system pressure; and (3) there was no operable on-site air compressor to pump air into the pressure tank to provide the appropriate air blanket necessary to maintain the proper system pressure. (Stip. 4).

However, the Respondent has denied the existence of the previously alleged operation and maintenance deficiencies and has contended that:

> "The openings in the aerator roof and eaves were present solely because the roof was undergoing repair, and the openings were properly closed or screened shortly after the date of inspection. There was inadequate high service pump capacity because a replacement pump was being used at the time, and the pump normally used (which was undergoing repair) was of sufficient capacity. Finally, the on-site air compressor was in fact operable, but the person who was responsible for maintaining the supply did not know how to operate it. Moreover, an operable air compressor was available from a nearby residence."
>
> (Stip. 5).

In the instant case, the Agency has placed the Respondent's admitted acts or omissions into five major categories of violations. The Agency has asserted that the Respondent has, during the specific time periods alleged in the Complaint, failed to: (1) provide public notice pertaining to its variance from the fluoride maximum allowable concentration pursuant to PCB 81-137; (2) maintain a residual of free or combined chlorine at levels sufficient to provide adequate protection in the distribution system; (3) place its supply under the active supervision of a properly certified operator and failed to expeditiously file the "Certified Operator in Responsible Charge" form with the Agency; (4) submit monthly operating reports to the Agency, and (5) establish an adequate cross-connection control program. (Stip. 5).

On the other hand, the Agency has alleged (while the Respondent has denied) that: (1) the Respondent's potable water exceeded the total coliform bacteria maximum allowable concentration standard; (2) the Respondent failed to provide public notice when the total coliform bacteria maximum allowable concentration standard was exceeded, and (3) the Respondent caused or allowed the operation and maintenance deficiencies which rendered the public water supply facility's drinking water less than assuredly safe in quality and adequate in quantity. (Stip. 6).

In reference to the uncontested violations, the parties have stipulated that, for the purposes of settlement only, the Respondent has admitted violations of 35 Ill. Adm. Code 603.102, 603.103, 604.401, 606.101, 606.201 and 607.104(d), as well as violations of the Board's December 3, 1981 Order in PCB 81-137; Section 1 of the Water Supply Act, and Section 18 of the Illinois Environmental Protection Act. (Stip. 6-7).

Because of their failure to reach an agreement in reference to the contested violations, the parties have requested the Board to make findings, based upon the limited evidence contained in the Stipulation and Proposal for Settlement, on the three disputed issues:

1. Whether the Respondent provides drinking water which exceeded the maximum allowable concentration for total coliform bacteria in violation of 35 Ill. Adm. Code 604.102(a) and Section 18 of the Act;

2. Whether the Respondent failed to provide public notice when the total coliform maximum allowable concentration was exceeded in violation of 35 Ill. Adm. Code 606.201 and 35 Ill. Adm. Code 606.202 and Section 18 of the Act, and

3. Whether the Respondent caused or allowed the existence of operation and maintenance deficiencies which rendered the drinking water less than assuredly safe in quality and adequate in quantity in violation of 35 Ill. Adm. Code 601.101 and Section 18 of the Act.

CONTESTED ISSUE #1: BACTERIA CONCENTRATIONS IN EXCESS OF APPLICABLE STANDARDS

The sampling results of the monthly bacteriological samples submitted to the Agency for laboratory analysis were not contested by the Respondent, in that no claim was made that the analysis was improperly done; that there was an unaccounted for break in the chain of custody; or that a scientific or procedural mistake was made during the actual sampling or analysis procedure. No independent laboratory analysis was provided by the Respondent and no evidence was indicated to show that total coliform levels were other than represented by the Agency. (See: Attachment A to the Stipulation).

Accordingly, the water samples taken by the Agency between June, 1984 and February, 1985 indicate that, on average, a concentration of coliform bacteria in excess of one per 100 ml existed on more than one occasion. Additionally, at least one sample result apparently was greater than four coliform colonies per 100 ml and, given the relatively small numbers of samples taken, it is entirely possible that further unknown excursions may have occurred.

Although we are cognizant of the difficulties encountered in the day-to-day operations of smaller public water supplies such as the facility operated by the Respondent, it cannot be overemphasized that any exceedance of the maximum allowable concentration for coliform bacteria is serious in nature and creates an unacceptable risk of illness to system users.

In light of the lack of any showing, data, or evidence to the contrary, the Board finds that the Respondent did, in fact, provide drinking water which exceeded the maximum allowable concentration for total coliform bacteria on some occasions, thereby violating 35 Ill. Adm. Code 604.102(a) and Section 18 of the Act.

CONTESTED ISSUE #2: FAILURE TO PROVIDE ADEQUATE PUBLIC NOTICE OF EXCEEDING THE TOTAL COLIFORM MAXIMUM ALLOWABLE CONCENTRATIONS

The Respondent has denied that any public notice of the exceedance of the total coliform maximum allowable concentration standards was necessary because it contends that no violation occurred. Once again, the Board must conclude that, given all the facts and circumstances of this case, it would have been better for the Respondent to have promptly acted on the side of safety. Instead, the Agency was forced to take action and provide the public notice following the Blake Water Corporation's failure to do so. The Board notes that the purpose of the public notice requirement is simple: it is to notify the public so that, if an individual chooses, they can take steps to protect themselves from possible personal health problems or injury by perhaps boiling their water, or buying distilled or bottled water, or not drinking the water during certain time periods when they may be at increased risk or taking other common sense steps to protect themselves from potential harm. If there is an infant or an elderly person in the home, this option of taking precautionary steps to insure personal safety and health can be vitally important. By notifying the public of a possible problem, the public water supply is aiding those individuals in exercising their freedom of choice: they can make an informed or reasoned decision once all the salient facts are known to them. By not telling one's customers of potential problems that might be encountered in their drinking water, one is taking a somewhat short-sighted view of the situation. Customer loyalty is increased when they have reason to believe that the water supply operators are zealously guarding their health.

In any event, the protection of the public health is a top priority of paramount importance. Appropriate public notice of potential problems is a vitally important part of the procedural mechanism used to insure that the individual's freedom of choice and the individual's right to preserve their health are respected.

The Board therefore finds that the Responden failed to provide the requisite public notice when the total coliform maximum allowable concentration standard was exceeded, thereby violating 35 Ill. Adm. Code 606.201 and 35 Ill. Adm. Code 606.202 and Section 18 of the Act.

CONTESTED ISSUE #3: THE EXISTENCE OF OPERATION AND MAINTENANCE DEFICIENCIES WHICH RENDERED THE DRINKING WATER LESS THAN ASSUREDLY SAFE IN QUALITY AND ADEQUATE IN QUANTITY

The Respondent has denied the existence of any alleged operational and maintenance deficiencies and has presented plausible explanations for the three major problems observed by the Agency inspector. However, upon closer examination, the Respondent's contentions are not persuasive.

At the outset, the Board emphasizes that there is a distinction between whether or not a violation occurred, and extenuating circumstances or lack of them.

For example, when the Respondent asserts that the on-site air compressor was in fact operable, but the person who was responsible for maintaining the facility did not know how to operate the compressor, one's first question might be: "why not?" If the facility is not under the active supervision of a competent operator, the likelihood for problems, accidents, and possible water contamination is unduly increased. To rely on an off-site operable air compressor which may be available from a nearby residence appears to indicate a somewhat lackadaisical approach to one's operations. Moreover, if the person in temporary charge did not know how to operate a compressor, the availability of another compressor off-site would not be of any help either, since even the on-site air compressor close at hand would be useless to an unknowing or incompetent operator.

Similarly, it is indeed possible that the openings in the aerator roof and eaves were present only because the roof was undergoing repair. However, during such repair work, it would undoubtedly have been a good idea to make some provisions to insure that the infiltration of debris, dirt, insects, or animals into the aerator would be at least partially prevented or protected against to insure that water supply system contamination would not occur.

It is also conceivable that the pump normally used was undergoing repairs and that the replacement pump did not have adequate high service capacity. However, it might have been more appropriate and prudent to have taken active steps to obtain a replacement pump that did have sufficient capacity and to have previously obtained reliable sources of supply for such equipment in the event of any necessary maintenance and repair work.

There is nothing in the record in this case to indicate that the Respondent was not acting in good faith in trying to properly operate its public water supply system. It is stipulated that the "Respondent's operations have not been acceptably profitable, and Respondent has filed a request for a rate increase which is currently pending before the Illinois Commerce Commission". (Stip. 6). However, the record does indicate that, despite the economic contraints that are present, there appears to be significant room for improvement in the Respondent's operations of its public water supply facility.

Accordingly, the Board finds that the Respondent did, in fact, cause or allow the existence of operation and maintenance deficiencies which rendered the drinking water on some occasions less than assuredly safe in quality and adequate in quantity, thereby violating 35 Ill. Adm. Code 601.101 and Section 18 of the Act.

The proposed settlement agreement provided that the Respondent admitted the uncontested violations alleged in the Complaint and agreed to: (1) cease and desist from further violations; (2) follow an agreed-upon compliance plan to rectify past violations and prevent future excursions, and (3) pay a stiuplated penalty of $500.00 within 45 days into the Illinois Environmental Protection Trust Fund. (Stip. 8-10).

In evaluating this enforcement action and proposed settlement agreement, the Board has taken into consideration all the facts and circumstances in light of the specific criteria delineated in Section 33(c) of the Act and finds the settlement agreement acceptable under 35 Ill. Adm. Code 103.108. The Board strongly agrees with the Agency's conclusion that "the violations alleged in the complaint, and particularly those alleging the exceedance of the MAC for coliform bacteria and the failure to maintain an adequate chlorine residual, are serious in nature as they create an unacceptable risk of illness to system users". (Stip. 6). Concomitantly, the Board believes that the proposed compliance plan and stringent conditions to be imposed in the Board's Order will provide adequate safeguards to rectify the past environmental problems and protect the public health and safety and the drinking water quality for local residents.

As admitted in the Stipulation, the Board finds that the Respondent, the Blake Water Corporation, has violated 35 Ill. Adm. Code 603.102, 603.103, 604.401, 606.101, 606.201*, and 607.104(d), as well as the Board's December 3, 1981 Order in PCB 81-137; Section 1 of the Water Supply Act, and Section 18 of the Illinois Environmental Protection Act.

Additionally, the Board also finds that the Respondent has violated 35 Ill. Adm. Code 601.101, 604.102(a), and 606.201* (i.e., the contested violations which were denied by the

Respondent) and Section 18 of the Illinois Environmental Protection Act. The Respondent will be ordered to cease and desist from all further violations, to follow the agreed-upon compliance plan, to take specified steps to insure appropriate water quality and quantity, and to pay the stipulated penalty of $500.00 into the Illinois Environmental Protection Trust Fund.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

It is the Order of the Illinois Pollution Control Board that:

1. As admitted in the Stipulation, Respondent Blake Water Corporation has violated 35 Ill. Adm. Code 603.102, 603.103, 604.401, 606.101, 606.201 (for failure to provide public notice regarding its variance from the fluoride maximum allwable concentration standard), and 607.104(d) and has violated the Board's December 3, 1981 Order in PCB 81-137, Section 1 of the Water Supply Act, and Section 18 of the Illinois Environmental Protection Act.

2. The Respondent has also violated 35 Ill. Adm. Code 601.101, 604.102(a), and 606.201 (for failure to provide public notice when the total coliform maximum allowable concentration was exceeded).

3. The Respondent shall cease and desist from all further violations.

4. The Respondent shall provide drinking water which complies with the maximum allowable concentration standard for total coliform bacteria.

5. The Respondent shall provide the required public notice in the event of any future violation of the maximum allowable concentration standard for total coliform bacteria.

6. The Respondent shall provide public notice regarding its variance from the maximum allowable concentration standard for fluoride during the effective period of the variance granted in PCB 81-137.

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* The admitted violation of Section 606.201 pertains to the failure to provide public notice regarding the Respondent's variance from the fluoride MAC, while the contested violation of Section 606.201 relates to the alleged violation of the Respondent's failure to provide public notice when the coliform MAC was exceeded.

7. The Respondent shall maintain a chlorine residual of at least 0.2 mg/l free or 0.5 mg/l combined chlorine in all portions of the distribution system at all times.

8. The Respondent shall maintain its public water supply under the active supervision of a properly certified operator at all times.

9. The Respondent shall file all the requisite monthly operating reports with the Agency.

10. The Respondent shall operate and maintain its public water supply system so as to provide drinking water which is assuredly safe in quality and adequate in quantity.

11. The Respondent shall expeditiously develop and implement an adequate cross-connection control program as per the compliance program delineated on page 9 of the Stipulation and Proposal for Settlement.

12. Within 45 days of the date of this Order, the Respondent shall, by certified check or money order payable to the State of Illinois and designated for deposit into the Environmental Protection Trust Fund, pay the stipulated penalty of $500.00 which is to be sent to:

Fiscal Services Section
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

The Respondent has waived any right to have any portion of the stipulated penalty returned from the Environmental Protection Trust Fund.

13. The Respondent shall comply with all the terms and conditions of the Stipulation and Proposal for Settlement filed on May 7, 1986, which is incorporated by reference as if fully set forth herein.

IT IS SO ORDERED.

Board Member J. Theodore Meyer dissented and Board Member Dr. John C. Marlin concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 5th day of June, 1986 by a vote of 6-1.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board