

ILLINOIS POLLUTION CONTROL BOARD  
June 23, 1994

IN THE MATTER OF: )  
 )  
PETITION OF THE CITY OF )  
PERU FOR EXCEPTION TO THE ) PCB 86-1  
COMBINED SEWER OVERFLOW ) (CSO Exception)  
REGULATIONS )

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

This matter is before the Board on the City of Peru's (Peru) October 24, 1991, amended petition for exception to the combined sewer overflow (CSO) regulations found at 35 Ill. Adm. Code 306.305(a) and (b). The Illinois Environmental Protection Agency (Agency) filed a response to the amended petition on April 22, 1994. The Agency recommends that the Board grant Peru's request for exception from 35 Ill. Adm. Code 306.305(a), as it relates to first flush storm flows, and from 35 Ill. Adm. Code 306.305(b), subject to conditions.

For the reasons set forth below the Board will grant Peru's request for exception from the CSO regulations subject to certain conditions.

PROCEDURAL HISTORY

On January 2, 1986, the Board received a request from Peru for a permanent exception to the CSO regulations and on January 8, 1986, the Board accepted that petition. A public hearing was held on June 4, 1986 and the Agency submitted comments on September 22, 1986.<sup>1</sup> On April 1, 1987, the Board granted a temporary exception to Peru with conditions and retained jurisdiction over the proceeding. The April 1, 1987 opinion discusses in extensive detail the level of justification Peru was required to meet and finds that Peru met the level of justification. (April 1, 1987 O & O at 3; 77 PCB 13.) Further, the April 1, 1987 opinion details the compliance options and the cost effectiveness of each option. (April 1, 1987 O & O at 6-7; 77 PCB 16-17.)

The conditions set forth in the April 1, 1987 order required Peru: to construct and operate improvements by July 1, 1988; to continue street and sewer cleaning; to continue monitoring; and to submit an amended petition by March 1, 1990. (April 1, 1987 O & O at 9; 77 PCB 19.) On November 19, 1989, the Board granted a

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<sup>1</sup> For a more comprehensive review of the background of this proceeding refer to the Board's April 1, 1987, opinion and order (In the Matter of: Petition of the City of Peru for Exception to Combined Sewer Overflow Regulations, 77 PCB 11, PCB 86-1) which is hereby incorporated by reference in this opinion.

joint motion extending the construction deadline to November 1, 1989. On March 8, 1990, the Board granted a joint motion extending the date to file an amended petition to November 1, 1991.

On October 24, 1991, the City of Peru filed an amended petition for a CSO exception. The Agency filed its response to the amended petition on April 22, 1994.

#### BACKGROUND

Peru has a 1990 census population of 9,032 which is a reduction of 1,584 from the 1980 census. Local Peru industries include Maze Nail Company, G & O Radiator Manufacturing Company, Huntsman Chemical Company and Unytite, Inc. (Am. Pet at 2.) Peru is located along the Illinois River and some of the discharges from Peru's overflow is discharged to the Illinois River. (Am. Pet. at 2-3.)

Since the Board granted the temporary exception in 1987, Peru has completed construction improvements to the sewage treatment plant and the collection system. (Ag. Rec. at 5.) The construction program at the wastewater treatment plant included the placement of a mechanically-raked bar screen at the head end of the plant and the installation of grit removal facilities following screening. (Am. Pet. at 7.) The construction program also increased the secondary pumping and treatment capacities. (*Id.*) Work on the sewage collection system included rehabilitation of portions of the trunk sewers in areas where they were adjacent to or under a steam bed as well as improvements to diversions chambers and overflows. (*Id.*) As a result of the construction program the incidence of overflows has been greatly reduced and the appearance of the discharge stream at the overflow has improved. (Am. Pet. at 4.)

Peru has also completed two post-construction studies, City of Peru, Post-MCP Construction, CSO Study, 1990 (hereinafter 1990 Study) (Pet. Exh. A) and City of Peru, Illinois, Post-MCP Construction, CSO Procedure, Phase II Preliminary Stream Inspection (hereinafter Phase II). (Pet. Exh. B.) Both studies were forwarded to the Agency by Peru. The 1990 study indicates that the first flush rate and volume from the system has been reduced from 182 MGD to 99 MGD and the first flush volume has been reduced from 8.25 MG to 3.79 MG. (Am. Pet. at 6; Pet Exh. A at 14.) The Phase II study indicates that there "are no unusual problems with the streams or the stream beds within the City". (Am. Pet. at 8.)

The Agency, after reviewing the 1990 study and the Phase II study, notified Peru's consulting engineer of five concerns. Those five concerns were:

1. Solids had accumulated adjacent to outfall IR-1 and a pool, orange in color, had developed below outfall IR-3;
2. Water levels had been observed above the stop planks on three separate occasions at the diversion structure for outfall IR-9A;
3. WR-3 had activated only once during the two-year study period, indicating that it might be possible to eliminate the outfall altogether;
4. Infiltration apparently occurring at outfalls ER-2 and IR-7A; the City should eliminate the infiltration and consider permanently sealing these outfalls along with outfalls WR-4, WR-4A, WR-6, ER-1A, ER-C-5, ER-2A, IR-5, IR-8, and IR-9; and
5. The City should provide a description of the work done to correct the problems with the stop planks at outfall IR-10A.

(Ag. Rec. at 6; Pet. Exh. C.)

#### AMENDED PETITION

In response to the concerns raised by the Agency, Peru stated that it plans to construct a hand-raked bar screen at CSO IR-1 and to extend outfall to the normal low water line of the Illinois River. (Am. Pet. at 9.) Peru further plans to eliminate the infiltration at CSO IR-3 and to extend the outfall to the low water line of the Illinois River. (Am. Pet. at 10.) The Agency recommends that Peru collect data at these two outfalls after completion of construction. (Ag. Rec. at 7.)

Peru also responded that the high water levels at outfall IR-9A are likely caused by surcharging of the combined sewer in a trunk sewer tributary to the outfall during heavy rainfalls. (Am. Pet. at 10.) The high water levels are usually short-term and it has caused no problems with basement flooding, according to Peru. (Am. Pet. at 10-11.) The Agency states that it "now considers the surcharging of outfall IR-9A to be moot". (Ag. Rec. at 8.)

Peru answered the Agency's concerns regarding discharges at CSO ER-2 and CSO IR-7A by explaining that the trickle of water "is obviously groundwater, which causes no problem to the receiving stream". (Am. Pet. at 11.) Peru proposes to collect samples from each of these overflows and have them analyzed. (*Id.*) The Agency states that it is concerned about possible human contact in the vicinity of these discharges. (Ag. Rec. at 8.) The Agency therefore, recommends that these be monitored and eliminated if possible. (*Id.*) The Agency also agrees that the

list of possible CSO outfalls to be eliminated, provided by Peru in its petition, should be eliminated. (*Id.*)

Peru indicates that the problem with the stop planks in outfall IR-10A was that the planks were loosely fitted within the stop plank grooves. (Am. Pet. at 11.) Peru further indicated that the problem had been corrected. (*Id.*) The Agency recommends that inspections be required of all diversion structures equipped with stop planks. (Ag. Rec. at 9.)

Peru also indicated that the improvements made by the city have resulted in 20 of the 27 CSO outfalls showing no incidence of overflow for a once-in-one year rain. (Pet. Exh A at 9.) Further the outfalls have all experienced a drop in the rate of overflows except one. (*Id.*) The 1990 study also states "coupled with this lower incidence of overflow, is the fact that the condition of the receiving streams indicate a vast improvement over the previous study." (*Id.*)

In addition to the improved quality of the receiving streams, Peru's 1990 "Annual Operations Report" for the sewage treatment plant shows an average annual effluent BOD of 7 mg/l and an average annual suspended solids of 13 mg/l for the year. (Am. Pet. at 9.) No enforcement actions have been brought against Peru for water quality violations. (*Id.*)

#### AGENCY RECOMMENDATION

The Agency has recommended that Peru be granted a permanent exception to 35 Ill. Adm. Code 306.305(a) as it relates to first flush storm flows, and 35 Ill. Adm. Code 306.305(b), subject to specific conditions. Those conditions are:

- a. The City shall construct an additional hand-raked bar screen chamber for CSO IR-1 as described in the amended petition and extend the outfall pipe to the normal low water line of the Illinois River.
- b. The City shall eliminate the infiltration at CSO IR-3 and extend the outfall pipe to the low water line of the Illinois River.
- c. The City shall commit to definite completion dates for the projects in paragraphs (a) and (b) above.
- d. The City shall submit a plan for inspection, monitoring, and sampling of CSO IR-1 and CSO IR-3 and for monitoring CSOs WR-3, WR-4, WR-4A, WR-6, ER-1A, ER-2, ER-C5, ER-2A, IR-5, IR-7A, IR-8, and IR-9 to the Agency no later

than three months after the Board's decision in this matter. This plan shall provide for the collection of sufficient data to determine the post-construction compliance with water quality standards for CSO IR-1 and CSO IR-3 and to determine if any of the outfalls listed in this paragraph can be permanently sealed.

- e. If CSO ER-2 and CSO IR-7A can not be permanently sealed, the City shall take whatever action is necessary to eliminate the infiltration discharges from these outfalls.
- f. The City shall report its findings and recommendations to the Agency within six months of the conclusion of the monitoring program in paragraph (d) above.
- g. The City shall monitor its combined sewer overflows and all diversion structures containing stop planks on at least a weekly basis and after every rainfall and make written reports thereon and take corrective action as necessary.
- h. The City shall continue street and sewer cleaning efforts so as to minimize the bypassing of solid materials.
- i. This grant of exception does not preclude the Agency from exercising its authority to require as a permit condition a CSO monitoring program sufficient to assess compliance with this exception and any other Board regulations and other controls, if needed, for compliance with water quality standards.

(Ag. Rec. at 10-11.)

#### DISCUSSION

The Board, in granting the temporary CSO exception in 1987, expressed concern as to "whether the proposed improvements will adequately control any environmental impacts". (April 1, 1987 O & O at 7; 77 PCB 17.) The information provided in the amended petition clearly indicates that the improvements have controlled environmental impacts. However, the Board shares the concern the Agency has expressed over CSO ER-2 and CSO IR-7A. Therefore, the Board agrees that elimination of these two outfalls or at a minimum the elimination of infiltration is necessary.

The Board has previously determined that Peru has met the level of justification necessary to be granted an CSO exception. (See April 1, 1987 O & O at 3; 77 PCB 13.) The temporary nature of the CSO exception was necessary to insure that the construction plan would be sufficient. The Board finds that the amended petition sufficiently establishes that the environmental impact of a permanent exception will be minimal. Therefore, the Board grants Peru the requested CSO exception, with conditions.

#### CONCLUSION

Peru has requested a permanent CSO exception and the Agency has recommended that it be granted with specific conditions. The Board agrees that certain conditions are necessary to insure the continued quality of the streams into which the overflows discharge. Therefore, the Board will grant Peru's request for exception from 35 Ill. Adm. Code 306.305(a), as it relates to first flush storm flows, and from 35 Ill. Adm. Code 306.305(b) subject to conditions.

#### ORDER

The Board hereby grants the city of Peru's request for an exception from 35 Ill. Adm. Code 306.305(a), as it relates to first flush storm flows, and from 35 Ill. Adm. Code 306.305(b), subject to the following conditions:

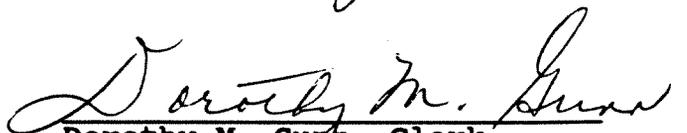
1. The City shall construct an additional hand-raked bar screen chamber for CSO IR-1 as described in the amended petition and extend the outfall pipe to the normal low water line of the Illinois River.
2. The City shall eliminate the information at CSO IR-3 and extend the outfall pipe to the low water line of the Illinois River.
3. The City shall commit to definite completion dates for the projects in paragraphs (a) and (b) above.
4. The City shall submit a plan for inspection, monitoring, and sampling of CSO IR-1 and CSO IR-3 and for monitoring CSOs WR-3, WR-4, WR-4A, WR-6, ER-1A, ER-2, ER-C5, ER-2A, IR-5, IR-7A, IR-8, and IR-9 to the Agency no later than three months after the Board's decision in this matter. This plan shall provide for the collection of sufficient data to determine the post-construction compliance with water quality standards for CSO IR-1 and CSO IR-3 and to determine if any of the outfalls listed in this paragraph can be permanently sealed.

5. If CSO ER-2 and CSO IR-7A can not be permanently sealed, the City shall take whatever action is necessary to eliminate the infiltration discharges from these outfalls.
6. The City shall report its findings and recommendations to the Agency within six months of the conclusion of the monitoring program in paragraph (d) above.
7. The City shall monitor its combined sewer overflows and all diversion structures containing stop planks on at least a weekly basis and after every rainfall and make written reports thereon and take corrective action as necessary.
8. The City shall continue street and sewer cleaning efforts so as to minimize the bypassing of solid materials.
9. This grant of exception does not preclude the Agency from exercising its authority to require as a permit condition a CSO monitoring program sufficient to assess compliance with this exception and any other Board regulations and other controls, if needed, for compliance with water quality standards.
10. This grant of exception is not to be construed as affecting the enforceability of any provisions of this exception, other Board regulations, the Environmental Protection Act, the Clean Water Act, or any other applicable federal regulation.

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (415 ILCS 5/40.1) provides for the appeal of final Board orders within 35 days of service of this decision. The Rules of the Supreme Court of Illinois establish filing requirements. (But see also, 35 Ill. Adm. Code 101.246, Motions for Reconsideration.)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 23<sup>rd</sup> day of June, 1994, by a vote of 6-0.

  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board