

ILLINOIS POLLUTION CONTROL BOARD
January 8, 1987

CHANUTE AIR FORCE BASE,)
)
 Petitioner,)
)
 v.) PCB 86-152
)
 ILLINOIS ENVIRONMENTAL PROTECTION)
 AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by R. C. Flemal):

This matter comes before the Board upon a petition and amended petition for variance filed September 16 and October 10, 1986, by Chanute Air Force Base ("Chanute"). Chanute requests that the Five-Day Biochemical Oxygen Demand ("BOD₅") and Suspended Solids ("TSS") effluent limitations of 35 Ill. Adm. Code Section 304.120, which presently are 10 mg/l and 12 mg/l as monthly averages respectively, be relaxed to 20 mg/l and 25 mg/l for the Main Sewage Treatment Facility at Chanute Air Force Base. The variance is requested for the period until the new Rantoul Regional Treatment Plant, to which Chanute will discharge, is completed. Completion is anticipated in summer or early fall 1987.

On November 3, 1986, the Illinois Environmental Protection Agency ("Agency") filed a recommendation ("Agency Rec") that the variance be granted with conditions. Petitioner waived hearing and no hearing has been held.

BACKGROUND

Chanute is located in Champaign County, Illinois, adjacent to and contiguous with the Village of Rantoul ("Rantoul"). Petitioner owns and presently operates a separate wastewater treatment facility located on its grounds. This facility has a design average flow of 1.5 mgd and discharges to an unnamed tributary of the Upper Salt Fork Drainage Ditch, and thence to the Vermilion River. Influent to the Chanute facility is virtually all domestic wastewater.

In 1981 Chanute entered into a Federal court consent decree in which it agreed to participate in and cooperate in funding a new regional wastewater treatment facility designed to meet the wastewater treatment needs of both Rantoul and Chanute. Construction of the new facility is underway and timely completion is anticipated. Chanute will continue to operate its present facility until the new regional facility is operational. The relief Petitioner requests is for this interim period.

Petitioner had previously filed a petition on February 27, 1984, requesting, among other matters, variance from the same BOD₅ and TSS limitations at issue in the current matter. That request was denied by the Board because Chanute at that time "failed to provide sufficient information to allow the Board to make an informed decision" (PC3 84-24, 53 PC3 239, 242, May 29, 1984).

Petitioner acknowledges that its present facility is incapable of consistently meeting the 10/12 BOD₅ and TSS limitations¹. Petitioner argues that this occurs in spite of the fact that it has undertaken substantial effort and expense, including expenditure of "over \$2 million" (Pet. p. 5) for an activated carbon adsorption system, in an attempt to comply with the 10/12 limitations. Additional recent efforts to achieve compliance have included tightening of training and operational procedures to assure that the facility is functioning optimally, altering sludge handling facilities and operations, and reducing infiltration and inflow (Pet. p. 5).

HARDSHIP

Given the imminent completion of the new regional facility, Petitioner argues that the further expenditures necessary to achieve full compliance during the interim period would impose a substantial, arbitrary, and unreasonable hardship. Among interim compliance options which Petitioner has considered are additions of polishing lagoons, microscreening, filtration, and activated carbon adsorption.

Polishing lagoons were formerly used, but have been abandoned as ineffective (Pet. p. 5). Microscreening and filtration are alleged to be costly, although no figures for these options have been specified apart from their inclusion in a 1975 estimated \$3.1 to 3.6 million upgrading program. The activated carbon adsorption unit is on site. However, it is not presently functional, and Petitioner estimates that repair and parts replacement would cost \$120,000. Neither the Agency nor Chanute believes that returning the activated carbon adsorption system to service would be sufficient by itself to allow compliance with the 10/12 limits (Agency Rec. p. 5; Pet. p. 5).

ENVIRONMENTAL IMPACT

Both Petitioner and the Agency assert that grant of the requested relief would cause little adverse environmental

¹ Data provided by the Agency (Agency Rec. p. 3-4) from Petitioner's discharge monitoring reports indicate that during the period October 1985 to August 1986 BOD₅ had monthly average concentrations ranging from 8 to 18 mg/l and TSS had monthly average concentrations ranging from 12 to 24 mg/l.

impact. The Agency cites 1980-86 water quality sampling data from various locations around the Chanute Base, noting that "no violations of water quality standards were observed" where the receiving ditch leaves the base (Agency Rec. p. 4).

CONCLUSION

Based on the record before it, the Board finds that Petitioner would suffer arbitrary or unreasonable hardship if denied variance relief, and that such hardship would not be justified by the environmental impact of Petitioner's discharge. Accordingly, the relief will be granted with conditions.

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

ORDER

Chanute Air Force Base is hereby granted variance from the Five-Day Biochemical Oxygen Demand ("BOD₅") and Suspended Solids ("TSS") limitations of 35 Ill. Adm. Code Section 304.120, subject to the following conditions:

1. Variance shall begin this date and shall expire on September 30, 1987, or upon the Rantoul regional STP achieving operational status, whichever occurs first;
2. Petitioner's effluent shall be limited to 20 mg/l BOD₅ as a monthly average, and 25 mg/l TSS, also as a monthly average;
3. Petitioner shall continue its participation in the Rantoul regional STP and shall do everything in its power to assure its completion in as timely a manner as possible;
4. Chanute shall comply with all efforts to minimize any adverse environmental effects occasioned by this variance, including items 16(a) through 16(e) of the Petition for Variance as attached.
5. Within forty-five days after this date Petitioner shall execute and send to:

Illinois Environmental Protection Agency
Attention: James Frost
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, Illinois 62706

a certificate of acceptance of this variance by which it agrees to be bound by its terms and conditions. This forty-five day period shall be held in abeyance for any period during which this matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

I, (We), _____, having read the Opinion and Order of the Illinois Pollution Control Board, in PCB 86-152, dated January 8, 1987, understand and accept the said Opinion and Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent


Title

Date

Board Members Bill Forcade dissented and John Marlin concurred.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 8th day of January, 1987, by a vote of 5-1.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

4. Granting of the variance is consistent with Federal Effluent Guidelines of 30 mg/l BOD₅, and 30 mg/l suspended solids.

STATEMENT OF FACTS.

5. Petitioner owns and operates a Main Sewage Treatment Facility at Chanute Air Force Base, Illinois.

a. Existing Facilities

Chanute Air Force Base's Main Sewage Treatment Facility (MTF) was initially put into service in 1942. Appendix B is a map showing the location of the Treatment Facility on Chanute Air Force Base and the tributary into which it discharges. Several subsequent modifications and expansions have been made to the original MTF. The various changes to the system are documented in Appendix C of this document. Prior to the addition of the tertiary treatment system (a carbon adsorption system) in 1979, the MTF consisted of a secondary standard rate trickling filter plant with a design capacity of 1.56 MGD. Primary treatment was provided by a comminutor followed by a clarifier and Imhoff Tank operating in parallel. Due to operational problems, the primary clarifier was removed from service in 1979. Secondary treatment now consists of the trickling filter followed by final clarifiers. Sludge, since 1985, is handled with a service contractor due to poor performance by anaerobic digester, which had been installed in 1967.

As Appendix B shows, Chanute Air Force Base is traversed by the Salt Fork Creek, which enters in the southwest and exits in the southeast. It enters from and exits to farm land.

Appendix D shows Chanute Air Force Base's proximity to local communities. The base is in the Village of Rantoul, population roughly 28,000, in east central Illinois, in Champaign County. It is about 15 miles north of Champaign-Urbana. The base is abutted on three sides by farm land, with residential and commercial land on the base's north boundary.

b. Activity of Petitioner

Chanute Air Force Base provides independent military and technical training for officers and airmen of the Air Force, Air Force Reserves, Air National Guard, Air Force civilian employees and other Department of Defense agencies. As part of this mission, Chanute Air Force Base houses thousands of airmen in dormitories and thousands of military dependents in military family housing located on Chanute Air Force Base. The installation was activated in 1917 and presently encompasses an area of 2,125 acres. Staff requirements of the base involve approximately 3,500 permanently assigned personnel. The present student enrollment on base is estimated at 4,000 students but has historically ranged to a level of 7,000 students. The bulk of the training involves aircraft and aircraft support equipment maintenance training.

Chanute Air Force Base, as mentioned, is contiguous to the Village of Rantoul. By contract, we already forward large quantities of wastewater to Rantoul. The Village of Rantoul currently has interim standards of 20 mg/l of BOD₅ and 24 mg/l of suspended solids, compared to our 10/12 standards. These interim standards for Rantoul are in effect until Rantoul completes its regional wastewater treatment plant, which is projected for Fall 1987.

As will be developed below in more detail, the Air Force through Chanute Air Force Base has joined this regional project and has contributed nearly \$11 million to it. Chanute will hook up to the regional system when it becomes operational and anticipates no problems meeting the 10/12 limits then.

6. Petitioner is presently discharging under Permit No. IL0027073, effective 12 October 1983, expires 1 July 1988 (See Appendix A).

7. Petitioner is presently in compliance with all applicable Board regulation except 35 Ill. Adm. Code, Subtitle C, Ch I, Section 304.120.

8. Petitioner is having substantial difficulty in achieving compliance with 35 Ill. Adm. Code, Subtitle C, Ch I, Section 304.120, despite its best efforts to comply.

The MTF as described above is unable to meet NPDES permit effluent limitations. A major modification to the system commenced in 1979. This modification consisted primarily of two major changes, the first involving the trickling filter. The effectiveness of the trickling filter was often reduced due to freezing conditions during cold weather. To eliminate this problem, the trickling filter was equipped with a metal cover. Nonetheless, we haven't achieved compliance.

In addition, a physio-chemical tertiary treatment system consisting of chemical treatment followed by activated carbon adsorption was added to the treatment scheme. This did not help achieve compliance either.

Each of these systems will be discussed in more detail below. Appendix E shows our BOD₅ and suspended solids results.

9. Quantity and Type of Wastewater Influent

Influent flow to the MTF is virtually all domestic wastewater. The data presented represents average values compiled from sampling information obtained at the MTF from January of 1980 to July of 1986. Detailed information is provided in Appendix E. This data comes from the period after installation of the carbon adsorption system. The make-up of the wastewater constituents and overall quantity has not varied significantly over this six-year period. Average values are displayed in Table 1.

TABLE 1

INFLUENT CHARACTERISTICS

AVERAGE DAILY FLOW	1.23 MGD
AVERAGE BOD ₅ CONCENTRATION	259 mg/l
AVERAGE SUSPENDED SOLIDS CONCENTRATION	134 mg/l

The following typical values of effluent constituent concentrations were compiled from MTF records for the period from January 1980 to July 1986. The average effluent flow is essentially the same as the average influent value from Table 1. The average effluent concentration values are presented in Table 2.

TABLE 2

EFFLUENT CONCENTRATIONS

AVERAGE EFFLUENT BOD ₅	13 mg/l
AVERAGE EFFLUENT SUSPENDED SOLIDS	10 mg/l

These values represent an average removal efficiency of eighty-five percent of the BOD₅ and eighty-three percent of the suspended solids. The MTF has remained unable to consistently meet the existing NPDES permit discharge requirements of 10 mg/l BOD₅ and 12 mg/l suspended solids.

10. Statement of Reasons, Purpose, and Effects. Petitioner has been actively working toward achieving full compliance.

a. Various methods of compliance have been investigated by Chanute Air Force Base over a long period of time. On the assumption that an increase in overall removal efficiency of 10 to 20 percent is required, several effluent polishing processes were deemed worthy to investigate. These include:

- (1) Polishing lagoons
- (2) Microscreening
- (3) Filtration
- (4) Activated carbon adsorption

(1) **Polishing lagoons.** Chanute Air Force Base commissioned Clark, Deitz Engineers to undertake a study of potential sewage treatment facility modifications in March of 1967. For this study, polishing lagoons were considered as a method of tertiary treatment. The study concluded that the required acreage was not available in the immediate vicinity of the existing sewage treatment plant. Thus, pumping facilities would be required to transport the secondary effluent to a remote site on base. The MTF is located in close proximity to the Base Hospital and other habitable buildings leading to potential odor and insect nuisance problems. The polishing lagoons were implemented at a remote site in 1972; however, three years later due to operational problems, they were abandoned as ineffective.

(2) **Microscreening and Filtration.** Options involving screening or filtration were investigated in a subsequent study by Clark, Dietz Engineers in May 1975. Filtration was selected over microscreening as the preferred means of achieving improved effluent quality. Various alternatives involving upgrading of the existing plant, construction of a new plant, or construction of a new plant utilizing some existing treatment units were evaluated and assigned costs. Construction cost estimates in 1975 for the various alternatives ranged from \$3.1 to 3.6 million. The additional cost of operation and maintenance for a twenty-year operation period raised the estimates from \$5.7 to 6.6 million. We implemented many changes, as Appendix C shows.

(3) **Activated carbon adsorption.** The use of a carbon adsorption system was investigated as a short-term solution to meet effluent standards in the interim period prior to the construction of a regionalized sewage treatment plant. The regional approach was first being considered in 1979. A feasibility study was conducted by the Calgon Corporation in 1979. It concluded that a combined chemical treatment/carbon adsorption system for polishing sanitary wastewa from the existing facility could be constructed on the present site and would be capable of meeting the effluent limitations of 10 mg/l BOD₅ and 12 mg/l suspended solids. In December of 1979, the Air Force entered into a contract for \$1.4 million for the design and construction of modifications to incorporate Calgon's proposal. Calgon Corporation originally retained ownership of the carbon adsorption system necessitating an additional contract. The service fee and maintenance contract was initially for a three-year period of operation. Renewal of the service contract was available in six-month increments for an additional three years. The treatment modifications went into service in January of 1980. Although there were some problems confirming that the system obtained the performance specification of 10 mg/l BOD₅ and 12 mg/l suspended solids, the plant was accepted in May 1980. In the spring of 1985, Chanute Air Force Base purchased the Calgon lease for an additional \$389,000.

Plant records indicate that compliance with the current NPDES require has been achieved less than fifty percent of the time since Calgon installation. Reports we've furnished to the Illinois Environmental Protection Agency show this. See also Appendix E. Consequently, the carbon adsorption system, though costing us over \$2 million, has not been an effective tool in meeting our BOD₅ and suspended solid limits. Though we can purchase a new carbon filter, install it and make other repairs at the price of \$120,000, we see no potential that it will help us achieve required limits.

b. We've also tightened our administrative controls. Since January 1986, we've closely inspected and tightened our management procedures. Our MTF Supervisor re-checked training records and procedures to insure our facility is being optimally run. He reemphasized the finer points to stress optimum operation. He re-checked all of our procedures on stream sampling and testing to insure accurate test results. Appendix E shows this administrative tightening has had negligible effect on our BOD₅ and suspended solid levels. Our MTF Supervisor coordinated with water pollution specialists in the IEPA, Champaign County, to insure he wasn't missing any administrative techniques.

c. The handling of the sludge build-up in the MTF was considered essential for a proper operation of the treatment process. In the past, due to wet or cold periods of weather, the available capacity in the drying beds has been severely limited. In 1981, a permit was obtained to increase the volume of the sludge drying beds by raising the wall heights approximately nine inches.

The quality of the effluent was still severely impacted from not maintainin sufficient freeboard below the Imhoff tank slots. Recognizing sludge handling was a major problem in obtaining good effluent quality, Chanute started processing a service contract for land application of liquid sludge on farm land. By December 1985, a service contract with A. D. Soil, Inc., was initiated with all necessary IEPA permits at an estimated annual cost of \$24,000. This is further evidence of our attempt to comply. However, Appendix E shows this hasn't helped enough.

d. With chemical treatment through carbon and the processing of the sludge disposal contract, we hoped the quality of the effluent would improve by increased settling time. By the summer of 1985, Chanute started action to place on line an additional secondary treatment tank that would allow an additional five hours of settling time. This was a primary clarifier distributor system. Bugged with administrative and weather delays, the installation of the pump needed to transfer the sewage to the secondary tank was not completed until February 1986. On the second day of operation, the pivot drive assembly broke and the secondary treatment tank idea was abandoned. The pivot drive will cost in excess of \$100,000 to repurchase and install. Even with its installation, we cannot predict full compliance. Nonetheless, this is evidence of our efforts to comply.

e. In Spring 1985, Chanute obtained CRS Serrine, Inc., at a cost of \$180,000 to prepare an Engineering and Preventive Maintenance Management Study for the Wastewater Collection System. The objective was to evaluate the maintenance and rehabilitation needs of the system and prepare recommendation for required improvements. The recommendations will lead to the reduction of infiltration and inflow sources. It is anticipated that this will reduce the wastewater flow volume during heavy rainfall periods. This should help, but not enough probably.

11. Effect of variance on toxics, ammonia level.

Appendix F is a summary from March 1980 - March 1986 of the effluent from the sewage treatment plant and other surface water sampling sites both before and while the Salt Fork Creek is on base property. The data relates to toxics, ammonia and heavy metals. Appendix G is a map showing the various sampling sites in relation to the treatment facility. Site 3 is where the facility discharges

In the majority of cases the ammonia levels and toxic chemicals or heavy metals are below the general use water quality standards set forth in Title 35, Subtitle C, Subpart B, Section 302.208 of the Illinois Revised Statutes.

Technically, heavy metals, such as chromium and cadmium, could clog the trickling filter if discharged in high concentrations. But here, they were not discharged in excess of recommended standards. If the trickling filter is clogged, this of course would cause a rise in the BOD₅ levels.

This, however, should not be a problem. We discharge only small amounts of iron on a regular basis and we do not foresee increasing the discharge of any toxics or heavy metals. Further, a review of Appendix E compared to Appendix F shows when our BOD₅ and suspended solids were above 10/12, there was little or no correlation to increased levels of toxics or heavy metals.

Based on this lack of correlation and the fact we will not increase discharges of toxics or heavy metals, we see no reason to believe the variance will negatively affect toxic, ammonia or heavy metal concentrations in the water.

Also, ammonia and nitrogen pollutants can be placed in the water prior to the stream's entry onto the base, as the map at Appendix D shows. During periods of high rainfall, these can come from upstream agricultural, residential and possibly industrial sources. The base has little or no control on the quality of the incoming waters. This is an explanation of why certain materials were detected in higher than normal levels while the creek entered base property. Also, the use of fertilizers on Chanute Air Force Base is minimal. This diminishes the possibility of ammonia and nitrogen problems.

12. Environmental Impact of Variance.

The discharge from the MTF will have minimal impact on the receiving stream during the requested period of the variance (approximately one year).

Effluent from the MTF is discharged to a drainage ditch located on the premises of the base. This small ditch originates at the base of a series of drain tiles and has minimal and changing flow rates during the summer months. Due to this instability of flow and the lack of shade, it is unlikely that any type of extensive stable aquatic environment exists.

The stream into which the ditch empties is a tributary to the Upper Salt Fork Drainage Ditch. See Appendices B and D. The seven-day, ten-year low-flow upstream of the MTF outfall is 0 c.f.s. with a seven-day, ten-year low-flow for the Upper Salt Fork Drainage Ditch of 4.0 c.f.s. No unnatural sludge deposits have been observed along the 22,000 feet of drainage ditch prior to the confluence with the Upper Salt Fork Drainage Ditch. The receiving water has been classified general use.

By making reference to Appendix F, operation of the treatment plant from 1980 to 1986 indicates very little difference in sampling results regarding toxics and metal, when the plant was exceeding effluent limitations as appears in Appendix E.

Discharge of any toxic chemicals or fire retardant chemicals used in the fire protection training area is not expected and should not have any impact on the environment. We have no evidence from the times we exceeded BOD₅ or suspended solid limits (Appendix E) that we harmed the environment, plant or animal. This was so even when we exceeded limits for several months in a row. We therefore believe there will be no environmental harm during the variance period.

Human contact along the receiving water is limited by the fact that it meanders through primarily agricultural land. Only three active residences are in the general vicinity of the drainage ditch after it leaves the base grounds, with none of these in close proximity to the path of the stream. No known sources of public water supply use the receiving stream as a source. In addition, no threatened or endangered plant and animal species have been observed along the stream.

No known environmental factors such as wetlands, flood plains, air quality, unique plant or animal communities, or other important fish and wildlife habitats would be significantly affected. Also, there are no historic, archaeological or cultural features in the immediate area which would be affected.

13. Petitioner estimates achieving full compliance with 35 Ill. Adm. Code, Subtitle C, Ch I, following implementation of Regional connection with the Village of Rantoul and Chanute Air Force Base.

This regional connection and new Rantoul Treatment Facility is planned to be completed by Fall of 1987.

To alleviate the wastewater management problems identified above and to meet the wastewater management objectives, we had to reconsider our approach to basic methods of wastewater treatment, especially after realizing the methods mentioned above were not wholly satisfactory. We considered: (1) non-regionalization consisting of upgrading the existing plant, or (2) complete regionalization involving the transport of all sewage to the Village of Rantoul facility for treatment and discharge. Having evaluated the economic and environmental impacts of the two alternatives, Chanute AFB pursued regionalization with the Village of Rantoul for full treatment and discharge at a cost of \$10.6 million to the Air Force.

Appendix H is a consent decree entered into by the Air Force and the Illinois Environmental Protection Agency in 1981 from Federal court in which we agreed to regionalize and to cooperate in funding.. We've met all of our fund and engineering responsibilities to regionalize as spelled out in the consent decree. We're right on schedule in building our pumping station on Chanute's premises to tie us into the regional system.

We've paid all of our funding request to Rantoul promptly. We've not attached bills and vouchers because of their cumbersome volume. We can produce them, if required.

Appendix I shows the proposed and actual schedules for completion of the regionalization. None of the delays is attributable to the Air Force. Any delays resulted from the Village of Rantoul, the State of Illinois, or from design problems and contract bid protest beyond our control.

Note also that USEPA inspectors visited the regional facility construction site and our pumping station construction site since February 1986, and were absolutely pleased on the facilities and progress.

14. This variance can be granted by the Board consistent with all federal effluent guidelines of 30 mg/l for BOD₅ and 30 mg/l for suspended solids.

15. Immediate compliance with 35 Ill. Adm. Code, Subtitle C, Ch I, Section 304.120, on the other hand, would impose a substantial, arbitrary, and unreasonable hardship on petitioner for the following reasons:

Chanute Air Force Base has expended over \$2.9 million on a carbon adsorption system in an attempt to comply with present effluent limitations. It has been documented that this expenditure has not allowed the wastewater final effluent to meet discharge limitations on any type of continuous basis. In fact, many times the reduction in pollutant load over the secondary effluent is insignificant. See Appendix E.

Without the granting of a variance, Chanute is faced with one of two options to consider while we wait to regionalize. The first is to purchase a carbon changer and repair existing equipment of the carbon adsorption system at an estimated cost of \$120,000, requiring six months. The second choice is to make major repair to the primary clarifier distributor equipment (pivot drive) at an estimated cost of \$100,000, requiring six to nine months until fully operations

We cannot justify either of these expenses for a system that has proven not to meet with present NPDES permit effluent standards or is of dubious value and which provides minimal long-term environmental benefits to the receiving water. Considering this, along with major funding reduction from the Gramm-Rudman Act, the expenditure of such sums of money and the additional time and cost of maintenance associated with continued operation of either choice constitutes an unreasonable hardship.

With the regionalization scheduled in approximately one year at a cost to us of \$10.6 million, any major design and construction modifications to the treatment system to meet current NPDES effluent standards would be economically unsound and again create an unreasonable hardship. Most importantly, they would not help meet the effluent standards, as history has shown.

Requiring us to comply with 10/12 is also arbitrary. The Village of Rantoul has interim standards of 20/24 pending completion of the regional facility. Admittedly we do not have nor can we now apply for interim standards, but requiring a tougher standard on Chanute Air Force Base than on our contiguous neighbor is arbitrary. This is especially so in light of the fact that the only reason the regional facility is not done is not because of any Air Force delay.

The hardship of compliance is no doubt substantial when you consider we've done all we can from a technical and management viewpoint and committed \$10.6 million to the regional facility. We would have to spend nearly one-quarter million dollars to fix or update systems which can't do the job individually.

The whole reason for regionalizing was to deal with wastewater management comprehensively and finally. It would have cost us less to deal with the problem piece-meal, in all likelihood, but the solution would not have been optimum. We chose the better solution. To require us to now spend nearly one-quarter million dollars while we're waiting to regionalize is unreasonable and arbitrary, especially since Rantoul can operate on 20/24 until regionalization.

Our bottom line, regardless of Rantoul's limits, it's unreasonable and arbitrary to impose 10/12 on us pending regionalization. We should also note that the current NPDES permit with the 10/12 standard came after our consent agreement to regionalize.

16. It is the intent of Chanute Air Force Base to obtain a variance of the present NPDES discharge standards until the on-line operations of the new Rantoul Regional Treatment Facility are in effect and to minimize any adverse environmental effects.

In order to minimize the impact of the reduced effluent standards during the period of variance, the following measures will be maintained or begun:

- a. Chemical treatment will continue with strict monitoring to assure NPDES standards are met or that levels will be as low as possible..
- b. Maximum allowable effluent will be diverted to the Village of Rantoul.
- c. The new Treatment Plant Manager (assigned February 1986) will continue with close attention to management and administration. He will review on-the-job training with all plant operators including initial lab training briefings, and will continue these on a regular basis.
- d. The sludge service contract will continue at an annual estimated cost of \$24,000.
- e. We will implement the recommended Engineering and Preventive Maintenance Study (mentioned above) for reducing infiltration and inflow sources into wastewater.

It is expected that for the interim period, the treatment plant can achieve the discharge limits of 20 mg/l for BOD₅ and 25 mg/l for total suspended solids. Of course, we will strive for lower results.

Although this would be exceptional performance for this type of plant, where a removal efficient of approximately eight-five percent might be expected, under good operating conditions, a relatively high quality effluent can be expected. For the entire year of 1985, the secondary effluent averaged 13 mg/l BOD₅ and 10 mg/l suspended solids in the discharge. We want to keep our averages down like this until regional hookup.

We've taken further actions to minimize adverse impact. In some instances, during periods of excessive rainfall, the increased hydraulic loading on the plant caused operational difficulties. Presently, excessive flow is stored in the collection system, to the extent possible, reducing shock loadings.

17. Request for Relief.

Wherefore, petitioner requests that the Board grant it a variance from 35 Ill. Adm. Code, Subtitle C, Ch I, Section 304.120 until on-line operations of the new Rantoul Regional Treatment Facility (Fall, 1987), subject to the proposed plan, allowing 20 mg/l of BOD₅ and 25 mg/l of suspended solids.

We request a hearing in the event the Agency recommends against this petition

FOR CHANUTE AIR FORCE BASE




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Telephone: 217 495-2015

STATE OF ILLINOIS)
)
COUNTY OF CHAMPAIGN) ss

AFFIDAVIT


I, Ronald I. Cowger, Base Commander at Chanute Air Force Base, Illinois, having been duly sworn, desposes and says that:

I have received the attached documents requesting a variance for Chanute Air Force Base and all the information contained therein is true to the best of my knowledge.



RONALD I. COWGER, Colonel, USAF
Base Commander

Subscribed and sworn to before me this 12th day of September 1986.



Notary Public

My commission expires 11 July 1989.