



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

LARRY J. WILSON, DIRECTOR

February 14, 1989

Allen Water & Wastewater Engineering Inc.
102 S. Iris Road
Mt. Pleasant, IA 52641

ATTENTION: Thomas F. Allen, P.E., President

RE: Variance Request
Standby Power Facilities
City of Salem, Iowa

Gentlemen:

The Iowa Department of Natural Resources in accordance with Subrule 567--64.2(9)c of the Iowa Administrative Code has denied the request for a variance from Iowa Wastewater Facilities Design Standard 13.11 which requires that standby facilities be provided for emergency operation of pumping stations during possible periods of extensive power outages, mandatory power reductions, or uncontrolled storm events.

The engineering justification submitted does not substantially demonstrate that this variance would provide for equivalent or improved effectiveness. The submitted justification pertains to power service over only a three year period. This limited service record of power reliability does not assure that future extensive power outages or mandatory power reductions will not occur. In this regard the possibility of uncontrolled storm events which could cause disruption of the power service to the existing pumping stations has not been considered. Such events include cold weather storm periods with icing conditions, lightning occurrences during thunderstorms, and tornadoes.

Sincerely,

DARRELL MCALLISTER
BUREAU CHIEF
SURFACE AND GROUNDWATER PROTECTION BUREAU

DM:FE-045.cef

cc: City of Salem
Field Office 6

RECEIVED	FACILITY NAME	COUNTY No.	PROGRAM AREA CODE	FACILITY TYPE CODE	SUBJECT AREA CODE
1/9/89	4 City of Salem	5 44	6 CP	7 C02	8 345
REFERENCE	DESIGN STANDARD REFERENCE	DECISION		APPEAL ACTION	
64.2(9)	10 13.11	11 Denied 2/8/89		12	
ENGINEER		VARIANCE RULE			
Allen Water & Wastewater Engineering, Inc. - Mt. Pleasant		14 64.2(9)C			

DESCRIPTION OF VARIANCE REQUESTED: The City of Salem has retained Allen Water & Wastewater Engineering Inc. for engineering services in preparing a preliminary engineering report for necessary improvements in the municipal systems for water mains, sanitary sewerage and storm sewers. The improvements for the sanitary sewerage system include upgrading two existing raw sewage pumping stations. The existing pumping stations do not have provisions for alarm systems and emergency operation. In the engineering report which was approved on November 9, 1988, it is indicated that the needed pumping station improvements include provision of stand-by power. However, in the engineer's letter of 1/5/89 a waiver from normal standby power requirements is requested.

1. For the years 1986, 1987 and 1988 there was only one power outage that affected either of the two pumping stations. This power outage was for scheduled maintenance that affected the entire City of Salem for approximately $3\frac{1}{2}$ hours in the early hours of the morning of 9/10/86. A letter in this regard from the supplier of electrical power to the City of Salem was submitted with the variance request.
2. The excellent record of maintaining power justifies a waiver from the normal standby power requirements.

DEPARTMENTS JUSTIFICATION: We recommend that the requested variance be denied for the following reasons:

1. The submitted justification pertains to power service over only a 3 year period. This service record of power reliability does not assure that future extensive power outages or mandatory power reductions will not occur.
2. The factor of possible uncontrolled storm events which could cause disruption of the power service to the pumping stations has not been considered. Such events include cold weather storm periods with icing conditions, lightning occurrences during thunderstorms and tornadoes.
3. Our Field Office staff has recommended that the pumping stations be equipped with alarm systems and emergency standby power systems.

PRECEDENTS USED: The only variance that has been granted for not providing emergency standby power or pumping facilities was granted to the South Panamanian Sanitary District on 11/17/87. In this case it was determined that the engineering justification submitted substantially demonstrated that the conditions and circumstances which were considered in the adoption of the rule or standard were not applicable to the project.

STAFF REVIEWER:

SUPERVISOR:

AUTHORIZED BY:

Greg M. Evans 2/7/89
John Janney 2/8/89
Daniel H. White 2/8/89



ALLEN WATER & WASTEWATER ENGINEERING INC.

102 S. Iris Road
Mt. Pleasant, Iowa 52641
(319) 385-8740

January 5, 1989

Mr. Wayne Farrand
Iowa Department of Natural Resources
Henry A. Wallace Building
900 E. Grand Avenue
Des Moines, IA 50319

RE: Standby Power - City of Salem

Dear Mr. Farrand,

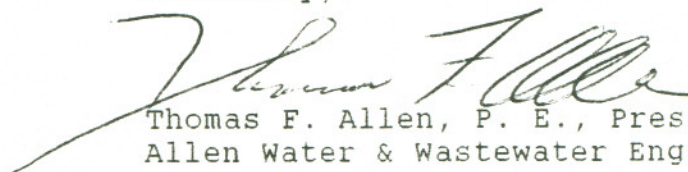
Allen Water and Wastewater Engineering has been retained by the City of Salem to assist them in making improvements to their water and wastewater systems. Part of the improvements to the wastewater system include upgrading of two existing lift stations. Currently, neither of these lift stations have standby power facilities.

Enclosed is a copy of a letter from Union Electric regarding power outages at the two lift stations in the City of Salem. You will note that for the years 1986, 1987, and 1988 there was only one power outage that affected either of these lift stations. This power outage was for scheduled maintenance that affected the entire City of Salem for approximately 3 1/2 hours in the early hours of the morning of September 10, 1986. This seems to me to be an excellent record of maintaining power and one that would justify a waiver from the normal standby power requirements.

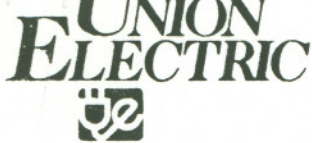
I am, therefore, asking for a waiver from the normal standby power requirements for the two lift stations serving the Salem wastewater system.

Thank you for your consideration.

Sincerely,



Thomas F. Allen, P. E., President
Allen Water & Wastewater Eng., Inc.



21 South Ninth Street, Keokuk

October 13, 1988

Mr. Tom Allen
Allen Water & Wastewater Engineering
102 South Iris Road
Mt. Pleasant, IA 52641

Dear Mr. Allen:

In response to your request regarding information about outages which would have effected the two sewage lift stations in Salem, I am pleased to be able to report that a review of our files for 1986, 1987, and 1988 to date shows only one outage. This was a scheduled outage for maintenance reasons at Houghton Substation and effected the whole town of Salem on 9/10/86 from 2:29 a.m. to 5:55 a.m.

If you have any further questions, please feel free to call us.

Very truly yours,

Richard Coeur
Engineer

WRC:dc