EPC COMMISSION MINUTES & AGENDA

MONTH March

YEAR 1988

Motion was made by Gary Priebe to approve the Washington Regional Office lease as presented by Mr. Kuhn. Seconded by Clark Yeager. Motion carried unanimously.

REPORT ON FEASIBILITY OF LIMITING THE TYPES OF WASTE ACCEPTED AT A HAZARDOUS WASTE FACILITY

Ruth Bender, Division Administrator, Waste Management Authority Division, presented the following item.

Senate File 396, 1987 Iowa Acts, requires the Waste Management Authority Division to prepare a feasibility report on limiting the types of waste accepted at a hazardous waste facility. The report was to be submitted to the General Assembly by January 1, 1988. Due to the scope of the report and the recent staffing of the Waste Management Authority Division, a preliminary report was submitted on January 1 and a final report is being prepared for submittal on April 1, 1988. The Commission received copies of the preliminary report in January.

A summary of the final report will be provided.

Mrs. Bender summarized the report and stated that it is presently in draft form and will be distributed to staff tomorrow for review. Recent amendments to Superfund require states to certify their ability to treat or dispose of all waste generated in their borders by October, 1989 or risk the loss of Superfund monies. The three scenarios being examined in the report are as follows: 1) to accept solidified or stabilized inorganic waste and liquid wastes only; 2) to require waste minimization efforts before wastes are accepted; and 3) to accept waste generated from any state included in a regional agreement only. Mrs. Bender further explained details and analyzation of each scenario.

Nancylee Siebenmann asked if the Commission will receive a copy of the report before submittal to the legislature.

Mrs. Bender stated that a copy will be provided, if available. Staff will be working on the report right up to the deadline.

MONTHLY REPORTS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The following monthly reports are enclosed with the agenda for the Commission's information.

1. Rulemaking Status Report
2. Variance Report
3. Hazardous Substance/Emergency Response Report
4. Enforcement Status Report
5. Contested Case Status Report

Members of the department will be present to expand upon these reports and answer questions.

Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office number	Program	Alleged Violation	Action	Date
Delhi Lakeview Estates, Inc. (1)	Drinking Water	Monitoring/reporting - nitrate.	Order/Penalty	2/1. 88
South Central Iowa Landfill Agency, Winterset (5)	Solid Waste	Cover violations.	Order/Penalty	2/11/88
City of Donnellson (6)	Waste Water	MIP	Referred to AG	2/16/88
ASPRO, Inc. Waterloo (1)	Air Quality	Excess Emissions	Referred to AG	2/16/88
Living History Farms, Urbandale (5)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Central Baptist Church, Council Bluffs (4)	Drinking Water	Monitoring/reporting - nitrate.	Order/Penalty	2/17/88
Ramsay Reform Church, Titonka (2)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Breitbach's Tap. Sherrill (1)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Randy's Bluffton Store Decorah (1)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Clear-View Acres Store Delhi (1)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Camp Okoboji, Milford (3)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
The Meadows, Inc. Moville (3)	Drinking Water	Monitoring/reporting - nitrate	Order/Penalty	2/17/88
4 Sons Handy Shop Neola (4)	Drinking Water	Monitoring/reporting - bacteria	Order/Penalty	2/17/88
Knollridge Garden Apts. Coralville (6)	Drinking Water	Monitoring/reporting - other inorganics	Order/Penalty	2/17/88
City of McGregor (1)	Waste Water	Municipal Improvement Program	Order	2/23/88
David Francy, New London (6)	Waste Water	Prohibited discharge	Order/Penalty	2/24/88
City of Fairfield (6)	Waste Water	Monitoring/reporting - discharge limits, operational violations	Order/Penalty	2/26/88
Motel Grinnell, Inc. Grinnell (5)	Waste Water	Monitoring/reporting - discharge limits, operational violations	Order/Penalty	2/26/88
Valley Oaks Country Club, Clinton (6)	Drinking Water	Monitoring/reporting - nitrate	Order/Penalty	2/26/88
City of Stacyville (2)	Waste Water	MIP	Amended Order	2/29/88

be held on May 12, 1988 at 10:00 a.m. at the Kirkwood Community College, Iowa Hall, Iowa Room, Cedar Rapids, Iowa; on May 13, 1988 at 10:00 a.m. in the Denison Community Room, 111 North Main Street (adjacent to City Hall), Denison, Iowa; and on May 16, 1988 at 10:00 a.m. at the Wallace State Office Building in the ground floor auditorium, 900 East Grand Avenue, Des Moines, Iowa.

Copies of the proposed rules may be obtained from the Records Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034.

In accordance with Iowa Code section 17A.31, notice is hereby given that these rules may have an impact on small business.

These rules are intended to implement 1987 Iowa Code Supplement section 455B.190.

Chapter 39
Requirements For Properly Plugging Abandoned Wells

567--39.1(455B) Purpose. The purpose of this chapter is to implement 1987 Iowa Code Supplement section 455B.190 by providing a schedule and required procedures for the proper plugging of abandoned wells.

567--39.2(455B) Applicability. These rules govern the proper plugging of all abandoned wells. For additional guidance and background information, refer to "Guidelines for Plugging Abandoned Water Wells," Technical Information Series 15, Geological Survey Bureau, Iowa Department of Natural Resources, 1987.

567--39.3(455B) Definitions.

"Abandoned well" means a water well which is no longer in use or which is in such a state of disrepair that continued use for the purpose of accessing groundwater is unsafe or impracticable.

"Agricultural lime" means all calcium and magnesium products sold for agricultural purposes in the oxide, hydrate, or carbonate form; such form being designated as quicklime, hydrated lime, carbonate of lime, and crushed or ground limestone which is used for agricultural purposes as a soil pH buffer.

"Annular space" means the space between the well casing and the well bore or the space between two or more concentric well casings.

"Approved" means accepted or acceptable under an applicable specification stated or cited in these rules.

"Aquifer" means a geological formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

"Artesian well" means a well in an aquifer where the groundwater is confined under pressure and the static water level in the well stands above the top of the confined aquifer it taps.

"Bentonite" means a naturally occurring highly plastic, colloidal clay composed largely of the mineral montmorillonite which expands upon wetting.

"Bentonite grout (or slurry)" means a mixture of ten percent (10%) processed bentonite (by weight) and clean water.

"Bentonite pellets" mean a form of processed bentonite which can be used directly for sealing applications in well plugging operations.

tremie pipe. Bentonite pellets or graded bentonite may be added by pouring in place and agitating to avoid bridging. Any of the approved sealing materials shall be added above the static water level up to four (4) feet below the ground surface. If bentonite grout is used, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The fill materials may be omitted and any of the approved sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Only bentonite products or neat cement sealing materials shall be used below the static water level. If bentonite grout is used from the static water level to the top of the well, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

b. Bedrock wells completed in a single unconfined aquifer. The plugging procedure for these wells is the same as for bedrock wells completed in a single confined aquifer except that a bridge plug or packer is not required to stop the flow of water since this problem will not exist in this type of well.

c. Bedrock wells completed in multiple aquifers. For the lowest aquifer, fill material consisting of pea gravel, crushed stone or gravel shall be placed to within ten (10) feet below the bottom of the casing or confining layer. Neat cement tremied in place shall then be used as a sealing material to ten (10) feet above the bottom of the casing or above the bottom of the confining layer, whichever is highest. The minimum thickness of the sealing material above each aquifer shall be ten (10) feet except for the uppermost aquifer. This same procedure and type of fill materials and sealing material shall be used throughout subsequent aquifers including the uppermost aquifer. The seal for the uppermost aquifer shall extend from at least ten (10) feet below the bottom of the casing to at least ten (10) feet above the bottom of the casing. The casing shall be filled above the static water level with any of the approved sealing materials up to four (4) feet below the ground surface. If bentonite grout is used, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The fill materials may be omitted and any of the approved sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Only bentonite products or neat cement shall be used as the sealing materials below the static water level. If bentonite grout is used from the static water level to the top of the well, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

567--39.8(455B) Standby wells. Standby wells do not require the plugging operations for an abandoned well which renders the well permanently unusable as a source of water supply. A standby well must be disinfected when taken out of use and must be disinfected and checked for bacterial safety when

Iowa Code section 455B.304 requires the Commission to adopt rules that prohibit land burial or disposal by land application of wet sewer sludge at a sanitary landfill.

The term "wet sewer sludge" contained in Iowa Code section 455B.304 is taken to mean municipal sewage sludge which contains more liquid than solid, that is, equal to or greater than 50 percent liquid. The proposed amendment adds language to paragraph 102.14(3)"a" which restricts burial or disposal by land application of municipal sewage sludge at a sanitary landfill to sludge which has a solids content greater than 50 percent.

Public hearings were held in Iowa City on January 6, 1988; in Council Bluffs on January 7, 1988; and in Des Moines on January 8, 1988 at which time oral and written comments were received. A written response has been prepared.

The rule is identical to that published under the Notice of Intended Action.

The rule will become effective May 25, 1988.

This rule is intended to implement Iowa Code section 455B.304.

The following amendment is proposed.

Amend subrule 102.14(3), paragraph "a" as follows:

a. Unstabilized sewage sludge, including unstabilized septic tank pumpings, shall not be disposed in the portion of a sanitary landfill open to the public. Municipal Ssewage sludge, whether stabilized or unstabilized, may be disposed of at a sanitary landfill as provided in Chapter 103 or 121 only if the sludge has a solids content greater than 50 percent.

_____ _____
Date

_____
Larry J. Wilson, Director

Chairman Schlutz stated that after a rule has gone to public hearing comments are not taken. Mr. Schlutz added that Mr. Jim Resnick has asked to speak on Item 10 since he will not be able to attend during public participation tomorrow.

Jim Resnick Water Pollution Control, Davenport, addressed the Commission stating that he wrote the Commission a letter regarding this item. He stated that Davenport's primary method of disposal is the landfill, and the rule that is proposed will take everybody in the state out of the landfill business. Mr. Resnick stated that 50 percent solids is unfeasible. He added that if the 50 percent rule is adopted, he would hope that the legislature itself adopts it, and not as a result of something that comes from the DNR or this Commission. Mr. Resnick said he does not know what precipitated this, but he views it as a tragedy that a problem which was centralized in this area of the state was visited on the other 99 areas of the state. Mr. Resnick stated that he feels that the 50 percent rule has no basis in any scientific area and it is a very deadly piece of rulemaking.

Mr. Stokes stated that the Groundwater Protection Act mandated that the Department and this Commission adopt rules prohibiting the disposal of wet sewer sludge at landfills. He added that the law does not define "wet sewer sludge" and this is an attempt of trying to interpret legislative intent. The legislature did not like what was going on at a particular landfill where

resources, on the quality of water, on fish, wildlife, and recreational facilities or uses, and on all other public rights and requirements.'

"It is the duty of the person who wants to straighten a channel to go through the permit process, just as other people doing other kinds of projects must meet other environmental requirements. When someone has simply changed a channel and ignored the requirements, the DNR is faced with the difficult job of determining what environmental damage may have been done. To do that, the department needs engineering plans. Requiring those plans is not just hassling the landowner or imposing unreasonable costs. It is the legitimate means of carrying out the responsibilities of the department which are assigned by law.

"As of now, it is our understanding that there are only eight funded FTE positions in the floodplain program. These individuals are expected to issue permits, perform inspections, deal with complaints, provide sessions on floodplain insurance, help deal with floods, and perform related duties. In addition, they are apparently expected to monitor the eighteen thousand miles of streams and rivers in Iowa for floodplain violations. This puts the DNR in an impossible position, and it's not surprising that many illegal channel changes are not found for several years. It's also not surprising that while investigating one illegal channel change, DNR staff members sometimes find others which are older.

"There seems to be a notion among some people--why, it is hard for me to understand--that illegal channel changes really aren't environmental violations. If anything, adverse effects caused by channel changes are MORE permanent than many other environmental insults. The effects of a chemical spill, while catastrophic, may be temporary. But a channel change may not only permanently destroy wildlife habitat, but it can also increase the amount of flooding downstream, increase soil erosion, and increase siltation. These become ongoing problems for downstream landowners and the public.

"In fact, I've heard that on several occasions when someone is confronted with an illegal channel change, he or she responds by saying that the channel change was necessitated by someone else's previous illegal channel change upstream. I've been occasionally contacted myself by landowners who felt very aggrieved that their land is suffering because of other people's channel changes.

"Even in cases where no complaint is made, the environmental insult exists, just as a hazardous spill is an environmental insult even if it occurs in a remote area. Why should someone who straightens a channel illegally and is not caught for several years be exempt from the very reasonable requirement that engineering plans be submitted so that the DNR can at least assess the extent of any environmental damage?

"The channel changer already benefits because the floodplain program is underfunded and understaffed, and has limited ability to find illegal changes. The channel changer also benefits economically from any additional acres brought into production, which seems to be the main reason for channel changes. Why give that person yet another advantage by saying in effect, 'if you aren't caught for X number of years, your illegal channel changed becomes a freebie?'

Ms. Hansen stated that a time factor would be involved; but if it were the Commission's preference, staff lawyers could work out the consent decree. Discussion followed regarding same.

APPOINTMENT -- MATT COENAN

Matt Coenan, Treasurer, Lakewood Sanitary District, stated that in regards to the administrative order, the only thing left to do is the riprap of the lagoon. He added that this should never have come before the Commission as the District had, last October, already contracted for a trapper to handle the muskrat infestation, and also had contracted for the riprapping to be done. Mr. Coenan stated that their loan, at that time, was sold by the Farmers' Home Administration and the servicing agent would not give permission to spend the money until they received all of the needed records. The majority of the work would have been done had permission to spend the money been given before February, 1988. Mr. Coenan stated that he spoke with Jim Strickler in December, 1987, and Mr. Strickler was to set up a meeting between Mr. Coenan and DNR staff to determine exactly what the department wanted riprapped. Mr. Coenan added that the meeting did not happen, then he received a letter saying that they would be on the EPC agenda today. He stated that DNR staff came out last week but none of the trustees were informed, so again the District has not had an opportunity to find out exactly what needs to be done.

Duane Freiters, Lakewood, stated that he did not agree with Lakewood's prior administration, and that he is attempting to leave the past in the past and do what now needs to be done. He added that they do not want to be held responsible for what was done by the people in the past.

Motion was made by Keith Uhl to table the referral for Lakewood Sanitary District for thirty days to allow legal staff to work out a consent decree. Seconded by Charlotte Mohr. Motion carried unanimously.

PESTICIDE AND SYNTHETIC ORGANIC COMPOUND SURVEY

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission will be provided a copy of the Pesticide and Synthetic Organic Compound Survey. The report contains the results and findings of the water system monitoring required by House File 2303. Sampling activities began November 1, 1986 and were concluded on November 1, 1987. The staff will present a summary of the report. It will also be sent to the General Assembly by April 1, 1988.

Summarized, the report states that in 1986 the seventy-first Iowa General Assembly passed House File 2303. This legislation required the Iowa Department of Natural Resources (IDNR) to develop and implement a one-time, finished water testing program of public and privately owned water systems for pesticides and synthetic organic contaminants (SOC). The University Hygienic Laboratory provided the analytical services. The testing was conducted from November, 1986 to November, 1987. The testing, on a voluntary basis, was also available to privately owned water systems.

NOTICE OF INTENDED ACTION -- CHAPTER 7, CONTESTED CASE PROCEDURES

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

The Commission is requested to approve the filing of a Notice of Intended Action to adopt the attached rules regarding contested case procedures. The Director has recently filed these rules as proposed DNR rules, and the Natural Resource Commission has proposed to adopt these by reference. As with other procedural rules of the department, our intent is to place the complete text of the rules in Part 561 of the Iowa Administrative Code which includes the general DNR rules. The Commissions and other rulemaking entities of the department concurrently adopt them simply by cross-reference. These particular rules were modeled in large part after the WAWM rules on this subject, under which the department is still operating for contested cases within the Environmental Protection Division.

CHAPTER 7
RULES OF PRACTICE IN CONTESTED CASES

561--7.1(17A, 455A) Definitions. When used in this chapter:
"Agency" means the commission or the director, as appropriate, having statutory jurisdiction over a particular contested case.
"Commission" means the natural resource commission or the environmental protection commission, as designated in Iowa Code chapter 455A as having appellate jurisdiction over a particular matter.
"Department" means the department of natural resources.
"Director" means the director of the department or an authorized representative.
"Party" means a person named and admitted as a party.

561--7.2(17A, 455A) Scope and applicability. This chapter shall govern procedure in contested cases as defined in Iowa Code subsection 17A.2(2). Contested cases generally include, but are not limited to, appeals of administrative orders issued by the director and appeals of license or permit conditions, license or permit denials or suspensions.

561--7.3(17A, 455A) Waiver of procedures. The parties to a contested case may, by written stipulation representing an informed, mutual consent, waive any provision of this chapter or of the Iowa Code relating to contested case proceedings.

561--7.4(17A, 455A) Informal procedure prior to hearing.
7.4(1) Any person who desires to pursue informal settlement of any contested case may request a meeting with appropriate staff. The request shall be in writing and shall be delivered to the director with a copy to the Government Liaison Bureau. Upon receipt of the request, all formal contested case procedures are stayed, except in the case of emergency orders as provided in 7.16. If informal settlement is unsuccessful, formal contested case procedures may be instituted in accordance with 561--7.5(455B).
7.4(2) Prehearing procedures for emergency orders are set forth in rule 7.17(455A).

d. Order or statement of agreement. Any action taken at the prehearing conference shall be recorded in an appropriate order, unless the parties enter upon a written stipulation as to such matters or agree to a statement thereof made on the record by the presiding officer.

e. Objections. When an order is issued at the termination of the prehearing conference, a reasonable time shall be allowed to the parties to present objections on the ground that it does not fully or correctly embody the agreement at such conference. Thereafter, the terms of the order or modification thereof shall determine the subsequent course of the proceedings relative to matters it includes, unless modified to prevent manifest injustice.

7.10(5) Intervention.

a. Petition. A person who may be aggrieved or adversely affected by the disposition of a case may file a petition for leave to intervene in that case. The petition shall set forth the grounds for the proposed intervention, the position and interest of the petitioner, and the likely impact intervention would have on the expeditious progress of the case. Any person already a party in the case may file an answer to a petition to intervene, making specific reference to the factors set forth in this paragraph and paragraph "c" of this subrule, within ten days of receipt of the petition.

b. Filing and service. A petition for leave to intervene shall be filed and contemporaneously served upon all parties in the case before the prehearing conference, or in the absence of a prehearing conference, no later than twenty days prior to the date for which the contested case hearing is scheduled. Any petition filed after such time shall include, in addition to the information required in paragraph "a" of this subrule, a statement of good cause for failure to file in a timely manner. An untimely petition for leave to intervene shall be granted only upon finding that circumstances justified the untimely filing, and the intervenor shall be bound by any agreements, arrangements, and other matters previously made in the case.

c. Disposition. Leave to intervene shall be granted only if the petitioner demonstrates both that common questions of law or fact exist and that intervention would not unduly prolong or otherwise prejudice the adjudication of the rights of the original parties. In evaluating the merits of the petition for leave to intervene, the presiding officer shall consider the extent to which the petitioner will be adversely affected by a final order and the extent to which the interests of the petitioner are not being adequately represented by the original parties.

7.10(6) Consolidation and severance.

a. Consolidation. The presiding officer may, with or without motion, consolidate any or all matters at issue in two or more cases where there exist common parties or common questions of law or fact, and where consolidation would expedite or simplify consideration of the issues. Consolidation shall not affect the right of any party to raise issues that could have been raised if consolidation had not occurred.

b. Severance. The presiding officer may, with or without motion, for good cause shown, order any case severed with respect to any or all parties or issues.

561--7.11(17A, 455A) Time.

7.11(1) Computation. In computing any period of time prescribed or allowed by this chapter or by an applicable statute, the day of the act, event or default from which the designated period begins to run shall not be included. The last day of the period shall be included, unless it is a Saturday, Sunday

7.15(1) Filing by parties of briefs and proposed findings. Within thirty days after the last evidence is taken, each party may file with the presiding officer proposed findings of fact, conclusions of law, and a proposed order or decision, complying with 7.15(2), and a brief in support thereof. A copy of each such document shall be served upon each other party. Each party may, within the same period, file with the presiding officer a brief concerning any relevant matters at the hearing. Within twenty days thereafter each party may file a brief which takes specific exception to matters contained in an opposing brief or which contains alternative findings of fact, conclusions of law and proposed order. Briefing schedule, including waiver of briefs, shall be determined at the close of the hearing

7.15(2) Final decision or order.

a. When the agency presides at the reception of evidence, the decision of the agency is a final decision.

b. When the agency does not preside at the reception of evidence, the presiding officer shall make a proposed decision. The proposed decision or order of the presiding officer becomes the final decision or order of the agency without further proceedings unless there is an appeal to, or review or motion of, the agency within the time provided in 7.15(7)"a".

7.15(3) Decisions and orders.

a. By whom prepared. The presiding officer who presided at the reception of evidence shall prepare a proposed or final decision or order in each case. Findings of fact shall be prepared by the officer presiding at the reception of the evidence in a case unless the officer becomes unavailable. If the officer is unavailable, the findings of fact may be prepared by another person qualified to be a presiding officer who has read the record, unless demeanor of witnesses is a substantial factor. If demeanor is a substantial factor and the presiding officer is unavailable, the portions of the hearing involving demeanor shall be heard again or the case shall be dismissed.

b. Content of decision or order. The proposed or final decision or order shall:

(1) Be in writing or stated in the record.

(2) Include findings of fact. Findings of fact, if set forth in statutory language, shall be accompanied by a concise and explicit statement of underlying facts supporting the findings. If a party submitted proposed findings of fact in accordance with 7.15(1), the decision or order shall include a ruling upon each proposed finding.

(3) Include conclusions of law, supported by cited authority or reasoned opinion.

c. Delivery. A copy of the proposed decision or order shall be delivered to the parties either by personal service or by certified mail, return receipt requested.

7.15(4) The record.

a. Content of record. The record shall include:

(1) All pleadings, motions and intermediate rulings;

(2) All evidence received or considered and all other submissions;

(3) A statement of all matters officially noticed;

(4) All questions and offers of proof and objections and rulings thereon;

(5) All proposed findings and exceptions;

(6) The decision, opinion or report by the presiding officer.

b. By whom prepared. The presiding officer shall prepare the record for each case.

second part of a more general infrastructure bonding program bill. He added that it is not linked together, they just happen to be in the same bill. It appears as though it will make it through the House this session.

Charlotte Mohr inquired as to the status of SF 2126.

Mr. Combs responded that it is in a subcommittee in the House. As it stands, it will not make it out of committee. He added that they are looking to see if there are any other possible options that may be pursued without severely damaging the authority of the lifting of the floodplain program.

ROADSIDE VEGETATION MANAGEMENT SLIDE TAPE SHOW

Delayed until April meeting.

ADDRESS ITEMS FOR NEXT MEETING

None requested

NEXT MEETING DATES

March 21-22, 1988
April 25-26, 1988 (Ames)
May 16-17, 1988

ADJOURNMENT

Motion was made by Charlotte Mohr to adjourn the meeting. Seconded by Clark Yeager. Motion carried unanimously.

With no further business to come before the Environmental Protection Commission, Chairman Schlutz adjourned the meeting at 1:00 p.m., Tuesday, March 22, 1988.

Larry J. Wilson, Director

Charlotte Mohr

Charlotte Mohr, Secretary

(3-88.MIN/sc)

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 4

DECISION

REGIONAL OFFICE LEASE -- MANCHESTER

The Environmental Protection Commission will be requested to approve a one-year extension of the existing lease for Regional Office #1 in Manchester, Iowa.

The current lease expired February 28, 1988. The landlord has agreed to construct a handicap access by installing a ramp on the side entrance. The terms of the lease will remain the same with the exception of the monthly rent payment increasing $25/month for the additional expense of the construction of the handicap access. Total monthly payment is now $495 or $5.35/ft^2.

John Beamer
3/7/88

(III MIN/sc)

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between University of Northern Iowa (herein referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Big Spring Basin Demonstration Project (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Contractor Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the title page of this Contract.

2.3 Key Personnel for Contractor.

Barton L. Bergquist, Project Director

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement.

ARTICLE IV. STATEMENT OF PURPOSE

This contract is entered into to evaluate adverse biological effects of herbicides in a model aquatic organism, *Tetrahymena*; and to assist with related water quality evaluations.

ARTICLE V. SCOPE OF WORK

The effects of selected herbicides (atrazine and alachlor) alone and as application-recommended mixtures will be evaluated for adverse biological effects, by exposing a model, unicellular aquatic organism--*Tetrahymena* --to varying concentrations and mixtures of these herbicides and measuring the effects on the following biological-chemical parameters:

ADM-1-1-1
March 1988

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Des Moines, Iowa
March 21-22, 1988

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IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
RULEMAKING STATUS REPORT
MARCH 1, 1988

PROPOSAL	DRAFT TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 4 - Rulemaking Procedures	2/15/88	3/09/88		---				
2. Ch. 5 - Petition for Rulemaking	2/15/88	3/09/88		---				
3. Ch. 23 - MSPS & NESHAPS	10/20/87	11/18/87	12/10/87 3/09/88	12/09/87 12/10/87 12/11/87	1/19/88	1/19/88	2/10/88	3/09/88
4. Ch. 38 Private Well Construction Permit	12/15/87	1/13/88	3/09/88	2/03/88 2/05/88 2/08/88	3/21/88	*3/21/88	*4/15/88	*7/20/88
5. Ch. 37 - Well Plugging	3/21/88	*4/21/88		5/12/88 5/13/88 5/16/88				
6. Ch. 47 Grants to Counties	2/15/88	3/09/88		3/29/88 3/31/88 4/04/88				
7. Ch. 70 - Channel Changes	3/21/88							
8. Ch. 1 - Construction Grants	10/20/87	11/18/87	12/10/87 3/09/88	12/08/87	1/19/88	1/19/88	2/10/88	3/09/88
9. Chs. 100, 102 - Liquids in Landfills	10/20/87	11/18/87	12/10/87	12/09/88 12/10/87 12/11/87	2/16/88	2/16/88	3/09/88	4/15/88
10. Ch. 102 Sewage Sludge at Landfills	11/17/87	12/16/87	1/05/88	1/06/88 1/07/88 1/08/88	3/21/88	*3/21/88	*4/15/88	*7/20/88
11. Chs. 100,103 Landfill Ground Water Monitoring	10/20/87	11/18/87	12/10/87	1/06/88 1/07/88 1/08/88				
12. Ch. 135 - Sniffer Well Criteria	10/20/87	11/18/87	12/10/87	12/09/87 12/10/87 12/11/87	2/16/88	2/16/88	3/09/88	4/15/88
13. Ch. 209 - Solid Waste Energy Grants	12/14/87	12/30/87	1/05/88	1/19/88	2/16/88	2/16/88	3/09/88	2/16/88

*Projected

E:MPM/CI-125:JOS.FRM

Summary of Administrative Penalties

The following administrative penalties are due:

NAME/LOCATION	AMOUNT	DUE DATE
*Shelter Shield (Buffalo Center)	$1,000	12-03-86
*Cedar Hills Apartments (Dubuque)	1,000	12-29-86
*City of Dysart	400	3-13-87
*Country Corner Cafe (Pacific Junction)	451	8-05-87
*JTM Indust./MacJade/Leamer (Pleasant Valley)	1,000	8-12-87
*Big Rock Tap	660	9-21-87
*Twelve Mile House (Bernard)	339	10-28-87
*OK Lounge (Marion)	448	11-01-87
*Timberline Assoc. Ltd. (W. Burlington)	1,000	11-02-87
*Pleasant Creek Estates (Shellsburg)	200	11-30-87
City of Brighton	700	12-04-87
City of Sheldon	900	1-02-88
Petroleum Marketing Co. (Malcolm)	900	1-12-88
H.P. Jensen Subdivision (Ames)	100	2-25-88
City of Braddyville	600	3-04-88
**Elings/Catron/Frey (Des Moines)	600	3-15-88
Ellie's Bar and Grill (Grand River)	515	3-05-88
Donald Caraway (Linn County)	500	3-08-88
City of Newell	100	3-07-88
White Consolidated Industries (Webster City)	500	3-10-88
Wagner's Printer's, Inc. (Davenport	800	3-11-88
City of Lynnville	225	3-13-88
**Lawrence Payne (Ottumwa)	630	3-15-88
Kossuth County SLF	700	3-15-88
Highway #3 Mobile Home Park (Cedar Falls)	400	3-15-88
City of Cushing	700	3-19-88
City of Carson	600	3-26-88
Don Scribner (Nashua)	1,000	3-28-88
City of Sidney	250	3-31-88
Lynn Mennenga Feedlot (Wright Co.)	600	4-09-88
Benton Co. Care Facility	100	4-09-88
Linn Hollow MHP (Washington)	200	4-13-88
Delhi Lakeview Estates, Inc.	100	4-13-88
Mike Vanderpool Construction (Indianola)	1,000	4-16-88
The Meadows, Inc. (Moville)	275	4-17-88
Living History Farms (Urbandale)	260	4-19-88
Breitbach's Tap (Sherrill)	230	4-19-88
Randy's Bluffton Store (Decorah)	215	4-19-88
4 Son's Handy Shop (Neola)	330	4-19-88
Central Baptist Church (Council Bluffs)	100	4-22-88
Motel Grinnell	1,000	4-22-88
Camp Okoboji	230	4-22-88
Ramsey Reform Church (Titonka)	215	4-23-88
David Francy (New London)	800	4-26-88
Knollridge Garden Apts. (Coralville)	100	4-26-88
City of Fairfield	1,000	4-29-88
Valley Oaks Country Club (Clinton)	100	4-29-88
*Chico's Supper Club (Burr Oak)	954	6-10-88
Clear View Acres Store (Delhi)	230	-------

* Referred to the Attorney General
** On Payment Schedule

"Bentonite products" mean the forms of bentonite which can be used for sealing materials in wells, including graded bentonite, bentonite pellets and bentonite grout.

"C ing" means a tubular retaining structure which is installed in the excavated hole to maintain the well opening.

"Concrete" means a mixture of one sack (94 pounds) of portland cement, an equal amount by volume of sand and gravel or crushed stone and not more than six (6) gallons of clean water.

"Confined aquifer" means an aquifer in which the groundwater is under pressure greater than atmospheric pressure. The static water level in a well tapping a confined aquifer rises to a level above the top of the aquifer.

"Crushed stone" means Class A or Class B crushed stone as defined in the specifications of the Iowa Department of Transportation.

"Department" means the department of natural resources created under section 455A.2.

"Director" means the director of the department.

"Fill materials" mean soil, sand, gravel, crushed stone, pea gravel and agricultural lime used to occupy space between and below sealing materials in abandoned wells being plugged.

"Graded bentonite" means bentonite which is crushed and sized for pouring and easy handling. Like processed bentonite, it swells when hydrated by fresh water and will form a plastic, essentially impermeable mass.

"Gravel" means Class C gravel as defined in the specifications of the Iowa Department of Transportation.

"Groundwater" means any water of the state, as defined in section 455B.171, which occurs beneath the surface of the earth in a saturated geological formation of rock or soil.

"Grout" means a fluid mixture of cement and water (neat cement); sand, cement and water (sand cement grout); or bentonite and water (bentonite grout or slurry) of a consistency that can be forced through a pipe and placed as required.

"Limestone" means sedimentary rock which contains greater than fifty percent (50%) calcium carbonate and has strong reaction with hydrochloric acid (HCl).

"Liner pipe" means a protective well casing pipe installed subsequent to initial construction to seal off a zone of bacterial or chemical contamination or a casing pipe installed during or subsequent to the initial well construction to seal off a caving formation.

"Neat cement" means a mixture of one sack (94 pounds) of portland cement to not more than six (6) gallons of clean water. Bentonite up to two percent (2%) by weight of cement may be added to reduce shrinkage.

"Plugging" means the proper closure of an abandoned well by procedures which will permanently seal the well from contamination by surface drainage; and where the well penetrates multiple or confined aquifers, will permanently seal off and prevent flow or contamination out of an aquifer or from one aquifer to another. Plugging involves the application of sealing materials and can include fill materials.

"Processed bentonite" means bentonite which has been kiln dried and processed into pellets for direct use in well sealing applications or into powder or coarse granules for use in bentonite grout for sealing.

"Pump pit" means a sunken area located directly over the well used to house the equipment for discharging water from a well into the water system.

"Quaternary sediments" mean the unconsolidated materials above the bedrock.

"Sandpoint well" means a small diameter water well provided with a screened driving point which is driven or jetted into sand and gravel aquifers.

placed back in service. Disinfection of standby wells shall be done in accordance with AWWA (American Water Works Association) Standard A100. The well must not be subject to contamination by surface drainage or from other causes, and the well casing must be provided with an air-tight cover when the well is not in use.

567--39.9(455B) Variances. In accordance with Iowa Code section 455B.181, a variance to these rules may be granted by the department provided sufficient information is submitted in writing to the department to substantiate the need for such action and to assure the protection of all aquifers penetrated by the affected well. When justification satisfactory to the director is provided substantially demonstrating that a variance to these rules will result in equivalent effectiveness or improved effectiveness, a variance to these rules may be granted by the director. A denial of a variance may be appealed to the Environmental Protection Commission pursuant to Chapter 7 (900--7(455B)).

567--39.10(455B) Noncompliance. Violations of any of the provisions of this chapter may be addressed by the department pursuant to Iowa Code sections 455B.109, 455B.175, 455B.191 and 1987 Iowa Code Supplement section 455B.190.
These rules are intended to implement 1987 Iowa Code Supplement section 455B.190.

_____
Date

_____
Larry J. Wilson, Director

Discussion followed regarding the definition of abandoned well, standby wells, dry holes, and enforcement of the rules.

Motion was made by Charlotte Mohr to approve Notice of Intended Action--Chapter 39, Requirements for Properly Plugging Abandoned Wells. Seconded by Donna Hammitt. Motion carried unanimously.

ADOPTED RULE -- CHAPTER 102 -- PERMITS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission is requested to adopt the rule amending Chapter 102 of the ARC.

Attached is a copy of the rule and our responsiveness summary. We received extensive comments on our proposal that 50 percent of the sludge must be solid. All of the commentors objected to such a high percentage for solids. The staff is asking the Commission to decide what would be an acceptable ratio of solids to liquids.

As authorized by the Commission, public hearings were held at various locations across the state on January 6, 7 and 8, 1988. All comments oral and written were considered.

there was a problem and wanted it dealt with, and they viewed that the current rules of the department were not sufficient to deal with it.

Mr. Stokes stated that the issue at hand is what the Commission wishes to do in terms of adoption of this rule, or some rule, addressing wet sewer sludge at landfills. Mr. Stokes added that if one of the main concerns of the legislature was the "wet" content, it would now be addressed by the ban on free liquids that the Commission adopted two months ago.

Discussion followed regarding what percentage of solids would be acceptable, whether or not it would have to go back to rulemaking, treatment of sludge by wastewater treatment plants, language in the bill, and EPA's guidelines.

Keith Uhl stated that the department just recently imposed on these operators a liquids test which will bring them into a 15 to 30 percent solids range. He questioned why the Commission would want to subject them to two tests.

Chairman Schlutz asked if it will satisfy the legislature if the Commission does not adopt these rules today.

Mr. Stokes stated that the department has been going through some difficult times, particularly in the early stages of the Groundwater Protection Act, of what is legislative intent, and it quite literally depends on which legislator you talk to.

Keith Uhl stated that we are seeing more and more, in the state legislature, where bills are being passed for one particular situation or individual as opposed to bills which are in the best interest of the state as a whole.

Motion was made by Keith Uhl to withdraw from rulemaking Final Rule--Chapter 102, Disposal of Sewage Sludge. Seconded by Nancylee Siebenmann. Motion carried unanimously.

CONTESTED CASE DECISION -- CITY OF WAPELLO

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

On July 30, 1987, the Director issued Administrative Order No. 87-WW-48 to the City of Wapello requiring the city to comply with an implemuntation schedule for wastewater facility improvemants an to pay a $500 penalty. The city appealed that order, and the matter proceeded to administrative hearing on October 27, 1987. The parties subsequently filed written briefs with the hearing officer, and the hearing officer issued the Proposed Findings of Fact, Conclusions of Law, and Order on January 13, 1988. The decision affirms the Director's Order.

The city has appealed this order to the Commission. The written briefs of the city and the department, and the Proposed Decision have been distributed to the Commissioners. The entire record, including hearing tapes and exhibits, are available for your review. The attorneys for the city and department will present oral argument and respond to your questions. You may then affirm the Proposed Decision, or modify or reverse it, substituting your own findings of

"As to the argument that engineering plans are expensive, my understanding is that they may run from a few hundred dollars to two thousand, which is obviously a significant expense. However, the actual channel change also costs money. In addition, the long-term profits from any new productive acres can add up to considerably more than two thousand dollars. If the landowner is ready to pay the cost of changing the channel and enjoy resulting economic benefits, he or she should be prepared to pay for engineering plans as well. Complying with environmental requirements often costs money, which is one reason that environmental laws are needed. Your Commission has to deal with that reality at every meeting, and it doesn't seem logical for one kind of environmental violation to be singled out for a special waiver provision.

"In addition, this kind of waiver could set a precedent. If twenty years is chosen as the magic number, you may well face complaints not only from people who have straightened channels more recently and had to submit plans, as well as from people who feel their land was damaged by the channel changes receiving waivers, but also from people who straightened channels twenty or more years ago, were caught, and have already paid for plans. In fact I understand that three neighbors of the Greiners who did some illegal straightening had already settled with the state, and I wonder how they feel about the waiver in the Greiner case.

"Your Commission already faces continuous pressure from people who want their violations treated more leniently. Your rules serve in part as protection from that continuous pressure, both for you and for the public interest. Inserting this kind of waiver would lessen that protection, and make your job more difficult in the future.

"I can see only one reasonable argument for any kind of time consideration regarding channel changes, and that is that when the DNR becomes aware of an illegal straightening, it should take action with reasonable promptness. This is a legitimate requirement. Therefore, I'd suggest that if any rules change is made, it should be language to the effect that the DNR must take action within a certain number of years of becoming aware of the illegal channel change, and that otherwise, requirements for engineering plans would be waived.

"Your Commission would be justified in pointing out to people who complain about engineering plan requirements because their illegal channel changes are several years old that they should have gotten their permits in the first place, that they have been enjoying any benefits of the channel change for considerable time, and that they may have caused environmental damage and sent trouble downstream. If you determine that a rules change is really necessary, please use the idea we have suggested, and don't provide an automatic waiver which would mean more trouble for the environment, more trouble for landowners, and more trouble for yourselves. Thank you for your attention."

RECESS

Chairman Schlutz recessed the meeting at 5:30 p.m., Monday, March 21, 1988.

MEETING RECONVENES 8:30 A.M., TUESDAY, MARCH 22, 1988

Eight hundred and fifty-three (853) public water systems were tested. One hundred and twenty-two (122) tested positive for one or more pesticides. Five hundred and forty-eight (548) tested positive for one or more synthetic organic compounds. No measurable concentrations of pesticides or synthetic organic chemicals were found in two hundred seventy-nine (279) systems. Nine (9) water systems had pesticides or synthetic organic chemical levels that exceeded U.S. Environmental Protection Agency Health Advisory Levels or federal maximum contaminant levels. Contaminant levels high enough to cause an acute health risk were not observed in this study.

The pesticides most commonly found were Atrazine, Bladex, Lasso, Dual and 2,4-D. The most frequently found synthetic organic chemicals belong to a group of compounds called trihalomethanes (THMs). THMs are formed during disinfection when chlorine reacts with organic matter in the water.

The chart at the end of this section, in the complete report, provides a summary of results based on the characteristics of the system's primary source of water.

The most significant findings drawn from the project are:

- Surface water systems have the greatest potential for pesticide contamination.

- The shallower groundwater sources have a greater potential for contamination by pesticides and SOCs.

- A seasonal trend in pesticide occurrences in water sources was not observed.

- The frequency of appearance and concentration of trihalomethanes in groundwater systems was unexpected.

The most significant recommendations drawn from the project are:

1. Modify IDNR's statutory authority so that in the absence of federal regulations the Department may adopt monitoring and drinking water standards for public water supplies for pesticides and SOCs commonly used in Iowa and found in drinking water (i.e., Atrazine, Bladex, Lasso, Dual, 2,4-D, 1,2-Dichlorethane, Ethylbenzene, Tetrachloroethene, Toluene, Benzene, Carbon Tetrachloride, Methylene Chloride, 1,1,1-Trichloroethene, o-Xylene and p+m-Xylene).

2. The trihalomethane formation process would appear to limit their presence in groundwater. However, the study results indicate the potential for groundwater systems to exceed the trihalomethane maximum contaminant level. Therefore, encourage and support studies to determine the source and significance of trihalomethanes in groundwater supplies.

3. The trihalomethane monitoring requirement and standard, which is currently applicable to systems serving more than 10,000 people, should be extended to include all surface water supplies regardless of size.

561--7.5(17A, 455A) Commencement of cases. A contested case commences when a notice of hearing is delivered to a party. A notice of hearing will be prepared and issued by the presiding officer when the department receives a notice of appeal from a person other than the department, or a petition from the department, as provided in this rule.

7.5(1) Notice of appeal. Any person appealing an action of the department shall file a written notice of appeal within thirty days of receipt of notice of the department's action, unless a shorter time period is specified by the particular rules or statutes governing the subject matter. The notice of appeal shall state the name and address of the appellant, identify the specific portion or portions of the action of the department that is being appealed, and include a short and plain statement of the reasons the specific action is being appealed.

7.5(2) Petition from the department. When the department seeks to suspend or revoke a permit or license, institute licensee disciplinary proceedings, or otherwise commence a contested case, it shall file a petition as described in 7.8(1).

561--7.6(17A, 455A) Notice of hearing.

7.6(1) Content. The notice of hearing shall contain:

a. The names of the parties,

b. A statement of the time, place and nature of the hearing,

c. A statement of the legal authority and jurisdiction under which the hearing is to be held,

d. A reference to the particular section of the statutes and rules involved,

e. A short and plain statement of the matters asserted, and

f. The time within which a petition or answer must be filed.

g. In those cases where the department files the petition, the notice shall include a copy of the petition and a statement that in the event an answer is not timely filed in accordance with 7.8(2), judgment may be entered for the relief requested in the petition.

7.6(2) Delivery. Delivery of the notice of hearing shall be by certified mail, return receipt requested, personal service, or as otherwise required by statute.

561--7.7(17A, 455A) Time for response. A person served with a notice of hearing shall file a petition or answer as required by 7.8(17A, 455A) within twenty days of service of the notice of hearing. Failure to so file may, upon motion, result in the presiding officer entering a default against the person failing to file.

561--7.8(17A, 455A) Pleadings. Pleadings are the parties' written statements of their respective claims or defenses. They do not include motions. The only allowable pleadings shall be the petition and the answer.

7.8(1) Petition.

a. Who must file. In all cases where an action of the department is appealed, the party aggrieved by the action shall file the petition. In those cases where the department seeks to suspend or revoke a license or permit, the department shall file the petition.

b. Time for filing. Any petition required to be filed by the party other than the department shall be filed within twenty days of delivery of the notice of hearing, unless the presiding officer allows additional time.

or legal holiday; otherwise Saturdays, Sundays and legal holidays shall be included in computing the period.

7.11(2) Extension. When by this chapter, or by notice given thereunder, an act is required or allowed to be done within a specified time, the presiding officer may, at any time, exercise discretion and;

a. With or without motion or notice, for good cause, order the period extended if request therefor is made before the expiration of the period originally prescribed or as extended by a previous order, or

b. Upon motion made after the expiration of the specified period, permit the act to be done where the failure to act was the result of excusable neglect.

7.11(3) Mail. Any documents which may be filed with the department by mail pursuant to these rules shall be deemed filed on the date of postmark.

561--7.12(17A, 455A) Presiding officer.

7.12(1) Qualification. Except as otherwise provided in this subrule, a hearing officer shall preside at contested case hearings.

a. On motion of a party or on its own motion, the agency may order that the hearing be conducted before the agency or an appeal board appointed pursuant to Iowa Code section 17A.11(1).

b. In a hazardous waste facility site licensing proceeding pursuant to Iowa Code section 455B.477, the hearing shall be before the environmental protection commission, with at least a quorum present, and with a hearing officer present to assist the commission in assuring that the requirements of Iowa Code chapter 17A are met.

c. In the case of an appeal to or review on motion of the agency of a proposed decision of the hearing officer or appeal board, the agency shall preside.

7.12(2) Disqualification.

a. Grounds for disqualification.

(1) A presiding officer shall not participate in the making of a proposed or final decision if such individual has prosecuted or advocated in connection with that case, the specific controversy underlying that case or another pending factually related controversy that may culminate in a case, involving the same parties.

(2) A presiding officer shall not be subject to the authority, direction or discretion of any person who has prosecuted or advocated in connection with that case, the specific controversy underlying that case or a pending factually related case or controversy, involving the same parties.

(3) A member of an agency having jurisdiction of a case shall not participate in the making of a final decision or order if such member is employed by, receives directly or indirectly personal income from, or has other substantial connection with a person subject to permit or enforcement action pending before the commission.

(4) A presiding officer shall not be biased for or against any party.

b. Affidavit asserting disqualification. A party may file an affidavit asserting disqualification of a presiding officer under this subrule at any time, except that an affidavit against a member of the commission on appeal or review of the proposed decision shall be filed prior to any hearing on appeal or review of the proposed decision. A determination on whether the individual challenged should participate shall be made by the agency before further participation by the individual challenged.

561--7.13(17A, 455A) Separation of functions and ex parte communications.

7.15(5) Appeal and review. Any party may appeal a proposed decision to the agency having jurisdiction of the case. An agency may review any proposed decision in a case under its jurisdiction.

a. Time allowed.

(1) Appeal by party. An appeal by a party to the agency having jurisdiction of that proceeding shall be taken within thirty days after receipt of the proposed decision or order.

(2) Agency decision to review. Any agency may decide on its own to review a proposed decision, notwithstanding the absence of a timely appeal by a party. A decision to review shall be made at the next regular meeting of the commission or by the director within thirty (30) days following the issuance of the proposed decision or order of the presiding officer.

b. Notice. Appeal is taken and perfected by filing with the director a notice signed by the appellant or the appellant's attorney. It shall specify the parties taking the appeal and the final decision or order or part thereof appealed from. The notice shall set forth, with particularity, the conclusions of law or findings of fact appealed from. The director shall mail or deliver a copy of such notice to the attorneys for all parties of record other than appellant, or to any such party who has no attorney of record, at the party's last known address. No failure of the director to mail or deliver any such notice shall affect the validity of the appeal.

c. Date of appeal or review. The director shall schedule appeal or review for a date after the end of the briefing period provided in paragraph "e", and shall notify the parties of the date.

d. Agency review. On appeal from or review of the proposed decision, the agency has all the power which it would have in initially making the final decision except as it may limit the issues on notice to the parties.

e. Presentations by parties on appeal. Within twenty days of the date the appeal is perfected or the agency decides to review the proposed decision or order, each party may file exceptions and present briefs to the agency. Within twenty days thereafter, each party may file a brief which takes specific exception to matters contained in an opposing brief. Request for opportunity to present oral arguments shall be filed at least ten days prior to the date set for consideration of the case. In cases where a regular agency meeting does not occur within the time limitation for final decisions or orders, the agency may shorten or extend the briefing period, provided that the briefing periods shall be at least twenty days before the date of consideration and not longer than would cause the date of consideration to occur later than the next regular meeting of the agency following any meeting that occurs sooner than the twenty-day minimum briefing period.

f. Final argument. The final argument and the conclusion of the hearing is deemed to have occurred at the end of the briefing period, or when oral arguments have been permitted, at the end of such presentation.

7.15(6) Applications for rehearing.

a. By whom filed. Any party may file an application for rehearing.

b. Content of application. The application shall state on whose behalf it is filed, state the specific grounds for rehearing, and state the relief sought.

c. Time of filing. The application shall be filed with the director within twenty days after the receipt of any final decision.

d. Notice to other parties. A copy of such application shall be timely mailed by the applicant to all parties of record not joining therein.

e. Disposition. Any application shall be deemed denied unless the agency grants the application within twenty days after its filing.

ADM-1-1-1
March 1988

MEETING AGENDA
ENVIRONMENTAL PROTECTION COMMISSION
WALLACE STATE OFFICE BUILDING
March 21-22, 1988

Meeting Convenes at 1:00 p.m., March 21, 1988 fourth floor conference room and reconvenes on March 22, 8:30 a.m.

Break	3:00 p.m.
Appointment:	
City of Wapello	3:15 p.m.
Cindy Hildebrand	4:00 p.m.

Meeting Reconvenes 8:30 a.m., March 22, 1988

Appointments:	
Lakewood	9:30 a.m.
Stan Moser	10:00 a.m.
~~City of Wapello~~	[illegible]
Break	10:15 a.m.
Public Participation	10:30 a.m.
Lony Grill	10:40 a.m.

1. Approval of Agenda.
2. Approval of Minutes of February 15-16, 1988.
3. Director's Report. (Wilson) Informational.
4. Approval to Extend Lease for Manchester Regional Office. (Kuhn) Decision.
5. Groundwater Contract Approval. (Kuhn) Decision.
6. Washington Regional Office Lease. (Kuhn) Decision.
7. Report on Feasibility Limiting the Types of Waste Accepted at a Hazardous Waste Facility. (Bender) Informational.
8. Monthly Reports. (Stokes) Informational.
9. Notice of Intended Action--Chapter 39, Requirements for Properly Plugging Abandoned Wells. (Stokes) Decision.
10. Final Rule--Chapter 102, Disposal of Sewage Sludge. (Stokes) Decision.
11. Proposed Revisions to Chapter 22, Air Quality Permitting Rules. (Stokes) Informational.
12. Proposed Public Water Supply Rules. (Stokes) Informational.

ENVIRONMENTAL PROTECTION COMMISSION

Item 5 Decision

Attached is a summary of recently prepared contracts relating to implementation of the Groundwater bill. The contracts are consistent with the appropriations in the Groundwater law. The contracts funded with Oil Overcharge funds have also been approved by the Energy Funds Disbursements Council and the DOE.

Also attached, after the summary are copies of the "Scope of Work" and budgets for each contract. Approval of these contracts is respectfully requested.

Stan Kuhn

1. The time course alteration of intracellular adenosine triphosphate (ATP) levels as a quantifiable measure of cellular viability (and damage) in the Tetrahymena following different degrees of chemical exposure.
2. The time/rate changes in growth curves of multiple replicates of monoxenic cultures and subcultures of Tetrahymena, exposed to different concentrations of the herbicides.
3. Measurement of the biological degradation of parent compounds and detectable metabolites in the Tetrahymena cultures.
4. Evaluate these methods as indicators of mutagenesis, and potential indicators of adverse impacts on primary ecological production from water contamination.
5. Collect groundwater and surfacewater samples in the Laurel Rose Watershed, as dictated by hydrologic conditions; compile records on farming practices and prepare summary reports.

ARTICLE VI. MILESTONE

Date	Activity
June 30, 1988	Summarize findings on alachlor.
Dec. 31, 1988	Summarize findings on atrazine and project evaluation. Summarize water quality findings.

ARTICLE VII. REPORTS

7.1 The contractor shall submit to the Department quarterly progress reports due on the last day of October, January, April, and July of each year. Progress reports should cover what has been accomplished in Article V.

7.2 The contractor shall submit three (3) copies of a final report describing all activities performed and the results obtained with supporting data. This report shall include information as described in Article V, Scope of Work, and meet all Contractor requirements. Specific content and format should be discussed in advance with the Department. The final report shall be submitted no later than ninety (90) days following the expiration of this contract.

7.3 The contractor will provide a report on all funds expended by August 15 of each state fiscal year this agreement is in effect. (This is a requirement of the Department for reporting.)

7.4 The Contractor shall furnish to the Department final report of project expenditures within sixty (60) days following the expiration of this Contract.

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IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
RULEMAKING STATUS REPORT
MARCH 1, 1988

PROPOSAL	DRAFT TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 4 - Rulemaking Procedures	3-03-88	3-23-88		---				
2. Ch. 5 - Petition for Rulemaking	3-03-88	3-23-88		---				
3. Ch. 7 - Contested Case Procedures	3-03-88	3-23-88						
4. Ch. 8 - Contract Procedures	3-03-88	3-23-88						
5. Ch. 14 - Concessions	12-04-87	12-30-87	1-05-88	---	3-03-88	3-03-88	3-23-88	4-27-88
6. Ch. 16 - Docks	11-05-87	12-02-87	12-09-87	12-22-87	2-04-88	2-08-88	2-24-88	3-30-88
7. Ch. 20 - Mfr. Cert. Orig.	11-05-87	12-02-87	12-09-87	12-22-87				
8. Ch. 45 - Motor Regulations, West Lake	3-03-88	3-23-88		---				
9. Ch. 52 - Wildlife Refuges	10-09-87	8-04-87	12-09-87	11-24-87	2-04-88	2-08-88	2-24-88	3-30-88
10. Ch. 91 - Waterfowl, Coot	2-04-88	2-24-88	---	4-09-88				
11. Ch. 96 - Pheasant, etc.	2-04-88	2-24-88	---	4-09-88				
12. Ch. 97 - Snipe, etc.	2-04-88	2-24-88	---	4-09-88				
13. Ch 99 - Fall Turkey	2-04-88	2-24-88	---	4-09-88				
14. Ch. 106 Bear	2-04-88	2-24-88	---	4-09-88				
15. Ch. 107 - Rabbits, etc.	2-04-88	2-24-88	---	4-09-88				
16. Ch. 108 - Mink, etc.	2-04-88	2-24-88	---	4-09-88				
17. Ch. 110 - Trapping Limitations	3-03-88	3-23-88		4-20-88				

E:[illegible]/CI-1067.fm

MONTHLY VARIANCE REPORT

2/29/88

No.	Facility	Program	Engineer	Subject	Decision	Date
1	Farley, City of	Wastewater Const.	Crawford Engr.	Number of Aerated Cells	approved	02/12/88
2	DNR-Union Grove St.Prk.	Flood Plain	Butts Engineering	Storm/Storage Capacity	approved	02/01/88
3	Grain Processing Co.	Wastewater Oper.	E.H.Bartlett(GPC)	Monitoring Frequency	approved	02/03/88
4	Altoona, City of	Wastewater Oper.		Monitoring Frequency	denied	02/12/88
5	Davenport Truck Plaza	Watersupply Const.	Shive-Hattery	Construction Materials	approved	02/29/88
6	Davenport Truck Plaza	Watersupply Const.	Shive-Hattery	Installation Procedures	approved	02/29/88

The following administrative penalties have been appealed:

NAME/LOCATION	AMOUNT
Mandi-Klaap, Inc. (Webster City)	1,000
Iowa City Regency MHP	1,000
Bianchi Meyrat Lagoon (Des Moines)	600
Thomas E. Lennon (Barnum)	700
Great Rivers Coop (Atavia)	1,000
City of Wapello	500
Wilfred McFee (Union Co.)	500
Richard Davis/1st Iowa State Bank (Albia)	1,000
Gradert, Ernest and Kevin (Sibley)	500
Stan Moser (Hudson)	250
City of Tabor	700
Hardin County SLF	500
City of University Park	500
South Central Iowa Landfill Agency	1,000
Cloyd Poland (Decatur)	800

*Referred to the Attorney General
**On Payment Schedule

The following administrative penalties were paid in January:

NAME/LOCATION	AMOUNT
Kimballton Utilities	$ 100
Hawkeye Tiling (Jesup)	500
Village Oaks Homeowners Ass'n. (Blue Grass)	150
City of Mount Vernon	500
**Lawrence Payne	35
City of Earling	500
Kopper Kettle (Minden)	200
Arlene's Cafe (Turin)	50
City of Arcadia	100
Clark Co. Landfill Comm.	300
Dubuque Municipal Airport	50
West Union Country Club	75
AMPEL, Inc. (Des Moines)	1,000
City of Maxwell	650
City of Rippey	100
City of Hospers	1,000
Iowa-Illinois Gas and Electric (Davenport)	600
**Elings/Catron/Frey (Des Moines)	200
	$6,110

* Referred to the Attorney General
** On Payment Schedule

"Sand cement grout" means a mixture of one sack (94 pounds) of portland cement, an equal amount by volume of clean masonry sand and not more than six (6) gallons of clean water.

"Sealing" means the application of sealing materials (bentonite products, neat cement, sand cement grout or concrete) for plugging an abandoned well to seal off unwanted flow into, out of or between aquifers.

"Standby well" means a water well which is temporarily taken out of service with the expectation of being returned to service when needed.

"Static water level" means the water level in a water well when the well is not flowing or being pumped.

"Tremie pipe" means a device, usually a small diameter pipe, that carries grouting materials to the bottom of the hole and which allows pressure grouting from the bottom up without introduction of air pockets.

"Unconfined aquifer" means an aquifer in which the static water level does not rise above the top of the aquifer.

"Water well" means an excavation that is drilled, cored, bored, augered, washed, driven, dug, jetted or otherwise constructed for accessing groundwater.

"Well screen" means the intake section of the well that obtains water from an aquifer and serves as a structural retainer to support the bore hole in unconsolidated materials.

567--39.4(455B) Forms. The following form is currently in use: Abandoned Water Well Plugging Record. 2/88. 542-1226.

567--39.5(455B) Abandoned well plugging schedule.

39.5(1) Certification. Within thirty (30) calendar days after completion of plugging, abandoned well owners shall certify on DNR form number 542--1226, Abandoned Water Well Plugging Record, that abandoned wells have been properly plugged in accordance with the requirements and time schedule contained in this chapter.

39.5(2) Category I. Abandoned wells eight (8) inches or larger in diameter abandoned prior to (the effective date of this rule--date to be inserted) shall be properly plugged by (six (6) months after the effective date of this rule--date to be inserted).

39.5(3) Category II. Wells abandoned prior to (the effective date of this rule--date to be inserted) (a) located less than two hundred (200) feet from an active well supplying potable water or (b) located less than one-eighth (1/8) mile (660 feet) from a point source of potential contamination shall be properly plugged by July 1, 1990. Examples of point sources of potential contamination include industrial waste sites, uncontrolled hazardous waste sites, petroleum storage areas, hazardous waste treatment, storage or disposal areas, agricultural chemical storage areas, animal feedlots and wastewater treatment facilities.

39.5(4) Category III. All other wells which were abandoned prior to (the effective date of this rule--date to be inserted) shall be properly plugged by July 1, 1993.

39.5(5) Category IV. Wells which are abandoned on or after (the effective date of this rule--date to be inserted) shall be properly plugged within ninety (90) days of the date of abandonment.

567--39.6(455B) Water well plugging materials.

RESPONSE SUMMARY
TO
FORMAL COMMENTS ON RULES PERTAINING TO
DISPOSAL OF "WET SEWER SLUDGE" IN
SANITARY LANDFILLS

Public hearings held in Iowa City, Council Bluffs and Des Moines, Iowa on January 6, 7 and 8, 1988, respectively.

Commentors

1. John P. Ballizzi, P.E.
2. Abie C. Davis, P.E.
3. David M. Fox, P.E.
4. Richard D. Franc
5. Charles L. Meyer, P.E.
6. David C. Nelson, P.E.
7. Craig Olson
8. James D. Resnick
9. Charles J. Schmadeke
10. Cynthia Turkle

A. Commentors: 1, 4, 5, 6, 9, 10

Comment: The technology required to achieve a 50 percent solid content in stabilized sludge is not economically feasible.

Response: The following table indicates sludge dewatering technology and typical solids content:

Type	Percent Solids
Sludge Beds	25 to 40
Vacuum Filtration	15 to 40
Centrifuge	30 to 40
Belt Filter Presses	30 to 40
Composting	30 to 40

It is possible to increase the solids content by adding larger doses of coagulants or other chemicals to increase the solids percentage. It may be more economical to compost, incinerate, or land apply sludge at a permitted site than to dispose of it in a sanitary landfill.

B. Commentors: 3, 5, 6, 7, 8, 9

Comment: The proposed rule amendment requires that sewer sludge have liquid content less than 50 percent in order to qualify for land disposal at a sanitary landfill. This definition will virtually eliminate the possibility of land disposal of municipal sewer sludges at landfills because without composting, this level of solids content it is virtually impossible. A large number of communities, both small and large in the

fact and conclusions of law based on your conclusions from your review of the record and legal argument.

Diana Hansen, Legal Bureau, stated that, as the department sees it, there are only two issues that were raised by the city in its appeal of the administrative order. The first was whether the City of Wapello was entitled to "treatment equivalent to secondary treatment limits" for its wastewater treatment facility. The department feels that the hearing officer's decision was correct in its finding that the City of Wapello was not entitled to the less stringent limits, and in the hearing officer's ruling that the penalty of $500 was appropriate.

Mrs. Hansen briefed the Commission on the history of this case. She stated that in 1984 the City of Wapello was found to be one of the cities that would be required to submit a plan of action to meet secondary treatment limits and was requested to submit a plan of action to meet these particular limits. Mrs. Hansen outlined five criteria the city would have to meet in order to be eligible for the relaxed effluent limits (treatment equivalent to secondary treatment limits).

Mrs. Hansen stated that the city did not meet the fifth criteria and the department's contention is that the facility was hydraulically overloaded and also organically overloaded. This kept the facility from consistently complying with the relaxed limits. Mrs. Hansen stated that the hearing officer ruled that "consistently complying" meant the facility should meet treatment equivalent to secondary standards 95 percent of the time. Based on the data presented to the hearing officer, she determined that the city was not meeting the less stringent limits 95 percent of the time. The department maintains that a better test would be a 100 percent test.

Mrs. Hansen stated that, since the City of Wapello did not meet all of the five criteria, the city was not eligible for treatment equivalent to secondary treatment limits. The department's position is that once a city is found not to be eligible for the less stringent limits, then it should be required to comply with secondary treatment limits.

APPOINTMENT -- ROGER HUDDLE, CITY OF WAPELLO

Roger Huddle, City Attorney, City of Wapello, addressed the Commission giving a history of the Clean Water Act requirements along with the history of this case in regards to their dealings with the department.

Mr. Huddle stated that when their facility's operation permit was granted, it did not, and never has, operated in the 180-day detention time later set by EPA rules. He added that their facility was never designed for that and permits were never approved for that purpose. Mr. Huddle stated that their facility does not have a specific limitation of its design. He stated that what the permit says is, "at a flow of 415,000 gallons there will be an average detention time of 60 days." Mr. Huddle added that there is no way the City of Wapello can meet standard secondary effluent limitation. To put this system on line would cost over $400,000 which is why the City of Wapello would like to show that they can fall within the more relaxed standards. Mr. Huddle stated that Congress recognized that small communities may have trouble meeting these stringent limitations and therefore developed and adopted more

PROPOSED REVISIONS TO CHAPTER 22, AIR QUALITY PERMITTING RULES

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission will be provided copies of a proposed revision to the department's air quality permit regulations. Specifically, the proposed revision will address exemptions from the requirement to obtain air quality construction permits before the construction or use of certain equipment used in the agricultural sector. The intent is to clarify the existing exemptions applicable to "agricultural purposes" to address changes in farm production and management practices which have occurred since these rules were first adopted.

These rules would be brought back to the Commission at their April meeting for approval of a Notice of Intended Action to begin the formal rulemaking process.

Mr. Stokes described a recent issue dealing with an enforcement matter in use with a corn roaster. This brought about concern with the department's interpretations and rules to require certain corn roasters to get permits from the department. Mr. Stokes distributed the following proposed revision to the rule:

"22.1(2) Exemptions. The provisions of this rule shall not apply to the following listed equipment or control equipment unless review of the equipment or control equipment is necessary to comply with rule 22.4 (455B) or 22.5 (455B), in which case a permit must be obtained.

"Equipment used on farms and ranches for agricultural purposes cultivating land, harvesting crops, or raising livestock other than anaerobic lagoons. This exemption is not applicable if the equipment is used to remove substances from grain which were applied to the grain by another person. This exemption is also not applicable to equipment used by a person to manufacture commercial feed, as defined in section 198.3, which is normally not fed to livestock owned by that person or another person in a feedlot, as defined in section 172D.1, subsection 6, or a confinement building owned or operated by that person and located in this state."

This was an informational item; no action was required.

PROPOSED PUBLIC WATER SUPPLY RULES

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

Proposed rules incorporating federal Safe Drinking Water Act requirements will be discussed. A copy of the proposed rules will be provided to the Commission at the meeting. The proposed rules include the following requirements for public water systems:

- Monitoring requirements and maximum contaminant levels for eight volatile organic compounds.

- Monitoring requirements for 51 volatile organic compounds.

4. Conduct additional controlled studies to correlate the significance of pesticide and SOC contamination in finished drinking water and groundwater sources.

5. Educate water suppliers with vulnerable water sources (e.g., surface and shallow groundwater sources, and water sources in close proximity to commercial or industrial use, disposal or storage of synthetic organic compounds and pesticides) of the possible contamination pathways and encourage the development of economical and innovative method to protect drinking water sources.

6. Encourage and support studies directed at developing innovative and economical treatment techniques for the removal of pesticides and SOCs.

7. Adequate funding should accompany sampling projects of this nature to insure follow-up and data analysis activities can be conducted.

A copy of the complete report is available from DNR.

Mr. Stokes explained the report in detail. Discussion followed regarding same.

Clark Yeager expressed concern in regards to the scientific level of detection in the various substances.

Mr. Stokes stated that the UHL Lab representative who was scheduled to attend today's meeting had a death in the family and could not make it. He added that someone from UHL would be in attendance next month to discuss these concerns.

Keith Uhi stated that he and Director Wilson met with James Tyler, Board of Regents, Wayne Richey and others, and they indicated full cooperation of the three institutes that the Commission has some concern over, and to some extent, to take direction from this department and its director. He asked if this would be an appropriate time to begin that, if indeed, two centers would be directly involved, such as the Leopold Center in regards to groundwater contamination, and CHEEC in regards to health ramifications in the water supply. He added that if the department has an area where they want additional testing studies to be done, it would be feasible to explore whether or not these institutions are going to respond to requests for particular studies that we think are necessary.

APPOINTMENT -- STAN MOSER

Allen Stokes informed the Commission that Stan Moser was the subject of a compliance action which he has appealed and has gone before a hearing officer. The hearing officer's decision has not yet been presented to the Commission. Once it is received, Mr. Moser has the opportunity to appeal to the Commission.

Mr. Moser stated that he is here to request some rule changes outside of his particular case and he will use a hypothetical situation in his discussion. Mr. Moser stated that when an attorney is from the same office as the hearing officer, it is just a big happy family. He expressed concern about people

provisions of the statutes and rules involved, on whose behalf it is filed, and the name, address and telephone number of the petitioner and the petitioner's attorney, if any.

7.8(2) Answer.

a. Who must file. In all cases where an action of the department is appealed, the department shall file the answer. In those cases where the department seeks to suspend or revoke a license or permit, the holder of the license or permit shall file the answer.

b. Time for filing. The answer shall be filed within twenty days of receipt of the petition.

c. Content of answer. The answer shall show on whose behalf it is filed, and specifically admit or deny each allegation or paragraph of the petition. It shall state any facts deemed to show a defense. It may raise points of law appearing on the face of the petition, and may contain as many defenses, legal or equitable, as the pleader may claim, which defenses may be inconsistent. It shall state the name, address and telephone number of the person filing the answer and the attorney, if any.

d. Matters admitted and defenses waived. Any allegation in the petition not denied in the answer shall be deemed admitted. Any defense not raised in the answer which could have been raised at that time on the basis of facts then known shall be deemed waived, except for subject matter jurisdiction.

e. Failure to answer. If the party required to file an answer by this subrule fails to file an answer within twenty days of receipt of the notice of hearing or petition, a default may, upon motion, be entered by the presiding officer.

7.8(3) Amendment. Any pleading may be amended before a pleading has been filed responding to it. The presiding officer, in furtherance of justice, may allow later amendments, including those to conform to the proof and which do not substantially change the claim or defense. The presiding officer may impose terms or grant a continuance without terms, as a condition of such allowance.

7.8(4) Filing and service of pleadings. The original of all pleadings shall be filed with the presiding officer and a copy of all pleadings shall be contemporaneously served upon the other parties. Filing and service of pleadings shall be by first-class mail or personal service. No return of service shall be required.

7.8(5) Docketing. Upon receipt of a pleading, the presiding officer shall docket the pleading in a docket kept for that purpose and shall assign a number to the case which number shall be placed on all subsequent pleadings filed in the case.

7.8(6) Form. All pleadings shall:

a. Contain a caption in the following form:

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES
DES MOINES, IOWA

IN THE MATTER OF	)PETITION (OR ANSWER)
(State name and address	)
of party other than the	)NO. _____
department)	

b. Be legibly printed or typewritten on white paper. The impression shall be on one side of the paper only and the lines shall be double spaced, except quotations of two or more lines, which shall be single spaced and indented. Standard letter-size paper (8-1/2" x 11") shall be used.

7.13(1) Separation of functions. A compliance officer of the department shall perform the investigative and prosecuting functions for the department. Additional employees of the department may be designated by the director to perform such functions as necessary during the course of the case. No person performing such functions shall participate or advise in any decision arising out of that case except as witness or counsel in public proceedings. All employees of the department other than those performing the investigative and prosecuting functions in the case shall be available to advise the agency and presiding officer on any of their functions relating to the case and any appeal.

7.13(2) Communications initiated by hearing officer or agency member

a. Except as provided in "b" and "c", after commencement the presiding officer and members of the agency having jurisdiction of the case shall not communicate, directly or indirectly, in connection with any issue of fact or law in that case with any person or party.

b. The presiding officer or members of the agency having jurisdiction of the case may so communicate upon notice and opportunity for all parties to participate. Notice of the time and place of the discussion and the issues of fact or law to be discussed shall be delivered by first-class mail to the parties. The discussion shall not extend to issues of fact or law not specified in the notice unless all parties participate in the discussion. The time of the discussion shall not be sooner than ten days after receipt of the notice.

c. The presiding officer or members of the agency having jurisdiction of the case may communicate with members of the department and may have the aid and advice of persons other than those with a personal interest in, either the case under consideration or a pending factually related case involving the same parties.

7.13(3) Communications initiated by parties.

a. Parties, including the department or their representatives in a case, shall not communicate directly or indirectly in connection with any issue of fact or law in that case with the presiding officer or members of the agency having jurisdiction of the case.

b. Paragraph "a" shall not apply if the requirements of 7.13(2)"b" are satisfied.

c. The presiding officer or members of the agency should refuse to discuss issues of fact or law with parties unless notice and opportunity for hearing has been given. The presiding officer or members of the agency shall deliver, by first-class mail, a copy of any written communication or summary of oral communication received from a party directly or indirectly related with any issue of fact or law in the case to the other parties and shall include the written communication or summary in the record.

d. The presiding officer may require the recipient of a prohibited communication to submit the communication if written or a summary of the communication if oral for inclusion in the record of the proceedings.

e. The presiding officer may take any of the following actions as sanctions for violations: The presiding officer may make a decision against a party who violates the rules; the presiding officer may make a recommendation that the agency censure, suspend or revoke a privilege to practice before the agency; the presiding officer may recommend that the director censure agency personnel.

561--7.14(17A, 455A) Hearing procedures.

7.15(7) Stays of agency actions.

a. When available.

(1) Any party appealing the issuance of an order, other than an emergency order which is governed by 7.17, may petition the presiding officer for a stay of the order pending review of the order. The petition for stay shall be filed with the notice of appeal (see 7.5(1) of these rules), and shall state the reasons justifying a stay.

(2) Any party adversely affected by a final decision and order may petition the agency which issued the decision for a stay of that decision and order pending judicial review. The petition for stay shall be filed with the director within ten days of receipt of the final decision and order, and shall state the reasons justifying an stay.

b. When granted. The presiding officer or agency, as appropriate, shall grant a stay when it concludes that substantial legal or factual questions exist as to the propriety of the department's order, the party will suffer substantial and irreparable injury without the stay, and the interest of the public will not be significantly harmed.

c. Vacation. A stay may be vacated by the issuing authority upon application of the department or any other party.

561--7.16(17A, 455A) License suspension or revocation and other licensee disciplinary proceedings.

7.16(1) Notice. Except as provided in 7.16(6), prior to the suspension or revocation of a license, the department shall give notice of the intended action, and an opportunity to be heard at an evidentiary hearing conducted according to the provisions of this chapter.

7.16(2) Content of notice. The notice shall inform the licensee of the department's intent to suspend or revoke the license or otherwise discipline the licensee and shall include facts or conduct which warrant the intended action, a statement of the legal authority and jurisdiction under which the hearing is to be held, and a statement that the licensee may show at such a hearing that the licensee meets all lawful requirements to retain the license or otherwise not be subject to disciplinary action.

7.16(3) Delivery of notice. Delivery of notice in licensee proceedings may be by personal service or by restricted certified mail.

7.16(4) Mandatory hearings. Where required by statute (e.g. Iowa Code section 455B.217), a hearing shall be held prior to revocation or suspension of a license. The petition shall be filed at the same time the notice is filed. The presiding officer shall prepare the notice of hearing upon receipt of the notice of intended action and petition and the procedure shall follow that of this chapter.

7.16(5) Requested hearing. In the case of revocation or suspension of licenses other than those within 7.16(4), the department shall give notice as required in 7.16(1) and 7.16(2), which notice shall include a statement that the person notified has the right to a hearing in accordance with this chapter and that the person entitled to such a hearing may invoke the right within thirty days of receipt of the notice. Upon receipt of the request for a hearing, the presiding officer shall prepare a notice of hearing. Within ten days of receiving notice of hearing, the department shall file a petition and the procedure shall follow that of this chapter.

7.16(6) Emergency suspension. A license may be suspended without notice and opportunity to be heard if the agency having jurisdiction finds that the public health, safety or welfare imperatively requires emergency action, and incorporates a finding to that effect in its order. The order shall be served

13. Proposed Notice of Intended Action--Chapter 70, Waiver of Engineering Plans for Existing Channel Change Projects. (Stokes) Informational.

14. Pesticide and Synthetic Organic Compound Survey. (Stokes) Informational.

15. Notice of Intended Action--Ch. 7 Contested Case Procedure Rules. (Combs) Decision.

16. Contested Case Decision--City of Wapello. (Combs) Decision.

17. Progress of Iowa City Case. (Combs) Informational.

18. Legislative Status Report. (Combs) Informational.

19. Des Moines Metro East Landfill Status. (Combs) Informational. (Closed Session)

20. Referrals to Attorney General's Office. (Combs) Decision.

21. Roadside Vegetation Management Slide Tape Show. (Combs) Informational.

22. Address Items for Next Meeting.

REMINDER: 1:30 p.m. Tuesday, March 22 - Public Hearings on Groundwater Standards - to be held in the Wallace Building Auditorium - 2nd floor.

NEXT MEETING DATES
March 21-22, 1988
April 25-26, 1988 (Ames)
May 16-17, 1988

CONTRACT NUMBER	CONTRACTOR	SOURCE OF FUNDS	AMOUNT	DESCRIPTION
87-6241-01	IOWA STATE UNIVERSITY DEPT OF BOTONY	FEDERAL EPA 205 GRANT FOR BIG SPRINGS	[illegible]	TO DOCUMENT THE FATE OF PESTICIDES IN BIG SPRING BASIN SURFACE WATERS AND ASSESS THE EFFECTS OF SELECTED PESTICIDES ON ALGAE IN GROUND & SURFACE WATERS.
87-6242-01	UNIVERSITY OF NORTHERN IOWA	FEDERAL EPA 205 GRANT FOR BIG SPRINGS	[illegible]	TO EVALUATE ADVERSE BIOLOGICAL EFFECTS OF HERBICIDES IN A MODEL ACQUATIC ORGANISM (TETRAHYMENA)
87-6254-01	IOWA STATE UNIVERSITY COOP EXT SERVICE	GROUNDWATER OIL OVERCHARGE BIG SPRINGS	124268	TO DEMONSTRATE & FACILITATE IMPLEMENTATION OF ON FARM BEST MGT PRACTICES TO CONSERVE ENERGY REDUCE EROSION & REDUCE SURFACE & GROUNDWATER CONTAMINATION WHILE ENHANCING AG PROFITABILITY & EFFICIENCY.
87-6254-02	IOWA STATE UNIVERSITY AG EXPERIMENT STATION	GROUNDWATER OIL OVERCHARGE BIG SPRINGS	162500	TO DEMONSTRATE TO A BROAD CROSS SECTION OF BIG SPRING BASIN FARMERS IMPROVED NUTRIENT MGT PRACTICES THAT CONSERVE ENERGY REDUCE ENVIRONMENTAL HAZARDS & ENHANCE FARM EFFICIENCY & PROFITABILITY
87-6254-03	NORTHEAST IOWA WATER RESOURCES DISTRICT	GROUNDWATER OIL OVERCHARGE BIG SPRINGS	26000	TO PROVIDE RESOURCES TO THE COOP EXT SERVICE (SEE CONT# 87-6254-01) TO HELP IN THE DEVELOPMENT OF ED MATERIALS DISSEMINATING THE RESULTS OF THE BIG SPRING DEMONSTRATION PROJECT
87-6254-04	UNIVERSITY OF IOWA HYGIENIC LABORITORY	GROUNDWATER OIL OVERCHARGE BIG SPRINGS (43000) EPA BIG SPRINGS GRANT (125000)	168000	TO PROVIDE THE GEOLOGICAL SURVEY SECTION ANALYTICAL SUPPORT FOR SAMPLES COLLECTED (APPROX 2500) FROM THE BIG SPRINGS AREA
87-6254-05	U.S. GEOL SURVEY	GROUNDWATER OIL OVERCHARGE BIG SPRINGS (660500) & INTEGRATED FARM MGT FUNDS FROM AG (616200)	77000	TO PROVIDE FOR THE ESTABLISHMENT & OPERATION OF GROUNDWATER MONITORING STATIONS WITHIN THE BIG SPRINGS BASIN AS WELL AS PROVIDING SURFACE WATER FLOW INFORMATION. PERFORM DYE & LOW FLOW HYDROLOGIC STUDIES.
87-6257-01	UNIVERSITY OF IOWA DEPT OF GEOLOGY	GROUNDWATER OIL OVERCHARGE BIG SPRINGS (25265) & INTEGRATED FARM MGT FUNDS FROM AG (12968) & GROUNDWATER OIL OVERCHARGE GENERAL (480207)	120440	TO PROVIDE THE GEOL SURVEY SECTION WITH TEMPORARY QUALIFIED TECHNICAL AND PROFESSIONAL SUPPORT STAFF TO AID THE SECTION IN COLLECTING TABULATING & PREPARING THE RESULTS OF VARIOUS GROUNDWATER WORK PRODUCTS. (10000 HRS)
87-6258-01	UNIVERSITY OF IOWA HYGIENIC LABORITORY	GROUNDWATER OIL OVERCHARGE RURAL WELL ASSESSMENT	277000	TO PROVIDE SAMPLE ANALYSIS SERVICES (APPROX 3000 SAMPLES) RELATING TO THE DEPTS STATISTICAL ASSESSMENT OF RURAL PRIVATE WATER SUPPLY QUALITY & PROVIDE ASSISTANCE IN PROJECT DESIGN & PREPARATION OF EDUCATIONAL MATERIALS.
87-6258-02	UNIVERSITY OF IOWA PESTICIDE HAZ ASSESSMENT LABORATORY	GROUNDWATER OIL OVRCHARGE RURAL WELL ASSESSMENT (6252000) GROUND WATER OIL OVERCHARGE BIG SPRINGS (633000)	285000	TO PROVIDE PESTICIDE SAMPLE ANALYSIS OF APPROX 1200 SAMPLES RELATING TO THE DEPTS STATISTICAL ASSESSMENT OF RURAL PRIVATE WATER SUPPLY QUALITY & PROVIDE ASSISTANCE IN PROJECT DESIGN & PREPARATION OF EDUCATIONAL MATERIALS.
87-6260-01	DEPARTMENT OF AGRICULTURE	GROUNDWATER OIL OVERCHARGE ABANDONED WELL EDUCATION	100000	TO CONDUCT AN EDUCATION PROGRAM ON THE USE OF BEST MGT PRACTICES TO CONSERVE ENERGY & MITIGATE GROUNDWATER CONTAMINATION FROM AG DRAINAGE WELLS SINKHOLES & ABANDONED WELLS.
87-6270-01	DEPARTMENT OF AGRICULTURE	GROUNDWATER OIL OVERCHARGE AG ENERGY MGT	1530000	TO DEVELOP & IMPLEMENT INTEGRATED FARM MGT DEMONSTRATION PROJECTS AND EDUCATION PROGRAMS & MATERIALS ON A STATEWIDE BASIS.
87-6280-01	IA STATE WATER RES RESEARCH INST(ISWRRI)	GROUNDWATER OIL OVERCHARGE ISWRRI REGENTS	120000	TO ESTABLISH A COMPETITIVE GRANTS PROGRAM FOR ALTERNATIVES TO SOLID WASTE DISPOSAL/GROUNDWATER PROTECTN
87-6290-01	IOWA STATE UNIVERSITY LEOPOLD CENTER	GROUNDWATER OIL OVERCHARGE LEOPOLD CENTER	800000	TO ESTABLISH A COMPETITIVE GRANTS PROGRAM FOR: SUSTAINABLE AGRICULTURE AND AGRICULTURAL BIOMASS ENERGY GENERATION PROJECTS.

Contract No. 87-6242-02

APPENDIX A

BUDGET SUMMARY

Personnel Salary and Benefits	2,241.00
Travel	500.00
Equipment Lumino-meter and attachments	6,759.00
Supplies	1,000.00
Other - Water sample collection, handling, shipping	2,500.00
TOTAL	$13,000.00

ADM -1-1-1
March 198

MINUTES
ENVIRONMENTAL PROTECTION COMMISSION
Wallace State Office Building
Fourth Floor Conference Room
Des Moines, Iowa
March 21-22, 1988

The meeting of the Environmental Protection Commission was held at the Wallace State Office Building in Des Moines, Iowa convening at 1:00 p.m. on Monday, March 21, 1988.

MEMBERS PRESENT

Charlotte Mohr, Robert Schlutz, Donna Hammitt, Nancylee Siebenmann, Keith Uhl, Gary Priebe, Clark Yeager.

MEMBERS ABSENT

Catherine Dunn, Richard Timmerman.

ADOPTION OF AGENDA

The following appointments were added to the agenda:

City of Wapello -- changed to 3:15 p.m., Monday, March 21
Lakewood -- 9:30 a.m., Tuesday, March 22
City of Long Grove -- 10:40 a.m., Tuesday, March 22

Motion was made by Charlotte Mohr to approve the agenda as amended. Seconded by Nancylee Siebenmann. Motion carried unanimously.

ADOPTION OF MINUTES

Motion was made by Nancylee Siebenmann to approve the minutes of February 15-16, 1988 as presented. Seconded by Donna Hammitt. Motion carried unanimously.

APPROVAL TO EXTEND LEASE FOR MANCHESTER REGIONAL OFFICE

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

The Environmental Protection Commission will be requested to approve a one-year extension of the existing lease for Regional Office #1 in Manchester, Iowa.

The current lease expired February 28, 1988. The landlord has agreed to construct a handicap access by installing a ramp on the side entrance. The terms of the lease will remain the same with the exception of the monthly rent payment increasing $25/month for the additional expense of the construction of the handicap access. Total monthly payment is now $495 or $5.35/ft^2.

REPORTS OF HAZARDOUS CONDITIONS

During the period of February 1, 1988 through February 29, 1988, reports of 51 hazardous conditions were forwarded to the Central Office. Two incidents are highlighted, followed by a general summary and the number per field office.

Date Reported and County	Description: Material, Amount, Date of Incident, Cause, Location, Impact	Responsible Party	Response and Corrective Actions
2/12/88 CLINTON	On February 12, 1988, a hole in the bottom of an above-ground storage tank at 625 6th St. in DeWitt, Iowa, allowed about 4,100 gallons of gasoline to be released into the city's sewage system. As a result, approximately 1,000 people were evacuated from a 38 square block area for about four to five hours. In addition, some bacterial growth was lost from the city's wastewater treatment plant, and product reached Silver Creek.	Eldridge Coop 625 6th Street DeWitt, Iowa 52742	The sewer system was flushed to eliminate explosive vapors. A trench was dug by the tank to recover product. Product was pumped out of the tank and contaminated soil was excavated. A contractor has been retained by the responsible party to assess possible contamination of groundwater.
2/13/88 [illegible]	On February 13, 1988, a tanker carrying 8,000 gallons of gasoline overturned three miles east of Independence, Iowa near a bridge on HWY 20. Numerous holes and gashes in the tanker caused the loss of about 7,000 gallons of product into the Wapsipinicon River.	Randolph's, Inc. 806 3rd Street Traer, Iowa 50675	Sand was placed by a culvert in an attempt to contain the product. Another tanker truck pumped about 150 gallons out of the damaged vehicle. Investigation discovered product in a lowland flood plain area and a sump was dug to recover product. Also, contaminated soil was excavated and spread over land to allow for aeration.

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
CONTESTED CASES
MARCH, 1988

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
10-17-85	City of Davenport	Administrative Order	WM	Hansen	Hearing rescheduled for 5/12/88.
1-23-86	Galvin Soil Service	Administrative Order	WM	Lande	Hearing continued; cleanup study progressing.
6-12-86	AEM - Clinton	Administrative Order	Air	Lande	Hearing continued.
10-29-86	Hundt-Kinsp Company, Inc.	Administrative Order	AQ/WM/SW	Lande	Briefing completed. Await decision.
12-02-86	City of Keokuk	Administrative Order	WM	Hansen	Hearing continued; settlement close.
12-11-86	Gladys Hesse	Permit Condition	FP	Clark	Hearing rescheduled for 3-08-88.
12-24-86	Francis Roehrlin	Administrative Order	FP	Clark	Briefing in progress.
2-10-87	Greiter	Administrative Order	FP	Clark	Appealed. Commission rescinded order.
2-12-87	Iowa City Regency WMP	Administrative Order	WM	Hansen	Hearing held 11-03-87.
2-23-87	Ottumwa-Wapello Lagoon (Hank Smith)	Administrative Order	WM	Kennedy	Hearing continued.
4-23-87	Willow Creek Dam/Earnie et.al	Permit Issuance	FP	Clark	Negotiating before filing.
4-11-87	Thomas Lennon	Administrative Order	FP	Clark	Awaiting decision.
5-15-87	Great Rivers Group	Administrative Order	WC	Lande	Hearing continued; study proceeding.
5-17-87	City of Reynolds	Administrative Order	WM	Hansen	Proposed decision appealed.
5-17-87	City of Donnellson	Administrative Order	WM	Hansen	Settled.
5-17-87	Goodnet, Kevin and Bennet	Administrative Order	AQ	Lande	Hearing continued; stipulations being prepared.
10-02-87	University Park	Administrative Order	WM	Hansen	Hearing continued; settlement proposed.
11-10-87	City of Sandyville	Administrative Order	WM	Clark	Settled.
10-02-87	Kossuth County SLF	Administrative Order	SW	Kennedy	Settled.
10-07-87	Glen Ekern	Administrative Order	SW	Murphy	Hearing set for 3-07-88.
10-11-87	Pinkus Landfill	Permit Exemption	SW	Kennedy	Awaiting decision.
10-15-87	D-Lagoon Co. Conn. Dist. (IBP)	Permit Issuance	WM	Clark	Hearing rescheduled for 4-18-88
10-21-87	City of Sidney	Administrative Order	WM	Murphy	Settled.
10-21-87	City of Tabor	Administrative Order	WM	Hansen	Hearing rescheduled for 4-04-88.
10-21-87	Sioux FS WMP	Administrative Order	WM	Murphy	Settled.
10-21-87	Mahaska County SLF	Administrative Order	SW	Kennedy	Negotiating before filing.
10-21-87	City of Tipton	Administrative Order	WM	Hansen	Negotiating before filing.
10-21-87	Hilltop RuPco	Administrative Order	WM	Murphy	Negotiating before filing.
1-15-88	First Iowa State Bank	Administrative Order	SW	Kennedy	Hearing set for 4-14-88.
1-22-88	IBP, Fort Madison	NPDES Permit	WM	Hansen	Negotiating before filing.
2-16-88	Sherrerbile Enterprise, Woodmans; Northwest Mills	Administrative Order	SW	Lande	New Cases. Plans approved.
2-22-88	Monroe County Sanitary Dump	Administrative Order	SW	Lande	Negotiating before filing.
2-10-88	Lehigh Clay Products	Administrative Order	WM	Lande	New Case. Appellant revised plans to be submitted.
2-22-88	Amana	Tax Certification Denial	AQ/WM	Lande	New Case. Appealed.
2-22-88	South Central Iowa Landfill Agency	Administrative Order	SW	Lande	New Case. Appealed.

39.6(1) Sealing materials. Approved sealing materials are bentonite products (graded bentonite, bentonite pellets and bentonite grout), neat cement, sand cement grout and concrete.

39.6(2) Fill materials. Approved fill materials include soil, sand, pea gravel, gravel, crushed stone and agricultural lime. Fill materials are not required for well plugging, but may be used to save on quantities and costs of sealing materials as provided in Rule 39.7. The fill materials shall be free of sticks, leaves or other foreign matter and shall be free of any toxic or agricultural chemical residue.

567--39.7(455B) Water well plugging procedures.

39.7(1) Freedom from obstructions. Abandoned wells must be checked before they are plugged in order to insure freedom from obstructions that may interfere with plugging operations. Drop pipes, check valves, pumps, and other obstructions shall be removed if practicable.

39.7(2) Wells in Quaternary sediments.

a. Large diameter wells one hundred (100) feet or less in depth. The services of a registered well driller are not required for the plugging of large diameter (eighteen (18) inch diameter or more) wells one hundred (100) feet or less in depth in Quaternary sediments (above bedrock). These wells may be plugged by pouring fill and sealing materials from the top of the well or by using tremie pipes, except for sand cement grout placed below water, which must be placed by dump bailer.

Fill materials of sand, gravel, crushed stone, pea gravel or agricultural lime shall be placed up to one (1) foot below the static water level. A minimum of one (1) foot of bentonite pellets, graded bentonite or neat cement shall be placed on top of the fill material up to the static water level as a seal. Sand cement grout placed with a dump bailer also may be used on top of the fill material up to the static water level and in standing water above the static water level to act as a seal. Fill material of soil, sand, gravel, crushed stone, pea gravel or agricultural lime shall then be added up to four (4) feet below the ground surface.

The fill materials may be omitted and sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Bentonite pellets, graded bentonite or neat cement sealing materials shall be used below the static water level. Sand cement grout placed with a dump bailer also may be used below the static water level or in standing water above the static water level. Sealing materials which may be used above the static water level include bentonite pellets, graded bentonite, neat cement, sand cement grout and concrete.

The casing pipe shall be removed down to four (4) feet below the ground surface, and shall be capped by a minimum of one (1) foot of bentonite pellets, graded bentonite, neat cement, sand cement grout or concrete. The cap shall extend six (6) or more inches beyond the outside diameter of the top of the remaining well casing and shall terminate three (3) feet below the ground surface.

If there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet (three (3) feet above the cap) shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

b. Wells less than eighteen (18) inches in diameter or greater than one hundred (100) feet in depth, excluding sandpoint wells. Plugging of wells

state of Iowa, depend on disposal of various types of sludges generated in the waste treatment process at their local landfill.

Response: It would be difficult to achieve the 50 percent solids level with conventional technology. However, land disposal of sludge will still be allowed in accordance with Chapter 120. Some large municipalities also utilize sludge incineration. It is not a general practice for communities to dispose of sewage sludge in landfills, although a few communities presently utilize landfills for sludge disposal.

C. Commentor: 3

Comment: Wastewater sludges generated in different treatment processes are unique in the water content at the point where they appear and act as a solid material. Some digested activated sludge will be in a solid form with as low as 10 to 12 percent solids while some primary sludges may exhibit 30 to 35 percent solids when similarly processed. It would appear that a more appropriate way to define municipal sewer sludges acceptable for landfilling would be that they appear and act as a solid material and have no free water associated with them. This definition would allow municipalities to continue to discharge sludges at landfills that have previously been permitted that have not caused operational difficulties at the landfill.

Response: Staff agrees that some sludges appear solid, yet have a high moisture content. Other sludges may appear to be fluid at a lower moisture content. We thought the proposed rule reflected the legislative intent.

D. Commentor: 3

Comment: It seems that research would confirm that the majority of solid waste received currently at landfills is less than 50 percent solids.

Response: We have not seen research that indicates the solids content of "typical" solid waste. Considering the large amounts of paper and plastics that make up solid waste, the moisture content of solid waste could be round 50 percent.

E. Commentors: 1, 5, 6, 7

Comment: Draft solid waste regulations developed by EPA call for dewatering of sludge to 20 percent solids. It is recommended that this requirement be imposed now in all new or reissued permits for POTWs disposing of sludge at codisposal landfills. When OMB releases their guidance on the subject, it will be released in the Federal Register for a 60-day comment period. It is expected to become final in March of 1988. If the EPA is recommending 20 percent solids, the 50 percent solids recommendation of DNR staff appears to be overly restrictive. No recommendation is made regarding sludge dewatering for sludge-only landfills.

relaxed standards and encouraged the more relaxed standards for small communities. He expanded on details by EPA regarding this provision.

Mr. Huddle further discussed submission of plans and dates regarding same; history of communication with the department; the department not knowing how to interpret their rules; details of the hearing with the hearings officer; compliance of effluent limitations and 95 percentile; percent of removal limitations according to the city's data; and the department's problems in analyzing the city's data.

Mr. Huddle stated that, under their definition of the rules, the city is complying under the treatment equivalent to secondary. He asked if it makes any sense, when under anyone's definition the city is so close to the relaxed standards, to spend one-half million dollars on a treatment system. In conclusion, Mr. Huddle stated that he is asking that the Commission seriously consider the definitions under treatment equivalent to secondary. He added that they are asking for time to comply under the new rules which were adopted after their plan was completed.

Diana Hansen stated that the rules for treatment equivalent to secondary treatment were published in May, 1986 and that the city's plan of action was submitted June 18, 1986. She added that there has not been a formal request from the City of Wapello for treatment equivalent to secondary treatment backed up by an engineer's discussion of why the city qualifies for such treatment. She further discussed hydraulic and organic overloading, by-passing, the city not meeting a 60-day detention time, fall and spring drawdown, and the city exceeding the equivalent to secondary treatment limits at least once each winter and each summer.

Discussion followed regarding latitude given to small communities; the City of Wapello not meeting its original design standards; EPA regulations; state regulations and effective dates of same; plans and specifications due from the city; and the requirement of meeting the federal July 1, 1988 deadline.

Mr. Huddle stated that every time the city talks to DNR about treatment equivalent to secondary treatment the only thing they get are letters regarding hydraulic overload. He added that the city has not had the opportunity to apply for treatment equivalent to secondary treatment.

Keith Uhl asked if the Commission supported staff and referred the City of Wapello would they still have the opportunity to apply for treatment equivalent to secondary treatment.

Allan Stokes stated that they could file an amended plan of action for consideration, and if the department denies it, they would have the opportunity to come before the Commission for appeal.

Further discussion took place regarding hydraulic and organic overloading. Also discussed was the disposition of the administrative order if the appeal was tabled.

Motion was made by Gary Priebe to table the appeal for 60 days to allow the City of Wapello time to apply for treatment equivalent to secondary, and for

- Public notification requirements regarding lead in drinking water.

- The prohibition of the use of lead containing materials in water supply distribution systems and residential and nonresidential piping.

We anticipate bringing a Notice of Intended Action for these rules to the Commission at the April meeting.

Mr. Stokes distributed a copy of the proposed water supply rules.

Mr. Stokes explained EPA's requirements and definitions under the Safe Drinking Water Act. He displayed charts showing allowed maximum contaminant levels for certain substances; charts showing unregulated contaminants required for vulnerable systems; charts for monitoring frequency for BOC; charts showing EPA's deadlines for initial sampling; and charts showing the regulated number of water systems in Iowa. Mr. Stokes explained details of the information shown on the charts.

This was an informational item; no action was required.

NOTICE OF INTENDED ACTION -- WAIVER OF ENGINEERING PLANS FOR EXISTING CHANNEL CHANGE PROJECTS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

As directed by the Commission, the department staff has drafted rule amendments which would automatically waive the submission of engineering plans as part of an after-the-fact permit application for channel changes if the channel change has been in place for more than a certain number of years. The draft Notice of Intended Action will be distributed and discussed at the meeting.

Mr. Stokes distributed a copy of the draft rule amendments.

Clark Yeager inquired as to what is happening in the legislature on this matter.

Mr. Stokes stated that the Senate passed a bill saying that if the department does not discover the violation within five years we cannot do anything about the situation.

Chairman Schlutz asked if there are any suggestions as to the number of years for an automatic waiver.

Clark Yeager stated that if the Commission approves rules for an automatic waiver they would be reacting as the legislature to a single purpose issue, and he feels that each situation should be reviewed on a case-by-case basis.

Mr. Stokes stated that the department will have no basis to deny a permit absent the needed facts, other than in an absolutely gross, horrendous situation.

dumping trash on an individual's private property, and the department's rules pertaining to same.

Mr. Stokes clarified that hearing officers are assigned by the Office of Inspections and Appeals, and are not a part of the DNR.

REFERRALS TO THE ATTORNEY GENERAL - (Continued)

City of Long Grove

Diana Hansen briefed the Commission on the history of this case. She stated that the main stumbling block is the immediate penalty for the city not having, by the deadline, an approvable plan of action. The department has now approved the plan of action by which the city will meet the July 1, 1988 deadline. The department feels that, in view of the past actions by the city, the new schedule should be placed in a court order compelling them to meet the July 1, 1988 deadline. The department also requests a penalty for the city not having an approvable plan of action as of last fall.

Keith Uhl inquired why this fine was higher than the normal penalty.

Ms. Hansen responded that it was because the consent decree is not being handled by the department. Most of those handled in-house are capped at a $1,000 penalty that would have been assessed in an administrative order.

Keith Uhl asked if the city would agree to a $1,000 fine.

Ms. Hansen responded that it is her understanding that any immediate penalty would be unacceptable to the city.

APPOINTMENT -- MIKE HAMILTON -- CITY OF LONG GROVE

Mike Hamilton, representing the city of Long Grove, distributed a history of documentation at city council meetings concerning this project along with a copy of a Notice of Hearing and Letting for construction of a lagoon. Mr. Hamilton discussed problems concerning variances, bids and rebidding, costs and purchase of additional land. He stated that he and his engineer, Tom Allen, had a phone conference with Diana Hansen and Bill Chen in February, and she indicated that the department would like to have this settled as a consent decree with some sort of an up-front fine. He added that he did not feel a fine was appropriate. Mr. Hamilton stated that the council decided to continue with Mr. Allen as they would still have the opportunity to complete construction by July 1, 1988. He stated that it was a matter of technical argument concerning how the lagoon was going to be designed, with the sole purpose of trying to reduce the costs and not place a burden on taxpayers. Mr. Hamilton stated that, in a letter dated March 18, 1988, he received notice that the city was being referred. He added that he asked Ms. Hansen what the recommended fine would be, and she indicated that since this was going to be referred that she would not say. Mr. Hamilton stated that the city has every intention of meeting the July 1, 1988 deadline, and he feels that a fine is not appropriate.

Clark Yeager recommended that a consent decree be worked out with no fine levied unless the city does not meet the 7/1/88 deadline.

c. Be signed by the person filing the pleading.

561--7.9(455B) Defaults and orders thereon.

7.9(1) Defaults defined. The respondent shall be in default when it fails to timely file an answer within the time prescribed for filing an answer. Any party shall be in default when it fails to comply with an order of the presiding officer.

7.9(2) How entered. If the party is in default, the presiding officer on motion of the adverse party shall enter such default against the party.

7.9(3) Order issued. Whenever the respondent fails to timely answer, or any party fails to comply with an order of the presiding officer and default is entered, the relief requested by the party moving for default may be granted in an order.

7.9(4) Setting aside default. On motion and for good cause shown, the presiding officer may set aside a default or order thereon for mistake, inadvertence, surprise, excusable neglect or unavoidable casualty. The motion must be filed promptly after the discovery of the grounds thereof, but in no case shall the motion be filed more than ten days after receipt of the order.

7.9(5) Appeal of denial of motion to set aside default.

(a) The exclusive remedy for an order based on default shall be a timely motion to set aside default and if denied, followed by an appeal to the agency having jurisdiction of the matter. The appeal is limited to the grounds for denial of the motion to set aside default. Review is limited to whether the denial of the motion was arbitrary or capricious and whether there is a showing of good cause to set aside default due to mistake, inadvertence, surprise, excusable neglect or avoidable casualty.

(b) Upon a finding by the agency of good cause, the default shall be set aside. The hearing shall be completed, with proper notice, before appeal on the subject matter of the case shall be permitted.

561--7.10(17A, 455A) Prehearing procedures.

7.10(1) Motions.

a. General. All motions, except those made orally on the record during a hearing, shall be in writing and shall state with particularity the grounds therefor, shall set forth the relief or order sought, and shall be filed with the presiding officer and contemporaneously served upon all parties.

b. Response to motions. Any party may file a response to any written motion within ten days after service of such motion, except as otherwise provided by the presiding officer. Failure to file a response within the designated period may be deemed a waiver of objection to the granting of motion.

c. Disposition. The presiding officer shall rule on a motion after the designated time for response has expired. A motion involving separate grounds or parts shall be disposed of by separate ruling on each and shall not be sustained or overruled generally.

7.10(2) Discovery.

a. In general. The discovery procedures available to parties in civil actions are available to parties.

b. Departmental records in general.

(1) The records of the department are available for public inspection, as required by Iowa Code chapter 22 and as provided in 571--Chapter 2, IAC.

(2) Except as provided in paragraph "c" of this subrule, identifiable departmental records that are not available for public inspection but that are discoverable and relevant to disputed material facts shall, upon request,

7.14(1) Conduct of proceedings. A hearing shall be conducted by a presiding officer who shall:

a. Open the record and receive appearances;
b. Administer oaths, and issue subpoenas;
c. Enter the notice of hearing into the record;
d. Receive testimony and exhibits presented by the parties;
e. In the hearing officer's discretion, interrogate witnesses;
f. Rule on objections and motions;
g. Close the hearing;
h. Issue an order containing findings of fact, conclusions of law.

7.14(2) Counsel. Any party may be represented by counsel or other representative at the party's own expense.

7.14(3) Appearance pro se. If a party other than the department appears on the party's own behalf without counsel or other representative, the presiding officer shall explain to the party the rules of practice and procedure and generally conduct the hearing in a less formal manner than that used when a party is represented by counsel or other representative. It should be the purpose of the presiding officer to assist to the extent necessary any party who appears without a representative to allow the party to fairly present evidence, testimony and arguments on the issues.

7.14(4) Attendance and participation of the public. Every hearing before an agency of the department or a hearing officer or appeal board shall be open to the public.

7.14(5) Recording of hearing.

a. Method of recording. Oral proceedings in connection with a hearing in a case shall be recorded either by mechanized means or by certified shorthand reporters. Parties requesting that the hearing be recorded by certified shorthand shall bear the costs.

b. Transcription. Oral proceedings in connection with a hearing in a case or any portion of the oral proceedings shall be transcribed at the request of any party with the expense of the transcription charged to the requesting party.

c. Copies of tapes of oral proceedings may be obtained from the presiding officer at the requestor's expense.

d. Retention time. The recording or stenographic notes of oral proceedings or the transcription thereof shall be filed and maintained by the department for at least five years from the date of the decision.

7.14(6) Fees. Each party bears all costs and expenses, including fees, for its own witnesses.

7.14(7) Failure to appear. If a party fails to appear after proper service of notice of hearing, the presiding officer may adjourn the hearing, or may proceed with the hearing and make a proposed decision in the absence of the party. Adjournment may be granted by the presiding officer on the presiding officer's own motion in the interest of justice.

7.14(8) Evidence.

a. Admissibility in general. Evidence that is relevant and material shall be admitted unless it is unduly repetitious. Relevant and material evidence may be admitted even though inadmissible in a jury trial. Evidence not provided to a party upon request, upon issuance of a subpoena, through discovery, prehearing procedures, or during informal procedures shall not be admissible by the party who failed to provide the evidence at the hearing unless it is necessary to avoid a manifest injustice.

b. Privilege. The rules of privilege recognized by law shall be given effect.

in the same manner provided in 7.16(3). If a license is summarily suspended in accordance with this paragraph, the department shall promptly thereafter give notice and an opportunity to be heard and determine the matter.

7.16(7) Effective date of suspension or revocation.

a. With respect to license suspension or revocation pursuant to this rule, except an emergency suspension pursuant to 7.16(6), the suspension or revocation shall be effective upon failure of the permittee to request a hearing within the time required in 7.16(5) or upon the issuance of an order suspending or revoking the permit after hearing.

b. With respect to a license suspension pursuant to 7.16(6), the license suspension is effective upon service of the order, and shall remain effective until rescinded by the agency or until the suspension is terminated by order after hearing.

561--7.17(17A, 455A) Special procedure for emergency orders. The procedures prescribed in this rule are available in those cases involving an emergency order issued by the department.

7.17(1) Stay of order. A person named in an emergency order may request a stay of the order by contacting the director by telephone or by delivery of a written request for stay to the department.

a. Upon receipt of a request for stay, the director shall schedule a hearing to take place within five days of receipt of the request or such longer time as agreed upon by the appellant. The person requesting the stay shall be notified of the time and place of the hearing.

b. The scope of the hearing on a request for stay shall be limited to, and the decision whether to grant a stay shall be based upon, the following factors:

(1) Will the requestor suffer irreparable injury if a stay is not granted,

(2) Is the requestor likely to prevail on the merits when the appeal of the order is heard,

(3) Where lies the public interest, and

(4) Is the rule or statute upon which the order is founded clearly invalid.

c. The decision to grant or deny a stay shall conform with 7.15(2) of these rules.

7.17(2) Decision on merits. When agreed to by the parties, the appeal of an emergency order may be decided based upon the evidence presented at the hearing for stay. Otherwise, a hearing on the merits shall proceed in accordance with 7.7(17A, 455A) to 7.15(17A, 455A) of these rules.

These rules are intended to implement Iowa Code sections 17A.3 and 455A.

_____

Date

_____

Larry J. Wilson, Director

Motion was made by Clark Yeager to approve Notice of Intended Action--Chapter 7, Contested Case Procedures. Seconded by Donna Hammitt. Motion carried unanimously.

PROGRESS OF IOWA CITY CASE

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

ENVIRONMENTAL PROTECTION COMMISSION

Monday, March 21, 1988

NAME	COMPANY OR AGENCY or Organization	CITY
(Please print)		
JAMES D. RESNICK	WATER POLLUTION CONTROL	DAVENPORT
ROBERT E. MAIN	WATER POLLUTION CONTROL	NEWTON
MARJORIE DENNISON	CEDAR RAPIDS GAZETTE	DES MOINES BUREAU
TIM ROLLINGER	IOWA PUBLIC SERVICE	SIOUX CITY
Frank Weaver	Iowa Power	Des Moines
Winton Etchen	IFCA	Des Moines
Tom Carney	R&T	
DAN VEST	GROWMARK, INC.	BLOOMINGTON, IL.
Roger Huddle	City of Wapello	
L. C. [illegible]	" "	
R. Meyer	" "	
DON JENSEN	COLLN BIELA	HUMBOLDT IA
Cindy Hildebrand	Iowa Audubon Council	Ames, IA

Tuesday, March 22, 1988

TIM ROLLINGER	IOWA PUBLIC SERVICE	SIOUX CITY
Todd Kimm	Radio Iowa	DSM
Duane Frideres	Lakewood Benefited Sanitary District	Norwalk
Matthew Cosner	Lakewood Benefited Sanitary District	Norwalk

Contract No. 87-6242-01

NOC BIG SPRINGS

ARTICLE V. SCOPE OF WORK

5.1 General

The Iowa State University, Department of Botany work element will document the fate of nitrate in surface waters in Big Spring Basin (5.2) and assess the effects of selected pesticides in groundwaters and surface water on stream primary producers - algae (5.3).

5.2 In-stream nitrogen losses

Detailed stream surveys will be conducted to provide measurements of the fate of nitrogen in stream segments. The detailed stream surveys will include:

a) detailed cross sections and longitudinal morphologic surveys of selected stream sections,
b) discharge measurements in selected reaches,
c) sampling and analysis of soluble and total nitrogen and organic carbon in stream waters,
d) sampling and analysis of organic carbon and nitrogen in stream sediments, and,
e) estimation of primary production and algal assimilation of nitrogen in stream segements.

The survey data will allow mass balance analyses to more clearly document the fate of nitrogen in surface waters and estimate the role of different processes affecting stream nitrogen.

5.3 Pesticide Effects

To more clearly assess the effects of atrazine on algal community structure and function, photosynthesis dose response curves and EC50s will be determined for algae collected throughout the growing season at Big Spring and periodically at pristine Osage Spring. Atrazine concentrations at Big Spring are already determined as part of a routine monitoring program. Changes in atrazine resistance of algae, as indicated by EC50s for photosynthesis, will be compared to observed patterns of atrazine loading to determine whether resistance varies in relation to atrazine loading.

ARTICLE VI. MILESTONE

Date	Activity
January 31, 1988	Evaluation of existing database to delineate patterns of nitrate loss in relation to reach and discharge.

Contract No. 87-6254-01

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between Iowa State University, Cooperative Extension Service (hereinafter referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Big Spring Demonstration Project (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. Jerald DeWitt has been designated by the Contractor to act as the Prrject Director. Financial and Administrative matters of the contract are under the supervision of Richard E. Hasbrook. Negotiations concerning this project should be referred to Richard E. Hasbrook.

2.3 Key Personnel for Contractor.

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a five year project, and that pending successful completion, and upon mutual consent, this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. STATEMENT OF PURPOSE

This Contract is entered into for conducting an essential program element in the Big Spring Basin Demonstration Project. This program element will demonstrate and facilitate implementation and adoption of on-farm best management practices to conserve energy, reduce soil erosion, reduce the nonpoint source contamination of surface water and groundwater resources, and enhance the efficiency and profitability of agricultural production.

Motion was made by Donna Hammitt to approve an extended lease for the Manchester Regional Office as presented. Seconded by Charlotte Mohr. Motion carried unanimously.

GROUNDWATER CONTRACT APPROVAL

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

Attached is a summary of recently prepared contracts relating to implementation of the Groundwater Bill. The contracts are consistent with the appropriations in the Groundwater Law. The contracts funded with oil overcharge funds have also been approved by the Energy Funds Disbursements Council and the DOE.

Also attached, after the summary, are copies of the "Scope of Work" and budgets for each contract. Approval of these contracts is respectfully requested.

Mr. Kuhn explained the funding for the groundwater contracts and the differences between the stripper well money and the Exxon money.

Motion was made by Charlotte Mohr to approve the groundwater contracts as presented. Seconded by Donna Hammitt. Motion carried unanimously.

WASHINGTON REGIONAL OFFICE LEASE

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

The Commission is requested to approve a new office lease for Regional Office #6 at Washington, Iowa.

The current lease expired, and has been continued on a month-to-month basis. Current rent is $4.84 per sq. ft. The current landlord has proposed to expand by adding 500 sq. ft. and remodeling. This would increase the cost to $5.05.

We attempted to secure a reasonable proposal from the Liquor Department relative to the vacant store building in Washington.

The DNR considered and inspected seven other buildings. The office that appears the best contains 3,128 sq. ft. and also has an attached garage that would hold four vehicles. The cost would be $5.00 per sq. ft., no charge for the garage, and would include heating, air-conditioning, water, lights, garbage pickup, and yard maintenance.

Mr. Kuhn stated that after the item was prepared a proposal for the Liquor Building was received as follows: $5,000/year lease cost; $3,600/year utilities to be paid by DNR; also costs for snow removal and yard maintenance to be paid by DNR. Lease agreement will be for five years. Estimated total annual cost is $9,500. The Liquor Department is currently paying $10,000/year lease on the building; thus, a savings of $5,000/year to the state. The other proposal, using the current building, is around $15,000.

Numbers in Parentheses Represent Reports for the Same Period in Fiscal Year 1987

		Substance Type				Mode				
Month	Total # of Incidents	Petroleum Product	Agri. Chemical	Other Chemicals and Substances	Handling and Storage	Pipeline	Highway Incident	RR Incident	Fire	Other
Oct	69	47	4	18	53	0	9	1	2	4
Nov	48	35	3	10	37	0	4	0	1	6
Dec	46	36	3	7	39	1	2	0	0	4
Jan	54	43	4	7	45	1	5	1	1	2
Feb	51 (41)	30 (25)	2 (1)	19 (15)	37 (30)	1 (1)	9 (5)	3 (1)	1(2)	0(2)
		UST-9		UST-1	UST-10					

Total # of Incidents Per Field Office	01	02	03	04	05	06
This Period	5	3	4	5	18	16

Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Lloyd and Doris Foland, Decatur (5)	Flood Plain	Construction without permit registration.	Order/Penalty	2/5/88
City of Deep River (5)	Drinking Water	Construction contrary to permit.	Order	2/5/88
West Union Country Club, West Union (1)	Drinking Water	Monitoring/reporting, bacteria.	Order/Penalty	2/5/88
Swiss Valley Farms Co., Hopkinton (1)	Wastewater	Pretreatment.	Order	2/5/88
City of Hopkinton (1)	Wastewater	Pretreatment, discharge limits.	Order	2/5/88
Lynn Marmarge Feedlot, Wright Co. (2)	Wastewater	Prohibited discharge.	Order/Penalty	2/5/88
Lime Hollow MHP, Washington (6)	Drinking Water	Monitoring/reporting, radioactivity.	Order/Penalty	2/5/88
Benton Co. Care Facility Vinton (1)	Drinking Water	Monitoring/reporting, radioactivity.	Order/Penalty	2/5/88
Mike Vandeyssel Construction, Inc. Stronquist Construction et. al. (5)	Solid Waste	Open dumping.	Order/Penalty	2/11/88

PROPOSED NEW CHAPTER 39, REQUIREMENTS FOR PROPERLY PLUGGING ABANDONED WELLS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

Rules have been developed for implementing Iowa Code chapter 455B, House File 631, section 305, pertaining to properly plugging abandoned wells. Copies were made available to the commission at the February meeting. Abandoned well owners will be required to certify on form DNR 542-1226 that abandoned wells have been properly plugged in accordance with the requirements of this chapter and the following time schedules.

Category I - Safety. Abandoned wells eight (8) inches or larger in diameter abandoned prior to the effective date of this rule shall be properly plugged within six (6) months after the effective date of this rule.

Category II - Contamination. Abandoned wells abandoned prior to the effective date of this rule (1) located less than 200 feet from an active well supplying potable water or (2) located less than one-eighth of a mile (660 feet) from a point source of contamination shall be properly plugged by July 1, 1990.

Category III - All other wells abandoned prior to the effective date of this rule. All other wells abandoned prior to the effective date of this rule shall be properly plugged by July 1, 1993.

Category IV - Wells abandoned after the effective date of this rule. Wells abandoned after the effective date of this rule shall be properly plugged within 90 days of the date of abandonment.

If the Commission authorizes it, three public hearings on the proposed new chapter of the rules can be held throughout the state beginning on May 12, 1988, and written and oral comments can be received throughout May 23, 1988. The results of the comments and recommendations are scheduled to be brought back to the Commission at the June, 1988 meeting.

ENVIRONMENTAL PROTECTION COMMISSION [567]
Notice of Intended Action

Pursuant to the authority of 1987 Iowa Code Supplement section 455B.190, the Environmental Protection Commission intends to create a new Chapter 39, "Requirements for Properly Plugging Abandoned Wells." 1987 Iowa Code Supplement section 455B.190 requires that all abandoned wells be properly plugged in accordance with a closure program implemented by the Department of Natural Resources. Accordingly, the proposed rules establish a time schedule for plugging various types of abandoned wells; set forth proper procedures and materials to be employed; and require certification of each plugged well by completing a new form entitled, "Abandoned Water Well Plugging Record."

Any interested person may file written comments or suggestions on the proposed rules through May 23, 1988. Such written materials should be directed to Wayne Rand, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034. Persons are also invited to present oral or written comments at public hearings which will

less than eighteen (18) inches in diameter or greater than one hundred (100) feet in depth must be performed by a registered well driller.

Fill material consisting of sand, gravel, crushed stone or pea gravel shall be placed in the bottom portion of the well open to the water-bearing formation up to four (4) feet below the static water level. A minimum of four (4) feet of sealing materials consisting of bentonite products or neat cement shall be added above the fill material up to the static water level. If bentonite grout or neat cement is used, it shall be placed by tremie pipe. If bentonite pellets or graded bentonite are used, they may be added by pouring in place and agitating to avoid bridging. Any of the approved sealing materials shall be added above the static water level up to four (4) feet below the ground surface. If bentonite grout is used, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The fill materials may be omitted and any of the approved sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Only bentonite products or neat cement sealing materials shall be used below the static water level. If bentonite grout is used from the static water level to the top of the well, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

c. Sandpoint wells. Plugging of sandpoint wells must be performed by a registered well driller. The preferred method of plugging a sandpoint well is to pull the casing and sandpoint out of the ground, allowing the hole to collapse and fill. If the sandpoint and casing cannot be extracted, they shall be tremied full of neat cement or completely sealed with bentonite products.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

39.7(3) Bedrock wells. Plugging of all bedrock wells shall be performed by registered well drillers. If the details of well construction are unknown, the well shall be (1) tremied full of neat cement up to four (4) feet below the ground surface or (2) tremied full of bentonite grout up to ten (10) feet below the ground surface, with the bentonite grout capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

a. Bedrock wells completed in a single confined aquifer. Before proceeding to plug the well, a bridge plug or packer shall be placed at or below the bottom of the casing to stop the flow of water if necessary where the pressure in the confined aquifer is great, causing the well to flow at the surface.

Fill material consisting of pea gravel, crushed stone or gravel shall be placed from the bottom of the well to within ten (10) feet below the bottom of the casing. Sealing material consisting of bentonite products or neat cement shall be placed from the top of the fill material to at least ten (10) feet above the bottom of the casing or to the static water level, whichever is higher. If bentonite grout or neat cement is used, it shall be placed by

Response: This rule is prepared in response to a provision adopted by state law. Compliance with federal regulations, based on federal law, may be achieved by more restrictive state authority.

F. **Commentor:** 1

Comment: If the proposed rules are adopted as published, a transition period for implementation consistent with the development of economical technologies capable of dewatering sludge to 50 percent solids is recommended.

Response: The statutory requirement is already in effect. This rule only defines a term within that statute, it does not appear to be possible to delay implementation.

G. **Commentors:** 5, 6

Comment: What is the definition of sewage sludge? Does it include screenings? If so, screenings are also normally less than 50 percent solids. How would screenings be dewatered to greater than 50 percent? What disposal methods other than landfilling are practical for screenings?

Response: Grit, grease, and screenings are not considered "wet sewage sludge," and need not meet the 50 percent solid criteria. In order to be disposed in a sanitary landfill, grit, grease and bar screenings must pass the paint filter test.

H. **Commentor:** 8

Comment: Water Engineering Research Laboratory released a report by Jos. Farrell, et al. dated August 20, 1987 entitled "The Effects of Municipal Wastewater Sludge on Leachates and Gas Production from Sludge -- Refuse Landfills" which finds "generally advantageous effect of including sewage sludge in the landfill" and "it is a popular misconception that introducing sludge into landfills degrades leachate quality." An abstract is submitted.

Response: This is an interesting study which appears to be based on enhancing anaerobic decomposition through the introduction of biological solids.

ENVIRONMENTAL PROTECTION COMMISSION [567]
Adopted Rule

Pursuant to the authority of Iowa Code section 455B.304, the Environmental Protection Commission adopts amendments to 567--Chapter 109, "Permits," Iowa Administrative Code.

Notice of Intended Action was published in the Iowa Administrative Bulletin on December 16, 1987 as ARC 8210.

staff to review it and have a decision at the following meeting whether or not they would qualify. Seconded by Clark Yeager.

Chairman Schlutz requested a roll call vote. "Aye" votes were cast by Commissioners Mohr, Priebe, Siebermann, Uhl, Yeager and Schlutz. "Nay" vote was cast by Commissioner Hammitt. Motion carried 6 to 1.

APPOINTMENT -- CINDY HILDEBRAND

Cindy Hildebrand, representing the Iowa Audubon Council, addressed the Commission presenting concerns and suggestions regarding possible changes in the way the Commission handles permitless or illegal channel changes.

Ms. Hildebrand presented the following statement:

"Members of the Environmental Protection Commission, my name is Cindy Hildebrand and I am here today on behalf of the Iowa Audubon Council. I'm here to present our concerns and suggestions regarding possible changes in the way your Commission handles permitless or illegal channel changes.

"As I understand it, your concern over this issue was heightened by the Greiner case, which involved a channel change which took place twenty years ago. It was argued that requiring engineering plans after he channel change had been in place for so long was unreasonable. The Commission decided to waive the requirement for engineering plans in that case, and in addition, you are now considering a possible rules change. My understanding of the rules change is that if there were an affidavit that a channel change had taken place a certain number of years ago, that time yet to be determined, the requirement for engineering plans would be waived.

"I understand that you have not yet decided whether this rules change will take place, and that you are considering it partly because of a bill in the Legislature which would involve a five-year statute of limitations concerning all floodplain projects. You have pointed out, and we completely agree with you, that the bill in question is a bad idea, and would hamper the authority of your Commission. However, we feel that the proposed rules change is also a bad idea, and that it would also hamper the authority of your Commission. We hope that after considering the issues at stake, you will decide to handle any future problems in this area differently, perhaps with language that I'll suggest.

"To review a little background--as you undoubtedly know, the DNR floodplain program suffers in effect from a triple whammy--it doesn't get any federal funds, it is underfunded and understaffed, and it is often misunderstood. The permit process is sometimes viewed, even in the press, as just troublesome bureaucratic red tape. But the purposes of the floodplain program are to protect lives and property from flood damage and to ensure the wise use, protection, and conservation of the water resources of the state. These purposes are legitimate and necessary, and are part of the Iowa Code.

"Section 455B.264 of the Code states in part regarding floodplain projects, 'In determining the effect of the proposal, the department shall consider fully its effect on flooding of or flood control for any proposed works and adjacent lands and property, on the wise use and protection of water

Chairman Schlutz stated that going back twenty years is ridiculous and he feels the limit should be ten years.

Charlotte Mohr stated that she is really hesitant to put a number of years in the rule, and she feels each case needs to come before the Commission and be evaluated individually.

Keith Uhl commented that the Commission should be given authority to decide whether or not each individual case would need, or not need, certified engineering plans.

Mr. Stokes stated that would put the burden on the department to make site inspections and determine whether or not certified engineering plans are needed. This could, in turn, bring more appeals before the Commission by parties who don't want to submit engineering plans.

The Commission instructed staff to rewrite the proposed rules and add a revision to the waiver section which would give them the authority to determine, on a case-by-case basis, whether or not to waive the requirement for certified engineering plans.

REFERRAL TO THE ATTORNEY GENERAL'S OFFICE

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

The Director requests the referral of the following to the Attorney General for appropriate legal action. Litigation reports have been provided to the Commissioners and are confidential pursuant to Iowa Code section 22.7(4).

Lakewood Sanitary District (tabled) - wastewater
Broadview Courts (Dubuque) - water supply
City of Long Grove - wastewater
City of Sidney - wastewater

Lakewood Sanitary District

Motion was made by Gary Priebe to remove Lakewood Sanitary District from the table. Seconded by Clark Yeager. Motion carried unanimously.

Diane Hansen briefed the Commission on the history of this case. She stated that it was brought before the Commission in October, 1987 and was tabled at that time to allow the department to resolve the matter with the district.

Ms. Hansen stated that the department would like Commission to authorize the Attorney General's Office to negotiate a consent decree to allow the district to provide a schedule for completing repair to the dikes, and to include a condition that the facility keep in operating condition.

Keith Uhl asked if the Legal Bureau's lawyers could work out the consent decree.

Keith Uhl stated that staff has attempted to negotiate with the other party, and negotiations have broken down because the other party did not agree to a fine.

Discussion followed regarding penalties and policy for same.

Motion was made by Keith Uhl for referral to the Attorney General's Office urging that the maximum fine be $1,000. Seconded by Mancylee Siebenmann.

Chairman Schlutz requested a roll call vote. "Aye" votes were cast by Commissioners Hammitt, Siebenmann, Uhl and Schlutz. "Nay" votes were cast by Commissioners Mohr, Priebe and Yeager. Motion failed 4 to 3 due to a lack of concurrence of a majority of the Commission.

Motion was made by Keith Uhl for referral to the Attorney General's Office urging that the maximum fine be $500. Seconded by Gary Priebe.

Chairman Schlutz requested a roll call vote. "Aye" votes were cast by Commissioners Hammitt, Priebe, Siebenmann, Uhl and Schlutz. "Nay" votes were cast by Commissioners Mohr and Yeager. Motion carried 5 to 2.

PUBLIC PARTICIPATION

Chairman Schlutz announced public participation at 10:30 a.m.; no one requested to speak.

DES MOINES METRO EAST LANDFILL STATUS (closed session)

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

Chairman Schlutz asked that the Commission go into closed session to discuss Item 19, Des Moines Metro East Landfill Status. Mike Murphy stated that a motion is needed to go into closed session pursuant to Iowa Code Section 21.5(1)c to discuss strategy with legal counsel in matters that are in actual or potential litigation.

Motion was made by Clark Yeager to go into closed session. Seconded by Donna Hammitt.

Chairman Schlutz requested a roll call vote. "Aye" votes were cast by Commissioners Hammitt, Mohr, Priebe, Siebenmann, Uhl, Yeager and Schlutz. Motion carried 7 to 0.

Motion was made by Clark Yeager to adjourn the closed session and return to open session. Seconded by Charlotte Mohr.

Chairman Schlutz requested a roll call vote. "Aye" votes were cast by Commissioners Hammitt, Mohr, Priebe, Siebenmann, Uhl, Yeager and Schlutz. Motion carried 7 to 0.

No action was taken in closed session.

promptly be made available to a party. However, such records may be protected from further disclosure by order of the presiding officer.

c. Prior statements or reports of witnesses. When a party relies on a witness who has made prior statements or reports with respect to the subject matter of the witness' testimony, it shall, upon request, make such statements or reports available to a party for use on cross-examination unless such statement is confidential under 561--Chapter 2. If the statement or report is confidential under 561--Chapter 2, it may be made available, but it may be made subject to a protective order.

d. Disclosure of evidence and witnesses. At a prehearing conference or within some reasonable time set by the presiding officer prior to the hearing, each party shall make available, upon request, to the other parties the names of expert and other witnesses the party expects to call, together with a brief narrative summary of their expected testimony and a list of all documents and exhibits which the party expects to introduce into evidence. Thereafter, witnesses, documents, or exhibits may be added and narrative summaries of expected testimony amended upon motion by a party. However, witnesses, documents or exhibits may be added following a prehearing conference held in accordance with subrule 7.10(4) only if the moving party can show that they were not readily identifiable with reasonable diligence prior to the prehearing conference and that the addition is necessary to prevent manifest injustice.

7.10(3) Subpoenas. Subpoenas shall be issued to a party on request after commencement. Requests shall be made to the presiding officer.

7.10(4) Prehearing conference.

a. Matters considered. After filing of the pleadings, the presiding officer may, and shall upon the request of one of the parties, direct the parties to appear at a specified time and place before the presiding officer for a prehearing conference to consider, so far as is applicable to the particular hearing:

(1) The possibility or desirability of waiving any provisions of this chapter or of Iowa Code chapter 17A by written stipulation representing an informed, mutual consent;

(2) The necessity or desirability of amending pleadings;

(3) Agreeing to the admission of facts, documents or records not controverted, to avoid unnecessary introduction of evidence;

(4) Limiting the number of witnesses;

(5) Settling on facts of which the presiding officer is to be asked to take official notice;

(6) Stating and simplifying the factual and legal issues to be decided in the contested case;

(7) The procedure at the hearing;

(8) Such other matters as may aid, expedite or simplify the disposition of the proceeding.

b. Stipulations. Since stipulations are encouraged, it is expected and anticipated that the parties proceeding to a hearing will stipulate to evidence to the fullest extent to which complete or qualified agreement can be reached, including all material facts that are not or should not fairly be in dispute.

c. Privilege. Facts disclosed in the course of the prehearing conference are privileged and, except by agreement, shall not be used for or against participating parties either before the hearing, during the hearing, or elsewhere unless fully substantiated by other evidence.

c. Objections. If a party objects to admission or rejection of any evidence or the limitation of the scope of any examination or cross-examination, the party shall state briefly the grounds for such objection. The objection, the ruling thereon, and the reasons for the ruling shall be noted in the record.

d. Offer of proof. Whenever evidence is deemed inadmissible, the party offering such evidence may make an offer of proof which shall be noted in the record. The offer of proof for excluded oral testimony shall consist of a brief statement describing the nature of the evidence excluded. If the evidence excluded consists of a document or exhibits, it shall be inserted in the record. In the event that the agency decides that the presiding officer's ruling in excluding the evidence was erroneous and prejudicial, the hearing may be reopened to permit the taking of such evidence or, where appropriate, the agency may evaluate the evidence and proceed to a final decision.

e. Verification. Subject to paragraphs "a" to "d", when a hearing will be expedited, and the interests of the parties will not be prejudiced substantially, any part of the evidence may be required to be submitted in verified form. With the approval of the presiding officer, a witness may insert into the record, as testimony, statements of fact or opinion prepared by the witness or written answers to interrogatories, or may submit as an exhibit the prepared statement of the witness provided that the statements or answers must not include legal arguments. Before any statement or answer is read or admitted into evidence, the witness shall deliver to the presiding officer and opposing party a copy of it. The admissibility of the evidence contained in the statement shall be subject to the same rules as if the testimony were produced in the usual manner and the witness shall be subject to oral cross-examination on the contents of the statements. Approval for this procedure may be denied when it appears to the presiding officer that the memory or demeanor of the witness is of importance.

f. Documentary evidence. Documentary evidence may be received in the form of copies or excerpts if the original is not readily available. Upon request, parties shall be given an opportunity to compare the copy with the original, if available.

g. Examination and cross-examination. Witnesses at the hearing shall be examined orally, under oath. Witnesses at the hearing, or persons whose testimony has been submitted in written form, shall be subject to cross-examination by any parties as necessary for a full and true disclosure of facts. The presiding officer may limit the examination or cross-examination or both when necessary for orderly presentation of evidence.

h. Official notice. Official notice may be taken of all facts of which judicial notice may be taken and of other facts within the specialized knowledge of the agency. Parties shall be notified at the earliest practicable time, either before or during the hearing, or by reference in preliminary reports, preliminary decisions or otherwise, of the facts proposed to be noticed, and their source, including any staff memoranda or data. The parties may contest such facts before decision is announced.

i. Evaluation of evidence. The agency's experience, technical competence, and specialized knowledge may be utilized in evaluating the evidence.

7.14(9) Conduct at hearings. All persons shall conduct themselves in a courteous and dignified manner. Attorney's conduct is subject to the requirements of Disciplinary Rule DR 7-106 and Ethical Considerations EC 7-19 to EC 7-39. Contemptuous conduct is grounds for removal from the hearing.

561--7.15(17A, 455A) Posthearing procedures and orders.

Mr. Combs distributed a copy of a progress report from Jean Lloyd-Jones of the Iowa Peace Institute. He stated that Johnson County is not participating in the mediation process; they are continuing negotiations outside of the process. He added that last week an Environmental Protection Division staff person attended one of the mediation meetings as a technical resource. Mr. Combs stated that the bottom line is whether or not there is enough time to complete the mediation, as the Commission requested.

Mr. Combs stated that when Diana Hansen spoke with the City Attorney of Iowa City he indicated that the City Council would be reluctant to enter into a consent decree containing penalties of any type, even if the other problems are resolved.

Keith Uhl asked if a letter could be sent to the City of Iowa City stating that it is becoming a policy of this Commission that there is not going to be consent decrees without penalties.

Mr. Combs informed the Commission that HF 2370 passed the House on March 15, 1988 and it deals with state agencies paying sewer rates to municipalities in which they reside. Basically, the state agency will pay the same sewer rates as other users in the community. If the community wants to increase those rates for sewer improvement projects, and those rate increases are more than five percent in a fiscal year, the city must notify the state agency and give them an opportunity to make other arrangements for sewer service. If the state agency agrees to pay the increased rates, they must stay on the city sewer system until such time that the bonds used to pay for that increase are retired.

REFERRALS TO ATTORNEY GENERAL'S OFFICE - (Continued)

Broadview Courts

Mr. Combs stated that this case has been settled; therefore, no action is required.

City of Sidney

Mr. Combs briefed the Commission on the history of this case.

Motion was made by Nancylee Eichenmann for referral to the Attorney General's Office. Seconded by Clark Yeager. Motion carried unanimously.

LEGISLATIVE STATUS REPORT

James Combs, Division Administrator, Coordination and Information Division, presented the following item.

Mr. Combs stated that there are a number of bills that have passed the Senate regarding clean-up corrections in relation to the groundwater act of last year. The House subcommittees are now looking at combining some of those and adding some language of their own.

Mr. Combs reported that the House version of the Senate Revolving Fund Bill is dead; the Senate version has the language, in essence, as we proposed it as a

ENVIRONMENTAL PROTECTION COMMISSION

Tuesday March 22, 1988

NAME	COMPANY OR AGENCY	CITY
(Please print)		
ROBERT M. HAMILTON	LONG GROVE, IA.	
Joel R. McCutcheon	Long Grove IA.	
DAN WEST	GRUMMARK, INC	BLOOMINGTON, IL.

BUDGET SUMMARY

Budget Categories	Grant	Contractor Match	Total Cost
a. Personnel			
P.I: Grant = 1 month grant, match = 5% academic year	3,644	1,640	5,284
Lab Tech. III 3/4 time	12,402	---	12,402
Total Personnel	16,046	1,640	17,686
b. Fringe			
21.7% of P.I. salary	791	356	1,147
25.6% of Lab Tech salary	3,175	---	3,175
Total Fringe	3,966	356	4,322
c. Travel	1,206	---	1,206
d. Equipment *			
Solid State Flowmeter	1,260	1,260	2,520
80286 Computer	1,638	1,638	3,276
Gas Chromatograph integrator	1,294	1,294	2,588
Thermocouple datalogger	1,090	1,090	2,180
Total Equipment	5,282	5,282	10,564
e. Supplies	6,500	---	6,500
f. Contractual	---	---	---
g. Other (indirect costs = 36% of direct costs except equipment)	---	10,697	10,697
h. Total Costs	$33,000	$17,975	$50,975

*See the procedures in section 15.0 of the General Conditions. These procedures must be carried out prior to any actual purchases of equipment begin made under this agreement.

ARTICLE V. SCOPE OF WORK

This program element will encompass an integration of field demonstrations, farmer participation, coordination of support groups such as soil and water conservation district commissioners and county extension council members, and media materials concerning groundwater protection, energy conservation, soil conservation, and farm profitability. Specifically the following activities will occur:

a. Replicated field demonstrations plots of 3 or more treatments will be established annually for nutrient management, pesticide management, and tillage systems. Also, plots to evaluate manure additions and recommended seeding, fertilization, and management of alfalfa in a crop rotation will be established. Plots will be established in the Big Spring Groundwater Basin and in adjacent areas in up to six counties in northeast Iowa. Plots will be located on farmers' fields. One treatment of each demontration plot will consist of the farmer's management practice that is used on larger field areas.

b. Farmers in the 1100-acre Bugenhagen subbasin, Clayton County, will be asked to cooperate in the subbasin demonstration project. These farmers will be provided soil testing, crop enterprise record, and crop scouting services as well as individual recommendations for agricultural management practices.

c. Monitoring and on-site documentation of conservation efforts, land treatment practices, land management changes and cropping patterns in the Big Spring Groundwater Basin.

d. Conduct annual surveys of fertilizer and chemical usage and compile an animal census in Clayton County and selected adjacent areas.

e. Assist with compilation of general farm enterprise assessment and farm energy analysis (from inventories, items c and d).

f. Promote energy conservation opportunities through newsletters, local media, and farm energy analysis services.

g. Identify possibilities to utilize crop residues/biomass for energy applications, consistent with other conservation goals; arrange consulting services for field demonstrations of conversion technologies (particularly in alternative management areas around sinkholes).

h. Provide information concerning agricultural best management practices and farm energy conservation to local media services.

i. Serve as liaison concerning groundwater protection for cooperative extension service to federal and state agencies and organizations in northeast Iowa.

Contract No. 87-6254-01

APPENDIX A

FY'88 BUDGET SUMMARY

Budget Categories	GRANT/CONTRACT	ISU	TOTAL
Personnel			
2 - Ext. Associates	$52,000		$52,000
Area Specialist		6,000	6,000
State Specialist		10,000	10,000
Clerical (hourly)			
Hourly	4,800		4,800
Salaried		1,200	1,200
Hourly Employees	15,000		15,000
Benefits	13,650	1,935	15,585
Travel			
25,000 mi. @ 0.21¢	5,250	1,000	6,250
Lodging/meals	3,000	500	3,500
Equipment*			
"Weigh Wagon" and other, for measuring crop harvest; PC for data handling.	13,800		13,800
Supplies	3,040		3,040
		620	620
Contractual	0		0
Other			
Seed, Fertilizer, landowner cooperation	6,400		6,400
Laboratory analysis	17,428	3,000	20,428
Total Indirect Costs @ 36.0% of total direct costs less equipment		52,136	52,136
TOTAL COSTS	$134,368	$76,391	$210,759

* See the procedures in Section 15.0 of the General Conditions regarding equipment. These procedures must be carried out prior to any actual purchases of equipment being made under this agreement.

APPENDIX A

BUDGET SUMMARY

Budget Categories	GRANT
a. Personnel Salary and Benefits	$18,000
b. Travel	4,000
c. Equipment	---
d. Supplies	8,000
e. Contractual	---
f. Other* printing, media materials	6,000
h. Total Costs	$36,000

administrative costs. In addition to the amount of this agreement, which the Department shall reimburse the contractor, the Department also is providing contributed services to complete these joint efforts. The Department certifies, as part of this agreement, that it is spending in excess of $63,000 on the Big Springs Basin Demonstration Project (cost center: 3254) exclusive of this agreement, during the term of this agreement. This agreement and the level of funding implied herein is exclusive of, and in addition to, any other agreements between the referenced parties.

ARTICLE V. SCOPE OF WORK

5.1 There are four primary work elements that will be carried out:

1a. Develop and maintain groundwater level recording stations for four sets of observation wells, and precipitation stations for two sites;

1b. Conduct surface water hydrologic investigations including at least one (but not limited to one) low-flow and seepage study and one dye-dilution study as flow and weather conditions permit;

1c. Install and maintain ~~4~~ 3 automated water-quality monitoring and suspended sediment sampling stations;

1d. Maintain discharge recording for three surface water discharge stations.

5.2 Methods for discharge and other recording stations will meet and be maintained to the standards of accuracy required by the Contractor.

5.3 The location of recording stations and timing of hydrologic investigations will be determined by mutual consent of the project officers.

ARTICLE VI. MILESTONES

Deadlines and timing of these investigations are subject to many variables; station development deadlines and reporting time frames will be developed by mutual agreement between the project officers.

ARTICLE VII. REPORTS

7.1 The contractor shall arrange with the Department Project Officer to submit quarterly progress reports due on the last day of October, January, April, and July of each year. Progress reports should cover what has been accomplished in Article 5, and should detail the progress and results of station installation and data collection.

7.2 The contractor shall submit three (3) copies of a final report describing all activities performed and the results obtained with supporting data. This report shall include information as described in

Contract No. 87-6257-01

APPENDIX A

BUDGET SUMMARY

Under this agreement the Department will reimburse the Contractor, at an hourly rate up to the maximum hours listed below for each work program/cost center:

Cost Center	Program	Amount
6257	General Groundwater Programs;	
	Professional staff; 4,550 hours @ $14.25/hr.	64,837.50
	Support staff; 1,640 hours @ $8.00/hr.	13,120.00
6254	Big Spring Basin Demonstration Project;	
	Professional staff; 1,820 hours @ $14.25 hr.	25,935.00
	Support staff; 1000 hours @ $8.00/hr.	8,000.00
6251	Integrated Farm Management Demonstration Project;	
	Professional staff; 910 hours @ $14.25 hr.	12,967.50
6257	PC/terminal lease	2,250.00
6254	PC/terminal lease	1,330.00
TOTAL		$128,440.00

NOTE: The University of Iowa indirect cost rate is 39% of total costs, or $50,480, and is contributed for the benefit of this program because the federal government has restricted the use of these funds for the payment of indirect costs.

Contract No. 87-6258-01

APPENDIX A

BUDGET SUMMARY

	Contract TOTAL AMOUNT
For Water Quality Analyses and Support Services outlined in Article V., Scope of Work. See billing schedule in Article 10.4.	$277,000

NOTE: The University of Iowa indirect cost rate is 39% of total costs, or $77,720 ~~$100,030~~, and is contributed for the benefit of this program because the federal government has restricted the use of these funds for the payment of indirect expenses.

Memo-Contract: 87-G260-01

MEMORANDUM OF UNDERSTANDING
BETWEEN
DEPARTMENT OF NATURAL RESOURCES
AND
DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

THIS MEMORANDUM, by and between the Iowa Department of Natural Resources (DNR) and the Iowa Department of Agriculture and Land Stewardship (IDALS) is made pursuant to the following authority: 1) Iowa Code Chapters 455E, and 93 (as amended in 1987 Iowa Acts, the Groundwater Protection Act, HF631) pertaining to the establishment and administration of a Targetted Education Program, and allocations to the Fund from the Oil-Overcharge Account of the Groundwater Protection Fund; and 2) 1986 Iowa Acts (Chapt. 1249) and 1987 Iowa Acts (i.e., SF 517) pertaining to appropriations from oil-overcharge funds. This memorandum shall be in full effect on and after the 1st day of July 1987.

The referenced Iowa Acts declare the intent to expend and disburse funds distributed to the state and the citizens of Iowa under the various oil-overcharge settlements (e.g., the United States v. Exxon Corporation) within the letter and spirit of the guidelines established in these settlements. This Memorandum describes the purpose and responsibilities of the DNR and the IDALS for carrying out the scope of work as described herein. Accordingly: the parties agree as follows:

1. DURATION OF AGREEMENT

   This Memorandum shall be in force and effect until June 30, 1999.

2. NATURE OF ORGANIZATION

   The DNR will administer the Energy Trust Fund and the Oil-Overcharge Account in accordance with the appropriate federal and state guidelines, Iowa Acts, and any instruction or decision made by the Governor's Energy Fund Disbursement Council. As funds are dis-

APPENDIX A: Energy Fund Disbursement Council Summary and Approved Budget.

DNR PROPOSAL ITEM 6.9.

Targetted Education Programs on Ag-Drainage Wells, Sinkhole Basins, and Abandoned Wells
AGRICULTURAL ENERGY MANAGEMENT PROGRAM
(See Oil-Overcharge, Groundwater Framework Document)

Narrative:

As directed in HF 631, the Department of Agriculture and Land Stewardship will develop a 'targetted education program' on best management practices and technologies that conserve overall energy consumption and mitigate groundwater contamination from agricultural-drainage wells, sinkholes basins, and abandoned wells. The primary concern with these features, relating to groundwater contamination, is that they provide ready avenues for agricultural chemicals to flow into groundwater. Hence, in concert with other oil-overcharge Agricultural-Energy Programs (and other programs as well) these efforts will also focus on providing educational materials and technical guidance on reducing chemical usage and/or making it more efficient; on alternative crops or alternative landuse; and other available technologies. This program will focus on the special problem areas in north-central and northeast Iowa. The educational programs will include the development of informational brochures and technical manuals, media materials, and public meetings.

During FY'88 the primary activities will be to develop some basic informational fact sheets, and to organize the distribution procedures and target areas. Some efforts will be coordinated with demonstration efforts funded from other sources.

FY'88 Funding:

$100,000 from Stripper Well account.

Administration:

The Department of Agriculture and Land Stewardship is to carry out this program; the DNR will issue an agreement with DALS, after EFDC approval. DALS will subcontract portions of this effort with Iowa State University, Cooperative Extension Service.

DOE clearance:

Approved in context of Stripper Well Plan, as part of the Agricultural Energy Management Program.

Further Action:

PROPOSAL GUIDELINES:

LEOPOLD CENTER OIL OVERCHARGE FUNDS

Proposals to the Leopold Center for oil overcharge funds shall be prepared as follows:

1. Abstract. (1 page, including title, investigators, institution, brief project description, and total funds requested.)
2. Description of project.
3. Rationale (need for project).
4. Objectives.
5. Strategies (procedures).
6. Services, technologies that are addressed.
7. Target audience.
8. Organization(s) providing service.
9. Technical support (other agencies or institutions involved).
10. Project evaluation/energy benefits (how will results be quantified or evaluated; what energy benefits will accrue).
11. Environmental impact.
12. Major activities and planned completion dates (milestones).
13. Budget. (Use the following format.)

Budget Categories	Year one	Year two
Personnel	$	$
Fringe benefits		
Travel		
Equipment*		
Supplies*		
Contractual*		
Construction*		
Other*		
Total direct charges		
Program Income		

*Explain or itemize significant entries. If any equipment purchases are included in the budget, complete the form on page 2.

REQUEST FOR PROPOSALS TO
THE LEOPOLD CENTER FOR SUSTAINABLE AGRICULTURE

The Iowa Legislature established the Leopold Center for Sustainable Agriculture in 1987 as part of the Groundwater Protection Act (HF 631). The enacting legislation defines sustainable agriculture as "...the appropriate use of crop and livestock systems and agricultural inputs supporting those activities which maintain economic and social viability while preserving the high productivity and quality of Iowa's land." The mission of the center reflects the "land ethic" philosophy of Aldo Leopold, conservationist, ecologist and educator.

The work of the Center shall focus on three major activities as set out in the statute:

a) conduct and sponsor research to identify and reduce negative environmental and socio-economic impacts of agricultural practices;

b) research and assist in developing emerging alternative practices that are consistent with a sustainable agriculture; and

c) develop, in association with the Iowa Cooperative Extension Service, an educational framework to inform the agricultural community and the general public of its findings.

The activities that the Center may address include:

1. Identifying concerns regarding the use of agricultural inputs and examining their impacts on the quality of Iowa's natural resources.

2. Developing and analyzing agricultural production practices that will maintain and enhance environmental quality.

3. Evaluating the on-farm, and the economic and social feasibility of implementing these alternative practices, or systems.

4. Integrating sustainable agricultural systems into larger management units such as watersheds, rural water districts, and wildlife corridors.

5. Developing educational programs to inform the agricultural community and general public of these practices and systems.

6. Assessing the impact of changing to a more sustainable agriculture on agriculture and the environment.

The Leopold Center will carry on a mission-oriented, interdisciplinary research and demonstration program, in part, through competitive grants. Competitive grants will be available to researchers at all Iowa colleges and universities, private nonprofit organizations and foundations.

APPENDIX A: Energy Fund Disbursement Council Summary and Approved Budget.

DNR PROPOSAL ITEM 6.7.

THE AGRICULTURAL ENERGY MANAGEMENT FUND'S
INTEGRATED FARM MANAGEMENT DEMONSTRATION PROJECT
(See Oil-Overcharge, Groundwater Programs Framework Document)

Narrative:

In FY'87 the legislature, the EFDC, and DOE approved a $1,000,000 program developed through the Agricultural Energy Management Fund's Advisory Council—the Integrated Farm Management Demonstration Project. The original proposal made clear that this was the initiation of a multi-year project, and that FY-87 funding would end in the middle of the 1987 crop year. At that time funding decisions were limited to FY'87. This year the legislative intent was made clear, as set forth in HF 631, to continue this effort over a 5-year period. HF 631 allocates $7,500,000 to this program over the next 5-years.

The original proposal, which was approved in concept and allocated the $1,000,000 for FY'87, also spelled out that the full 12-month budget for the program put in place, was approximately $1,483,000. Because of the late start of the project, related to planning efforts, it was also discussed with the EFDC that the full $1,000,000 would not be spent in FY'87. The program continues with the 'no-cost' time extension provided with EFDC approval, pending approval of new funds. The estimated expenditures for FY'87 are approximately $568,800 leaving a balance of $431,200. (The complete accounting will not be available until toward the end of August.)

Because we are in the middle of the crop-year/demonstration year the current plan has not changed from the proposal earlier approved by the EFDC. Even given the late start some remarkable progress was made this year: 315 demonstrations have been developed, some in every county of the state. The various demonstration locations comprise over 3,700 individual plots. Over 80 different public presentations and field days have already been held, reaching many hundreds of Iowa farmers and citizens. Educational curricula material are well under development. The program, while it certainly has some growing pains to be worked out, shows signs of great success. Farmer/public interest is quite enthusiastic.

The AEMF Advisory Council and their legislative advisors did approve some minor changes to the project; some minor budget adjustments were made (downward) and a Demonstration Coordinator position for the Department of Agriculture and Land Stewardship was approved. These adjustments bring the total for FY'88 to the $1,530,000 request. This is to finish out the crop year and all current work elements in the ongoing, approved project. The AEMF Advisory Countil will meet in September and December to consider additions, deletions, and adjustments to the current program for crop-year '88.

With the $431,200 projected balance in the FY'87 appropriation, the AEMF Advisory Council is asking approval for $1,098,800 in new funds for the current FY'88 effort.

(This would leave an approximate balance in the allocations from HF 631 of $6,401,200 through FY'92.)

Reporting Requirements

Quarterly progress reports and a project completion report must be submitted in a timely fashion to the ISWRRI Director. ISWRRI will also receive copies of manuscripts for review prior to submittal to a journal. All publications will acknowledge the support of ISWRRI with funds from the Iowa Groundwater Protection Fund.

Deadlines

Multiple year (up to 3 year) projects will be considered, however, funding of the subsequent years will be subject to continued appropriations from the Iowa Legislature and satisfactory progress. Project proposals must be submitted to ISWRRI before 5:00 P.M. November 15. Proposers will be notified by January 1, 1988 of the results of the reviews. Projects will begin as soon after January 1, 1988 as possible. Proposers are encouraged to contact the ISWRRI Director to discuss their proposal before submittal.

Submit 20 copies of the proposal to:

T. A. Austin, Director
Iowa State Water Resources Research Institute
355 Town Engineering Building
Iowa State University
Ames, IA 50011
(515) 294-8921

ENVIRONMENTAL PROTECTION COMMISSION

Item 6 Decision

Approval of Office Lease, Washington, Iowa

The EPC is requested to approve a new office lease for Regional Office #6 at Washington, Iowa.

The current lease expired, and has been continued on a month-to-month basis. Current rent is $4.84 per sq. ft. The current landlord has proposed to expand by adding 500 sq. ft., and remodeling. This would increase the cost to $5.05.

We attempted to secure a reasonable proposal from the Liquor Department relative to the vacant store building in Washington. However, the DNR was not successful in entering into construction negotiations with Liquor on this issue.

The DNR considered and inspected seven other buildings. The office that appears the best contains 3,128 sq. ft. and also has an attached garage that would hold four vehicles. The cost would be $5.00 per sq. ft., no charge for the garage, and include heating, A/C, water, lights, garbage pick-up and yard maintenance.

Assuming that no further developments occur regarding the Liquor building or other possibilities, the staff recommends the proposal in the preceding paragraph.

Stan Kuhn

MONTHLY VARIANCE REPORT

No.	Facility	Program	Engineer	Subject	Decision	Date
1	Farley, City of	Wastewater Const.	Crawford Engr.	Number of Aerated Cells	approved	08.13.88
2	DNR-Union Grove St.Prk.	Flood Plain	Butts Engineering	Storm Storage Capacity	approved	06.11.88
3	Grain Processing Co.	Wastewater Oper.	E.M.Bartlett(IPC)	Monitoring Frequency	approved	02/03.88
4	Altoona, City of	Wastewater Oper.		Monitoring Frequency	denied	02/12.88
5	Davenport Truck Plaza	Watersupply Const.	Shive-Hattery	Construction Materials	approved	03 07 88
6	Davenport Truck Plaza	Watersupply Const.	Shive-Hattery	Installation Procedures	approved	09 20 88

DATE: March 2, 1988

TO: EPC

FROM: Mike Murphy

SUBJECT: Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
The Meadows, Inc. Moville (3)	Drinking Water	Monitoring/reporting - nitrate	Order/Penalty	2/17/88
4 Sons Handy Shop Neola (4)	Drinking water	Monitoring/reporting - bacteria	Order/Penalty	2/17/88
Knollridge Garden Apts. Coralville (6)	Drinking Water	Monitoring/reporting - other inorganics	Order/Penalty	2/17/88
City of McGregor (1)	Waste Water	Municipal Improvement Program	Order	2/23/88
David Francy, New London (6)	Waste Water	Prohibited discharge	Order/Penalty	2/24/88
City of Fairfield (6)	Waste Water	Monitoring/reporting - discharge limits, operational violations	Order/Penalty	2/26/88
Motel Grinnell, Inc. Grinnell (5)	Waste Water	Monitoring/reporting - discharge limits, operational violations	Order/Penalty	2/26/88
Valley Oaks Country Club, Clinton (6)	Drinking Water	Monitoring/reporting - nitrate	Order/Penalty	2/26/88
City of Stacyville (2)	Waste Water	MIP	Amended Order	2/29/88

MG:bsg/M062L03.03

Contract No. 87-6254-02

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between Iowa State University, Agricultural Experiment Station (herein referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Big Spring Demonstration Project (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Contractor Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the title page of this Contract.

2.3 Key Personnel for Contractor.

Dr. A.M. Blackmer, Dr. James L. Baker

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a five year project, and that pending successful completion, and upon mutual consent this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. STATEMENT OF PURPOSE

This contract is entered into to demonstrate improved nutrient management practices to a broad cross section of Big Spring Basin farmers that conserve energy, reduce environmental hazards, and enhance farm efficiency and profitability.

Contract No. 87-6254-04

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between University of Iowa (herein referred to as the Contractor), for the services of its University Hygienic Laboratory and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Laboratory Services and Field Surveys in support of the Big Spring Basin Demonstration Project (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the signature page of this Contract.

2.3 Key Personnel for Contractor.

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a five year project, and that pending successful completion, and upon mutual consent this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. STATEMENT OF PURPOSE

The University Hygienic Laboratory (UHL) will provide laboratory analytical services and cooperative field investigations with the DNR-Geological Survey Bureau.

Contract No. 87-6254-05

APPENDIX A

FY'88 BUDGET SUMMARY

The work elements particular to this agreement are identified below, and the level of effort is also identified. (Other contributions by the Department are referenced in Scope of Work.).

Work Element From Scope of Work	Reimbursement Amount; DNR to USGS (Repay)	USGS Contributed Services (Match)
Cost Center: 6254		
5.1a. Groundwater level recording for four sets of observation wells, and precipitation stations for two sites	17,950	$49,450
5.1b. Surface water hydrology study including low-flow, dye-dilution, and seepage studies	13,550	20,800
5.1c. Automated water-quality monitoring and suspended sediment sampling, including 4 instrumented sites	29,300	68,250
Cost Center: 6251		
5.1d. Provide continuous discharge recording and maintenance for three surface water discharge stations in the basin	16,200	1,500
TOTAL ----------	$77,000	$140,000

Pricing Structure For Contract

The hourly rates we utilize in the contract were derived as follows:

We prorated the RAs salary across the differences in time during the different semesters and summer session catalog. The salary figure includes salary and benefits AND is prorated to include paid holidays, so that the hours billed for are only the actual hours worked. Then we prorated the other support expenses across the annual hourly total. The hourly rate for the RAs is comprised as follows:

Salary and benes/prorated:	$13.15
Travel (mileage/food/lodging)	0.75
Duplicating, drafting, data processing charges, photographic.	0.24
Supplies	0.11
Total	$14.25/hour

The other support staff figure was developed as an average rate for the other support help we anticipate. The type of help, and their typical hourly wage is shown below:

Data entry; $6.25 - 7.80/hr
Data processing; $7.50 - 9.25/hr.
Art/illustrating; $7.50 - 9.40/hr (the last one cost $8.55/hr, plus materials.)

We settled on an average of $8.00/hr.

The $8.00/hr figure is a compromise among the various needs and types of positions; the University seems willing to try this this year and see how things average out.

The computer equipment was prorated across the two cost centers These are the areas that the equipment will get the most use; 6257 has more data entry and handling work than 6254, so the greater portion of the charges were placed here. We estimated what was a reasonable proportion of the work effort to each CC
The price was based on the Univ state contract prices.

Contract No. 87-6258-02

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between the University of Iowa (herein referred to as the Contractor), for the services of its Institute of Agricultural Medicine, Pesticide Hazard Assessment Lab and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, as shown in the contract title (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the signature page of this Contract.

2.3 Key Personnel for Contractor.

Burton Kross

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement.

ARTICLE IV. STATEMENT OF PURPOSE

The Contractor will provide services to the DNR-Geological Survey Bureau to assist in conducting a statistical assessment of rural private water supply quality. The results of this survey will be used interactively with statewide education and demonstration programs, such as the Integrated Farm Management Demonstration Project. The issue of private water quality is a key element to persuading the rural, farm community to change to farm management practices that will conserve energy and reduce environmental impacts.

bursed from the Oil-Overcharge Account IDALS will also administer these funds in accordance with these guidelines.

3. PURPOSE

The purpose of this Memorandum is to set forth the points of understanding, between the parties hereto, covering the expenditure of Stripper Well overcharge funds for the Targetted Education Programs (Appendix A).

4. FINANCING

The 1987 Iowa Acts provide for One Hundred Thousand Dollars ($100,000), to be appropriated from the Oil-Overcharge Account and to be deposited in an appropriate account for the use of IDALS for approved projects (Appendix A).

A. By the action of the Energy Fund Disbursement Council up to $100,000 of Stripper Well Funds may be transferred to IDALS.

B. Payments to approved sub-Contractor(s) shall be made by the IDALS in accordance with Paragraph C below. The IDALS shall employ all applicable state and federal regulations in the administration of these funds. These funds may not be used for indirect administrative expenses.

C. Upon execution of this Memorandum, the DNR shall authorize the transfer of funds to IDALS, and the IDALS shall make payments to Contractors based upon actual expenses of program operation. Except, a one-time advance to the Contractors, not to exceed 10 percent of the contract, will be allowed. Invoices will be itemized and due on or about the first work day of each month. Upon receipt of the monthly financial report, the DNR will make

TARGETED EDUCATION

FY-88 BUDGET

Personnel	$ 36,025.00
Fringe Benefits	7,200.00
Travel	3,000.00
Supplies	3,000.00
Contractual	30,775.00
Other	20,000.00
Total Direct Charges	100,000.00
TOTALS	$100,000.00

EQUIPMENT PURCHASE JUSTIFICATION/APPROVAL
(Required for All Contracts and Subcontracts)

Project#/Title: _____

Source of funding and cost center: _____ Contract# _____

List equipment to be purchased: _____

_____

_____

_____

_____

_____

_____

1. Explain equipment uses and reasons for purchase(s):

2. Discuss reason for not leasing or renting:

3. What procedures will be taken in procuring this equipment:

4. Describe energy conservation benefits of equipment after the grant expires:

draft-8/27/87

State funding for the initial programs of the Center, covered by this Request for Proposals (RFP) will come from the Oil Overcharge Account of the Groundwater Protection Fund. After this first year, funding for the Center's programs will come from the Agricultural Management Account of the Groundwater Protection Fund as specified in the enacting legislation. The specific procedures and guidelines of this RFP apply only to these special funds and not to the longer term programs of the Center. For this RFP, development and demonstration of the production, or utilization of energy renewable resources, such as biomass energy generation from herbaceous or woody alternative crops, will receive a high priority.

Research and Demonstration Areas

In this first year, the Iowa Legislature has appropriated $800,000 of oil overcharge funds to begin the Leopold Center activities. However, this source of funds results in some special restrictions on how funds can be spent. Because of these restrictions, only demonstration and applied research can be funded. In addition, any projects funded must include components that result in energy conservation and/or energy production from alternative sources. Therefore this program shall emphasize the implementation of integrated farm management practices that conserve energy and enhance the overall efficiency and profitability of agricultural production. The development or demonstration of agricultural and wood resources for biomass energy generation will also be emphasized.

While tillage, harvest, and grain drying constitute the major direct uses of energy in row-crop production in Iowa, the greatest consumption of energy is related to the use of fertilizers, particularly nitrogen, which is synthesized from natural gas. Also, most pesticides are derived from petroleum fuels. Hence, reductions or improvements in the efficient use of agricultural chemicals, which will reduce energy consumption as well as provide environmental protection, is appropriate.

Proposals are sought in one or more of the following four general program areas:

Area 1. Demonstration of biomass production and utilization practices, or other innovative energy production or conservation measures, relating to the agricultural sector. Projects should focus on the development of alternative herbaceous and woody crops for energy-resource production. Harvesting, storage and utilization of these products should be examined. Examples might include:

*Demonstration of producing herbascious and woody crops for future energy conversion;

*Demonstration of unique energy-conversion technologies including gasification, anaerobic digestion of biomass crops, and co-combustion of biomass with fossil fuels;

*Demonstration of the technical and economic aspects of harvesting, transporting, and storing biomass crops;

*Demonstration, or economic assessment of crop-derived products to replace petroleum-derived products.

FY'88 Funding:

$1,530,000 (see attached budgets); $1,500,000 from EXXON ($431,200 in balance from FY'87 extension; approximately $1,068,800 in new FY'88 funds); $30,000 from Stripper (new FY'88).

Administration:

DNR will issue a new agreement to Department of Agriculture and Land Stewardship who administer this program; we ask for approval for the project including the subcontracts as identified on the budget. The subcontractors, and their budgets are essentially the same as the prior approved plan, with the noted addition of the DALS Demonstration Coordinator.

DOE clearance:

The new FY'88 EXXON expenditures will be included in amendments of the State SECP plan to DOE Kansas City.

Further Action:

Proposal Evaluation

Proposals will be evaluated on technical merit with a peer review. This technical review will evaluate each proposal as to its (1) need and relevancy to the stated program objectives; (2) importance of the expected results; (3) originality of the proposed research /demonstration; (4) adequacy of budget; and (5) completeness and clarity of the proposal.

In addition, each proposal will be evaluated by the ISWRRI Director, the Energy and Geological Resources of Division of the Iowa Department of Natural Resources and the Energy Fund Disbursement Council of the State of Iowa to determine if the requirements of the oil-overcharge funds are met. The Energy Fund Disbursement Council has the final authority for approving these programs.

Proposal Format

Proposals should be clear and concise. The following should be included:

1. Project title - not to exceed 100 characters.

2. Principal Investigator(s) with addresses and phone numbers.

3. Statement of the problem to be addressed.

4. Project objectives.

5. Research plan.

6. Literature review.

7. Expected project products and timetable showing milestones.

8. Budget including:

   - salaries
   - fringe benefits
   - supplies
   - equipment
   - travel
   - contractual
   - construction
   - publication costs
   - computer costs
   - other

9. Short (no more than 3 pages) resumes of research personnel.

Please note there is no indirect cost chargeable to these projects.

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 7

INFORMATIONAL

REPORT ON FEASIBILITY OF LIMITING THE TYPES OF WASTE ACCEPTED AT A HAZARDOUS WASTE FACILITY

Senate File 396, 1987 Iowa Acts, requires the Waste Management Authority Division to prepare a feasibility report on limiting the types of waste accepted at a hazardous waste facility. The report was to be submitted to the General Assembly by January 1, 1988. Due to the scope of the report and the recent staffing of the Waste Management Authority Division, a preliminary report was submitted on January 1 and a final report is being prepared for submittal on April 1, 1988. The Commission received copies of the preliminary report in January.

A summary of the final report will be provided.

Ruth Bender
3/7/88

(I10.MIN/sc)

REPORTS OF HAZARDOUS CONDITIONS

During the period of February 1, 1988 through February 29, 1988, reports of 51 hazardous conditions were forwarded to the Central Office. Two incidents are highlighted, followed by a general summary and the number per field office.

Date Reported and County	Description: Material, Amount, Date of Incident, Cause, Location, Impact	Responsible Party	Response and Corrective Actions
2/12/88 **CLINTON**	On February 12, 1988, a hole in the bottom of an above-ground storage tank at 625 6th St. in DeWitt, Iowa, allowed about 4,100 gallons of gasoline to be released into the city's sewage system. As a result, approximately 1,000 people were evacuated from a 38 square block area for about four to five hours. In addition, some bacterial growth was lost from the city's wastewater treatment plant, and product reached Silver Creek.	Eldridge Coop 625 6th Street DeWitt, Iowa 52742	The sewer system was flushed to eliminate explosive vapors. A trench was dug by the tank to recover product. Product was pumped out of the tank and contaminated soil was excavated. A contractor has been retained by the responsible party to assess possible contamination of groundwater.
2/13/88 **BUCHANAN**	On February 13, 1988, a tanker carrying 8,000 gallons of gasoline overturned three miles east of Independence, Iowa near a bridge on HWY 20. Numerous holes and gashes in the tanker caused the loss of about 7,000 gallons of product into the Wapsipinicon River.	Randolph's, Inc. 606 3rd Street Traer, Iowa 50675	Sand was placed by a culvert in an attempt to contain the product. Another tanker truck pumped about 150 gallons out of the damaged vehicle. Investigation discovered product in a lowland flood plain area and a sump was dug to recover product. Also, contaminated soil was excavated and spread over land to allow for aeration.

IOWA DEPARTMENT OF NATURAL RESOURCES
Government Liaison Bureau

DATE: March 1, 1988

TO: Environmental Protection Commission

FROM: Michael P. Murphy

SUBJECT: Summary of Administrative Penalties

The following administrative penalties are due:

NAME/LOCATION	AMOUNT	DUE DATE
*Shelter Shield (Buffalo Center)	$1,000	12-03-86
*Cedar Hills Apartments (Dubuque)	1,000	12-29-86
*City of Dysart	400	3-13-87
*Country Corner Cafe (Pacific Junction)	451	8-05-87
*JTM Indust./MacDade/Leamer (Pleasant Valley)	1,000	8-12-87
*Big Rock Tap	660	9-21-87
*Twelve Mile House (Bernard)	339	10-29-87
*OK Lounge (Marion)	448	11-01-87
*Timberline Assoc. Ltd. (W. Burlington)	1,000	11-02-87
*Pleasant Creek Estates (Shellsburg)	200	11-30-87
City of Brighton	700	12-04-87
City of Sheldon	900	1-02-88
Petroleum Marketing Co. (Malcolm)	900	1-12-88
H.P. Jensen Subdivision (Ames)	100	2-25-88
City of Braddyville	600	3-04-88
**Elings/Catron/Frey (Des Moines)	600	3-15-88
Ellie's Bar and Grill (Grand River)	515	3-05-88
Donald Caraway (Linn County)	500	3-06-88
City of Newell	100	3-07-88
White Consolidated Industries (Webster City)	500	3-10-88
Wagner's Printer's, Inc. (Davenport	800	3-11-88
City of Lynnville	225	3-13-88
**Lawrence Payne (Ottumwa)	630	3-15-88
Kossuth County SLF	700	3-15-88
Highway #3 Mobile Home Park (Cedar Falls)	400	3-15-88
City of Cushing	700	3-19-88
City of Carson	600	3-26-88
Don Scribner (Nashua)	1,000	3-28-88

* Referred to the Attorney General
** On Payment Schedule

ARTICLE V. SCOPE OF WORK

5.1 Documentation trials. Program personnel will apply several N treatments to replicated plots within documentation trials and collect information describing the response of the soil and crop to this nitrogen. An average of 10 local documentation trials per year is planned to provide convincing calibration of all tests used to assess nitrogen sufficiency.

5.2 Tests sites. Program personnel will select many test sites consisting of three plots (each 6 rows wide and 50 feet long) that are located on areas of seemingly uniform soil types within corn fields. Detailed information describing the site will be gathered and the nitrogen status of the site will be assessed by soil and tissues analyses calibrated in the documentation trials. Although less sites may be attained during the first or second year of the project, about 100 test sites per year are planned.

5.3 Ridge Tillage. A demonstration of nitrogen management with ridge tillage using the point-injector fertilizer applicator will be performed on two cooperator sites. (The point-injector fertilizer applicator has the unique advantage of being able to incorporate fertilizer in ridges without destroyingy them; and the ridge configuration, by affecting the micro-hydrology of the soil surface offers potential advantages of increased efficiency of nitrogen use and reduced nitrate-nitrogen leaching losses. Ridge-tillage is generally one of the more energy efficient tillage systems.

5.4 Nitrogen. Determination of actual nitrate-nitrogen leaching, as affected by tillage and nitrogen placement will be made using a small rainfall simulator for ridge and flat tillage systems. Demonstrations will be developed to illustrate the correct timing-nitrogen rate combination for optimum or near-optimum yields for improving the efficiency of nitrogen. Single and split applications timed from early spring to late June at rates from 0 to 200 kg N/ha will be tested relative to resulting corn yields.

5.5 Instrumented field equipment will be use to measure and document energy use and improvements of different tillage and machinery applications demonstrations.

5.6 Feedback to farmers. Cooperating farmers will receive individual reports of assessments made on their farms. All information gathered will be analyzed thoroughly to identify ways of improving general recommendations concerning nitrogen management in the area (e.g., proper adjustments of N fertilization practices for application of animal manures, rotations, or different soil types). The information gathered will be made available in a timely manner to the general public through normal channels (publication in scientific and popular journals, the news media, extension activities, classroom, farmer meetings, etc.). Special efforts will be made to make this information available to consultants, soil testing laboratories and other groups making fertilizer recommendations for farmers.

5.7 Assist in maintenance of gaging and monitoring installations.

ARTICLE V. SCOPE OF WORK

V.1. The UHL will provide nitrate and bacteria analyses (1,200 estimated), nitrogen-series analyses (570 estimated), and pesticide analyses (730 estimated, some common herbicides, some with insecticides), on select water samples as specified by field staff. The exact number of samples and analyses will be coordinated between UHL and DNR-GSB program managers.

V.2. The UHL will provide analyses for SOC/VOCs on other select water samples; the number of samples and analytes will be arranged between UHL and DNR-GSB program managers.

V.3. The UHL will conduct baseline surveys of the aquatic benthics, vertebrates, and invertebrates in the surface waters of the Big Spring Basin: sampling will include Robert's Creek, Silver Creek, and Big Spring. Specific sites will be arranged between UHL and DNR-GSB program managers.

V.4. The approximate sampling schedule and submittal procedures, and any other analyses will be arranged between UHL and DNR-GSB program managers.

V.5. All analytical work at the UHL conforms to state-of-the-art quality assurance/quality control (QA/QC) procedures; UHL has an U.S. Environmental Protection Agency approved QA/QC program.

ARTICLE VII. REPORTS

7.1 The UHL shall submit to the Department-GSB reports of laboratory analyses in a timely manner.

7.2 The UHL shall review, quarterly, with DNR-GSB, the progress on Article V.3, Scope of Work.

7.3 The UHL shall submit three (3) copies of a final report describing all activities performed and the results obtained with supporting data. This report shall include information as described in Article V.3, Scope of Work, and meet all Contractor requirements. Specific content and format should be discussed in advance with the Department. The final report shall be submitted no later than ninety (90) days following the expiration of this contract.

7.4 The Department shall, review and comment on all reports submitted by the Contractor within twenty (20) working days after the Department's receipt of the reports. Failure to reply within the allotted time constitutes approval by the Department.

Contract No. 87-6237-01

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between University of Iowa (herein referred to as the Contractor), for services from its Department of Geology and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Professional Assistance to DNR-GSB for the Completion of Work Related to the Iowa Groundwater Protection Act of 1987 (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the signature page of this Contract.

2.3 Key Personnel for Contractor.

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance." It is understood that this agreement is for the first year of a multi-year project, and that pending successful completion, and upon mutual consent this contract can be amended and extended, subject to continued financing.

ARTICLE IV. STATEMENT OF PURPOSE

This contract is entered into for the purpose of providing the Department's Geological Survey Bureau (GSB) with temporary, qualified technical and professional support staff, equivalent to 7,280 professional staff hours and 2,640 support staff hours for other supplemental services, to assist the Department to complete various work required by the Iowa Groundwater Protection Act of 1987.

Contract No. 87-6253-01

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between the University of Iowa (herein referred to as the Contractor), for the services of its University Hygienic Laboratory and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, as shown in the contract title (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the signature page of this Contract.

2.3 Key Personnel for Contractor.

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement.

ARTICLE IV. STATEMENT OF PURPOSE

The UHL will provide services to the DNR-Geological Survey Bureau to assist in conducting a statistical assessment of rural private water supply quality. The results of this survey will be used interactively with statewide education and demonstration programs, such as the Integrated Farm Management Demonstration Project. The issue of private water quality is a key element to persuading the rural, farm community to change to farm management practices that will conserve energy and reduce environmental impacts.

ARTICLE V. SCOPE OF WORK

V.1. The Contractor will assist DNR-GSB: in the statistical design of the project; in the development of a quality assurance, quality control and evaluation plan; in the site inventory instrument; in the data handling and management procedures; by providing support for the actual conduct of the survey; and in report preparation and presentations.

V.2. The Contractor will assist DNR-GSB with the development of appropriate educational materials and presentations.

V.3. The Contractor will provide for pesticide analyses (common herbicides and and specified metabolites), Microtox analyses and organic screening, and for analyses of specified ions on an estimated 1,150 water samples (including attendant quality control samples), as delivered by field staff from this project The exact number of samples and analyses will be coordinated between the Institute and DNR-GSB program managers.

V.4. The Contractor will provide for similar pesticide and metabolite analyses, and organic screening and Microtox analyses for an estimated 180 samples from the Big Spring Basin demonstration project.

V.5. The approximate sampling schedule and submittal procedures, and any other analyses will be arranged between the Contractor and DNR-GSB program managers.

V.6. All analytical work of the Contractor conforms to state-of-the-art quality assurance/quality control (QA/QC) procedures; the institute has an U.S. Environmental Protection Agency approved QA/QC program.

ARTICLE VII. REPORTS

7.1 The Contractor shall submit to the Department-GSB reports of laboratory analyses in a timely manner.

7.2 The Contractor shall review, quarterly, with DNR-GSB, the progress on Article V, Scope of Work.

7.3 The Contractor shall submit three (3) copies of a final report describing all activities performed and the results obtained with supporting data. This report shall include information as described in Article V, Scope of Work, and meet all Contractor requirements. Specific content and format should be discussed in advance with the Department. The final report shall be submitted no later than ninety (90) days following the expiration of this contract.

7.4 The Department shall, review and comment on all reports submitted by the Contractor within twenty (20) working days after the Department's receipt of the reports. Failure to reply within the allotted time constitutes approval by the Department.

ARTICLE VIII. REVIEW OF WORK

The Department or its advisers shall have the right to review and observe at any time, completed work or work in progress on the Project.

available additional funds as requested for projected expenses for subsequent thirty-day periods. The Administrator of the DNR shall notify the Treasurer to authorize a maximum drawdown through the appropriate IDALS account, for the next 30 days. Total combined payments to IDALS shall not exceed $100,000.

D. For every state fiscal year this agreement is in effect, a final invoice to close out the fiscal year will be submitted by August 15. A financial report, showing the total expenditure of funds for the state fiscal year, should accompany this invoice.

5. REPORTING

The IDALS shall develop and submit four copies of quarterly and annual fiscal and technical reports to the DNR, Energy and Geological Resources Division, on the following dates: January 15, April 15, July 15, and October 15, for the years this Memorandum is in effect. The fiscal reports shall show the Oil-Overcharge funds and every other source of funding spent on this project separately, and should indicate funds actually spent, not simply those billed to the Oil-Overcharge Account.

6. TERMINATION

All funds under this Memorandum must be directly spent for the Targetted Education Program, as approved by the DOE and the Energy Fund Disbursement Council (Appendix A). No expense can be incurred under this project after June 30, 1989, unless funds are reappropriated by the Legislature. All outstanding expenses must be paid before August 15, 1989. Any balance of unspent funds after the Memorandum completion date of June 30, 1989, shall, upon payment of outstanding expenses, revert to the Treasury, Oil-Overcharge Account, pursuant to the Iowa Code.

MEMORANDUM OF UNDERSTANDING
BETWEEN
DEPARTMENT OF NATURAL RESOURCES
AND
DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

THIS MEMORANDUM, by and between the Iowa Department of Natural Resources (DNR) and the Iowa Department of Agriculture and Land Stewardship (IDALS) is made pursuant to the following authority: 1) Iowa Code Chapters 455E and 467E (as amended in 1987 Iowa Acts, the Groundwater Protection Act, HF631) pertaining to the establishment and administration of the Agricultural Energy Management Fund, and allocations to the Fund from the Oil-Overcharge Account of the Groundwater Protection Fund; and 2) 1986 Iowa Acts (Chapt. 1249) and 1987 Iowa Acts (i.e., SF 517) pertaining to appropriations from oil-overcharge funds. This memorandum shall be in full effect on and after the 1st day of July 1987.

The referenced Iowa Acts declare the intent to expend and disburse funds distributed to the state and the citizens of Iowa under the various oil-overcharge settlements (e.g., the United States v. Exxon Corporation) within the letter and spirit of the guidelines established in these settlements. This Memorandum describes the purpose and responsibilities of the DNR and the IDALS for carrying out the scope of work as described herein. Accordingly: the parties agree as follows:

1. DURATION OF AGREEMENT

   This Memorandum shall be in force and effect until June 30, 1989.

2. NATURE OF ORGANIZATION

   The DNR will administer the Energy Trust Fund and the Oil-Overcharge Account in accordance with the appropriate federal and state guidelines, Exxon guidelines, Iowa Acts, and any instruction or decision made by the Governor's Energy Fund Disbursement Council. As funds

Area II Identification and reduction of negative environmental and socio-economic impacts of current agricultural practices. This area will emphasize the development of conservative and efficient applications of existing technologies; for example reduced nitrogen rates or fewer pesticide applications. Possible research or demonstration topics might include:

*Evaluation of the use of nitrogen-fixing plants on corn production efficiency, energy consumption, and the environment.

*Demonstration of practices that reduce pesticide use and/or losses, such as biologic controls, or banding.

*Determination of the socio-economic and energy impacts of various public policies regulating fertilizers and pesticides.

Area III. Development and testing of emerging alternative practices and systems that are consistent with a sustainable agriculture. This area will emphasize fundamental redesign of cropping and livestock systems to achieve reduced reliance on outside inputs and improve profitability or competitiveness. Some example research or demonstration topics include:

*Evaluation of integration of livestock activities into crop production with improved management of manure as a resource.

*Comparison of crop management systems, including conservation tillage, on the efficient use of energy, land, and water resources.

*Utilization of agricultural residues and woody biomass for energy generation.

*Demonstration or evaluation of integrated farm management practices that reduce tillage and reduce or improve the efficiency of chemical inputs.

Area IV. Improvement in the educational framework to inform the agricultural community and the general public to implement these findings Projects in this area would be conducted in association with the Iowa Cooperative Extension Service. Some example research or demonstration topics include:

*Determination of optimal strategies for new technologies in information transfer.

*Demonstration of innovative educational or information transfer programs.

Funding Requirements

The oil-overcharge funds are designed to provide support for appropriate projects for one year. These funds were appropriated for state fiscal year 1988; July 1, 1987 to June 30, 1988. Because of the time lags involved in initiating Center activities and because crop year projects and fiscal years do not coincide, these funds may carry over through June 30, 1989. All projects funded through this RFP must be initiated by June 30, 1988 and completed by June 30, 1989.

APPENDIX A: Program and RFP as approved by the EFDC.

DNR PROPOSAL ITEM 6.6.

AGRICULTURAL-ENERGY APPLIED STUDIES THROUGH THE
LEOPOLD CENTER FOR SUSTAINABLE AGRICULTURE
(See Oil-Overcharge, Groundwater Programs Guidance Document)

Narrative:

The Leopold Center for Sustainable Agriculture was appropriated oil-overcharge funds in HF 631, to initiate needed agricultural research and education programs. In the context of the oil-overcharge programs, these projects will be restricted in scope, and some must include biomass programs. Other projects must be demonstration projects to fit under the context of the EXXON funds. DNR, Energy and Geological Resources Division is assisting ISU and the Leopold Center Advisory Board with the design and review of appropriate projects.

At this time only the Center's Request for Proposals is submitted for EFDC review and approval.

FY'88 Funding:

$800,000; $300,000 from the EXXON account, $500,000 from the Stripper Well account.

Administration:

Iowa State University Experiment Station will administer these projects, with oversight from the Leopold Center Advisory Board; the DNR will issue an agreement to ISU, and will amend the agreement as individual projects are approved. DNR, Energy and Geological Resources Division is assisting ISU with review and oversight of proposals to ensure their compliance with oil-overcharge programs.

DOE clearance:

The $300,000 from EXXON funds will be included in amendments to the state SECP plan to Kansas City/DOE; the remainder has been approved in context of Stripper Well Plan, as part of the Agricultural-Energy Management Program.

Further Action:

Individual program grants/contracts will be returned to the EFDC for approval.

INTEGRATED FARM MANAGEMENT DEMONSTRATION PROJECT

FY-88 BUDGET

Iowa State University	
Cooperative Extension Service	$ 489,812
Experiment Station	$ 540,990
Iowa Natural Heritage Foundation	$ 186,100
University of Northern Iowa	$ 45,000
University of Iowa	
Contant	$ 29,398
University Hygienic Lab	$ 94,700
Dept. of Natural Resources - GSB	$ 91,000
DALS	$ 53,000
	$1,530,000

Request for Proposals to

IOWA STATE WATER RESOURCES RESEARCH INSTITUTE

The Iowa Legislature provided funding for an expanded research program in ISWRRI as part of the Groundwater Protection Act of 1987 (HF 631).

The Act provides for "competitive grants to colleges, universities, and private institutions within the state for the development of research and education programs regarding alternative disposal methods (to landfilling solid waste) and groundwater protection." Funding for this program is from the Oil Overcharge Account. Proposals for applied research and demonstration projects that address either of the two program elements above and which also include significant components that result in energy conservation and/or energy production from alternative sources are requested. The legislature appropriated $120,000 for projects to be spent beginning January 1, 1988 and ending on or before June 30, 1989.

The Act establishes a waste management hierarchy in descending order of preference of volume reduction at the source, recycling and reuse, combustion with energy recovery and refuse-derived fuel, combustion for volume reduction, and disposal in sanitary landfills. These priorities should be considered in preparation of project proposals.

Proposals are sought in the following general program areas:

1. Applied Research and Demonstration on Alternatives to Landfill Disposal of Municipal Solid Waste.

   Examples of projects considered under this area might include:

   - Energy/resource recovery from landfills
   - Water resource impacts from waste to energy processes
   - Water resource impacts from air pollutants from waste to energy plants
   - Environmental control technologies for waste to energy plants in Iowa
   - Unique alternatives to landfilling of solid waste for Iowa conditions
   - Characterization of waste resultant from waste-to-energy technologies

2. Economic and energy evaluation of regionalization of solid waste disposal

   Examples of projects considered under this area might include:

   - Evaluating energy reductions/increases from regionalization of solid waste disposal in Iowa
   - Economies of scale in waste-to-energy systems for Iowa use
   - Alternative waste volume reduction and recycling programs for Iowa's industry

3. Energy reduction in groundwater management.

   Examples of projects considered under this area might include:

   - Optimum pumping from multiple wells to reduce energy
   - Minimum energy leachate control systems at existing landfills
   - Landfill operations to minimize energy and formation of leachate

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 8 INFORMATIONAL

MONTHLY REPORTS

The following monthly reports are enclosed with the agenda for the Commission's information.

1. Rulemaking Status Report

2. Variance Report

3. Hazardous Substance/Emergency Response Report

4. Enforcement Status Report

5. Contested Case Status Report

Members of the department will be present to expand upon these reports and answer questions.

Allan Stokes
March 8, 1988

Numbers in Parentheses Represent Reports for the Same Period in Fiscal Year 1987

		Substance Type				Mode				
Month	Total # of Incidents	Petroleum Product	Agri. Chemical	Other Chemicals and Substances	Handling and Storage	Pipeline	Highway Incident	RR Incident	Fire	Other
Oct	69	47	4	18	53	0	9	1	2	4
Nov	48	35	3	10	37	0	4	0	1	6
Dec	46	36	3	7	39	1	2	0	0	4
Jan	54	43	4	7	45	1	5	1	1	2
Feb	51 (41)	30 (25)	2 (1)	19 (15)	37 (30)	1 (1)	9 (5)	3 (1)	1(2)	0(2)
		UST-9		UST-1	UST-10					

Total # of Incidents Per Field Office	01	02	03	04	05	06
This Period	5	3	4	5	18	16

E:CHT.ER

Administrative Penalties Due (Continued)

NAME/LOCATION	AMOUNT	DUE DATE
City of Sidney	250	3-31-88
Lynn Mennenga Feedlot (Wright Co.)	600	4-09-88
Benton Co. Care Facility	100	4-09-88
Linn Hollow MHP (Washington)	200	4-13-88
Delhi Lakeview Estates, Inc.	100	4-13-88
Mike Vanderpool Construction (Indianola)	1,000	4-16-88
The Meadows, Inc. (Moville)	275	4-17-88
Living History Farms (Urbandale)	260	4-19-88
Breitbach's Tap (Sherrill)	230	4-19-88
Randy's Bluffton Store (Decorah)	215	4-19-88
4 Son's Handy Shop (Neola)	330	4-19-88
Central Baptist Church (Council Bluffs)	100	4-22-88
Motel Grinnell	1,000	4-22-88
Camp Okoboji	230	4-22-88
Ramsey Reform Church (Titonka)	215	4-23-88
David Francy (New London)	800	4-26-88
Knollridge Garden Apts. (Coralville)	100	4-26-88
City of Fairfield	1,000	4-29-88
Valley Oaks Country Club (Clinton)	100	4-29-88
*Chico's Supper Club (Burr Oak)	954	6-10-88
Clear View Acres Store (Delhi)	230	-------

The following administrative penalties have been appealed:

NAME/LOCATION	AMOUNT
Handi-Klasp, Inc. (Webster City)	1,000
Iowa City Regency MHP	1,000
Bianchi Meyrat Lagoon (Des Moines)	600
Thomas E. Lennon (Barnum)	700
Great Rivers Coop (Atavia)	1,000
City of Wapello	500
Wilfred McFee (Union Co.)	500
Richard Davis/1st Iowa State Bank (Albia)	1,000
Gradert, Ernest and Kevin (Sibley)	500
Stan Moser (Hudson)	250
City of Tabor	700
Hardin County SLF	500
City of University Park	500
South Central Iowa Landfill Agency	1,000
Cloyd Foland (Decatur)	800

*Referred to the Attorney General
**On Payment Schedule

Contract No. 87-6254-02

APPENDIX A

FY'88 BUDGET SUMMARY

Budget Categories	GRANT/CONTRACT	ISU	TOTAL
Salary and Benefits ISU/ARS staff Graduate Assistants, Technicians, Hourly	94,233	16,562	110,795
Travel	15,000	---	15,000
Equipment* Digital Balance	1,767	---	1,767
Supplies	40,500	---	40,500
Contractual	---	---	---
Other (work item 5.7)	11,000	---	11,000
Total Indirect Costs		58,066	58,066
TOTAL COSTS	$162,500	$74,628	$237,128

* See the procedures in section 15.0 of the General Conditions. These procedures must be carried out prior to any actual purchases of equipment being made under this agreement.

Contract No. 87-6254-04

APPENDIX A

BUDGET SUMMARY

Item # Scope of Work	Contract Amount
(DNR-Cost Center 6254)	
V.1. Select Water Analyses (DNR-Cost Center 6242)	$125,000
V.2. SOC/VOC Analyses	3,000
V.3. Aquatic Surveys	40,000
TOTAL	$168,000

ARTICLE V. SCOPE OF WORK

5.1. The Contractor will provide professional and technical support staff to the Department's Geological Survey Bureau to assist in various work elements to meet program goals of the Iowa Groundwater Protection Act of 1987. These programs include Groundwater Hazard/Aquifer Vulnerability Mapping, the Big Spring Basin Demonstration Project, a Natural Resources Geographic Information System demonstration and other related efforts. The work effort provided by the Contractor will contribute needed background work to afford the Department to develop completion reports, maps, and other needed information for these programs.

5.2. The support staff of the Contractor will provide assistance for all basic data compilations and analysis, map and report preparations, other support work, data entry, and supplemental illustrating. The Contractor will also provide up to (but not limited to) 5 data entry stations as arranged with the Department-GSB.

Exemplary of the work to be performed, under the supervision of DNR, include:

A. Preparation of w maps of data from approx. 30,000 DNR well logs showing: t accurate location of these wells; the depth to bedrock; the thic ass of aquitard materials; the lithology of the bedrock, and natu of aquifers.
B. Preparation of work maps showing the distribution of bedrock outcrop areas derived from soil-survey reports of all counties, DNR outcrop and quarry records and various published and unpublished reports.
C. Preparation of maps showing the distribution of other surficial materials, such as alluvial soils, derived from various published and unpublished reports and soil surveys for all counties.
D. Data entry to computer files, and statistical manipulation of water quality records and hydrologic data.
E. Digitization of map products for computer entry and data processing for energy-resource assessments.
F. Analysis of well-logs, well and core samples to provide basic information n material lithology and stratigraphy.
G. Preparation of tables, graphs, and charts and other statistical summaries needed for interpretation and reports by DNR-GSB.

While the exact assignments will change as work progresses, these examples illustrate the type of work to be performed by qualified personnel. These work items are necessary elements that will be used by DNR staff to produce final maps, assessments, and reports on the vulnerability of aquifers and groundwater to contamination in Iowa, a demonstration of energy and natural resource assessments using GIS systems, and the impact of improved farm management practices on environmental quality, energy consumption, and farm productivity.

ARTICLE V. SCOPE OF WORK

V.1. The UHL will assist DNR-GSB: in the overall design of the project; in the development of a quality assurance, quality control and evaluation plan; in the data handling and management procedures; and in data assessment and report preparation.

V.2. The Contractor will assist DNR-GSB with the development of appropriate educational materials.

V.3. The Contractor will provide for pesticide analyses (common insecticides and acid-extractable herbicides, 1,150 estimated), nitrate and bacteria analyses (1,050 estimated), and nitrogen series analyses (1,040 estimated) (and attendant lab quality control samples), as delivered by field staff. The exact number of samples and analyses will be coordinated between UHL and DNR-GSB program managers.

V.4. The approximate sampling schedule and submittal procedures, and any other analyses will be arranged between UHL and DNR-GSB program managers.

V.5. All analytical work at the UHL conforms to state-of-the-art quality assurance/quality control (QA/QC) procedures; UHL has an U.S. Environmental Protection Agency approved QA/QC program.

ARTICLE VII. REPORTS

7.1 The UHL shall submit to the Department-GSB reports of laboratory analyses in a timely manner.

7.2 The UHL shall review, quarterly, with DNR-GSB, the progress on Article V, Scope of Work.

7.3 The UHL shall submit three (3) copies of a final report describing all activities performed and the results obtained with supporting data. This report shall include information as described in Article V.3, Scope of Work, and meet all Contractor requirements. Specific content and format should be discussed in advance with the Department. The final report shall be submitted no later than ninety (90) days following the expiration of this contract.

7.4 The Department shall, review and comment on all reports submitted by the Contractor within twenty (20) working days after the Department's receipt of the reports. Failure to reply within the allotted time constitutes approval by the Department.

ARTICLE VIII. REVIEW OF WORK

The Department or its advisers shall have the right to review and observe at any time, completed work or work in progress on the Project.

Contract No. 87-6258-02

APPENDIX A

BUDGET SUMMARY

Scope of Work	Contract Amount
1. Support Services for Statistical Rural Water Assessment project design, data, management, and water quality analyses, as described in scope of work, article V.1, V.2, V.3, V.4, V.5, and V.6.	$252,000
2. Support Services and special analyses for Big Spring Demonstration Project (CC - 6254), as described in scope of work, article V.4, V.5, and V.6.	33,000
TOTAL (see billing schedule in article 10.4)	$285,000

NOTE: The University of Iowa indirect cost rate is 39% of total costs, or $111,150, and is contributed for the benefit of this program because the federal government has restricted the use of these funds for the payment of indirect costs.

7. EVALUATION

The IDALS shall submit to the DNR an evaluation plan within 90 days from the beginning date of this Memorandum. The evaluation plan will identify specific measurable objectives, the type of evaluation methods (survey, performance efficiency, and attendance at events are examples), data to be collected and timetable for the evaluation. The plan will be reviewed by the DNR for approval. The IDALS will submit a report describing project results obtained through the evaluation no later than one year after the expiration of this Memorandum.

8. CONDITIONS

IDALS will comply with the General Conditions attached, except as amended below, or in writing between IDALS and DNR.

A. Amendments to General Conditions:

1. Section 5. Subcontractors, as noted in the Scope of Work or budget documents (Appendix A) are approved.

B. Section 7.1, 7.2, and 7.4 do not apply.

C. All reports and publications should carry an acknowledgement, such as, "This program has been supported, in part, through appropriations from the Iowa Groundwater Protection Act."

D. Section 9.2. No indirect administrative expenses are allowable by IDALS or the subcontractors.

E. Section 15.0. Unless specified in writing by the Department the contractor will retain title to equipment/property.

are disbursed from the Oil-Overcharge Account to the Agricultural Energy Management Fund (AEMF), IDALS will also administer the AEMF in accordance with these guidelines.

3. PURPOSE

The purpose of this Memorandum is to set forth the points of understanding, between the parties hereto, covering the expenditure of Exxon Oil and Stripper Well overcharge funds for the Agricultural Energy Management (AEM) Fund's Integrated Farm Management Demonstration Project (Appendix A).

4. FINANCING

The 1987 Iowa Acts provide for One Million Five-Hundred and Thirty-Thousand Dollars ($1,530,000), to be appropriated from the Oil-Overcharge Account and to be deposited in the Agricultural Energy Management Fund for the use of IDALS for approved projects (Appendix A).

A. By the action of the Energy Fund Disbursement Council up to $1,500,000 of Exxon settlement funds and up to $30,000 of Stripper Well Funds may be deposited into the AEM Fund. The existing project, approved for $1,530,000 in expenditures, is currently using $416,485 in funds remaining from the DNR-IDALS Memorandum of Understanding, Agreement #87-0062-01, and amendments; these funds ($416,485 from agreement 87-0062-01 and amendments) must be expended by 30 June 1988. Hence, under this memorandum $1,113,515 of FY'88 funds will be approved for transfer to IDALS; the FY'88 funds must be expended by 30 June 1989 (see item 6, Termination).

Projects requiring more than one year to complete can be submitted. However such projects will be funded one year at a time with progress reports used to determine if funds for later years should be granted, or can be granted, from other sources. No indirect or administrative costs will be allowed, and cost sharing is encouraged. Any equipment items must be justified and should be kept to a minimum.

Proposal Evaluation

Proposals will be evaluated at two levels. A peer review and rating will be obtained on the technical merit of the proposal. The Leopold Center Advisory Board will determine if a proposal is consistent with the goals of the Center, and will advise the Director in the funding of the research proposals.

All proposals must also be approved by the Energy Fund Disbursement Council of the State of Iowa; they have the final authority for approving these programs funded from the Oil-Overcharge Account. This procedure applies only to this first RFP of the Center.

The demonstrated ability of the proposal authors to appropriately conduct the proposed work effort, to provide quality control and assurance for the effort, and to provide an evaluation and measure of the effectiveness of the project, will be emphasized by the peer reviewers and the Board.

Because of the special nature of this year's funding, some proposals which may be appropriate to the long-term mission of the Center may not be eligible for consideration. These proposals will be returned to the principal author with suggestions to resubmit. Other proposals may require simple revisions to be appropriate. The Interim Director of the Center will have the prerogative to negotiate with the author(s) on both the funding and the objectives of the proposal.

Reporting Requirements for Successful Proposals

To meet the requirements regulating use of oil overcharge funds, quarterly progress reports and a completion report must be submitted in a timely fashion. It is expected that the fourth quarterly report each year would be a draft completion report or an annual report. The annual report will be used for project review to determine if furding should or can be continued.

Proposal Format and Deadlines

Proposals shall be prepared following the format given in the attached document "Proposal Guidelines: Leopold Center Oil Overcharge Funds". A staggered submission and review process has been established to expedite the awarding of these funds. To be considered, proposals must be submitted by the deadlines noted below. For each of these deadlines only a portion of the total allocation will be awarded. Worthy proposals not funded during a round of review, will be added to the next group for consideration through the final award period.

DNR on the following dates: January 15, April 15, July 15, and October 15, for the years this Memorandum is in effect. The fiscal reports shall show the Exxon funds and every other source of funding spent on this project separately. The fiscal report should indicate funds spent, not simply those billed to the Oil-Overcharge Account.

6. TERMINATION

All funds under this Memorandum must be directly spent for the Agricultural Energy Management Fund's Integrated Farm Management Demonstration Project, as approved by the DOE and the Disbursement Council (Appendix A). No expense can be incurred under this project after June 30, 1989, unless funds are reappropriated by the Legislature. All outstanding expenses must be paid before August 15, 1989. Any balance of unspent funds after the Memorandum completion date of June 30, 1989, shall, upon payment of outstanding expenses, revert to the Treasury, Oil-Overcharge Account, pursuant to the Iowa Code.

7. EVALUATION

The IDALS shall submit to the DNR an evaluation plan within 90 days from the beginning date of this Memorandum. The evaluation plan will identify specific measurable objectives, the type of evaluation methods (survey, performance efficiency, and attendance at events are examples), data to be collected and timetable for the evaluation. The plan will be reviewed by the DNR for approval. The IDALS will submit a report describing project results obtained through the evaluation no later than one year after the expiration of this Memorandum.

8. CONDITIONS

IDALS will comply with the General Conditions attached, except as amended below, or in writing between IDALS and DNR.

Contract No. 87-G280-01

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between Iowa State University, Iowa State Water Resources Research Institute (ISWRRI) (herein referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Grants for Alternatives to Solid Waste Disposal and Groundwater Protection (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Contractor Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated [illegible] the title page of this Contract.

2.3 Key Personnel [illegible] Contractor.

ARTICLE III. TIME OF PERFORMA[illegible]

The Contractor shall commence [illegible] his Contract on the beginning date and complete Contract tasks by the ending [illegible]te, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a five year project, and that pending successful completion, and upon mutual consent this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. STATEMENT OF PURPOSE

The purpose of this contract is to initiate the agreement to transfer funds to the Iowa State Water Resources Research Institute, for the Competitive Grants program to support Grants for "Alternatives to Solid Waste Disposal and Groundwater Protection," as directed in the 1987 Iowa Acts (see attachments). This agreement recognizes that a Request for Proposals has been approved by the Energy Fund Disbursement Council (as shown in the attachments) and that the RFP has been published and the review procedure is underway. This agreement does NOT transfer any funds at this time.

Contract No. 87-G290-01

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between Iowa State University, Leopold Center for Sustainable Agriculture (herein referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Grants for Sustainable Agriculture and Agricultural Biomass Energy Generation.

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Contractor Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the title page of this Contract.

2.3 Key Personnel for Contractor.

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a five year project, and that pending successful completion, and upon mutual consent this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. STATEMENT OF PURPOSE

The purpose of this contract is to initiate the agreement to transfer funds to the Leopold Center for Sustainable Agriculture, for the Competitive Grants program to support Grants for Sustainable Agriculture and Agricultural Biomass Energy Generation, as directed in the 1987 Iowa Acts (see attachments). This agreement recognizes that a Request for Proposals has been approved by the Energy Fund Disbursement Council (as shown in the attachments) and that the RFP has been published and the review procedure is underway. This agreement does NOT transfer any funds at this time.

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
RULEMAKING STATUS REPORT
MARCH 1, 1988

PROPOSAL	DRAFT TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 4 - Rulemaking Procedures	2/15/88	3/09/88		---				
2. Ch. 5 - Petition for Rulemaking	2/15/88	3/09/88		---				
3. Ch. 23 - NSPS & NESHAPS	10/20/87	11/18/87	12/10/87 3/09/88	12/09/87 12/10/87 12/11/87	1/19/88	1/19/88	2/10/88	3/09/88
4. Ch. 38 Private Hall Construction Permit	12/15/87	1/13/88	3/09/88	2/03/88 2/05/88 2/08/88	3/21/88	*3/21/88	*6/15/88	*7/20/88
5. Ch. 39 - Hall Plugging	3/21/88	*4/21/88		5/12/88 5/13/88 5/16/88				
6. Ch. 47 Grants to Counties	2/15/88	3/09/88		3/29/88 3/31/88 4/04/88				
7. Ch. 70 - Channel Changes	3/21/88							
8. Ch. 91 - Construction Grants	10/20/87	11/18/87	12/10/87 3/09/88	12/08/87	1/19/88	1/19/88	2/10/88	3/09/88
9. Chs. 100, 102 - Liquids in Landfills	10/20/87	11/18/87	12/10/87	12/09/88 12/10/87 12/11/87	2/16/88	2/16/88	3/09/88	4/13/88
10. Ch. 102 Sewage Sludge at Landfills	11/17/87	12/16/87	1/05/88	1/06/88 1/07/88 1/08/88	3/21/88	*3/21/88	*6/15/88	*7/20/88
11. Chs. 100,103 Landfill Ground Water Monitoring	10/20/87	11/18/87	12/10/87	1/06/88 1/07/88 1/08/88				
12. Ch. 135 - Sniffer Hall Criteria	10/20/87	11/18/87	12/10/87	12/09/87 12/10/87 12/11/87	2/16/88	2/16/88	3/09/88	4/13/88
13. Ch. 209 - Solid Waste Energy Grants	12/14/87	12/30/87	1/05/88	1/19/88	2/16/88	2/16/88	3/09/88	2/16/88

*Project [illegible]

E:[illegible]/CI-[illegible].FRM

DATE: March 2, 1988

TO: EPC

FROM: Mike Murphy

SUBJECT: Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Cloyd and Doris Foland, Decatur (5)	Flood Plain	Construction without permit registration.	Order/Penalty	2/5/88
City of Deep River (5)	Drinking Water	Construction contrary to permit.	Order	2/5/88
West Union Country Club, West Union (1)	Drinking Water	Monitoring/reporting, bacteria.	Order/Penalty	2/5/88
Swiss Valley Farms Co., Hopkinton (1)	Wastewater	Pretreatment.	Order	2/5/88
City of Hopkinton (1)	Wastewater	Pretreatment, discharge limits.	Order	2/5/88
Lynn Mennenga Feedlot, Wright Co. (2)	Wastewater	Prohibited discharge.	Order/Penalty	2/5/88
Linn Hollow MHP, Washington (6)	Drinking Water	Monitoring/reporting, radioactivity.	Order/Penalty	2/5/88
Benton Co. Care Facility Vinton (1)	Drinking Water	Monitoring/reporting, radioactivity.	Order/Penalty	2/5/88
Mike Vanderpool Construction, Inc. Sternquist Construction et. al. (5)	Solid Waste	Open dumping.	Order/Penalty	2/11/88

MG:bag/M062L03.01

The following administrative penalties were paid in January:

NAME/LOCATION	AMOUNT
Kimballton Utilities	$ 100
Hawkeye Tiling (Jesup)	500
Village Oaks Homeowners Ass'n. (Blue Grass)	150
City of Mount Vernon	500
**Lawrence Payne	35
City of Earling	500
Kopper Kettle (Minden)	200
Arleno's Cafe (Turin)	50
City of Arcadia	100
Clark Co. Landfill Comm.	300
Dubuque Municipal Airport	50
West Union Country Club	75
AMPEL, Inc. (Des Moines)	1,000
City of Maxwell	650
City of Rippey	100
City of Hospers	1,000
Iowa-Illinois Gas and Electric (Davenport)	600
**Elings/Catron/Frey (Des Moines)	200
	$6,110

* Referred to the Attorney General
** On Payment Schedule

MPM:mjg

Contract No. 87-6254-03

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Grant Contract is entered into by and between (18) (herein referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, (19) (hereinafter referred to as the Project).

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. The Contracter Officer authorized to execute any changes in the terms, conditions, or amounts specified in this Contract is as indicated on the title page of this Contract.

2.3 Key Personnel for Contractor.

William Gasper

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a five year project, and that pending successful completion, and upon mutual consent this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. and V. STATEMENT OF PURPOSE, SCOPE OF WORK

The Northeast Iowa Water Resources District will work with the Cooperative Extension Service to: develop educational materials that may be used to disseminate the results of the Big Spring Basin Demonstration Project and other information about improving farm management for energy conservation and improved efficiency to the general public of NE Iowa; to help identify farmer volunteers; and coordinate other public activities in NE Iowa.

Contract No. 87-6254-05

SPECIAL CONDITIONS

ARTICLE I. IDENTIFICATION OF PARTIES AND PROJECT

This Contract/Cooperative Agreement is entered into by and between The Iowa District, Water Resources Division, Geological Survey, U. S. Dept. of Interior (hereinafter referred to as the Contractor) and the Iowa Department of Natural Resources (hereinafter referred to as the Department) to complete the project, Big Spring Demonstration Project (hereinafter referred to as the Project). This agreement and the level of funding implied herein is exclusive of, and in addition to, any other agreements between the referenced parties.

ARTICLE II. DESIGNATION OF OFFICIALS

2.1 Department. The Director of the Department is the official authorized to execute any changes in the terms, conditions, or amounts specified in this contract. Larry L. Bean is designated to negotiate on behalf of the Department and, subject to the approval of the Director, make any changes to the Contract.

2.2 Contractor. Stephen J. Kalkhoff has been designated by the Contractor to act as the Project Director. Financial and Administrative matters of the contract are under the supervision of Richard A. Engberg.

2.3 Key Personnel for Contractor.

ARTICLE III. TIME OF PERFORMANCE

The Contractor shall commence work on this Contract on the beginning date and complete Contract tasks by the ending date, as set forth on the title page of this Contract under "Time of Performance," unless changed by mutual written agreement. It is understood that this agreement is for the first year of a three year project, and that pending successful completion, and upon mutual consent, this contract can be amended and extended, subject to continued financing. It is also understood, that while this agreement is for the first year of this project, that these funds allocated may be carried over through state FY'89, through 30 June 1989.

ARTICLE IV. STATEMENT OF PURPOSE

This cooperative agreement/contract is entered into for the exclusive purpose of providing mutual assistance for the Big Spring Basin Demonstration Project. Through this cooperative agreement the contractor will provide services to enhance the measurement and documentation of the hydrologic relationships, and the chemical, nutrient, and energy balance in the basin. The Department and the contractor will both contribute to cover the costs of the necessary field and office work related to this program, but excluding any

5.3. The Contractor will provide up to eight (8) graduate research assistants, or equivalent staff on an hourly basis, for an aggregate total of 7,280 professional staff hours, and other qualifed support staff for up to 2,640 hours as needed, to provide these services. The work will be performed under the supervision of DNR-GSB staff; work assignments and schedule and time requirements will be specified by DNR-GSB.

5.4. The assistants will be appointed by the Contractor (Department Chairman) with review and approval by the Department -GSB-Bureau Chief. For the appointments:

a. Preference will be given to students conducting thesis research in Iowa;
b. As called for, preference will be given to particular areas of specialization;
c. For assistants conducting Iowa related thesis research projects, summer work schedules will be arranged to accommodate their field work;
d. The Contractor will provide Graduate RA office space for the appointees, as needed.

5.5. The appointments require that each RA work an average of 20 hours work/week during the academic year, and 30 hours work/week during the summer University schedule.

5.6. The Contractor and GSB staff will review work and progress quarterly, or as the need arises. Termination of appointment for unsatisfactory work will be the discretion of the Department-GSB Bureau Chief.

ARTICLE VII. REPORTS - None

ARTICLE VIII. REVIEW OF WORK

The Department or its advisers shall have the right to review and observe at any time, completed work or work in progress on the Project.

8.1 The Contractor shall review quarterly, with DNR-GSB, the progress of work per article 5.6.

ARTICLE IX. FUNDING

9.1 Funding for this Grant Project is subject to the continued financial support of the State of Iowa. If the state discontinues funding, this Contract may be terminated, or amended by the Department.

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

DATE: 12/14/87
TO: Mike N. and File
FROM: George Hallberg
RE: Rationale for pricing for contract with UHL; 87-6258-01

The costs are based on our standard discount analytical charges with UHL. The number of samples is based on our project design. The pricing follows:

No. Sample	Analysis	Cost	Total
1,150	Insecticides @ $100 Acid-Herbicides @ $100	$200	$230,000
1,055	Nitrate and Bacteria samples	$ 15	15,825
1,040	N-Series (Nitrogen-series; NO_3, NO_2, Amm-NH_4, Organic-N)	$ 30	31,200
TOTAL			$277,025

We agreed to round to $277,000; the extra Nitrate/Bacteria analysis are insignificant costs. We will undoubtedly run over, but the lab has agreed this is a reasonable figure. They also may analyze a subset of sites for other volatile and synthetic organic compounds, about $300/sample - on their own.

The sample numbers are based on our design, as follows:

# sites/samples		
760	individual sites	
76	1:10 sites duplicates	Blind duplicates and field
38	1:20 sites spikes	spikes for Quality Control
874	subtotal	

To deal with temporal variability we will also resample as follows:

76	10% resample, different season
80	20 sites quarterly (4 times)
120	10 sites monthly - 1 year
276	subtotal
1,150	TOTAL

This is for the pesticides; other analyses don't require the same amount of quality control samples.

The number of sites may change slightly, but the number of time samples will be adjusted to keep the total @ 1150. We will undoubtedly run into problems that will require added samples; the lab has agreed to run them as part of the package, as we have a fixed amount of money for the project.

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

DATE: 12/14/87

TO: Mike H. and File

FROM: George R. Hallberg

RE: Pricing - Dept. Prev. Med., PHAP Lab Contract, 87-6258-02

The costs for this contract are based on the same sampling schedule as 6258-01 on the following basis:

Category of Samples	No. Samples	Analyses	
1	1,150	Herbicides/Metabolites @ approx. $192/sample	$220,800
	+(230 minimum; internal QA/QC for metabolites; they will absorb costs to develop method.)		(44,160)
2	1,040	For Organic screen, Microtox, and selections; @ $30	31,200
		(Cost Center 6258) subtotal	$252,000
Big Spring			
1	180 samples @ $160		$ 28,800
2	140 samples @ $30		4,200
		(Cost Center 6254) subtotal	$ 33,000
TOTAL			$285,000

As noted above the Dept. will absorb considerable analytical costs. As part of the project they (and 'CHEECS' - the Center for Study of Health Effects of Environmental Contaminants) are also contributing the statistical design, data management, and other assistance. So we are getting considerable extra.

WALLACE STATE OFFICE BUILDING / DES MOINES, IOWA 50319 / 515-281-5145

TARGETED EDUCATION

FY-88 BUDGET

Personnel	$ 36,025.00
Fringe Benefits	7,200.00
Travel	3,000.00
Supplies	3,000.00
Contractual	30,775.00
Other	20,000.00
Total Direct Charges	100,000.00
TOTALS	$100,000.00

B. Payments to approved Contractor(s) shall be made by the IDALS in accordance with Paragraph C below. The IDALS shall employ all applicable state and federal regulations in the adminstration of the Exxon Funds. These funds may not be used for indirect administrative expenses.

C. Upon execution of this Memorandum, the DNR shall authorize the transfer of funds to IDALS, and the IDALS shall make payments to Contractors based upon actual expenses of program operation. Except, a one-time advance to the Contractors, not to exceed 10 percent of the contract, will be allowed. Invoices will be itemized and due on or about the first work day of each month. Upon receipt of the monthly financial report, the DNR will make available additional funds as requested for projected expenses for subsequent thirty-day periods. The Administrator of the DNR shall notify the Treasurer to authorize a maximum drawdown through the appropriate IDALS account, for the next 30 days.

D. For every state fiscal year this agreement is in effect, a final invoice to close out the fiscal year will be submitted by August 15. A financial report, showing the total expenditure of funds for the state fiscal year, should accompany this invoice.

5. REPORTING

The State of Iowa is required to submit quarterly and annual reports to the Kansas City Support Office of U.S. Department of Energy (DOE) covering the expenditure of Exxon funds. The IDALS shall assist DNR to fulfill the responsibility for developing and submitting these reports and will submit four copies of quarterly and annual fiscal and technical reports to the Energy and Geological Resources Division of the

Submittal deadlines	Approximate amount to be awarded
1. October 16, 1987	$150,000
2. November 13, 1987	$350,000
3. December 18, 1987	$250,000 plus any remaining from previous review periods.

The authors of the proposals will be notified by the next deadline of the results of the reviews, or by February 15, 1988, in the case of the final review period.

Submit 20 copies of the proposal to:

Robert W. Jolly
Interim Director
Leopold Center for Sustainable Agriculture
104 Curtiss Hall
Iowa State University
Ames, Iowa 50011

A. Amendments to General Conditions:

1. Section 5. Subcontractors, as noted in the Scope of Work or budget documents (Appendix A) are approved.

B. Section 7.1, 7.2, and 7.4 do not apply.

C. All reports and publications should carry an acknowledgement, such as, "This program has been supported, in part, through appropriations from the Iowa Groundwater Protection Act."

D. Section 9.2. No indirect administrative expenses are allowable by IDALS or the subcontractors.

IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

BY: Dale M. Cochran
Dale M. Cochran, Secretary

DATE: 11/17/87

IOWA DEPARTMENT OF NATURAL RESOURCES

BY: Larry J. Wilson
Larry J. Wilson, Director

DATE: 10/07/87

DIVISION OF SOIL CONSERVATION

BY: R. B. Guilford
James B. Guilford, Admin.

DATE: 11/20/87

ENERGY AND GEOLOGICAL RESOURCES DIVISION

BY: Larry L. Bean
Larry L. Bean, Administrator

DATE: 12-7-87

As individual projects are selected by ISWRRI, they will in turn be submitted to the EFDC for approval. After EFDC approval this contract will be amended to allow the transfer of funds, up to a maximum of $120,000 for Iowa - FY'88.

ARTICLE V. SCOPE OF WORK

See Request for Proposals Attached.

ARTICLE VI. MILESTONES

See Request for Proposals Attached.

ARTICLE VII. REPORTS

7.1 The contractor shall submit to the Department quarterly progress reports due on the last day of October, January, April, and July of each year. Progress reports should cover what has been accomplished in Article V.

7.2 The contractor shall submit three (3) copies of a final report describing all activities performed and the results obtained with supporting data. This report shall include information as described in Article V, Scope of Work, and meet all Contractor requirements. Specific content and format should be discussed in advance with the Department. The final report shall be submitted no later than ninety (90) days following the expiration of this contract.

7.3 The contractor will provide a quarterly fiscal report on the amount of funds actually spent on the project, from this grant/contract and other sources. These reports are due 15 days after the end of the each calendar quarter (January 15, April 15, July 15, October 15) for all years this agreement is in effect.

Also, the contractor will provide a report on all funds expended (as above) by August 15 of each state fiscal year this is in effect. (This is a requirement of the Department for reporting to DOE.)

7.4 The Contractor shall furnish to the Department a detailed and documented description of all costs and expenses for the Project within sixty (60) days following the expiration of this Contract.

7.5 The Department shall, review and comment on all reports submitted by the Contractor within twenty (20) working days after the Department's receipt of the reports. Failure to reply within the allotted time constitutes approval by the Department.

As individual projects are selected by the Leopold Center, they will in turn be submitted to the EFDC for approval. After EFDC approval this contract will be amended to allow the transfer of funds, up to a maximum of $800,000 for Iowa - FY'88.

ARTICLE V. SCOPE OF WORK

See Request for Proposals Attached.

ARTICLE VI. MILESTONES

See Request for Proposals Attached.

ARTICLE VII. REPORTS

7.1 The contractor shall submit to the Department quarterly progress reports due on the last day of October, January, April, and July of each year. Progress reports should cover what has been accomplished in Article V.

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7.4 The Contractor shall furnish to the Department a detailed and documented description of all costs and expenses for the Project within sixty (60) days following the expiration of this Contract.

7.5 The Department shall, review and comment on all reports submitted by the Contractor within twenty (20) working days after the Department's receipt of the reports. Failure to reply within the allotted time constitutes approval by the Department.

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
RULEMAKING STATUS REPORT
MARCH 1, 1988

PROPOSAL	DRAFT TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 4 - Rulemaking Procedures	3-03-88	3-23-88		---				
2. Ch. 5 - Petition for Rulemaking	3-03-88	3-23-88		---				
3. Ch. 7 - Contested Case Procedures	3-03-88	3-23-88						
4. Ch. 8 - Contract Procedures	3-03-88	3-23-88						
5. Ch. 14 - Concessions	12-04-87	12-30-87	1-05-88	---	3-03-88	3-03-88	3-23-88	4-27-88
6. Ch. 16 - Books	11-05-87	12-02-87	12-09-87	12-22-87	2-04-88	2-05-88	2-24-88	3-30-88
7. Ch. 20 - Wfr. Cert. Orig.	11-05-87	12-02-87	12-09-87	12-22-87				
8. Ch. 48 - Motor Regulations, Heat Lake	3-03-88	3-23-88		---				
9. Ch. 82 - Wildlife Refuges	10-09-87	8-04-87	12-09-87	11-24-87	2-04-88	2-05-88	2-24-88	3-30-88
10. Ch. 91 - Waterfowl, Coot	2-04-88	2-24-88	---	4-09-88				
11. Ch. 96 - Pheasant, etc.	2-04-88	2-24-88	---	4-09-88				
12. Ch. 97 - Snipe, etc.	2-04-88	2-24-88	---	4-09-88				
13. Ch 99 - Fall Turkey	2-04-88	2-24-88	---	4-09-88				
14. Ch. 106 Deer	2-04-88	2-24-88	---	4-09-88				
15. Ch. 107 - Rabbits, etc.	2-04-88	2-24-88	---	4-09-88				
16. Ch. 108 - Mink, etc.	2-04-88	2-24-88	---	4-09-88				
17. Ch. 110 - Trapping Limitations	3-03-88	3-23-88		4-20-88				

E.[illegible]/CS-3067.fm

DATE: March 2, 1988

TO: EPC

FROM: Mike Murphy

SUBJECT: Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Delhi Lakeview Estates, Inc. (1)	Drinking Water	Monitoring/reporting - nitrate.	Order/Penalty	2/11/88
South Central Iowa Landfill Agency, Winterset (5)	Solid Waste	Cover violations.	Order/Penalty	2/11/88
City of Donnellson (6)	Waste Water	MIP	Referred to AG	2/16/88
ASPRO, Inc. Waterloo (1)	Air Quality	Excess Emissions	Referred to AG	2/16/88
Living History Farms, Urbandale (5)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Central Baptist Church, Council Bluffs (4)	Drinking Water	Monitoring/reporting - nitrate.	Order/Penalty	2/17/88
Ramsey Reform Church, Titonka (2)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Breitbach's Tap. Sherrill (1)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Randy's Bluffton Store Decorah (1)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Clear-View Acres Store Delhi (1)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88
Camp Okoboji, Milford (3)	Drinking Water	Monitoring/reporting - bacteria.	Order/Penalty	2/17/88

MG:beg/M062L03.02

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
CONTESTED CASES
MARCH, 1988

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
10-17-85	City of Burlington	Administrative Order	WM	Hanson	Hearing rescheduled for 6/12/88.
1-23-86	Dalvoin Soil Services	Administrative Order	WM	Lands	Hearing continued; cleanup study progressing.
6-12-86	AEM - Clinton	Administrative Order	Air	Lands	Hearing continued.
10-29-86	Hazmat-Klamp Company, Inc.	Administrative Order	AQ/WM/SW	Lands	Briefing completed. Await decision.
12-05-86	City of Hawkeye	Administrative Order	WM	Hanson	Hearing continued; settlement close.
[illegible]-11-86	Eloise Hanna	Permit Condition	FP	Clark	Hearing rescheduled for 3-08-88.
12-24-86	Francis Hamberlin	Administrative Order	FP	Clark	Briefing in progress.
3-10-87	Greiner	Administrative Order	FP	Clark	Appealed. Commission rescinded order.
3-12-87	Iowa City Regency MHP	Administrative Order	WM	Hanson	Hearing held 11-03-87.
3-20-87	Hinschi-Hayrot Lagoon (Hank Smith)	Administrative Order	WM	Kennedy	Hearing continued.
4-08-87	Mallem Creek Bam/Zumble et.al	Permit Issuance	FP	Clark	Negotiating before filing.
4-11-87	Thomas Lennon	Administrative Order	FP	Clark	Awaiting decision.
8-10-87	Great Rivers Co-op	Administrative Order	NC	Lands	Hearing continued; study proceeding.
8-17-87	City of Mapello	Administrative Order	WM	Hanson	Proposed decision appealed.
8-17-87	City of Donnellson	Administrative Order	WM	Hanson	Settled.
9-17-87	Grudnert, Kevin and Ernest	Administrative Order	AQ	Lands	Hearing continued; stipulations being prepared.
10-22-87	University Park	Administrative Order	WM	Hanson	Hearing continued; settlement proposed.
11-10-87	City of Sandyville	Administrative Order	WM	Clark	Settled.
12-02-87	Kossuth County SLF	Administrative Order	SW	Kennedy	Settled.
12-07-87	Stan Hanor	Administrative Order	SW	Murphy	Hearing set for 3-07-88.
12-11-87	Finlan Landfill	Permit Revocation	SW	Kennedy	Awaiting decision.

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
CONTESTED CASES
MARCH, 1988

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
12-15-87	Delaware Co. Conc. Cit. (IBP)	Permit Issuance	NR	Clark	Hearing rescheduled for 4-18-88
12-21-87	City of Sidney	Administrative Order	NM	Murphy	Settled.
12-21-87	City of Tabor	Administrative Order	NM	Hansen	Hearing rescheduled for 4-06-88.
12-21-87	Hiway 83 MHP	Administrative Order	NS	Murphy	Settled.
12-21-87	Hardin County SLF	Administrative Order	SW	Kennedy	Negotiating before filing.
12-31-87	City of Tipton	Administrative Order	NM	Hansen	Negotiating before filing.
12-31-87	Wilfred McFee	Administrative Order	NM	Murphy	Negotiating before filing.
1-15-88	First Iowa State Bank	Administrative Order	SW	Kennedy	Hearing set for 4-14-88.
1-22-88	IBP, Fort Dodge	NPDES Permit	NM	Hansen	Negotiating before filing.
2-04-88	Beaverdale Heights, Woodsman; Westwood Hills	Administrative Order	SW	Landa	New Cases. Plans approved.
2-05-88	Warren County Breston Bank	Administrative Order	UT	Landa	Negotiating before filing.
2-10-88	Lehigh Clay Products	Administrative Order	NC	Landa	New Case. Appealed; revised plans to be submitted.
2-22-88	Amana	Tax Certification Denial	AQ/NM	Landa	New Case. Appealed.
2-25-88	South Central Iowa Landfill Agency	Administrative Order	SW	Landa	New Case. Appealed.

E:NPM/CI-I2S1J02.FBM

an active well supplying potable water or (b) located less than one-eighth (1/8) mile (660 feet) from a point source of potential contamination shall be properly plugged by July 1, 1990. Examples of point sources of potential contamination include industrial waste sites, uncontrolled hazardous waste sites, petroleum storage areas, hazardous waste treatment, storage or disposal areas, agricultural chemical storage areas, animal feedlots and wastewater treatment facilities.

39.5(4) Category III. All other wells which were abandoned prior to (the effective date of this rule--date to be inserted) shall be properly plugged by July 1, 1993.

39.5(5) Category IV. Wells which are abandoned on or after (the effective date of this rule--date to be inserted) shall be properly plugged within ninety (90) days of the date of abandonment.

567--39.6(455B) Water well plugging materials.

39.6(1) Seal materials. Approved sealing materials are bentonite products (graded bentonite, bentonite pellets and bentonite grout), neat cement, sand cement grout and concrete.

39.6(2) Fill materials. Approved fill materials include soil, sand, pea gravel, gravel, crushed stone and agricultural lime. Fill materials are not required for well plugging, but may be used to save on quantities and costs of sealing materials as provided in Rule 39.7. The fill materials shall be free of sticks, leaves or other foreign matter and shall be free of any toxic or agricultural chemical residue.

567--39.7(455B) Water well plugging procedures.

39.7(1) Freedom from obstructions. Abandoned wells must be checked before they are plugged in order to insure freedom from obstructions that may interfere with plugging operations. Drop pipes, check valves, pumps, and other obstructions shall be removed if practicable.

39.7(2) Wells in Quaternary sediments.

a. Large diameter wells one hundred (100) feet or less in depth. The services of a registered well driller are not required for the plugging of large diameter (eighteen (18) inch diameter or more) wells one hundred (100) feet or less in depth in Quaternary sediments (above bedrock). These wells may be plugged by pouring fill and sealing materials from the top of the well or by using tremie pipes, except for sand cement grout placed below water, which must be placed by dump bailer.

Fill materials of sand, gravel, crushed stone, pea gravel or agricultural lime shall be placed up to one (1) foot below the static water level. A minimum of one (1) foot of bentonite pellets, graded bentonite or neat cement shall be placed on top of the fill material up to the static water level as a seal. Sand cement grout placed with a dump bailer also may be used on top of the fill material up to the static water level and in standing water above the static water level to act as a seal. Fill material of soil, sand, gravel, crushed stone, pea gravel or agricultural lime shall then be added up to four (4) feet below the ground surface.

The fill materials may be omitted and sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Bentonite pellets, graded bentonite or neat cement sealing materials shall be used below the static water level. Sand cement grout placed with a dump bailer also may be used below the static water level or in standing water above the static water level. Sealing materials which may be used above the static water level

6. Detailed Information:

Diameter at Top of Casing _____ inches Date Constructed _____

Depth to Static Water Level _____ feet Date Abandoned _____

Total Depth _____ feet Date Plugged _____

Distance from nearest active well supplying potable water (*check one*):
[] More than 200 feet [] Less than 200 feet

Distance from nearest point source of potential contamination (*check one*):
[] More than 660 feet [] Less than 660 feet

If distance is less than 660 feet, indicate type of nearest point source of potential contamination (*check one*):
[] industrial waste site
[] uncontrolled hazardous waste site
[] petroleum storage area
[] hazardous waste treatment, storage or disposal area
[] agricultural chemical storage area
[] animal feedlot
[] wastewater treatment facility
[] other potential contamination source (describe) _____

7. Certification by owner. I hereby certify that the abandoned well described has been plugged in accordance with the requirements of Chapter 39 of the rules implementing 1987 Iowa Code Supplement section 455B.190.

Signature of Owner Date

8. Certification by a registered well driller. This is required for all wells except large diameter (18" diameter or more) wells 100 feet or less in depth in Quaternary sediments.

Company Name

Address

City State Zip Code

I hereby certify that the abandoned well described was plugged under my supervision in accordance with the requirements of Chapter 39 of the rules implementing 1987 Iowa Code Supplement section 455B.190.

Name of Registered Well Driller Registration No.

Signature Date

This rule is intended to implement Iowa Code section 455B.304.

The following amendment is proposed:

Amend rule 102.14(3)a(4 8) as follows:

a. Unstabilized sewage sludge, including unstabilized septic tank pumpings, shall not be disposed in the portion of a sanitary landfill open to the public. Municipal sewage sludge, whether stabilized or unstabilized, may be disposed of at a sanitary landfill as provided in Chapter 103 or 121 only if the sludge has a solids content greater than 50 percent.

Date

Larry J. Wilson, Director

M064MJT.15

CHAPTER 22
CONTROLLING POLLUTION

(Prior to 7/1/83, DEQ Ch 3)

(Prior to 12/3/86, Water, Air and Waste Management[900])

567—22.1(455B) Permits required for new or existing stationary sources.

22.1(1) *Permit required.* Unless exempted in subrule 22.1(2), no person shall construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit or conditional permit or a permit required pursuant to 22.4(455B) and 22.5(455B) as required in this subrule.

a. New stationary sources and modifications of existing stationary sources. No person shall construct or install any equipment or control equipment at a new stationary source or at a modification of an existing stationary source unless a construction permit or conditional permit has been obtained from the department. A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary course.

b. Existing stationary sources. No person shall construct, install, reconstruct or alter any equipment or control equipment at an existing stationary source unless a construction permit or conditional permit has been obtained from the department for the equipment or control equipment.

c. Anaerobic lagoons. No person shall construct, reconstruct or alter an anaerobic lagoon unless a construction permit has been obtained from the department.

22.1(2) *Exemptions.* The provisions of this rule shall not apply to the following listed equipment or control equipment unless review of the equipment or control equipment is necessary to comply with rule 22.4(455B) or 22.5(455B), in which case a permit must be obtained.

a. Fuel-burning equipment for indirect heating and reheating furnaces using natural or liquefied petroleum gas with a capacity of less than fifty million BTU per hour input.

b. Fuel-burning equipment for indirect heating with a capacity less than one million BTU per hour input when burning coal or fuel oil.

c. Mobile internal combustion and jet engines, marine installations and locomotives.

d. Equipment used on farms and ranches for agricultural purposes other than anaerobic lagoons.

e. Incinerators with a rated refuse burning capacity of less than twenty-five (25) pounds per hour.

f. Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment.

g. Equipment or control equipment which eliminates all emission to the atmosphere.

h. Equipment (other than anaerobic lagoons) or control equipment which emits odors unless such equipment or control equipment also emits particulate matter, or any other air contaminant.

i. Alterations to equipment which have been determined by the department to effect no change in the emissions from that equipment.

22.1(3) *Construction permits.* The owner or operator of a new or modified stationary source shall apply for a construction permit unless a conditional permit is required by Iowa Code chapter 455B or subrule 22.1(4) or requested by the applicant in lieu of a construction permit. The owner or operator of any anaerobic lagoon shall apply for a construction permit.

a. New equipment design in concept review. If requested in writing, the director will review the design concepts of proposed new equipment and associated control equipment prior to application for a construction permit. The purpose of the review would be to determine the acceptability of the location of the proposed equipment. If the review is requested, the requester shall supply the following information:

(1) Preliminary plans and specifications of proposed equipment and related control equipment.

(2) The exact site location and a plot plan of the immediate area, including the distance to and height of nearby buildings and the estimated location and elevation of the emission points.

(3) The estimated emission rates of any air contaminants which are to be considered.

(4) The estimated exhaust gas temperature, velocity at the point of discharge, and stack diameter at the point of discharge.

should be analyzed within fourteen days of collection. If any organic contaminant listed in 41.3(2)d is detected in the original composite sample, a sample from each source that made up the composite sample must be reanalyzed individually within fourteen days from sampling. The sample for reanalysis cannot be the original sample, but can be a duplicate sample. If duplicates of the original samples are not available, new samples must be taken from each source used in the original composite and analyzed for the SOCs specified in 41.3(2)d. Reanalysis must be accomplished within fourteen (14) days of the second sample. To composite samples, the following procedure must be followed:

(i) Compositing samples prior to gas chromatograph analysis.

(A) Add 5 ml or equal larger amounts of each sample (up to 5 samples are allowed) to a 25 ml glass syringe. Special precautions must be made to maintain zero headspace in the syringe.

(B) The samples must be cooled at 4° C. during this step to minimize volatilization losses.

(C) Mix well and draw out a 5-ml aliquot for analysis.

(D) Follow sample introduction, purging, and desorption steps described in the method.

(E) If less than five samples are used for compositing, a proportionately smaller syringe may be used.

(ii) Compositing samples prior to gas chromatograph/mass spectrometric analysis.

(A) Inject 5-ml or equal larger amounts of each aqueous sample (up to 5 samples are allowed) into a 25-ml purging device using the sample introduction technique described in the method.

(B) The total volume of the sample in the purging device must be 25 ml.

(C) Purge and desorb as described in the method.

(8) The department may reduce the monitoring frequency specified in subparagraphs "f(1)" and "f(2)" of this section as follows:

(i) The monitoring frequency for groundwater systems is as follows:

(A) When SOCs are not detected in the first sample (or any subsequent samples that may be taken) and the system is not vulnerable as defined in subparagraph "f(8)(iv)" of this section, monitoring must be repeated every 5 years.

(B) When SOCs are not detected in the first sample (or any subsequent sample that may be taken) and the system is vulnerable as defined in subparagraph "f(8)(iv)" of this section,

(1) Monitoring must be repeated every 3 years for systems with equal to or greater than 500 service connections.

(2) Monitoring must be repeated every 5 years for systems with less than 500 service connections.

(C) If SOCs are detected in the first sample (or any subsequent sample that may be taken), regardless of vulnerability, monitoring must be repeated every 3 months, as required under subparagraph "f(1)" of this section.

(ii) The repeat monitoring frequency for surface water systems is as follows:

(A) When SOCs are not detected in the first year of quarterly sampling (or any other subsequent sample that may be taken) and the system is not vulnerable as defined in subparagraph "f(8)(iv)", monitoring is required every five (5) years.

(B) When SOCs are not detected in the first year of quarterly sampling (or any other subsequent sample that may be taken) and the system is vulnerable as defined in subparagraph "f(8)(iv)" of this section.

(27) 1,1,1,2-Tetrachloroethane
(28) Chloroethane
(29) 1,1,2-Trichloroethane
(30) 2,2-Dichloropropane
(31) o-Chlorotoluene
(32) p-Chlorotoluene
(33) Bromobenzene
(34) 1,3-Dichloropropene
(35) Ethylene dibromide (EDB)
(36) 1,2-Dibromo-3-chloropropane (DBCP)

f. Community water systems and nontransient noncommunity water systems must monitor for ethylene dibromide (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) only if the department determines they are vulnerable to contamination by either or both of these substances. For the purpose of this paragraph, a vulnerable system is defined as a system which is potentially contaminated by EDB and DBCP, including surface water systems where these two compounds are applied, manufactured, stored, disposed of, or shipped upstream, and for groundwater systems in areas where the compounds are applied, manufactured, stored, disposed of, or shipped in the groundwater recharge basin, or for groundwater systems, shallow wells (as defined in 40.2--455B) that are less than four hundred (400) feet and deep wells (as defined in 40.2--455B) that are less than two hundred (200) feet from underground storage tanks that contain leaded gasoline.

g. Analysis under this section shall be conducted using the recommended methods as follow, or their equivalent as determined by the department: 502.1, "Volatile Halogenated Organic Compounds in Water by Purge and Trap Gas Chromatography," 503.1, "Volatile Aromatic and Unsaturated Organic Compounds in Water by Purge and Trap Gas Chromatography," 524.1, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography/Mass Spectrometry," 524.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography/Mass Spectrometry, or 502.2, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series." These methods are contained in "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water," September, 1986, available from Environmental Monitoring and Support Laboratory (EMSL), EPA, Cincinnati, Ohio 45268. Analysis of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (ECB) shall be conducted by Method 504, "Measurement of 1,2,-Dibromoethane (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) in Drinking Water by Microextraction and Gas Chromatography," September 1986, available from EMSL, Cincinnati, Ohio 45268.

h. Analysis under this section shall only be conducted by laboratories approved under 41.4(4)f11. In addition to the requirements of 41.4(4)f11, each laboratory analyzing for ethylene dibromide (EDB) and 1,2-dibromo-3-chloropropane (DBCP) must achieve a method detection limit for EDB and DBCP of 0.00002 mg/l, according to the procedures in 40 CFR Appendix B of Part 136, October 26, 1984.

i. Public water systems may use monitoring data collected any time after January 1, 1983 to meet the requirements for unregulated monitoring, provided that the monitoring program was consistent with the requirements of this section.

j. Monitoring for the following compounds is required at the discretion of the department.

(1) 1,2,4-Trimethylbenzene

(3) The public water system is fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system, via door-to-door bottled water delivery.

(EP40.MIN/sc)

ENVIRONMENTAL PROTECTION COMMISSION [567]
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.278, the Environmental Protection Commission intends to amend Title V, Floodplain Development, Chapter 70, Scope of Title-Definitions-Forms-Rules of Practice.

Iowa Code section 455B.275 provides that a person desiring to undertake construction on a floodplain (including a channel change) shall file a written application with the department setting forth information as required by rule of the Commission. Further, Iowa Code section 455B.264 requires that upon such an application, the Department shall investigate the effect of the proposed project on the efficiency and capacity of the floodway and in determining the effect of the proposal, shall consider fully its effect on flooding of or flood control for any proposed works and adjacent lands and property, on the wise use and protection of water resources, on the quality of water, on fish, wildlife and recreational facilities or uses, and on all other public rights and requirements.

The procedure for submitting such an application and for the Department's review thereof are presently located at 567--70.3, et. seq., Iowa Administrative Code. Approval criteria for various types of floodplain projects are found in 567--Chapter 71, Iowa Administrative Code.

567--70.4(2)"a", Iowa Administrative Code, provides that an application shall not be considered complete until sufficient engineering plans have been submitted to enable the Department to determine whether the project as proposed satisfies applicable criteria and further provides that such engineering plans must be certified by a registered professional engineer as required by Iowa Code Chapter 114. However, submission of certified plans can be waived pursuant to 567--70.4(2)"b", Iowa Administrative Code, if: i) engineering data are not required to determine that the project is minor in scope and conforms to all applicable administrative and statutory criteria or ii) adequate engineering data used to evaluate the dimensions and effects of the project is already available to the engineering staff.

The Environmental Protection Commission feels that in the case of an after-the-fact application to maintain a channel change that was constructed without the necessary approval, certified engineering plans are not necessary if the channel change has been in place more than _____ years. The Commission feels that any potential adverse impacts from a channel change would be apparent within _____ years of the date of construction; therefore, certified engineering plans are not necessary to determine compliance with relevant engineering criteria and the requirement for certified engineering plans places an unnecessary financial burden on the applicant.

Notwithstanding the waiver provisions of 567--70.4(2)"b," Iowa Administrative Code, submission of certified plans cannot be waived for most channel changes because they are not minor in scope and rarely, if ever, does the Department have adequate engineering data already available to properly review a channel change. Therefore, the Commission proposes to amend the waiver provisions of 567--70.4(2)"b", Iowa Administrative Code, to automatically waive submission of certified plans for channel changes if the channel change has been in place for more than _____ years.

Any interested person may file written comments or suggestions on the proposed rules through _____, 1988. The Commission especially desires public comment as to the appropriate time period for the proposed automatic waiver provision. Such written comments should be directed to _____, Iowa Department of Natural Resources, Wallace State Office Building, 900 East

ERRATA PAGE

1) Page 1. Summary section. Recommendation #1. Change the compound 1,1,1-Trichloroethene to 1,1,1-Trichloroethane.

2) Page 15. Recommendations section. Recommendation #1. Change the compound 1,1,1-Trichloroethene to 1,1,1-Trichloroethane.

BACKGROUND

In 1986, the Seventy-first Iowa General Assembly passed House File 2303. This legislation required the Iowa Department of Natural Resources (IDNR) to develop and implement a one-time testing program of finished water for pesticides and synthetic organic contaminants (SOC) at public and privately owned public water systems. Monitoring of this type has not been done because IDNR's statutory authority restricts the implamentation of environmental monitoring programs that are not specifically imposed by federal legislation.

The analytical work was to be conducted at a laboratory designated by the IDNR. Analytical fees were not to exceed $330. The testing was also available to privately owned water supplies. The testing was to be completed by January 1, 1988. The legislation also required the IDNR to submit a report to the Iowa General Assembly by April 1, 1988 discussing the findings and conclusions drawn from the testing. The following briefly describes the testing program elements:

Selection of Monitoring Parameters. The legislation limited the number of monitoring parameters to thirty-five (35) pesticides and thirty-five (35) SOCs. Data from previous IDNR and U.S. Environmental Protection Agency (EPA) ground water studies were referenced to determine the compounds commonly detected. IDNR also reviewed EPA proposed volatile organic compound monitoring requirements. A list of potential monitoring parameters was prepared and sent to various water quality experts for comment. Their comments were evaluated and a final list of compounds was prepared. Appendix 1-CREDITS contains a list of individuals who were asked to assist in the development of the monitoring parameters. The compounds selected for this monitoring project appear in Appendices 2-SYNTHETIC ORGANIC COMPOUNDS and 3-PESTICIDES.

Selection of Water Systems to be Monitored House File 2303 required the following systems to be included in the testing program:

*Public water systems regulated under chapter 455B which serve a city under chapter 362 of the Iowa Administrative Code (IAC);

*Public water systems regulated under chapter 455B which serve a state-owned facility regularly housing 200 or more persons;

*Rural water districts created under chapter 357A (IAC); and

*Benefitted water districts created under chapter 357 (IAC).

The legislation also contained a provision that allowed the owners of private wells and privately owned public water systems to submit samples to the laboratory designated by IDNR for analysis. Samples were submitted from one domestic water supply.

The systems that were required to monitor were selected from the public water supply inventory maintained by IDNR. Figure 1 shows the numerical distribution of water systems tested.

TABLE 2

SUMMARY OF PUBLIC WATER SUPPLIES WITH VERIFIED PESTICIDE OR SYNTHETIC ORGANIC COMPOUNDS EXCEEDING RECOMMENDED HEALTH ADVISORY LEVELS

PWS NAME	COMPOUND	LEVEL	HEALTH ADVISORY* CRITERIA	STATUS
Bloomfield	Trihalomethanes	139 PPB	MCL is 100 PPB	Conducting additional monitoring & public notification
Centerville	Trihalomethanes	153 PPB	MCL is 100 PPB	Conducting additonal monitoring & public notification
Corning	Trihalomethanes	175 PPB	MCL is 100 PPB	Conducting additional monitoring & public notification
Cresco	Tetrachloroethylene	32 PPB	Unacceptable cancer risk level is 6.6 PPB	Contaminated well taken out of service. Drinking water contamination problem resolved.
Doon	Dual	29 PPB	Lifetime health advisory level is 10.5 PPB	Conducting additional monitoring & public notification
Fayette	Benzene Methyl t-Butyl Ether	8 PPB 59 PPB	MCL is 5 PPB Lifetime health advisory is 50 PPB	Contaminated well taken out of service. Drinking water contamination problem resolved.
Greenfield	Trihalomethanes	126 PPB	MCL is 100 PPB	Conducting additional monitoring & public notification
Osceola	Trihalomethanes	175 PPB	MCL is 100 PPB	Conducting additional monitoring & public notification
Oxford Junction	Atrazine	14 PPB	Lifetime health advisory is 2.5 PPB	Conducting additional monitoring & public notification
	Lasso	20 PPB	Unacceptable cancer risk level is 1.5 PPB	Conducting additional monitoring & public notification

*The trihalomethane maximum contaminant level applies only to water systems serving more than 10,000 people.

concentration and introduction, and was selected because of its relatively low detection limit for the compounds of interest and the capability of the instrument to identify sample contaminants via their mass spectra.

The pesticides listed in Appendix 3 except for Banvel, Amiben, Silvex and 2,4-D were analyzed by a quality assured extraction and analytical scheme which is essentially EPA Method 608. The only exception was that the serial extraction was performed with 45% (by volume) methylene chloride in hexane and that multiple chromatographic runs were needed to analyze for both the chlorinated hydrocarbons insecticides and the nitrogen and phosphorus containing herbicides and insecticides. The chlorinated hydrocarbons insecticides were analyzed using either packed or capillary column gas chromatography with electron capture detector. A confirmation run on a column (packed or capillary) having different retention characteristics was made for any observed compounds. The nitrogen and phosphorus containing herbicides and insecticides were analyzed with a packaged or capillary column gas chromatography with nitrogen and phosphorus specific detectors. The capillary column was preferred because of its greater specificity. A confirmation run on a packed or capillary column was made on samples with observed compounds. Banvel, Amiben, 2, -D, Silvex and the other acid base pesticides were analyzed using standards methods technique 509B.

Analytical precision (i.e., a measure of probability of agreement between replicate measurements on identical samples.) and accuracy (i.e., a measure of closeness to a known value expressed as an average number of measurements compared to an accepted reference value.) data for the study were developed as described below for each procedure involving a separate extraction and analysis:

VOLATILE SYNTHETIC ORGANIC COMPOUNDS

Determined from a random sampling of surrogate recoveries in the House File 2303 samples:

accuracy (percent recovery)	precision (relative standard deviation of measurement)
98%	±8.9%

PESTICIDES

Determined from recoveries of pesticides in each separate analytical procedure spiked in well water during the period of House File 2303 testing.

analyte category (method)	accuracy (percent recovery)	precision (relative standard deviation of measurement)
chlorinated hydrocarbon insecticides	87.7%	±22.2%
acid herbicides	65.3%	±30.4%
common herbicides and insecticides	116.0%	±50.9%

APPENDIX 4

ANALYTICAL RESULTS

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ENVIRONMENTAL PROTECTION COMMISSION

ITEM 9 DECISION

Proposed New Chapter 39: Requirements for Properly Plugging Abandoned Wells

Rules have been developed for implementing Iowa Code chapter 455B, House File 631, section 305, pertaining to properly plugging abandoned wells. Copies were made available to the commission at the February meeting. Abandoned well owners will be required to certify on form DNR 542-1226 that abandoned wells have been properly plugged in accordance with the requirements of this chapter and the following time schedules.

Category I - Safety. Abandoned wells eight (8) inches or larger in diameter abandoned prior to the effective date of this rule shall be properly plugged within six (6) months after the effective date of this rule.

Category II - Contamination. Abandoned wells abandoned prior to the effective date of this rule (1) located less than 200 feet from an active well supplying potable water or (2) located less than one-eighth of a mile (660 feet) from a point source of contamination shall be properly plugged by July 1, 1990.

Category III - All other wells abandoned prior to the effective date of this rule. All other wells abandoned prior to the effective date of this rule shall be properly plugged by July 1, 1993.

Category IV - Wells abandoned after the effective date of this rule. Wells abandoned after the effective date of this rule shall be properly plugged within 90 days of the date of abandonment.

If the Commission authorizes it, three public hearings on the proposed new chapter of the rules can be held throughout the state beginning on May 12, 1988, and written and oral comments can be received throughout May 23, 1988. The results of the comments and recommendations are scheduled to be brought back to the Commission at the June, 1988 meeting.

WAYNE REED
2-23-88

M033MJT.1

include bentonite pellets, graded bentonite, neat cement, sand cement grout and concrete.

The casing pipe shall be removed down to four (4) feet below the ground surface, and shall be capped by a minimum of one (1) foot of bentonite pellets, graded bentonite, neat cement, sand cement grout or concrete. The cap shall extend six (6) or more inches beyond the outside diameter of the top of the remaining well casing and shall terminate three (3) feet below the ground surface.

If there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet (three (3) feet above the cap) shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

b. Wells less than eighteen (18) inches in diameter or greater than one hundred (100) feet in depth, excluding sandpoint wells. Plugging of wells less than eighteen (18) inches in diameter or greater than one hundred (100) feet in depth must be performed by a registered well driller.

Fill material consisting of sand, gravel, crushed stone or pea gravel shall be placed in the bottom portion of the well open to the water-bearing formation up to four (4) feet below the static water level. A minimum of four (4) feet of sealing materials consisting of bentonite products or neat cement shall be added above the fill material up to the static water level. If bentonite grout or neat cement is used, it shall be placed by tremie pipe. If bentonite pellets or graded bentonite are used, they may be added by pouring in place and agitating to avoid bridging. Any of the approved sealing materials shall be added above the static water level up to four (4) feet below the ground surface. If bentonite grout is used, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The fill materials may be omitted and any of the approved sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Only bentonite products or neat cement sealing materials shall be used below the static water level. If bentonite grout is used from the static water level to the top of the well, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

c. Sandpoint wells. Plugging of sandpoint wells must be performed by a registered well driller. The preferred method of plugging a sandpoint well is to pull the casing and sandpoint out of the ground, allowing the hole to collapse and fill. If the sandpoint and casing cannot be extracted, they shall be tremied full of neat cement or completely sealed with bentonite products.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 10

DECISION

ADOPTED RULE -- CHAPTER 102 -- PERMITS

The Commission is requested to adopt the rule amending Chapter 102 of the ARC.

Attached is a copy of the rule and our responsiveness summary. We received extensive comments on our proposal that 50 percent of the sludge must be solid. All of the commentors objected to such a high percentage for solids. The staff is asking the Commission to decide what would be an acceptable ratio of solids to liquids.

As authorized by the Commission, public hearings were held at various locations across the state on January 6, 7 and 8, 1988. All comments oral and written were considered.

Hamlin
3/4/88

(I09.MIN/sc)

IOWA DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 11 INFORMATION

REVISIONS-CHAPTER 22 RULES-AIR QUALITY PERMITS

The commission will be provided copies of a proposed revisions to the department's air quality permit regulations. Specifically, the proposed revision will address exemptions from the requirement to obtain air quality construction permits before the construction or use of certain equipment used in the agricultural sector. The intent is to clarify the existing exemptions applicable to "agricultural purposes" to address changes in farm production and management practices which have occurred since these rules were first adopted.

These rules would be brought back to the commission at their April meeting for approval of a Notice of Intended Action to begin the formal rulemaking process.

Allan E. Stokes
Environmental Protection Division
March 7, 1988

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ENVIRONMENTAL PROTECTION COMMISSION

ITEM 12

INFORMATIONAL

PUBLIC WATER SUPPLY RULES

Proposed rules incorporating federal Safe Drinking Water Act requirements will be discussed. A copy of the proposed rules will be provided to the Commission at the meeting. The proposed rules include the following requirements for public water systems:

- Monitoring requirements and maximum contaminant levels for eight volatile organic compounds.
- Monitoring requirements for 51 volatile organic compounds.
- Public notification requirements regarding lead in drinking water.
- The prohibition of the use of lead containing materials in water supply distribution systems and residential and nonresidential piping.

We anticipate bringing a Notice of Intended Action for these rules to the Commission at the April meeting.

Dennis Alt
3/7/88

(108.MIN/sc)

(1) Monitoring must be repeated in three years for systems with equal to or greater than 500 service connections.

(2) Monitoring must be repeated every five years for systems with less than 500 service connections.

(C) When SOCs are detected in the first year of quarterly sampling (or any other subsequent sample that may be taken), regardless of vulnerability, monitoring must be repeated every 3 months, as required under subparagraph "f(2)" of this section.

(iii) The department may reduce the frequency of monitoring to once per year for a groundwater system or surface water system detecting SOCs at levels consistently less than the MCL for three consecutive years.

(iv) Vulnerability of each public water system shall be determined by the department based upon an assessment of the following factors.

(A) Previous monitoring results. A system will be classified vulnerable if any sample was analyzed to contain one or more contaminants listed in 41.3(2)d or 41.4(5)e except for trihalomethanes or other demonstrated disinfection by-products.

(B) Proximity of surface water supplies to commercial or industrial use, disposal or storage of volatile synthetic organic chemicals. Surface waters which withdraw water directly from reservoirs are considered vulnerable if the drainage basin up-gradient and within two (2) miles of the shoreline at the maximum water level contains major transportation facilities such as primary highways or railroads or any of the contaminant sources listed in subparagraph f(8)(iv)(C) of this section. Surface water supplies which withdraw water directly from flowing water courses are considered vulnerable if the drainage basin up-gradient and within two (2) miles of the water intake structure contains major transportation facilities such as primary highways or railroads or any of the contaminant sources listed in subparagraph f(8)(iv)(C) of this section.

(C) Proximity of groundwater supplies to commercial or industrial use, disposal or storage of volatile synthetic organic chemicals. Wells that are not separated from sources of contamination by at least the following distances will be considered vulnerable.

Sources Of Contamination	Shallow Wells (as defined in 40.2--455B)	Deep Wells (as defined in 40.2--455B)
Sanitary and industrial point discharges	400 ft.	400 ft.
Mechanical waste treatment plants	400 ft.	200 ft.
Lagoons	1,000 ft.	400 ft.
Chemical & mineral storage (above ground)	200 ft.	100 ft.
Chemical & mineral storage including underground storage tanks on or below ground	400 ft.	200 ft.
Solid waste disposal site	1,000 ft.	1,000 ft.

(v) A system is deemed to be vulnerable for a period of three years after any positive measurement of one or more contaminants listed in either 41.3(2)d or 41.4(5)e except for trihalomethanes or other demonstrated disinfection by-products.

(9) Compliance with 41.3(2)d shall be determined based on the results of running annual average of quarterly sampling for each sampling location. If one location's average is greater than the MCL, then the system shall be deemed to be out of compliance. If a public water system has a distribution

(2) 1,2,4-Trichlorobenzene
(3) 1,2,3-Trichlorobenzene
(4) n-Propylbenzene
(5) n-Butylbenzene
(6) Naphthalene
(7) Hexachlorobutadiene
(8) 1,3,5-Trimethylbenzene
(9) p-Isopropyltoluene
(10) Isopropylbenzene
(11) Tert-butylbenzene
(12) Sec-butylbenzene
(13) Fluorotrichloromethane
(14) Dichlorodifluoromethane
(15) Bromochloromethane

k. Instead of performing the monitoring required by this section, a community water system or nontransient, noncommunity water system serving fewer than 150 service connections may send a letter to the department stating that its system is available for sampling. Samples are not required unless requested by the department. The letter must be sent to the state no later than January 1, 1991.

(1) All community and nontransient, noncommunity water systems shall repeat the monitoring required in 41.4(5) no less frequently than every five years from the dates specified in 41.4(5)a.

567--41.4(6)(455B) Analytical methods for radioactivity. Change paragraph designation to "41.4(7)."

567--41.4(7)(455) Monitoring frequency for radioactivity in community water systems. Change paragraph designation to "41.4(8)."

567--41.4(8)(455B) Macroscopic organisms and algae. Change paragraph designation to "41.4(9)."

567--41.4(9)(455B) Special monitoring for sodium. Change paragraph designation to "41.4(10)."

567--41.4(10)(455B) Special monitoring for corrosivity characteristics. Change paragraph designation to "41.4(11)."

567--41.4(11)(455) Certification of laboratories. Change the paragraph designation to "41.4(12)." Modify the beginning statement as follows:

For the purpose of determining compliance with 41.4(1) ~~to~~ through ~~41.4(10)~~ 41.4(11), samples may be considered only if they have been analyzed by a laboratory currently certified by the department except that measurements for turbidity, temperature, pH and free chlorine residual may be performed by any person acceptable to the department.

567--41.4(12)(455B) Alternative analytical techniques. Change paragraph designation to "41.4(13)."

567--41.4(13)(455B) Monitoring of interconnected public water supply systems. Change paragraph designation to "41.4(14)."

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 13

INFORMATIONAL

NOTICE OF INTENDED ACTION -- WAIVER OF ENGINEERING PLANS FOR EXISTING CHANNEL CHANGE PROJECTS

As directed by the Commission, the department staff has drafted rule amendments which would automatically waive the submission of engineering plans as part of an after-the-fact permit application for channel changes if the channel change has been in place for more than a certain number of years. The draft Notice of Intended Action will be distributed and discussed at the meeting.

(I05.MIN/sc)

Riessen
2-29-88

Grand, Des Moines, Iowa 50319-0034. Persons are also invited to present oral or written comments at public hearings which will be held on _____, 1988 at _____ at the Iowa Department of Natural Resources, Geological Survey Bureau, Trowbridge Hall, 123 North Capitol, Iowa City, Iowa 52242; on _____, 1988 at _____ in the fifth floor conference room, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034; and on _____, 1988 at _____ at the Iowa western Community College, Continuing Education Building, Room ___, Council Bluffs, Iowa 51501.

The following rule amendment is proposed:

ITEM 1. Paragraph 70.4(2)"b" is amended to read as follows:

b. Waiver of submission of certified plans. The department shall waive the requirement for certified plans contained in paragraph "a" of this subrule for any channel change project where the applicant establishes by affidavit that the channel change has been in place for more than _____ years. The department may waive the requirement ~~in-paragraph-"a"-of-this-subrule-that-the application-for-approval-of-a-floodplain-project-be-supported-by~~ for certified engineering plans for any project by making the following determinations in the order which approves or disapproves the project:

1) Engineering data are not required to determine that the project is minor in scope and conforms to all applicable administrative and statutory criteria; or

2) Adequate engineering used to evaluate the dimensions and effects of the project were already available to engineering staff.

(EP70.MIN/sc)

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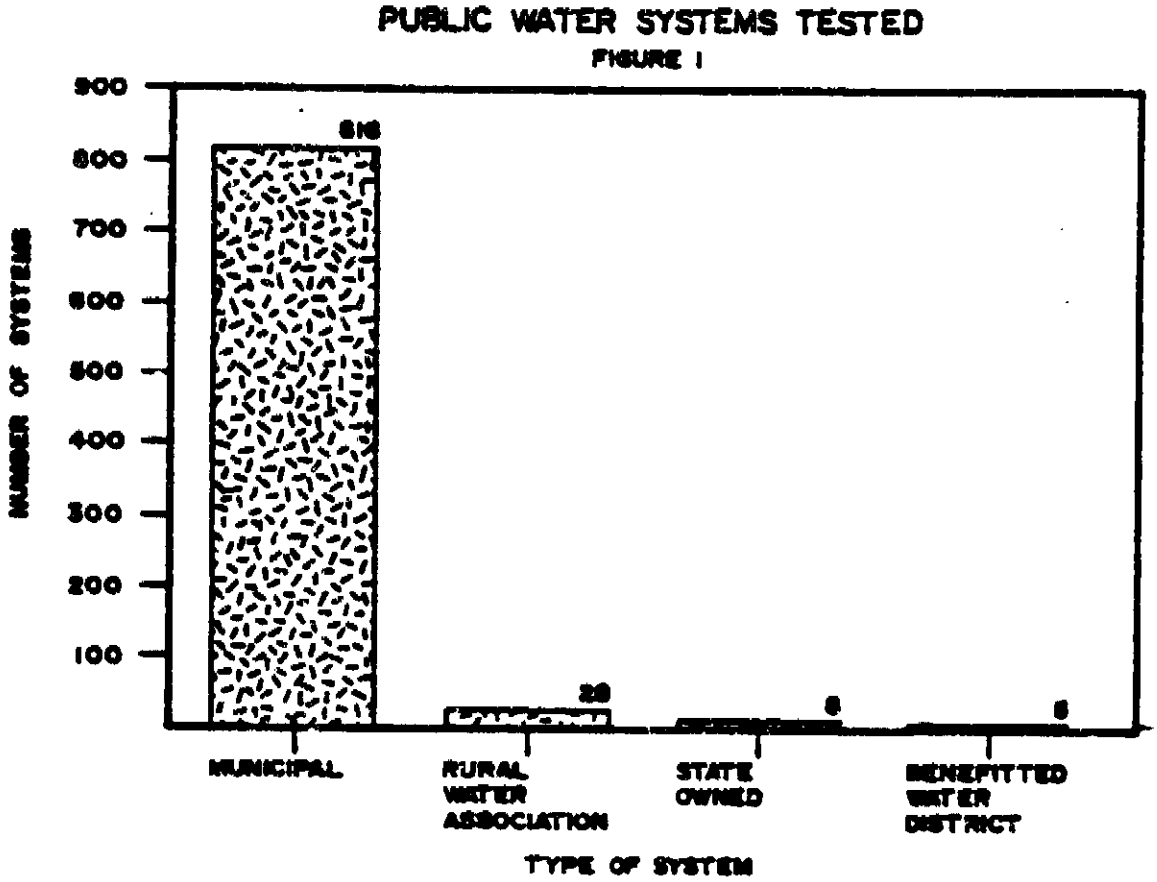
The contents of this report are based on analytical data received by November 15, 1987.



Laboratory selection. To insure the integrity of the analytical data, the legislation provided for the selection of one laboratory to conduct the testing. A laboratory bid package was prepared which specified analytical methodology and detection limits, sample reporting and scheduling requirements and quality control/quality assurance (QC/QA) measures. The bidding protocol required the submittal of documentation which would support the laboratory's capabilities in meeting the project specifications. A proposed analytical fee was to accompany each laboratory bid. The University Hygienic Laboratory (UHL), Oakdale Campus, University of Iowa, Iowa City, Iowa was the only laboratory to submit a bid for the testing. The analytical fees were $309 per sample. During October 1986, a laboratory services contract for the testing was finalized between IDNR and UHL.

Monitoring schedules. The testing period ran from November 1, 1986, to November 1, 1987. Approximately seventy (70) water systems were notified each month to conduct their sampling.

In designing the sampling schedule, the water source and project duration were taken into consideration. The primary raw water source for each system was identified. The systems were then assigned to one of six categories based on

STUDY RESULTS

Appendix 4-ANALYTICAL RESULTS provides a summary of the results for each public water system tested. Eight hundred and fifty-three (853) water systems were tested, with two hundred and seventy-nine (279) having no measurable concentrations of pesticides or SOCs. Ninety-seven (97) tested positive for both pesticides and SOCs. One or more pesticides were detected in one hundred and twenty-two (122) water systems. The pesticides most frequently found were Atrazine, Lasso, Bladex, Dual and 2,4-D.

SOCs were detected in five hundred and forty-eight (548) systems. The majority of the synthetic organic compounds found (i.e., chloroform, bromodichloromethane, bromoform and dibromodichloromethane) belong to a group of compounds called trihalomethanes. Trihalomethanes are formed when chlorine, which is used in the disinfection of drinking water, reacts with naturally occurring organic matter found in the water. The health significance of the appearance of the trihalomethanes is that chloroform has been found to cause cancer in laboratory animals. The current IDNR water supply monitoring rules, which were adopted from federal standards, require systems providing drinking water to more than 10,000 people to monitor for trihalomethanes. The maximum contaminant level for trihalomethanes is 100 PPB and is based on the average analytical result of samples collected quarterly for a year. Only one water system (i.e., University of Iowa Water System) which serves over 10,000 was found to have a trihalomethane concentration greater than 100 PPB. The rest of the systems serve less than 10,000 people. Table 3 shows the systems with verified results exceeding 100 PPB. The water source and population served are also indicated.

TABLE 3

SYSTEMS WITH TRIHALOMETHANE CONCENTRATIONS GREATER THAN 100 PPB

PWS NAME	SOURCE	POPULATION	TRIHALOMETHANE LEVEL
Bloomfield	Reservoir	2,849	139 PPB
Centerville	Reservoir	6,558	153 PPB
Corning	Reservoir	1,939	175 PPB
Greenfield	Reservoir	2,243	126 PPB
Osceola	Reservoir	3,750	175 PPB

IDNR believes it is worth noting that the sample collection methodology used in this study to measure trihalomethane concentrations is not the same method used to determine compliance with the trihalomethane maximum contaminant level. Compliance monitoring samples are dechlorinated with a thiosulphate solution. This is done to prevent the continued formation of trihalomethanes after collection until the sample is analyzed. Samples in this study were not dechlorinated because of the unknown effect the thiosulfate solution might have on the other analytical parameters. The trihalomethane concentrations found in this project may be artificially high due to the continued formation

FINDINGS DRAWN FROM STUDY RESULTS

1. Surface water systems have the greatest potential for pesticide contamination.

2. The shallower ground water sources have a greater potential for contamination by pesticides and SOC's.

3. A seasonal trend in pesticide occurrences in water sources was not observed.

4. The frequency of appearance and concentration of trihalomethanes in ground water systems was unexpected.

RECOMMENDATIONS DRAWN FROM STUDY RESULTS

1. Modify IDNR's statutory authority so that in the absence of federal regulations, the Department may adopt monitoring and drinking water standards for public water supplies for pesticides and SOCs commonly used in Iowa and found in drinking water (i.e., Atrazine, Bladex, Lasso, Dual, 2,4-D, 1,2-Dichlorethane, Ethylbenzene, Tetrachloroethene, Toluene, Benzene, Carbon Tetrachloride, Methylene Chloride, 1,1,1-Trichloroethene, o-Xylene and p+m-Xylene).

2. The trihalomethane formation process would appear to limit their presence in ground water. However, the study results indicate the potential for ground water systems to exceed the trihalomethane maximum contaminant level. Therefore, encourage and support studies to determine the source and significance of trihalomethanes in ground water supplies.

3. The trihalomethane monitoring requirement and standard, which is cu rently applicable to systems serving more than 10,000 people, should be extended to include all surface water supplies regardless of size.

4. Conduct additional controlled studies to correlate the significance of pesticide and SOC contamination in finished drinking water and ground water sources.

5. Educate water suppliers with vulnerable water sources (e.g., surface and shallow ground water sources, and water sources in close proximity to commercial or industrial use, disposal or storage of synthetic organic compounds and pesticides) of the possible contamination pathways and encourage the development of economical and innovative methods to protect drinking water sources.

6. Encourage and support studies directed at developing innovative and economical treatment techniques for the removal of pesticides and SOC's.

7. Adequate funding should accompany sampling projects of this nature to insure follow-up and data analysis activities can be conducted.

Public Water Supply Compounds above Detection Limits

Pws ID: 4201001				
Name: ACKLEY MUNICIPAL WATER WORKS	No Contaminants Detected			
City: ACKLEY				
Date Collected: 09/14/87				
Pws ID: 0105002				
Name: ADAIR MUNICIPAL WATER SUPPLY	No Contaminants Detected			
City: ADAIR				
Date Collected: 09/23/87				
Pws ID: 2503003				
Name: ADEL MUNICIPAL WATER WORKS	chloroform	17	uG/L	
City: ADEL	bromodichloromethane	8	uG/L	
Date Collected: 12/19/86	dibromochloromethane	2	uG/L	
Pws ID: 8803005				
Name: AFTON WATER SYSTEM	atrazine	0.37	uG/L	
City: AFTON	bladex	1.40	uG/L	
Date Collected: 08/24/87	chloroform	200	uG/L	
	bromodichloromethane	27	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 9003006				
Name: AGENCY WATER WORKS	atrazine	0.28	uG/L	
City: AGENCY	chloroform	1	uG/L	
Date Collected: 11/17/86				
Pws ID: 9203007				
Name: AINSWORTH WATER WORKS	dibromochloromethane	1	uG/L	
City: AINSWORTH	bromoform	3	uG/L	
Date Collected: 11/17/86				
Pws ID: 7509008				
Name: AKRON MUNI LIGHT & WATER WORKS	No Contaminants Detected			
City: AKRON				
Date Collected: 02/23/87				
Pws ID: 1103009				
Name: ALBERT CITY MUNI WATER SUPPLY	chloroform	2	uG/L	
City: ALBERT CITY				
Date Collected: 03/09/87				
Pws ID: 6803010				
Name: ALBIA MUNICIPAL WATER WORKS	atrazine	0.87	uG/L	
City: ALBIA	bladex	4.70	uG/L	
Date Collected: 12/01/86	chloroform	100	uG/L	
	bromodichloromethane	24	uG/L	
	dibromochloromethane	2	uG/L	

ENVIRONMENTAL PROTECTION COMMISSION [567]
Notice of Intended Action

Pursuant to the authority of 1987 Iowa Code Supplement section 455B.190, the Environmental Protection Commission intends to create a new Chapter 39, "Requirements for Properly Plugging Abandoned Wells." 1987 Iowa Code Supplement section 455B.190 requires that all abandoned wells be properly plugged in accordance with a closure program implemented by the Department of Natural Resources. Accordingly, the proposed rules establish a time schedule for plugging various types of abandoned wells; set forth proper procedures and materials to be employed; and require certification of each plugged well by completing a new form entitled, "Abandoned Water Well Plugging Record."

Any interested person may file written comments or suggestions on the proposed rules through May 23, 1988. Such written materials should be directed to Wayne Reed, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034. Persons are also invited to present oral or written comments at public hearings which will be held on May 12, 1988 at 10:00 a.m. at the Kirkwood Community College, Iowa Hall, Iowa Room, Cedar Rapids, Iowa; on May 13, 1988 at 10:00 a.m. in the Denison Community Room, 111 North Main Street (adjacent to City Hall), Denison, Iowa; and on May 16, 1988 at 10:00 a.m. at the Wallace State Office Building in the ground floor auditorium, 900 East Grand Avenue, Des Moines, Iowa.

Copies of the proposed rules may be obtained from the Records Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034.

In accordance with Iowa Code section 17A.31, notice is hereby given that these rules may have an impact on small business.

These rules are intended to implement 1987 Iowa Code Supplement section 455B.190.

Chapter 39
Requirements For Properly Plugging Abandoned Wells

567--39.1(455B) Purpose. The purpose of this chapter is to implement 1987 Iowa Code Supplement section 455B.190 by providing a schedule and required procedures for the proper plugging of abandoned wells.

567--39.2(455B) Applicability. These rules govern the proper plugging of all abandoned wells. For additional guidance and background information, refer to "Guidelines for Plugging Abandoned Water Wells," Technical Information Series 15, Geological Survey Bureau, Iowa Department of Natural Resources, 1987.

567--39.3(455B) Definitions.

"Abandoned well" means a water well which is no longer in use or which is in such a state of disrepair that continued use for the purpose of accessing groundwater is unsafe or impracticable.

"Agricultural lime" means all calcium and magnesium products sold for agricultural purposes in the oxide, hydrate, or carbonate form; such form being designated as quicklime, hydrated lime, carbonate of lime, and crushed or ground limestone which is used for agricultural purposes as a soil pH buffer.

39.7(3) Bedrock wells. Plugging of all bedrock wells shall be performed by registered well drillers. If the details of well construction are unknown, the well shall be (1) tremied full of neat cement up to four (4) feet below the ground surface or (2) tremied full of bentonite grout up to ten (10) feet below the ground surface, with the bentonite grout capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

a. Bedrock wells completed in a single confined aquifer. Before proceeding to plug the well, a bridge plug or packer shall be placed at or below the bottom of the casing to stop the flow of water if necessary where the pressure in the confined aquifer is great, causing the well to flow at the surface.

Fill material consisting of pea gravel, crushed stone or gravel shall be placed from the bottom of the well to within ten (10) feet below the bottom of the casing. Sealing material consisting of bentonite products or neat cement shall be placed from the top of the fill material to at least ten (10) feet above the bottom of the casing or to the static water level, whichever is higher. If bentonite grout or neat cement is used, it shall be placed by tremie pipe. Bentonite pellets or graded bentonite may be added by pouring in place and agitating to avoid bridging. Any of the approved sealing materials shall be added above the static water level up to four (4) feet below the ground surface. If bentonite grout is used, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The fill materials may be omitted and any of the approved sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Only bentonite products or neat cement sealing materials shall be used below the static water level. If bentonite grout is used from the static water level to the top of the well, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

b. Bedrock wells completed in a single unconfined aquifer. The plugging procedure for these wells is the same as for bedrock wells completed in a single confined aquifer except that a bridge plug or packer is not required to stop the flow of water since this problem will not exist in this type of well.

c. Bedrock wells completed in multiple aquifers. For the lowest aquifer, fill material consisting of pea gravel, crushed stone or gravel shall be placed to within ten (10) feet below the bottom of the casing or confining layer. Neat cement tremied in place shall then be used as a sealing material to ten (10) feet above the bottom of the casing or above the bottom of the confining layer, whichever is highest. The minimum thickness of the sealing material above each aquifer shall be ten (10) feet except for the uppermost aquifer. This same procedure and type of fill materials and sealing material shall be used throughout subsequent aquifers including the uppermost aquifer. The seal for the uppermost aquifer shall extend from at least ten (10) feet below the bottom of the casing to at least ten (10) feet above the bottom of the casing. The casing shall be filled above the static water level with any of the approved sealing materials up to four (4) feet below the ground surface. If bentonite grout is used, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

RESPONSE SUMMARY
TO
FORMAL COMMENTS ON RULES PERTAINING TO
DISPOSAL OF "WET SEWER SLUDGE" IN
SANITARY LANDFILLS

Public hearings held in Iowa City, Council Bluffs and Des Moines, Iowa on January 6, 7 and 8, 1988, respectively.

Commentors

1. John P. Bellizzi, P.E.
2. Abie C. Davis, P.E.
3. David M. Fox, P.E.
4. Richard D. Franc
5. Charles L. Meyer, P.E.
6. David C. Nelson, P.E.
7. Craig Olson
8. James D. Resnick
9. Charles J. Schmadeke
10. Cynthia Turkle

A. Commentors: 1, 4, 5, 6, 9, 10

Comment: The technology required to achieve a 50 percent solid content in stabilized sludge is not economically feasible.

Response: The following table indicates sludge dewatering technology and typical solids content:

Type	Percent Solids
Sludge Beds	25 to 40
Vacuum Filtration	15 to 40
Centrifuge	30 to 40
Belt Filter Presses	30 to 40
Composting	30 to 40

It is possible to increase the solids content by adding larger doses of coagulants or other chemicals to increase the solids percentage. It may be more economical to compost, incinerate, or land apply sludge at a permitted site than to dispose of it in a sanitary landfill.

B. Commentors: 3, 5, 6, 7, 8, 9

Comment: The proposed rule amendment requires that sewer sludge have liquid content less than 50 percent in order to qualify for land disposal at a sanitary landfill. This definition will virtually eliminate the possibility of land disposal of municipal sewer sludges at landfills because without composting, this level of solids content it is virtually impossible. A large number of communities, both small and large in the

1 22.1(2) **Exemptions**. The provisions of this rule shall not apply
2 to the following listed equipment or control equipment
3 unless review of the equipment or control equipment is
4 necessary to comply with rule 22.4(455B) or 22.5(455B),
5 in which case a permit must be obtained.
6 ...
7 d. Equipment used ~~on farms and~~ ranches for ~~agricultural~~
8 ~~purposes~~ cultivating land, harvesting crops, or raising
9 livestock other than anaerobic lagoons. This exemption
10 is not applicable if the equipment is used to remove
11 substances from grain which were applied to the grain by
12 another person. This exemption is also not applicable
13 to equipment used by a person to manufacture commercial
14 feed, as defined in section 198.3, which is normally not
15 fed to livestock owned by that person or another person
16 in a feedlot, as defined in section 172D.1, subsection 6,
17 or a confinement building owned or operated by that
18 person and located in this state.

DRAFT WATER SUPPLY RULES

*SYNTHETIC ORGANIC CHEMICALS AND MONITORING FOR UNREGULATED CONTAMINANTS

*PROHIBITION ON USE OF LEAD PIPES, SOLDER AND FLUX

567--40.2(455B) Definitions. Add the following definitions in alphabetical order.

"Best available technology" or "BAT" means the best technology, treatment techniques, or other means which the state finds, after examination, for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration).

"Deep well" means a well located and constructed in such a manner that there is a continuous layer of low permeability soil or rock at least five (5) feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

"Lead free" means (1) when used with respect to solder and flux refers to solders and flux containing not more than 0.2 percent lead, and (2) when used with respect to pipes and pipe fittings refers to pipes and lead fittings containing not more than 8.0 percent lead.

"Nontransient noncommunity water system or "NTNCWS" means a public water system that is not a community water system and that regularly serves at least 25 of the same persons four hours or more per day, for four or more days per week, for 26 or more weeks per year. Examples of NTNCWSs are schools, day-care centers, factories, offices and other public water systems which provide water to a fixed population of 25 or more people. In addition, other service areas such as hotels, resorts, hospitals and restaurants are considered as NTNCWS if they employ more than 25 people and are open six or more months of the year.

"Point-of-entry treatment device" is a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

"Point-of-use treatment device" is a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap.

"Shallow well" means a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock at least five (5) feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

567--41.3(2)(455B) Organic chemicals. Amend as follows:

41.3(2) Organic chemicals. The following are the maximum contaminant levels for organic chemicals. The-maximum-contaminant-levels-in-paragraphs "a"-and-"b"-of-this-subrule-apply-to-all-community-water-systems.--The-maximum contaminant-level-for-total-trihalomethanes-in-paragraph-"e"-of-this-subrule applies-only-to-community-water-systems-which-serve-a-population-of-10,000-or more-individuals-and-which-add-a-disinfectant-(oxidant)-to-the-water-in-any part-of-the-drinking-water-treatment-process.--Compliance-with-maximum contaminant-levels-for-organic-chemicals-is-calculated-pursuant-to-41.4(4)-and 41.4(5).

system separable from other parts of the distribution system with no interconnections, only that part of the system that exceeds any MCL as specified in 41.3(2)d will be deemed out of compliance. The department may reduce the public notice requirement to that portion of the system which is out of compliance. If any one sample result would cause the annual average to be exceeded, then the system shall be deemed to be out of compliance immediately. For systems that only take one sample per location because no SOCs were detected, compliance shall be based on that one sample.

(10) Analysis under this paragraph shall be conducted using the following approved methods or their equivalent as approved by Department. These methods are contained in "Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water," September 1966, available from Environmental and Support Laboratory (EMSL), EPA, Cincinnati, OH 45266 or the department.

(i) Method 502.1, "Volatile Halogenated Organic Chemicals in Water by Purge and Trap Gas Chromatography."

(ii) Method 503.1, "Volatile Aromatic and Unsaturated Organic Compounds in Water by Purge and Trap Gas Chromatography."

(iii) Method 524.1, "Volatile Organic Compounds in Water by Purge and Trap Gas Chromatography."

(iv) Method 524.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography/Mass Spectrometry."

(v) Method 502.2, "Volatile Organic Compounds in Water by Purge and Trap Capillary Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series."

(11) Analysis under this section shall only be conducted by laboratories that have received conditional approval by the department according to the following conditions:

(i) To receive conditional approval to conduct analyses for benzene, vinyl chloride, carbon tetrachloride, 1,2-dichloroethane, trichloroethylene, 1.1-dichloroethylene, 1,1,1-trichloroethane, and paradichlorobenzene the laboratory must:

(A) Analyze Performance Evaluation samples which include these substances provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the department.

(B) Achieve the quantitative acceptance limits under subparagraphs "f(11)(i)(C)" and "f(11)(i)(D)" of this section for at least six of the seven subject organic chemicals.

(C) Achieve quantitative results on the analyses performed under subparagraph "f(11)(i)(A)" that are within ±20 percent of the actual amount of the substances in the Performance Evaluation sample when the actual amount is greater than or equal to 0.010 mg/l.

(D) Achieve quantitative results on the analyses performed under subparagraph "f(11)(i)(A)" of this section that are within ±40 percent of the actual amount of the substances in the Performance Evaluation sample when the active amount is less than 0.010 mg/l.

(E) Achieve a method detection limit of 0.0005 mg/l, according to the procedures in 40 CFR, Appendix B of Part 136, October 26, 1984.

(F) Be currently approved by the department for the analyses of trihalomethanes under 41.4(6).

(ii) To receive conditional approval for vinyl chloride, the laboratory must:

567--41.4(14)(455B) Department analytical results used to determine compliance. Change paragraph designation to "41.4(15)."

567--41.4(15)(455B) Monitoring of other contaminants. Change paragraph designation to "41.4(16)."

567--41.5(1)(455B) Reporting requirements.

a. No change.

b. No change.

Add "c" as follows:

c. The owner or operator shall notify persons served by the system of the availability of the results of sampling conducted under 41.4(6) by including a notice in the first set of water bills issued by the system after the receipt of the results or written notice within three months. The notice shall identify a person and supply the telephone number to contact for information on the monitoring results.

567--41.5(2)(455B) Public notification requirements. Change the title of the paragraph to "General public notification requirements."

Add new paragraph "567--41.5(4) Public notification requirements pertaining to lead." Paragraph reads as follows:

a. Applicability of public notice requirements.

(1) Except as provided in subparagraph "a(2)" of this section, within thirty (30) days after the effective date of these rules, the owner or operator of each community water system and each nontransient, noncommunity water system shall issue notice to persons served by the system that may be affected by lead contamination of their drinking water. The department may require subsequent notices. The owner or operator shall provide notice under 41.5(4) even if there is no violation of the lead maximum contaminant level as prescribed in 41.3(1).

(2) Notice required under subparagraph "a(1)" of this section is not required if the system demonstrates to the department that the water system, including the residential and nonresidential portions connected to the water system, are lead free as defined in 40.2(455B).

b. Manner of notice. Notice shall be given to persons served by the system either by (1) three newspaper notices (one for each of three consecutive months and the first no later than thirty (30) days after the effective date of these rules); or (2) once by mail notice with the water bill or in a separate mailing within thirty (30) days after the effective date of these rules; or (3) once by hand delivery within thirty (30) days after the effective date of these rules. For nontransient noncommunity water systems, notice may be given by continuous posting. If posting is used, the notice shall be posted in a conspicuous place in the area served by the system and start no later than thirty (30) days after the effective date of these rules, and continue for three months.

c. General content of the notice.

(1) Notices issued under this section shall provide a clear and readily understandable explanation of the potential sources of lead in drinking water, potential adverse health effects, reasonably available methods of mitigating known or potential lead content in drinking water, any steps the water system is taking to mitigate lead content in drinking water, and the necessity for seeking alternative water supplies, if any. Use of the mandatory language in

ENVIRONMENTAL PROTECTION COMMISSION [567]
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.278, the Environmental Protection Commission intends to amend Title V, Floodplain Development, Chapter 70, Scope of Title-Definitions-Forms-Rules of Practice.

Iowa Code section 455B.275 provides that a person desiring to undertake construction on a floodplain (including a channel change) shall file a written application with the department setting forth information as required by rule of the Commission. Further, Iowa Code section 455B.264 requires that upon such an application, the Department shall investigate the effect of the proposed project on the efficiency and capacity of the floodway and in determining the effect of the proposal, shall consider fully its effect on flooding of or flood control for any proposed works and adjacent lands and property, on the wise use and protection of water resources, on the quality of water, on fish, wildlife and recreational facilities or uses, and on all other public rights and requirements.

The procedure for submitting such an application and for the Department's review thereof are presently located at 567--70.3, et. seq., Iowa Administrative Code. Approval criteria for various types of floodplain projects are found in 567--Chapter 71, Iowa Administrative Code.

567--70.4(2)"a", Iowa Administrative Code, provides that an application shall not be considered complete until sufficient engineering plans have been submitted to enable the Department to determine whether the project as proposed satisfies applicable criteria and further provides that such engineering plans must be certified by a registered professional engineer as required by Iowa Code Chapter 114. However, submission of certified plans can be waived pursuant to 567--70.4(2)"b", Iowa Administrative Code, if: i) engineering data are not required to determine that the project is minor in scope and conforms to all applicable administrative and statutory criteria or ii) adequate engineering data used to evaluate the dimensions and effects of the project is already available to the engineering staff.

The Environmental Protection Commission feels that in the case of an after-the-fact application to maintain a channel change that was constructed without the necessary approval, certified engineering plans are not necessary if the channel change has been in place more than _____ years. The Commission feels that any potential adverse impacts from a channel change would be apparent within _____ years of the date of construction; therefore, certified engineering plans are not necessary to determine compliance with relevant engineering criteria and the requirement for certified engineering plans places an unnecessary financial burden on the applicant.

Notwithstanding the waiver provisions of 567--70.4(2)"b," Iowa Administrative Code, submission of certified plans cannot be waived for most channel changes because they are not minor in scope and rarely, if ever, does the Department have adequate engineering data already available to properly review a channel change. Therefore, the Commission proposes to amend the waiver provisions of 567--70.4(2)"b", Iowa Administrative Code, to automatically waive submission of certified plans for channel changes if the channel change has been in place for more than _____ years.

Any interested person may file written comments or suggestions on the proposed rules through _____, 1988. The Commission especially desires public comment as to the appropriate time period for the proposed automatic waiver provision. Such written comments should be directed to _____, Iowa Department of Natural Resources, Wallace State Office Building, 900 East

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 14 INFORMATIONAL

PESTICIDE AND SYNTHETIC ORGANIC COMPOUND SURVEY

The Commission will be provided a copy of the Pesticide and Synthetic Organic Compound Survey. The report contains the results and findings of the water system monitoring required by House File 2303. Sampling activities began November 1, 1986 and were concluded on November 1, 1987. The staff will present a summary of the report. It will also be sent to the General Assembly by April 1, 1988.

Humeston
3/4/88

(107.MIN/sc)

SUMMARY

In 1986 the Seventy-first Iowa General Assembly passed House File 2303. This legislation required the Iowa Department of Natural Resources (IDNR) to develop and implement a one-time, finished water testing program of public and privately owned water systems for pesticides and synthetic organic contaminants (SOC). The University Hygienic Laboratory provided the analytical services. The testing was conducted from November 1986 to November 1987. The testing, on a voluntary basis, was also available to privately owned water systems.

Eight hundred and fifty-three (853) public water systems were tested. One hundred and twenty-two (122) tested positive for one or more pesticides. Five hundred and forty-eight (548) tested positive for one or more synthetic organic compounds. No measurable concentrations of pesticides or synthetic organic chemicals were found in two hundred seventy-nine (279) systems. Nine (9) water systems had pesticides or synthetic organic chemical levels that exceeded U.S. Environmental Protection Agency Health Advisory Levels or federal maximum contaminant levels. Contaminant levels high enough to cause an acute health risk were not observed in this study.

The pesticides most commonly found were Atrazine, Bladex, Lasso, Dual and 2,4-D. The most frequently found synthetic organic chemicals belong to a group of compounds called trihalomethanes (THMs). THMs are formed during disinfection when chlorine reacts with organic matter in the water.

The chart at the end of this section provides a summary of results based on the characteristics of the system's primary source of water.

The most significant findings drawn from the project are:

- Surface water systems have the greatest potential for pesticide contamination.
- The shallower ground water sources have a greater potential for contamination by pesticides and SOC's.
- A seasonal trend in pesticide occurrences in water sources was not observed.
- The frequency of appearance and concentration of trihalomethanes in groundwater systems was unexpected.

The most significant recommendations drawn from the project are:

1. Modify IDNR's statutory authority so that in the absence of federal regulations, the Department may adopt monitoring and drinking water standards for public water supplies for pesticides and SOCs commonly used in Iowa and found in drinking water (i.e., Atrazine, Bladex, Lasso, Dual, 2,4-D, 1,2-Dichlorethane, Ethylbenzene, Tetrachloroethane, Toluene, Benzene, Carbon Tetrachloride, Methylene Chloride, 1,1,1-Trichloroethene, o-Xylene and p+m-Xylene).

the primary water source. The sampling schedule was developed so that the number of water systems in each category would be evenly distributed throughout the period of time the project was conducted. The water systems were notified when to sample by the UHL and the samples were collected by a representative of the water system. The source categories and number of water systems in each category are as follow:

*Category 1-Surface Water-41 water supplies.
*Category 2-Wells less than 100 feet deep-217 water supplies.
*Category 3-Wells greater than 100 feet but less than 500 feet deep-337 water supplies.
*Category 4-Wells greater than 500 feet but less than 1000 feet deep-76 water supplies.
*Category 5-Wells greater than 1000 feet-105 water supplies.
*Category 6-Consecutive (i.e., purchase water from another water system)-77 water supplies.

Sampling methodology. Sampling methodology is an important data quality assurance consideration. Unfortunately, only limited sampling quality control measures could be implemented in this project.

For example, improper sample collection technique can bias the analytical precision due to the volatile nature of synthetic organic compounds. While the UHL provided written instruction, in most cases the individuals responsible for conducting the monitoring were not experienced in collecting samples for volatile organic contaminants.

Support resources. The General Assembly did not provide any funding to water systems or IDNR to conduct this project. The following is a summary of activity costs. The total estimated cost incurred to IDNR, water suppliers and the laboratory are estimated to be $306,300.

*IDNR - Estimated Costs $26,000
  Field Office Contamination Investigation
  Central Office
    Rule Making
    Laboratory Selection
    Project Design & Administration
    Final Report Preparation
*Water Suppliers - Estimated Costs $275,000
    Sample Collection
    Mailing Costs
    Analytical Fees
*Laboratory - Estimated Costs $5,300
    Computer Services
    Data Review
    Project Coordination

RESPONSE TO CONTAMINATION INCIDENCES

Since maximum contaminant levels (MCL) have been established for only a few of the pesticides and SOCs it was necessary to identify and respond to those drinking water contamination situations which had potential for creating an

of trihalomethanes after sample collection. Any samples collected to verify a result exceeding the maximum contaminant level were dechlorinated.

Table 4 summarizes SOC occurrences. Twenty-three (23) different SOCs were detected. Among those SOCs detected were acetone and methyl t-butyl ether. These compounds were not included in the list of analytes but, since laboratory personnel noted the presence of unknown compounds, further testing was conducted for identification purposes.

TABLE 4

SYNTHETIC ORGANIC COMPOUND OCCURRENCES

COMPOUND	NUMBER OF OCCURRENCES
Acetone	1
Benzene	4
Carbon Tetrachloride	6
Chlorobenzene	1
o-Dichlorobenzene	1
p-Dichlorobenzene	2
1,1-Dichloroethane	3
1,2-Dichloroethane	8
Ethylbenzene	13
Methylene Chloride	4
Methyl t-Butyl Ether	1
1,1,1-Tetrachloroethane	3
Tetrachloroethene	9
Toluene	9
1,1,1-Trichloroethane	7
Trichloroethene	4
Trihalomethanes	517
(Chloroform)	
(Bromodichloromethane)	
(Dibromodichloromethane)	
(Bromoform)	
Vinyl Chloride	1
o-Xylene	14
p+m-Xylene	45

APPENDIX 1
CREDITS

The Iowa Department of Natural Resources wishes to acknowledge the assistance of the following individuals provided in developing this monitoring project.

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Serco Laboratory
Cedar Falls, IA

Public Water Supply Compounds above Detection Limits

Pws ID: 6403011				
Name: ALBION WATER DEPT	dibromochloromethane	1	uG/L	
City: ALBION				
Date Collected: 11/10/86				
Pws ID: 5704012				
Name: ALBURNETT WATER SUPPLY	No Contaminants Detected			
City: ALBURNETT				
Date Collected: 10/15/87				
Pws ID: 4213013				
Name: ALDEN WATER SUPPLY	No Contaminants Detected			
City: ALDEN				
Date Collected: 07/07/87				
Pws ID: 4213013 Repeat				
Name: ALDEN WATER SUPPLY	chloroform	71	uG/L	
City: ALDEN	bromodichloromethane	7	uG/L	
Date Collected: 08/10/87	dibromochloromethane	1	uG/L	
Pws ID: 3503014				
Name: ALEXANDER WATER DEPT	No Contaminants Detected			
City: ALEXANDER				
Date Collected: 06/15/87				
Pws ID: 4652011				
Name: OTTOSEN WATER SUPPLY	chloroform	2	uG/L	
City: ALGONA	bromodichloromethane	1	uG/L	
Date Collected: 02/18/87	dibromochloromethane	1	uG/L	
Pws ID: 4654043				
Name: PIONEER WATER SYSTEM	No Contaminants Detected			
City: ALGONA				
Date Collected: 10/26/87				
Pws ID: 5502015				
Name: ALGONA MUNICIPAL UTILITIES	chloroform	1	uG/L	
City: ALGONA				
Date Collected: 06/15/87				
Pws ID: 7705022				
Name: ALLEMAN WATER SUPPLY	chloroform	3	uG/L	
City: ALLEMAN				
Date Collected: 01/15/87				
Pws ID: 9303024				
Name: ALLERTON WATER WORKS	atrazine	2.10	uG/L	
City: ALLERTON	bladex	0.93	uG/L	
Date Collected: 11/12/86	chloroform	64	uG/L	
	bromodichloromethane	13	uG/L	

"Annular space" means the space between the well casing and the well bore or the space between two or more concentric well casings.

"Approved" means accepted or acceptable under an applicable specification stated or cited in these rules.

"Aquifer" means a geological formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

"Artesian well" means a well in an aquifer where the groundwater is confined under pressure and the static water level in the well stands above the top of the confined aquifer it taps.

"Bentonite" means a naturally occurring highly plastic, colloidal clay composed largely of the mineral montmorillonite which expands upon wetting.

"Bentonite grout (or slurry)" means a mixture of ten percent (10%) processed bentonite (by weight) and clean water.

"Bentonite pellets" mean a form of processed bentonite which can be used directly for sealing applications in well plugging operations.

"Bentonite products" mean the forms of bentonite which can be used for sealing materials in wells, including graded bentonite, bentonite pellets and bentonite grout.

"Casing" means a tubular retaining structure which is installed in the excavated hole to maintain the well opening.

"Concrete" means a mixture of one sack (94 pounds) of portland cement, an equal amount by volume of sand and gravel or crushed stone and not more than six (6) gallons of clean water.

"Confined aquifer" means an aquifer in which the groundwater is under pressure greater than atmospheric pressure. The static water level in a well tapping a confined aquifer rises to a level above the top of the aquifer.

"Crushed stone" means Class A or Class B crushed stone as defined in the specifications of the Iowa Department of Transportation.

"Department" means the department of natural resources created under section 455A.2.

"Director" means the director of the department.

"Fill materials" mean soil, sand, gravel, crushed stone, pea gravel and agricultural lime used to occupy space between and below sealing materials in abandoned wells being plugged.

"Graded bentonite" means bentonite which is crushed and sized for pouring and easy handling. Like processed bentonite, it swells when hydrated by fresh water and will form a plastic, essentially impermeable mass.

"Gravel" means Class C gravel as defined in the specifications of the Iowa Department of Transportation.

"Groundwater" means any water of the state, as defined in section 455B.171, which occurs beneath the surface of the earth in a saturated geological formation of rock or soil.

"Grout" means a fluid mixture of cement and water (neat cement); sand, cement and water (sand cement grout); or bentonite and water (bentonite grout or slurry) of a consistency that can be forced through a pipe and placed as required.

"Limestone" means sedimentary rock which contains greater than fifty percent (50%) calcium carbonate and has strong reaction with hydrochloric acid (HCl).

"Liner pipe" means a protective well casing pipe installed subsequent to initial construction to seal off a zone of bacterial or chemical contamination or a casing pipe installed during or subsequent to the initial well construction to seal off a caving formation.

The fill materials may be omitted and any of the approved sealing materials may be used to fill the entire well up to four (4) feet below the ground surface. Only bentonite products or neat cement shall be used as the sealing materials below the static water level. If bentonite grout is used from the static water level to the top of the well, it shall be capped by at least six (6) feet of neat cement terminating four (4) feet below the ground surface.

The upper four (4) feet of the casing pipe below the ground surface shall be removed and if there is any curbing, pump pit or pump house structure located directly over the well, this shall also be removed down to a minimum of four (4) feet below the ground surface. The top four (4) feet shall then be backfilled with soil and graded so that surface water is directed away from the abandoned well location.

567--39.8(455B) Standby wells. Standby wells do not require the plugging operations for an abandoned well which renders the well permanently unusable as a source of water supply. A standby well must be disinfected when taken out of use and must be disinfected and checked for bacterial safety when placed back in service. Disinfection of standby wells shall be done in accordance with AWWA (American Water Works Association) Standard A100. The well must not be subject to contamination by surface drainage or from other causes, and the well casing must be provided with an air-tight cover when the well is not in use.

567--39.9(455B) Variances. In accordance with Iowa Code section 455B.181, a variance to these rules may be granted by the department provided sufficient information is submitted in writing to the department to substantiate the need for such action and to assure the protection of all aquifers penetrated by the affected well. When justification satisfactory to the director is provided substantially demonstrating that a variance to these rules will result in equivalent effectiveness or improved effectiveness, a variance to these rules may be granted by the director. A denial of a variance may be appealed to the Environmental Protection Commission pursuant to Chapter 7 (900--7(455B)).

567--39.10(455B) Noncompliance. Violations of any of the provisions of this chapter may be addressed by the department pursuant to Iowa Code sections 455B.109, 455B.175, 455B.191 and 1987 Iowa Code Supplement section 455B.190.

These rules are intended to implement 1987 Iowa Code Supplement section 455B.190.

_____

Date

_____

Larry J. Wilson, Director

(EP39.MIN/sc)

state of Iowa, depend on disposal of various types of sludges generated in the waste treatment process at their local landfill.

Response: It would be difficult to achieve the 50 percent solids level with conventional technology. However, land disposal of sludge will still be allowed in accordance with Chapter 120. Some large municipalities also utilize sludge incineration. It is not a general practice for communities to dispose of sewage sludge in landfills although a few communities presently utilize landfills for sludge disposal.

C. Commentor: 3

Comment: Wastewater sludges generated in different treatment processes are unique in the water content at the point where they appear and act as a solid material. Some digested activated sludge will be in a solid form with as low as 10 to 12 percent solids while some primary sludges may exhibit 30 to 35 percent solids when similarly processed. It would appear that a more appropriate way to define municipal sewer sludges acceptable for landfilling would be that they appear and act as a solid material and have no free water associated with them. This definition would allow municipalities to continue to discharge sludges at landfills that have previously been permitted that have not caused operational difficulties at the landfill.

Response: Staff agrees that some sludges appear solid, yet have a high moisture content. Other sludges may appear to be fluid at a lower moisture content. We thought the proposed rule reflected the legislative intent.

D. Commentor: 3

Comment: It seems that research would confirm that the majority of solid waste received currently at landfills is less than 50 percent solids.

Response: We have not seen research that indicates the solids content of "typical" solid waste. Considering the large amounts of paper and plastics that make up solid waste, the moisture content of solid waste could be around 50 percent.

E. Commentors: 1, 5, 6, 7

Comment: Draft solid waste regulations developed by EPA call for dewatering of sludge to 20 percent solids. It is recommended that this requirement be imposed now in all new or reissued permits for POTWs disposing of sludge at codisposal landfills. When OMB releases their guidance on the subject, it will be released in the Federal Register for a 60-day comment period. It is expected to become final in March of 1988. If the EPA is recommending 20 percent solids, the 50 percent solids recommendation of DNR staff appears to be overly restrictive. No recommendation is made regarding sludge dewatering for sludge-only landfills.

197.4 Inspection of.
Such records as are required by the department to be kept by such licensee shall be open to inspection by any peace officer at any reasonable time.

[C27, 31, 35, §3112-b5; C39, §3112.5; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §197.4]

197.5 Enforcement.
The department shall be charged with the duty of the enforcement of this chapter.

[C27, 31, 35, §3112-b6; C39, §3112.6; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §197.5]

197.6 Violations.
Any person who shall violate the provisions of this chapter shall, for each offense, be deemed guilty of a simple misdemeanor.

[C27, 31, 35, §3112-b7; C39, §3112.7; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §197.6]

CHAPTER 198

COMMERCIAL FEED

198.1 Short title.
198.2 Enforcing official.
198.3 Definitions.
198.4 Registration.
198.5 Labeling.
198.6 Misbranding.
198.7 Adulteration.
198.8 Prohibited acts.
198.9 Inspection fees and reports.
198.10 Rules.
198.11 Inspection, sampling and analysis.
198.12 Detained commercial feeds.
198.13 Penalties.
198.14 Co-operation with other entities.
198.15 Publication.

198.1 Short title.
This chapter shall be known as the "Iowa Commercial Feed Law of 1974."

[C66, 71, 73, 75, 77, 79, 81, §198.1]

198.2 Enforcing official.
This chapter shall be administered by the secretary of agriculture.

[C66, 71, 73, 75, 77, 79, 81, §198.2]

198.3 Definitions.
For the purposes of this chapter:

1. *"Distribute"* means to offer for sale, sell, exchange or barter, commercial feed or to supply, furnish, or otherwise provide commercial feed to a contract feeder.

2. *"Distributor"* means any person who distributes.

3. *"Commercial feed"* means all materials except whole seeds unmixed or physically altered entire unmixed seeds, when not adulterated within the meaning of section 198.7, subsection 1, which are distributed for use as feed or for mixing in feed. The secretary by rule may exempt from this definition, or from specific provisions of this chapter, commodities such as hay, straw, stover, silage, cobs, husks, hulls and individual chemical compounds or substances when such commodities, compounds or substances are not intermixed or mixed with other materials, and are not adulterated within the meaning of section 198.7, subsection 1.

4. [illegible] materials making up a commercial feed.

5. *"Mineral feed"* means a commercial feed intended to supply primarily mineral elements or inorganic nutrients.

6. *"Drug"* means any article intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in animals other than man and articles other than feed intended to affect the structure or any function of the animal body.

7. *"Customer-formula feed"* means commercial feed which consists of a mixture of commercial feeds or feed ingredients, or both, each batch of which is manufactured according to the specific instructions of the final purchaser.

8. *"Manufacture"* means to grind, mix or blend or further process a commercial feed for distribution.

9. *"Brand name"* means any word, name, symbol, or device or any combination thereof, identifying the commercial feed of a distributor or registrant and distinguishing it from that of others.

10. *"Product name"* means the name of the commercial feed which identifies it as to kind, class, or specific use.

11. *"Label"* means a display of written, printed, or graphic matter upon or affixed to the container in which a commercial feed is distributed, or on the invoice or delivery slip with which a commercial feed is distributed.

12. *"Labeling"* means all labels and other written, printed or graphic matter upon a commercial feed or any of its containers or wrappers or, accompanying such commercial feed.

a. Chlorinated hydrocarbons: (effective June 24, 1977). The maximum contaminant levels apply to all community water systems. Compliance with the maximum contaminant levels is calculated pursuant to 41.4(4)c.

	Level in milligrams per liter
Endrin (1,2,3,4,10, 10-hexachloro-6, 7-epoxy-1,4, 4a,5,6,7,8,8a-octa-hydro-1,4-endo, endo-5,8-dimethano naphthalene).	0.0002
Lindane (1,2,3,4,5,6-hexachloro-cyclohexane, gamma isomer).	0.004
Methoxychlor (1,1,1-Trichloro-2, 2-bis [p-methoxyphenyl] ethane).	0.1
Toxaphene ($C_{10}H_{10}Cl_8$-Technical chlorinated camphene, 67-69 percent chlorine).	0.005

b. Chlorophynoxys: (effective June 24, 1977). The maximum contaminant levels apply to all community water systems. Compliance with the maximum contaminant level is calculated pursuant to 41.4(4)c.

	Level in milligrams per liter
2,4-D (2,4-Dichlorophenoxyacetic acid).	0.1
2,4,5-TP Silvex (2,4,5-Trichloro-phenoxypropionic acid).	0.01

	Level in milligrams per liter
c. Total trihalomethanes.	0.10

The maximum contaminant level for total trihalomethanes applies to community water systems which serve a population of 10,000 or more individuals and which add a disinfectant (oxidant) to the water in any part of the treatment process. Compliance with the maximum contaminant level is calculated pursuant to 41.4(4)d. Total trihalomethanes is the sum of the concentrations of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform) and trichloromethane (chloroform). The total trihalomethane maximum contaminant level shall become effective on November 29, 1981 for community water systems serving 75,000 or more individuals and on November 29, 1983 for community water systems serving 10,000 to 74,999 individuals.

Add the following subparagraph "d":

d. Synthetic organic contaminants. The maximum contaminant levels for synthetic organic contaminants (SOC) apply to community water systems and nontransient noncommunity water systems. Compliance with the maximum contaminant level is calculated pursuant to 41.4(4)(b)(9).

	Level in milligrams per liter
Benzene	0.005
Vinyl chloride	0.002
Carbon tetrachloride	0.005
1,2-Dichloroethane	0.005
Trichloroethylene	0.005
1,1-Dichloroethylene	0.007
1,1,1-Trichloroethane	0.20
para-Dichlorobenzene	0.075

567--41.4(4)(455B) Organic chemical other than trihalomethane sampling and analytical requirements. Amend as follows:

(A) Analyze Performance Evaluation samples provided by EPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the department.

(B) Achieve quantitative results on the analyses performed under subparagraph "f(11)(ii)(A)" of this section that are within ±40 percent of the actual amount of vinyl chloride in the Performance Evaluation sample.

(C) Achieve a method detection limit of 0.0005 mg/l, according to the procedures in 40 CFR, Appendix B of Part 136, October 26, 1984.

(D) Receive approval or be currently approved by the department under subparagraph "f(11)(i)" of this section.

(12) The department may allow the use of monitoring data collected after January 1, 1983, for purposes of monitoring compliance. If the data is consistent with the other requirements in this paragraph, the department may use that data to represent the initial monitoring if the system is determined by the department not to be vulnerable under the requirements of this section. In addition, the results of U.S. Environmental Protection Agency's Groundwater Supply Survey can be used in a similar manner for systems supplied by a single well.

(13) The department may increase required monitoring where necessary to detect variations within the system.

(14) The department may determine compliance or initiate enforcement action based upon analytical results and other information compiled by their sanctioned representatives and agencies.

(15) The department may exempt a public water system that obtains treated water from another public water system serving more than 10,000 persons from conducting compliance monitoring for the organic chemicals under 41.3(2)d, provided that the system from which the water is obtained has conducted the analyses required under 41.3(2)d.

(16) Public water systems exempted by the department under "f(15)" and which disinfect are required to monitor under 41.4(6).

(17) Each approved laboratory must determine the method detection limit (MDL), as defined in 40 CFR, Appendix B of Part 136, October 26, 1984, at which it is capable of detecting SOCs. The acceptable MDL is 0.0005 mg/l. This concentration is the detection level for purposes of subparagraphs "f(5)", "f(6)", "f(7)", and "f(8)" of this section.

Amend 567--41.4(5)(455B) Total trihalomethanes sampling, analytical and other requirements as follows:

a. Community water systems which serve a population of 10,000 or more individuals and which add disinfectant (oxidant) to the water in any part of the drinking water treatment process shall analyze for total trihalomethanes in accordance with this subrule. ~~For--systems--serving--75,000--or--more individuals,-sampling-and-analyses-shall-begin-before-November-29,-1980.--For systems-serving-10,000-to-74,999-individuals,-sampling-and-analyses-shall begin-before-November-29,-1982.~~ For the purpose of this subrule, samples to be taken by the system shall be based on the number of treatment plants used by the system, except that multiple wells drawing water from a single aquifer may, with approval of the department, be considered as one treatment plant for determining the minimum number of samples. All samples required within a calendar quarter shall be collected within a 24-hour period.

b. No change.

c. No change.

d. No change.

e. No change.

subparagraph "d" of this section in the notice will be sufficient to explain potential adverse health effects.

(2) Each notice shall also include specific advice on how to determine if materials containing lead have been used in homes or the water distribution system and how to minimize exposure to water likely to contain high levels of lead. Each notice shall be conspicuous and shall not contain unduly technical language, unduly small print, or similar problems that frustrate the purpose of the notice. Each notice shall contain the telephone number of the owner, operator, or designee of the public water system as a source of additional information regarding the notice. Where appropriate, the notice shall be multilingual.

d. Mandatory health effects information. When providing the information in public notices required under paragraph "c" of this section on the potential adverse health effects of lead in drinking water, the owner or operator of the water system shall include the following specific language in the notice:

"The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain levels of exposure. There is currently a standard of 0.050 parts per million (ppm). Based on new health information, EPA is likely to lower this standard significantly.

"Part of the purpose of this notice is to inform you of the potential adverse health effects of lead. This is being done even though your water may not be in violation of the current standard.

"EPA and others are concerned about lead in drinking water. Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

"Lead levels in your drinking water are likely to be highest:

- if your home or water system has lead pipes, or
- if your home has copper pipes with lead solder, and
- if the home is less than five years old, or
- if you have soft or acidic water, or
- if water sits in the pipes for several hours."

Amend 567--41.6(5)(455B) Permit conditions as follows:

a. No change.

b. No change.

Add section "c" as follows:

If the department determines that a treatment method identified in 41.12(10) is technically feasible, the department may require the system to install or use that treatment method in connection with a compliance schedule issued under the provisions of this section. The department's determination shall be based upon studies by the system and other relevant information.

Amend 567--41.12(455B) Public water system construction. Add new subparagraph 41.12(10) as follows:

41.12(10) Best available treatment technology.

a. The department identifies the following as the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant level for synthetic organic chemicals listed in 41.3(2)d: Central treatment using packed tower aeration; or central treatment using granular activated carbon (except vinyl chloride).

b. The department shall require community water systems and noncransient, noncommunity water systems to install or use any treatment method identified

Grand, Des Moines, Iowa 50319-0034. Persons are also invited to present oral or written comments at public hearings which will be held on _____, 1988 at _____ at the Iowa Department of Natural Resources, Geological Survey Bureau, Trowbridge Hall, 123 North Capitol, Iowa City, Iowa 52242; on _____, 1988 at _____ in the fifth floor conference room, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034; and on _____, 1988 at _____ at the Iowa western Community College, Continuing Education Building, Room ___, Council Bluffs, Iowa 51501.

The following rule amendment is proposed:

ITEM 1. Paragraph 70.4(2)"b" is amended to read as follows:

b. Waiver of submission of certified plans. The department shall waive the requirement for certified plans contained in paragraph "a" of this subrule for any channel change project where the applicant establishes by affidavit that the channel change has been in place for more than _____ years. The department may waive the requirement ~~in paragraph "a" of this subrule that the application for approval of a floodplain project be supported by~~ for certified engineering plans for any project by making the following determinations in the order which approves or disapproves the project:

1) Engineering data are not required to determine that the project is minor in scope and conforms to all applicable administrative and statutory criteria; or

2) Adequate engineering used to evaluate the dimensions and effects of the project were already available to engineering staff.

(EF70.MIN/sc)

PESTICIDE AND SYNTHETIC ORGANIC COMPOUND SURVEY

Report to the Iowa General Assembly on the Results of the Water System Monitoring Required by House File 2303

Iowa Department of Natural Resources
Henry A. Wallace Building, 900 E. Grand
Des Moines, Iowa 50319-0034

2. The trihalomethane formation process would appear to limit their presence in ground water. However, the study results indicate the potential for ground water systems to exceed the trihalomethane maximum contaminant level. Therefore, encourage and support studies to determine the source and significance of trihalomethanes in ground water supplies.

3. The trihalomethane monitoring requirement and standard, which is currently applicable to systems serving more than 10,000 people, should be extended to include all surface water supplies regardless of size.

4. Conduct additional controlled studies to correlate the significance of pesticide and SOC contamination in finished drinking water and ground water sources.

5. Educate water suppliers with vulnerable water sources (e.g., surface and shallow ground water sources, and water sources in close proximity to commercial or industrial use, disposal or storage of synthetic organic compounds and pesticides) of the possible contamination pathways and encourage the development of economical and innovative method to protect drinking water sources.

6. Encourage and support studies directed at developing innovative and economical treatment techniques for the removal of pesticides and SOC's.

7. Adequate funding should accompany sampling projects of this nature to insure follow-up and data analysis activities can be conducted.

adverse health risk to consumers. Staffing resource limitations prevented a response to every incidence where a compound was detected. Generally, the adverse health risk situation develops from a long term exposure to an organic compound found at a very low concentration (i.e., parts per billion). Contaminant levels high enough to cause an acute health risk were not observed in this study.

In the absence of MCLs, the IDNR relied on health advisory information provided by EPA. Some of the organic compounds are suspected human carcinogens. Long term exposure to these compounds increases the risk of cancer to consumers. EPA's cancer risk estimates are based on a number of factors. For example, EPA's Cancer Assessment Group has estimated that consuming two (2) liters of drinking water containing a concentration of 6.6 parts per billion (PPB) of tetrachlorethylene for a life-time (i.e., 70 years) will result in one additional case of cancer in an exposed population of 100,000. This can also be expressed as the 1×10^{-5} cancer risk level. The cancer risk estimates also take various routes of exposure to a compound into consideration. Individuals may be exposed to chemicals through air and food as well as drinking water. The risk estimates used, assume that drinking water provides twenty percent (20%) of the intake of the compound. The IDNR chose the concentrations for an exposed population of 100,000 as an "acceptable level", since MCLs are generally established at this population level.

Other organic compounds have been found to be either non-carcinogenic or no determination has been made because of insufficient data. For these compounds, the EPA lifetime chronic health advisory level was determined to be an "acceptable level".

Whenever the acceptable level (e.g., MCL, lifetime chronic health advisory level or concentration resulting in one additional cancer case in an exposed population of 100,000) of a compound was exceeded the water supplier was requested to collect additional samples which were analyzed in an attempt to verify the original results. Systems with verified unacceptable contaminant levels were placed on corrective action schedules. These schedules contained additional monitoring and public notification requirements as well as target dates for improvements. A few of the contamination incidences were resolved by removing the contaminated well from service.

Generally, field office staff conducted on-site investigations at systems with verified contamination situations. The identification of contamination sources is an extremely difficult and time consuming task. Due to staffing constraints, the field office personnel were unable to precisely identify contamination point sources.

Information regarding contamination incidences was forwarded to the IDNR's Abandoned and Uncontrolled Sites Section. The information was reviewed to determine if additional site evaluations should be conducted to identify contamination point sources.

Table 1 summarizes resampling in progress. Table 2 provides a listing of facilities with contaminant concentrations exceeding recommended health advisory levels.

A summary of pesticide occurrences is shown in Table 5. Nine (9) different pesticides were detected.

TABLE 5

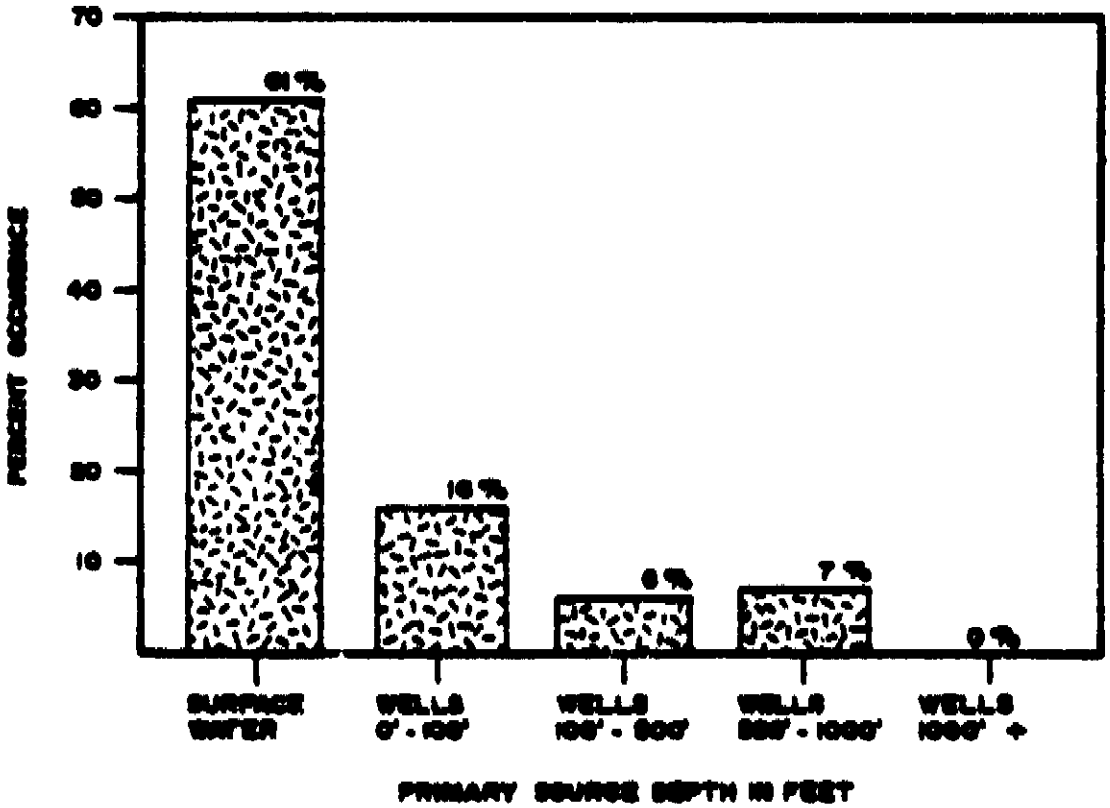
PESTICIDE OCCURRENCES

PESTICIDE	NUMBER OF OCCURRENCES
Atrazine	100
Bladex	48
2,4-D	13
Dual	19
Dyfonate	1
Furadan	1
Lasso	19
Prometon	1
Sencor	4

The study results show that the shallower the drinking water source, the greater the potential for the detection of pesticides. Sixty-one per cent (61%) of the surface water systems had measurable levels of pesticides. Figure 2 the indicates pesticide occurrences versus the depth of the drinking water source.

PESTICIDE OCCURENCES & SOURCE DEPTH

FIGURE 2



APPENDIX 2
SYNTHETIC ORGANIC COMPOUNDS

COMPOUND	*DETECTION LIMIT (micrograms per liter)
Benzene	1
Bromodichloromethane	1
Bromoform	3
Chloroethylvinyl Ether	5
Chloroform	1
Carbon Tetrachloride	1
Chlorobenzene	1
1,1-Dichloroethylene	1
1,2-Dichloroethane	1
Dichlorobenzene (o,m & p)	1
1,2-Dichloropropane	1
1,2-Dichloroethylene (Total)	1
Dibromomethane	2
Dichlorodifluoromethane	5
1,3-Dichloropropane	1
1,1-Dichloroethane	1
1,1-Dichloropropene	1
1,3-Dichloropropylene (Total)	1
Ethylbenzene	1
Chlorodibromomethane	1
Methylene Chloride	5
Styrene	1
1,1,1-Trichloroethane	1
Tetrachloroethylene	1
1,2,3-Trichloropropane	2
1,1,1,2-Tetrachloroethane	1
1,1,2-Trichloroethane	1
Toluene	1
1,1,2,-Tetrachloroethane	1
Trichloroethylene	1
Vinyl Chloride	1
Xylene (Total)	1

*The detection limit is the lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory conditions. Factors used in determining the detection limit include the analytical procedures and instrumentation used, laboratory personnel expertise and analytical costs.

Public Water Supply Compounds above Detection Limits

Pws ID: 1203026				
Name: ALLISON WATER SUPPLY	chloroform	13	uG/L	
City: ALLISON	bromodichloromethane	2	uG/L	
Date Collected: 06/17/87				
Pws ID: 1100025				
Name: ALTA MUNCIPAL WATER PLANT	No Contaminants Detected			
City: ALTA				
Date Collected: 02/16/87				
Pws ID: 1903027				
Name: ALTA VISTA WATER DEPT	No Contaminants Detected			
City: ALTA VISTA				
Date Collected: 09/23/87				
Pws ID: 8403029				
Name: ALTON MUNICIPAL WATER DEPT	chloroform	1	uG/L	
City: ALTON				
Date Collected: 01/28/87				
Pws ID: 7707030				
Name: ALTOONA WATER SUPPLY	No Contaminants Detected			
City: ALTOONA				
Date Collected: 06/11/87				
Pws ID: 6003032				
Name: ALVORD MUNICIPAL WATER SUPPLY	alachlor	0.31	uG/L	
City: ALVORD	atrazine	1.94	uG/L	
Date Collected: 01/07/87	bladex	0.80	uG/L	
	sencor	0.35	uG/L	
Pws ID: 4802033				
Name: AMANA WATER SUPPLY	No Contaminants Detected			
City: AMANA				
Date Collected: 11/21/86				
Pws ID: 4811035				
Name: EAST AMANA WATER SUPPLY	No Contaminants Detected			
City: AMANA				
Date Collected: 01/26/87				
Pws ID: 4828049				
Name: HIGH AMANA WATER SUPPLY	No Contaminants Detected			
City: AMANA				
Date Collected: 08/26/87				
Pws ID: 4830036				
Name: HOMESTEAD WATER SUPPLY	ethylbenzene	1	uG/L	
City: AMANA	p_m_xylene	7	uG/L	
Date Collected: 08/06/87	o_xylene	2	uG/L	

"Neat cement" means a mixture of one sack (94 pounds) of portland cement to not more than six (6) gallons of clean water. Bentonite up to two percent (2%) by weight of cement may be added to reduce shrinkage.

"Plugging" means the proper closure of an abandoned well by procedures which will permanently seal the well from contamination by surface drainage; and where the well penetrates multiple or confined aquifers, will permanently seal off and prevent flow or contamination out of an aquifer or from one aquifer to another. Plugging involves the application of sealing materials and can include fill materials.

"Processed bentonite" means bentonite which has been kiln dried and processed into pellets for direct use in well sealing applications or into powder or coarse granules for use in bentonite grout for sealing.

"Pump pit" means a sunken area located directly over the well used to house the equipment for discharging water from a well into the water system.

"Quaternary sediments" mean the unconsolidated materials above the bedrock.

"Sandpoint well" means a small diameter water well provided with a screened driving point which is driven or jetted into sand and gravel aquifers.

"Sand cement grout" means a mixture of one sack (94 pounds) of portland cement, an equal amount by volume of clean masonry sand and not more than six (6) gallons of clean water.

"Sealing" means the application of sealing materials (bentonite products, neat cement, sand cement grout or concrete) for plugging an abandoned well to seal off unwanted flow into, out of or between aquifers.

"Standby well" means a water well which is temporarily taken out of service with the expectation of being returned to service when needed.

"Static water level" means the water level in a water well when the well is not flowing or being pumped.

"Tremie pipe" means a device, usually a small diameter pipe, that carries grouting materials to the bottom of the hole and which allows pressure grouting from the bottom up without introduction of air pockets.

"Unconfined aquifer" means an aquifer in which the static water level does not rise above the top of the aquifer.

"Water well" means an excavation that is drilled, cored, bored, augered, washed, driven, dug, jetted or otherwise constructed for accessing groundwater.

"Well screen" means the intake section of the well that obtains water from an aquifer and serves as a structural retainer to support the bore hole in unconsolidated materials.

567--39.4(455B) Forms. The following form is currently in use: Abandoned Water Well Plugging Record. 2/88. 542-1226.

567--39.5(455B) Abandoned well plugging schedule.

39.5(1) Certification. Within thirty (30) calendar days after completion of plugging, abandoned well owners shall certify on DNR form number 542--1226, Abandoned Water Well Plugging Record, that abandoned wells have been properly plugged in accordance with the requirements and time schedule contained in this chapter.

39.5(2) Category I. Abandoned wells eight (8) inches or larger in diameter abandoned prior to (the effective date of this rule--date to be inserted) shall be properly plugged by (six (6) months after the effective date of this rule--date to be inserted).

39.5(3) Category II. Wells abandoned prior to (the effective date of this rule--date to be inserted) (a) located less than two hundred (200) feet from

[illegible] DEPARTMENT OF NATURAL RESOURCES

Abandoned Water Well Plugging Record

INSTRUCTIONS

Submit one completed copy of this form for each abandoned well that is plugged to the Department of Natural Resources, Wallace Building, 900 E. Grand Ave., Des Moines, Iowa 50319-0034 within thirty (30) days of completion of plugging operations.

Provide all of the information requested for Items 1 through 6 so far as it is known or can be obtained. If the date of construction or date of abandonment in Item 6 cannot be determined, provide the best estimate possible, such as "more than 20 years ago" or "prior to 1950."

Certification of plugging by the owner of the abandoned well in Item 7 is required for the plugging of all abandoned water wells.

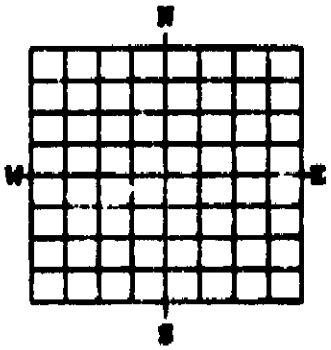
Certification of plugging by a registered well driller in Item 8 is required for all wells except large diameter (18" diameter or more) wells 100' or less in depth which are plugged by the well owner. If a registered well driller plugs this type of well, certification by the well driller is required.

1. Property Owner Name _____

2. Property Owner Address _____
Number and Street or RR

_____
City

_____
State Zip Code



LOCATE ABANDONED WELL ON THIS SECTION PLAT-640 ACRES

3. Address of property on which abandoned well is located (if different from above)

_____
Number and Street or RR

_____
City Zip Code

4. Legal description of property on which abandoned well is located:

Location ____1/4 ____1/4 ____1/4, Sec.____ T.____N., ____R. _____E W., _____County

5. Type of Well (check one)

[] Large diameter (18" or more) well 100 feet or less in depth
[] Well less than 18" diameter or greater than 100 feet in depth
[] Sandpoint well
[] Bedrock well in a single confined aquifer
[] Bedrock well in a single unconfined aquifer
[] Bedrock well in multiple aquifers
[] Well of unknown type

[illegible] form (Feb. 88) [illegible]

Response: This rule is prepared in response to a provision adopted by state law. Compliance with federal regulations, based on federal law, may be achieved by more restrictive state authority.

F. **Commentor**: 1

Comment: If the proposed rules are adopted as published, a transition period for implementation consistent with the development of economical technologies capable of dewatering sludge to 50 percent solids is recommended.

Response: The statutory requirement is already in effect. This rule only defines a term within that statute, it does not appear to be possible to delay implementation.

G. **Commentors**: 5, 6

Comment: What is the definition of sewage sludge? Does it include screenings? If so, screenings are also normally less than 50 percent solids. How would screenings be dewatered to greater than 50 percent? What disposal methods other than landfilling are practical for screenings?

Response: Grit, grease, and screenings are not considered "wet sewage sludge," and need not meet the 50 percent solid criteria. In order to be disposed in a sanitary landfill, grit, grease and bar screenings must pass the paint filter test.

H. **Commentor**: 8

Comment: Water Engineering Research Laboratory released a report by Jos. Farrell, et al. dated August 20, 1987 entitled "The Effects of Municipal Wastewater Sludge on Leachates and Gas Production from Sludge -- Refuse Landfills" which finds "generally advantageous effect of including sewage sludge in the landfill" and "it is a popular misconception that introducing sludge into landfills degrades leachate quality." An abstract is submitted.

Response: This is an interesting study which appears to be based on enhancing anaerobic decomposition through the introduction of biological solids.

(EP.01/sc)

172C.15 Additional information.

The secretary of state shall request additional information as may be necessary or appropriate to enable the secretary of state to administer this chapter.

[C77, 79, 81, §172C.15]

CHAPTER 172D

LIVESTOCK FEEDLOTS

172D.1 Definitions.
172D.2 Compliance — a defense to nuisance actions.
172D.3 Compliance with rules of the department.
172D.4 Compliance with zoning requirements.

172D.1 Definitions.

As used in this chapter, unless the context otherwise requires:

1. "*City*" means a municipal corporation, but not including a county, township, school district, or any special-purpose district or authority.

2. "*Department*" means the department of environmental quality in a reference to a time before July 1, 1983, and the department of water, air and waste management in a reference to a time on or after July 1, 1983, and includes any officer or agency within that department.

3. "*Established date of operation*" means the date on which a feedlot commenced operating with not more livestock than reasonably could be maintained by the physical facilities existing as of that date. If the physical facilities of the feedlot are subsequently expanded, the established date of operation for each expansion is deemed to be a separate and independent "established date of operation" established as of the date of commencement of the expanded operations, and the commencement of expanded operations shall not divest the feedlot of a previously established date of operation.

4. "*Established date of ownership*" means the date of the recording of an appropriate monument of title establishing the ownership of realty.

5. "*Rule of the department*" means a rule as defined in section 17A.2 which materially affects the operation of a feedlot and which has been adopted by the department. The term includes a rule which was in effect prior to July 1, 1975. Except as specifically provided in section 172D.3, subsection 2, paragraph "b", subparagraph (3) and paragraph "c", subparagraph (3) nothing in this chapter shall be deemed to empower the department to make any rule.

6. "*Feedlot*" means a lot, yard, corral, or other area in which livestock are confined, primarily for the purpose of feeding and growth prior to slaughter. The term does not include areas which are used for the raising of crops or other vegetation and upon which livestock are allowed to graze or feed.

7. "*Livestock*" means cattle, sheep, swine, poultry, and other animals or fowl, which are being produced primarily for use as food or food products for human consumption.

8. "*Materially affects*" means prohibits or regulates with respect to the location, or the emission of noise, effluent, odors, sewage, waste, or similar products resulting from the operation or the location or use of buildings, machinery, vehicles, equipment, or other real or personal property used in the operation, of a livestock feedlot.

9. "*Nuisance*" means and includes public or private nuisance as defined either by statute or by the common law.

10. "*Nuisance action or proceeding*" means and includes every action, claim or proceeding, whether brought at law, in equity, or as an administrative proceeding, which is based on nuisance.

11. "*Owner*" shall mean the person holding record title to real estate to include both legal and equitable interests under recorded real estate contracts.

12. "*Zoning requirement*" means a regulation or ordinance, which has been adopted by a city, county, township, school district, or any special-purpose district or authority, and which materially affects the operation of a feedlot. Nothing in this chapter shall be deemed to empower any agency described in this subsection to make any regulation or ordinance.

13. A rule pertaining to "*feedlot management standards*" means a rule, the implementation of which, or the compliance with which, requires the expenditure of funds not in excess of two percent of the establishment cost of the feedlot.

14. A rule pertaining to "*feedlot design standards*" means a rule, the implementation of which, or the compliance with which, requires the expenditure of funds in excess of two percent of the establishment cost of the feedlot.

15. "*Establishment cost of a feedlot*" means the cost or value of the feedlot on its established date of operation and includes the cost or value of the building, machinery, vehicles, equipment or other real or personal property used in the operation of the feedlot.

[C77, 79, 81, §172D.1; 82 Acts, ch 1199, §[illegible]; 84 Acts, ch 1239, §7]

a. No change.
b. No change.
c. No change.
d. Delete.
e. Change citation identification to "d."
f. Change citation identification to "e."
Add following new subparagraph "f":

f. Analysis of the contaminants listed in 41.3(2)d for purposes of determining compliance with the maximum contaminant levels shall be conducted as follows:

(1) Groundwater systems shall sample at points of entry to the distribution system representative of each well. Sampling must be conducted at the same location or a more representative location each quarter. Groundwater systems must sample every three months for each entry point to the distribution system except as provided in paragraph f(8)(i) of this section.

(2) Surface water systems shall sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment every three months except as provided in paragraph f(8)(ii) of this section. Sampling must be conducted at the same location or a more representative location each quarter.

(3) If the system draws water from more than one source and sources are combined before distribution, the system must sample at the entry point to the distribution system. The sample must be collected during periods of normal operating conditions.

(4) All community water systems and nontransient, noncommunity water systems serving more than 10,000 people shall analyze all distribution or entry-point samples, as appropriate, representing all source waters beginning no later than 45 days after the effective date of these rules. All community water systems and nontransient noncommunity water systems serving from 3,300 to 10,000 people shall analyze all distribution or entry-point samples, as required in this subparagraph during the calendar quarter that begins January 1, 1989. All other community and nontransient, noncommunity water systems shall analyze distribution or entry-point samples, as required in this subparagraph during the calendar quarter that begins January 1, 1991.

(5) The department may require confirmation samples for positive or negative results. If a confirmation sample(s) is required by the department, then the sample result(s) shall be averaged with the first sampling result and used for compliance determination in accordance with subparagraph "f(9)" of this section. The department has the discretion to delete results of sampling errors from this calculation.

(6) Analysis for vinyl chloride is required for groundwater systems and surface water systems that have detected one or more of the following two-carbon organic compounds: Trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene or 1,1-dichloroethylene. The analysis for vinyl chloride is required at each entry point to the distribution system at which one or more of the two-carbon organic compounds were found. If the first analysis does not detect vinyl chloride, the department may reduce the frequency of vinyl chloride monitoring to once every three years for that sample location or other sample locations which are more representative of the same source.

(7) Upon request, the department may allow public water systems to composite up to five samples from one or more sources. Compositing of samples is to be done in the laboratory by the procedures listed below. Samples

f. No change.

Add the following paragraph: 41.4(6) Special monitoring for organic chemicals.

a. All community and nontransient, noncommunity water systems shall monitor for the contaminants listed in subparagraph "e" in this section by date specified below:

Number of Persons Served	Monitoring to begin no later than --
Over 10,000	Within 45 Days Of Rule Effective Date
3,300 to 10,000	Jan. 1, 1989
Less than 3,300	Jan. 1, 1991

b. Surface water systems shall sample in the distribution system representative of each water source or at entry points to the distribution system. The minimum number of samples is one year of quarterly samples per water source.

c. Groundwater systems shall sample at points of entry to the distribution system representative of each well. The minimum number of samples is one sample per entry point to the distribution system.

d. The department may require confirmation samples for positive or negative results.

e. Community water systems and nontransient, noncommunity water systems shall monitor for the following contaminants except as provided in subparagraph "f" of this section:

(1) Chloroform
(2) Bromodichloromethane
(3) Chlorodibromomethane
(4) Bromoform
(5) trans-1,2-Dichloroethylene
(6) Chlorobenzene
(7) m-Dichlorobenzene
(8) Dichloromethane
(9) cis-1,2-Dichloroethylene
(10) o-Dichlorobenzene
(11) Dibrommethane
(12) 1,1-Dichloropropene
(13) Tetrachloroethylene
(14) Toluene
(15) p-Xylene
(16) o-Xylene
(17) m-Xylene
(18) 1,1-Dichloroethane
(19) 1,2-Dichloropropane
(20) 1,1,2,2-Tetrachloroethane
(21) Ethylbenzene
(22) 1,3-Dichloropropane
(23) Styrene
(24) Chloromethane
(25) Bromomethane
(26) 1,2,3-Trichloropropane

in 41.12(10) as a condition for granting an interim contaminant level except as provided in paragraph "c". If, after the system's installation of the treatment method, the system cannot meet the maximum contaminant level, that system shall be eligible for a compliance schedule with an interim contaminant level granted under the provisions of 41.7.

c. If a system can demonstrate through comprehensive engineering assessments, which may at the direction of the department include pilot plant studies, that the treatment methods identified in 41.12(10) would only achieve a de minimis reduction in contaminants, the department may issue a schedule of compliance that requires the system to examine other treatment methods as a condition of obtaining an interim contaminant level.

d. If the department determines that a treatment method identified in paragraph "c" of this section is technically feasible, the department may require the system to install or use that treatment method in connection with a compliance schedule issued under the provisions of 41.7. The department's determination shall be based upon studies by the system and other relevant information.

Add new paragraph 567--41.15(455B) Prohibition on the use of lead pipes, solder and flux. Any pipe, solder or flux which is used in the installation or repair of any public water system or any plumbing in a residential or nonresidential facility providing water for human consumption which is connected to a public water system shall be lead free (as defined in 40.2(455B). This action shall not apply to leaded joints necessary for the repair of cast iron pipe.

Add new paragraph 41.16(2) Use of noncentralized treatment devices.

a. Public water systems shall not use bottled water, point-of-use (POU) or point-of-entry (POE) devices to achieve compliance with a maximum contaminant level in 41.3(2)d.

b. The department may require a public water system exceeding a maximum contaminant level specified in 41.3(2)d to use bottled water as a condition of an interim compliance schedule or as a temporary measure to avoid an unreasonable risk to health. The system must meet the following requirements:

(1) Submit for approval to the department, a monitoring program for bottled water. The monitoring program must provide reasonable assurances that the bottled water meets all the maximum contaminant levels in 41.3. The public water system must monitor a representative sample of the bottled water for all contaminants regulated under 41.3(2)d the first quarter that it supplies the bottled water to the public, and annually thereafter. Results of the monitoring program shall be provided to the department annually.

(2) The public water system must receive a certification from the bottled water company that the bottled water supplied has been taken from an "approved source" as defined in 21 CFR, Part 129, Subpart A, Section 129.3(a); the bottled water company has conducted monitoring in accordance with 21 CFR, Part 129, Subpart E, Sections 129.80(g)(1) through (3); and the bottled water does not exceed any maximum contaminant levels or quality limits as set out in 21 CFR, Part 103, Subpart B, Section 103.35, 21 CFR, Part 110 and 21 CFR, Part 129. The public water system shall provide the certification to the department the first quarter after it supplies bottled water and annually thereafter.

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 15

INFORMATIONAL

NOTICE OF INTENDED ACTION -- WAIVER OF ENGINEERING PLANS FOR EXISTING CHANNEL CHANGE PROJECTS

As directed by the Commission, the department staff has drafted rule amendments which would automatically waive the submission of engineering plans as part of an after-the-fact permit application for channel changes if the channel change has been in place for more than a certain number of years. The draft Notice of Intended Action will be distributed and discussed at the meeting.

(105.MIN/sc)

Riessen
2-29-88

PESTICIDE AND SYNTHETIC ORGANIC COMPOUND SURVEY

Report to the Iowa General Assembly on the Results of the Water System Monitoring Required by House File 2303

March 1988

IOWA DEPARTMENT OF NATURAL RESOURCES

Environmental Protection Division

Water Supply Section

Wallace Building

Des Moines, Iowa 50319-0034

SUMMARY OF RESULTS BASED ON THE CHARACTERISTICS OF THE WATER SYSTEM'S PRIMARY SOURCE OF WATER

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	41	[illegible]	16	[illegible]	1	1	[illegible]	1
[illegible]	217	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	317	[illegible]	[illegible]	[illegible]	11	[illegible]
[illegible]	[illegible]	5	71	[illegible]	41	9	1	37
[illegible]	[illegible]	4	[illegible]	[illegible]	57	13	3	56
[illegible]	77	[illegible]	44	71	6	7	[illegible]	5
[illegible]	1	0	0	0	0	0	0	1

TABLE 1

SUMMARY OF PUBLIC WATER SYSTEMS WITH CONTAMINANT VERIFICATION RESAMPLING IN PROGRESS

PWS NAME	COMPOUND	LEVEL	HEALTH ADVISORY CRITERIA*
Afton	Trihalomethanes	228 PPB	MCL is 100 PPB
Bedford	Trihalomethanes	187 PPB	MCL is 100 PPB
Blockton	Trihalomethanes	431 PPB	MCL is 100 PPB
Central	Trihalomethanes	149 PPB	MCL is 100 PPB
Chariton	Trihalomethanes	152 PPB	MCL is 100 PPB
Danville	Trihalomethanes	109 PPB	MCL is 100 PPB
Galva	Atrazine	2.6 PPB	Lifetime health advisory level is 2.5 PPB
Hamaston	Trihalomethanes	275 PPB	MCL is 100 PPB
Lake Park	Trihalomethanes	267 PPB	MCL is 100 PPB
Lamoni	Trihalomethanes	242 PPB	MCL is 100 PPB
Lenox	Trihalomethanes	137 PPB	MCL is 100 PPB
Leon	Trihalomethanes	252 PPB	MCL is 100 PPB
Mount Ayr	Trihalomethanes	189 PPB	MCL is 100 PPB
Orient	Trihalomethanes	110 PPB	MCL is 100 PPB
Richets	Vinyl Chloride	3 PPB	MCL is 2 PPB
Sioux Rapids	Atrazine	3.5 PPB	Lifetime health advisory is 2.5 PPB

*The trihalomethane maximum contaminant level applies only to water systems serving more than 10,000 people.

The data was analyzed to determine if there was any time of the year when pesticide contamination was most likely to occur. Table 6 shows the percent of samples in each category that contained a measurable pesticide concentration. No trends of occurrence were discernible.

TABLE 6

PERCENT OF SYSTEMS IN EACH CATEGORY WITH POSITIVE PESTICIDE RESULTS

Primary Source	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Surface Water	71%	0%	50%	67%	80%	33%	100%	67%	50%	50%	40%	50%
Wells 0'-100'	11%	17%	15%	10%	5%	29%	24%	14%	9%	0%	24%	25%
Wells 100'-500'	8%	6%	0%	6%	3%	9%	10%	4%	7%	0%	4%	8%
Wells 500'-1000'	20%	0%	0%	0%	0%	11%	0%	13%	0%	0%	11%	0%
Wells >1000'	0%	9%	0%	8%	0%	11%	0%	0%	0%	0%	6%	0%

Note: The percentage calculation for each month is based on the total number of samples collected during that month.

IDHW was only able to make very basic trend analyses with the data regarding the source categories. This was due to our lack of information to precisely identify a system's primary water source. In addition, a water supply could have been assigned to particular ground water source category, but when the sampling was conducted that source might have been off line. We also believe it is inadvisable to draw conclusions from the data to predict contamination frequencies or levels since changing climatic and hydrogeological conditions and land use activities can dramatically alter the potential for contamination over time.

ANALYTICAL METHODOLOGY

The synthetic organic compounds listed in Appendix 2 were analyzed by using EPA Method 524 except that three internal standards (bromodichloromethane, 1,4-difluorobenzene and chlorobenzene-d5) and three surrogate spike compounds (toluene-d8, p-bromofluorobenzene and 1,2-dichloroethane-d4) used the same quality control criteria as EPA's Contract Laboratory Program. This method is a gas chromatography-mass spectrometric method using purge and trap sample

APPENDIX 3
PESTICIDES

COMPOUND	*DETECTION LIMIT (micrograms per liter)
Alachlor	0.2
Aldrin	0.05
Atrazine	0.2
Benzel	0.2
beta-BHC	0.05
Bladex	0.2
Carbofuran	0.2
Chlorodane	0.2
Counter	0.2
DDD	0.05
Diazinon	0.2
Dieldrin	0.05
Dyfonate	0.2
Dual	0.2
Endrin	0.05
gamma-BHC (Lindane)	0.05
Heptachlor	0.05
Heptachlor Epoxide	0.05
Lorsban	0.2
Malathion	0.2
MoCap	0.2
Methoxychlor	0.1
Sencor	0.2
Sutan	0.2
Thimet	0.2
Treflan	0.2
Toxaphene	0.5
Prowl	0.2
Amiben	0.2
2,4-D	0.2
Banvel	0.2
DDT	0.05
Bolster	0.2
Endrin Aldehyde	0.05
Silvex	0.2

*The detection limit is the lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory conditions. Factors used in determining the detection limit include the analytical procedures and instrumentation used, laboratory personnel expertise and analytical costs.

Public Water Supply — Compounds above Detection Limits

Pws ID: [illegible]
Name: MIDDLE AMANA WATER SUPPLY — No Contaminants Detected
City: AMANA
Date Collected: 11/21/86

Pws ID: [illegible] Repeat
Name: MIDDLE AMANA WATER SUPPLY — alachlor 0.23 uG/L
City: AMANA
Date Collected: 11/21/86

Pws ID: 0503039
Name: AMES WATER TREATMENT PLANT — No Contaminants Detected
City: AMES
Date Collected: 12/24/86

Pws ID: 0503528
Name: ISU CAMPUS WATER SUPPLY — No Contaminants Detected
City: AMES
Date Collected: 02/19/87

Pws ID: 5300947
Name: IOWA STATE MENS REFORMATORY — No Contaminants Detected
City: ANAMOSA
Date Collected: 06/19/87

Pws ID: 5300947 Repeat
Name: IOWA STATE MENS REFORMATORY
City: ANAMOSA
Date Collected: 03/16/87

chloroform	1	uG/L
bromodichloromethane	2	uG/L
dibromochloromethane	3	uG/L

Pws ID: 5307048
Name: ANAMOSA MUNICIPAL WATER SUPPLY
City: ANAMOSA
Date Collected: 11/13/86

chloroform	2	uG/L
bromodichloromethane	1	uG/L
dibromochloromethane	1	uG/L

Pws ID: 5303038
Name: AMBER WATER SUPPLY — No Contaminants Detected
City: ANAMOSA
Date Collected: 08/21/87

Pws ID: 4903080
Name: ANDREW WATER SUPPLY — No Contaminants Detected
City: ANDREW
Date Collected: 11/12/86

Pws ID: 1303083
Name: ANITA MUNICIPAL UTILITIES — No Contaminants Detected
City: ANITA
Date Collected: 09/16/87

Public Water Supply — Compounds above Detection Limits

Pws ID: 7700800				
Name: FOX CREEK BENEFITTED WATER DIS	chloroform	2	uG/L
City: ANKENY	bromodichloromethane	4	uG/L
Date Collected: 04/20/87	dibromochloromethane	4	uG/L
	bromoform	1	uG/L
Pws ID: 7709053			
Name: ANKENY WATER WORKS	chloroform	1	uG/L
City: ANKENY	bromodichloromethane	2	uG/L
Date Collected: 07/08/87	dibromochloromethane	6	uG/L
	bromoform	8	uG/L
Pws ID: 9704060			
Name: ANTHON MUNICIPAL WATER SYSTEM	No Contaminants Detected		
City: ANTHON			
Date Collected: 01/29/87			
Pws ID: 1207061			
Name: APLINGTON WATER SUPPLY	No Contaminants Detected		
City: APLINGTON			
Date Collected: 06/16/87			
Pws ID: 1403062			
Name: ARCADIA WATER SUPPLY	chloroform	16	uG/L
City: ARCADIA	bromodichloromethane	9	uG/L
Date Collected: 11/09/87	dibromochloromethane	4	uG/L
Pws ID: 5603701			
Name: ARGYLE RURAL WATER DISTRICT	No Contaminants Detected		
City: ARGYLE			
Date Collected: 11/12/86			
Pws ID: 2402063			
Name: ARION WATER SUPPLY	dibromochloromethane	1	uG/L
City: ARION			
Date Collected: 11/12/86			
Pws ID: 3307065			
Name: ARLINGTON WATER SUPPLY	No Contaminants Detected		
City: ARLINGTON			
Date Collected: 11/18/86			
Pws ID: 3203066			
Name: ARMSTRONG WATER SUPPLY	chloroform	8	uG/L
City: ARMSTRONG	bromodichloromethane	1	uG/L
Date Collected: 09/21/87			
Pws ID: 4703068			
Name: ARTHUR MUNICIPAL WATER SUPPLY	chloroform	18	uG/L
City: ARTHUR	bromodichloromethane	6	uG/L
Date Collected: 08/25/87	dibromochloromethane	3	uG/L
	bromoform	1	uG/L

Public Water Supply — Compounds above Detection Limits

		bromodichloromethane	16	uG/L
Pws ID: 4609028				
Name: BODE MUNICIPAL WATER SUPPLY		No Contaminants Detected		
City: BODE				
Date Collected: 07/13/87				
Pws ID: 8914031				
Name: BONAPARTE WATER SUPPLY		bromodichloromethane	2	uG/L
City: BONAPARTE		dibromochloromethane	3	uG/L
Date Collected: 11/17/86				
Pws ID: 7717032				
Name: BONDURANT MUNI WATER SUPPLY		atrazine	0.69	uG/L
City: BONDURANT		chloroform	5	uG/L
Date Collected: 11/12/86		bromodichloromethane	4	uG/L
		dibromochloromethane	2	uG/L
		p_m_xylene	1	uG/L
Pws ID: 0837701				
Name: LOGANSPORT WATER DISTRICT #1		chloroform	23	uG/L
City: BOONE		bromodichloromethane	10	uG/L
Date Collected: 08/26/87		dibromochloromethane	2	uG/L
Pws ID: 0819033				
Name: BOONE WATER WORKS		chloroform	3	uG/L
City: BOONE		bromodichloromethane	2	uG/L
Date Collected: 05/18/87		dibromochloromethane	1	uG/L
Pws ID: 0825036				
Name: BOXHOLM WATER SUPPLY		chloroform	1	uG/L
City: BOXHOLM				
Date Collected: 07/13/87				
Pws ID: 8409037				
Name: BOYDEN MUNI WATER SUPPLY		chloroform	38	uG/L
City: BOYDEN		bromodichloromethane	14	uG/L
Date Collected: 11/12/86		dibromochloromethane	2	uG/L
Pws ID: 7324038				
Name: BRADDYVILLE WATER WORKS		chloroform	22	uG/L
City: BRADDYVILLE		bromodichloromethane	13	uG/L
Date Collected: 01/07/87		dibromochloromethane	3	uG/L
Pws ID: 1011001				
Name: BRANDON WATER SUPPLY		No Contaminants Detected		
City: BRANDON				
Date Collected: 08/19/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 5720010				
Name: CENTRAL CITY WATER SUPPLY	No Contaminants Detected			
City: CENTRAL CITY				
Date Collected: 08/24/87				
Pws ID: 5903011				
Name: CHARITON MUNICIPAL WATER WORKS	atrazine	1.50	uG/L	
City: CHARITON	bladex	2.50	uG/L	
Date Collected: 05/18/87	chloroform	124	uG/L	
	bromodichloromethane	25	uG/L	
	dibromochloromethane	3	uG/L	
Pws ID: 3405012				
Name: CHARLES CITY WATER SUPPLY	chloroform	11	uG/L	
City: CHARLES CITY	bromodichloromethane	4	uG/L	
Date Collected: 07/15/87	dibromochloromethane	1	uG/L	
Pws ID: 2324016				
Name: CHARLOTTE WATER WORKS	No Contaminants Detected			
City: CHARLOTTE				
Date Collected: 08/18/87				
Pws ID: 2417018				
Name: CHARTER OAK WATER SUPPLY	chloroform	2	uG/L	
City: CHARTER OAK	bromodichloromethane	5	uG/L	
Date Collected: 11/19/86	dibromochloromethane	7	uG/L	
	bromoform	3	uG/L	
Pws ID: 8609019				
Name: CHELSEA WATER SUPPLY	chloroform	1	uG/L	
City: CHELSEA				
Date Collected: 01/06/87				
Pws ID: 1800900				
Name: CHEROKEE RWS MILL CREEK SUBSYS	chloroform	19	uG/L	
City: CHEROKEE	bromodichloromethane	22	uG/L	
Date Collected: 11/12/86	dibromochloromethane	13	uG/L	
Pws ID: 1811001				
Name: CHEROKEE RWS CHEROKEE SUBSYS	chloroform	15	uG/L	
City: CHEROKEE	bromodichloromethane	11	uG/L	
Date Collected: 06/03/87	dibromochloromethane	7	uG/L	
	bromoform	1	uG/L	
Pws ID: 1811020				
Name: CHEROKEE WATER SUPPLY	No Contaminants Detected			
City: CHEROKEE				
Date Collected: 11/24/86				

Public Water Supply — Compounds above Detection Limits

Pws ID: 5208071				
Name: CORALVILLE MUNI WATER SYSTEM		chloroform	1	uG/L
City: CORALVILLE		bromodichloromethane	3	uG/L
Date Collected: 04/08/87		dibromochloromethane	11	uG/L
		bromoform	17	uG/L
Pws ID: 0220075				
Name: CORNING MUNI WATER DEPARTMENT		chloroform	153	uG/L
City: CORNING		bromodichloromethane	21	uG/L
Date Collected: 12/29/86		dibromochloromethane	1	uG/L
Pws ID: 9721076				
Name: CORRECTIONVILLE WATER SUPPLY		chloroform	1	uG/L
City: CORRECTIONVILLE				
Date Collected: 08/24/87				
Pws ID: 4109077				
Name: CORWITH WATER SUPPLY		No Contaminants Detected		
City: CORWITH				
Date Collected: 08/19/87				
Pws ID: 9334078				
Name: CORYDON WATER SUPPLY		atrazine	0.90	uG/L
City: CORYDON		dual	0.33	uG/L
Date Collected: 03/12/87		chloroform	76	uG/L
		bromodichloromethane	26	uG/L
		dibromochloromethane	3	uG/L
Pws ID: 3525079				
Name: COULTER WATER SUPPLY		chloroform	2	uG/L
City: COULTER				
Date Collected: 12/30/86				
Pws ID: 7820080				
Name: COUNCIL BLUFFS WATER WORKS		chloroform	49	uG/L
City: COUNCIL BLUFFS		bromodichloromethane	20	uG/L
Date Collected: 02/19/87		dibromochloromethane	6	uG/L
Pws ID: 7521084				
Name: CRAIG WATER WORKS		chloroform	2	uG/L
City: CRAIG		bromodichloromethane	2	uG/L
Date Collected: 01/07/87				
Pws ID: 9214085				
Name: CRAWFORDSVILLE WATER SUPPLY		No Contaminants Detected		
City: CRAWFORDSVILLE				
Date Collected: 01/26/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 2330036				
Name: DE WITT WATER SUPPLY	No Contaminants Detected			
City: DEWITT				
Date Collected: 09/21/87				
Pws ID: 2533038				
Name: DEXTER WATER SUPPLY	chloroform	2	uG/L	
City: DEXTER	bromodichloromethane	3	uG/L	
Date Collected: 09/28/87	dibromochloromethane	4	uG/L	
	bromoform	1	uG/L	
Pws ID: 8018040				
Name: DIAGONAL WATER DEPT	chloroform	4	uG/L	
City: DIAGONAL				
Date Collected: 05/19/87				
Pws ID: 2109041				
Name: DICKENS WATER WORKS	chloroform	19	uG/L	
City: DICKENS	bromodichloromethane	14	uG/L	
Date Collected: 01/26/87	dibromochloromethane	5	uG/L	
Pws ID: 3815042				
Name: DIKE WATER SUPPLY	chloroform	2	uG/L	
City: DIKE				
Date Collected: 08/18/87				
Pws ID: 8225043				
Name: DIXON WATER WORKS	No Contaminants Detected			
City: DIXON				
Date Collected: 08/25/87				
Pws ID: 3215044				
Name: DOLLIVER MUNI WATER SUPPLY	No Contaminants Detected			
City: DOLLIVER				
Date Collected: 09/16/87				
Pws ID: 8227045				
Name: DONAHUE MUNI WATER SYSTEM	No Contaminants Detected			
City: DONAHUE				
Date Collected: 01/20/87				
Pws ID: 5620046				
Name: DONNELLSON MUNI WATER WORKS	No Contaminants Detected			
City: DONNELLSON				
Date Collected: 01/06/87				
Pws ID: 6015047				
Name: DOON WATER SUPPLY	alachlor	3.80	uG/L	
City: DOON	atrazine	2.00	uG/L	
Date Collected: 08/18/87	bladex	0.32	uG/L	
	dual	29.00	uG/L	
	sencor	2.50	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 4525017				
Name: ELMA WATER SUPPLY, CITY CLERK		atrazine	0.28	uG/L
City: ELMA				
Date Collected: 01/26/87				
Pws ID: 5728018				
Name: ELY WATER SUPPLY		chloroform	1	uG/L
City: ELY		bromodichloromethane	1	uG/L
Date Collected: 02/04/87		dibromochloromethane	1	uG/L
Pws ID: 6520019				
Name: EMERSON WATER DEPT		No Contaminants Detected		
City: EMERSON				
Date Collected: 05/20/87				
Pws ID: 7428021				
Name: EMMETSBURG MUNI UTIL WATER DEP		chloroform	1	uG/L
City: EMMETSBURG		bromodichloromethane	1	uG/L
Date Collected: 07/01/87				
Pws ID: 3133033				
Name: EPWORTH WATER SUPPLY		No Contaminants Detected		
City: EPWORTH				
Date Collected: 01/23/87				
Pws ID: 7349023				
Name: ESSEX WATER SUPPLY		chloroform	1	uG/L
City: ESSEX		bromodichloromethane	3	uG/L
Date Collected: 03/17/87		dibromochloromethane	5	uG/L
		bromoform	3	uG/L
Pws ID: 3218024				
Name: ESTHERVILLE WATER TREATMENT PL		chloroform	11	uG/L
City: ESTHERVILLE		bromodichloromethane	12	uG/L
Date Collected: 11/17/86		dibromochloromethane	9	uG/L
Pws ID: 0723027				
Name: EVANSDALE WATER WORKS		chloroform	1	uG/L
City: EVANSDALE				
Date Collected: 03/16/87				
Pws ID: 2115029				
Name: EVERLY WATER SUPPLY		atrazine	2.50	uG/L
City: EVERLY		chloroform	1	uG/L
Date Collected: 01/28/87		bromodichloromethane	2	uG/L
		dibromochloromethane	3	uG/L
		bromoform	3	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 8640089				
Name: GLADBROOK WATER SUPPLY	No Contaminants Detected			
City: GLADBROOK				
Date Collected: 03/03/87				
Pws ID: 6525090				
Name: GLENWOOD WATER DEPARTMENT	chloroform	4	uG/L	
City: GLENWOOD	carbon tetrachloride	3	uG/L	
Date Collected: 04/13/87	bromodichloromethane	3	uG/L	
	dibromochloromethane	2	uG/L	
Pws ID: 1438091				
Name: GLIDDEN WATER SUPPLY	chloroform	44	uG/L	
City: GLIDDEN	bromodichloromethane	9	uG/L	
Date Collected: 03/16/87	dibromochloromethane	1	uG/L	
Pws ID: 9937092				
Name: GOLDFIELD WATER SUPPLY	chloroform	3	uG/L	
City: GOLDFIELD	bromodichloromethane	1	uG/L	
Date Collected: 00/00/00				
Pws ID: 4135093				
Name: GOODELL WATER SUPPLY	No Contaminants Detected			
City: GOODELL				
Date Collected: 05/20/87				
Pws ID: 2339094				
Name: GOOSE LAKE MUNI WATER SYSTEM	No Contaminants Detected			
City: GOOSE LAKE				
Date Collected: 03/16/87				
Pws ID: 2339094 Repeat				
Name: GOOSE LAKE MUNI WATER SYSTEM	No Contaminants Detected			
City: GOOSE LAKE				
Date Collected: 05/18/87				
Pws ID: 9436095				
Name: GOWRIE MUNI UTILITIES WATER DE	bromodichloromethane	1	uG/L	
City: GOWRIE	dibromochloromethane	2	uG/L	
Date Collected: 04/14/87	bromoform	2	uG/L	
Pws ID: 7445096				
Name: GRAETTINGER MUNI WATER	chloroform	7	uG/L	
City: GRAETTINGER	bromodichloromethane	12	uG/L	
Date Collected: 05/19/87	dibromochloromethane	12	uG/L	
	bromoform	3	uG/L	
Pws ID: 9825097				
Name: GRAFTON WATER SUPPLY	chloroform	5	uG/L	
City: GRAFTON	bromodichloromethane	1	uG/L	
Date Collected: 05/26/87				

Public Water S pply Compounds above Detection Limits

Pws ID: 6525043 Repeat				
Name: HENDERSON WATER DEPT		1_1_1_trichloroethane	1	uG/L
City: HENDERSON				
Date Collected: 03/23/87				
Pws ID: 5735045				
Name: HIAWATHA WATER DEPT		chloroform	1	uG/L
City: HIAWATHA		bromodichloromethane	3	uG/L
Date Collected: 04/21/87		dibromochloromethane	4	uG/L
		bromoform	1	uG/L
Pws ID: 4425032				
Name: HILLSBORO WATER WORKS		bromoform	3	uG/L
City: HILLSBORO				
Date Collected: 02/17/87				
Pws ID: 7528051				
Name: HINTON WATER SUPPLY		No Contaminants Detected		
City: HINTON				
Date Collected: 12/01/86				
Pws ID: 3839052				
Name: HOLLAND WATER SUPPLY		No Contaminants Detected		
City: HOLLAND				
Date Collected: 05/14/87				
Pws ID: 4721054				
Name: HOLSTEIN WATER SUPPLY		chloroform	3	uG/L
City: HOLSTEIN		bromodichloromethane	7	uG/L
Date Collected: 05/26/87		dibromochloromethane	10	uG/L
		bromoform	3	uG/L
		p_m_xylene	1	uG/L
Pws ID: 3146055				
Name: HOLY CROSS WATER SUPPLY		chloroform	8	uG/L
City: HOLY CROSS		bromodichloromethane	2	uG/L
Date Collected: 06/03/87				
Pws ID: 7822086				
Name: CRESCENT WATER SUPPLY		No Contaminants Detected		
City: HONEY CREEK				
Date Collected: 11/19/86				
Pws ID: 2835056				
Name: HOPKINTON MUNI UTILITIES		1_1_1_trichloroethane	212	uG/L
City: HOPKINTON				
Date Collected: 01/06/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 4033013				
Name: KAMRAR WATER DEPT		No Contaminants Detected		
City: KAMRAR				
Date Collected: 05/11/87				
Pws ID: 4033013	Repeat			
Name: KAMRAR WATER DEPT		chloroform	2	uG/L
City: KAMRAR				
Date Collected: 03/17/87				
Pws ID: 4150014				
Name: KANAWHA WATER SUPPLY		No Contaminants Detected		
City: KANAWHA				
Date Collected: 04/14/87				
Pws ID: 8040015				
Name: KELLERTON WATER SUPPLY		No Contaminants Detected		
City: KELLERTON				
Date Collected: 03/17/87				
Pws ID: 8040015	Repeat			
Name: KELLERTON WATER SUPPLY		atrazine	3.00	uG/L
City: KELLERTON		bladex	1.20	uG/L
Date Collected: 06/01/87		dual	1.30	uG/L
Pws ID: 8040015	Repeat			
Name: KELLERTON WATER SUPPLY		chloroform	121	uG/L
City: KELLERTON		bromodichloromethane	33	uG/L
Date Collected: 04/24/87		dibromochloromethane	4	uG/L
		p_m_xylene	1	uG/L
Pws ID: 8548016				
Name: KELLEY WATER SUPPLY		ethylbenzene	1	uG/L
City: KELLEY		p_m_xylene	4	uG/L
Date Collected: 07/29/87		o_xylene	1	uG/L
Pws ID: 5038017				
Name: KELLOGG WATER SUPPLY		chloroform	3	uG/L
City: KELLOGG		bromodichloromethane	7	uG/L
Date Collected: 03/19/87		dibromochloromethane	8	uG/L
		bromoform	2	uG/L
Pws ID: 5038017	Repeat			
Name: KELLOGG WATER SUPPLY		No Contaminants Detected		
City: KELLOGG				
Date Collected: 05/11/87				
Pws ID: 9840018				
Name: KENSETT WATER SUPPLY		No Contaminants Detected		
City: KENSETT				
Date Collected: 04/13/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 1957064				
Name: LAWLER WATER SUPPLY	No Contaminants Detected			
City: LAWLER				
Date Collected: 11/17/86				
Pws ID: 9743065				
Name: LAWTON WATER SUPPLY	chloroform	4	uG/L	
City: LAWTON	bromodichloromethane	1	uG/L	
Date Collected: 02/02/87				
Pws ID: 8245066				
Name: LE CLAIRE UTILITIES DEPT	chloroform	2	uG/L	
City: LECLAIRE	p_m_xylene	1	uG/L	
Date Collected: 04/21/87				
Pws ID: 8215021				
Name: BLUE GRASS WATER SUPPLY	chloroform	2	uG/L	
City: LECLAIRE	bromodichloromethane	1	uG/L	
Date Collected: 09/21/87				
Pws ID: 5543069				
Name: LEDYARD WATER SUPPLY	No Contaminants Detected			
City: LEDYARD				
Date Collected: 05/11/87				
Pws ID: 5543069 Repeat				
Name: LEDYARD WATER SUPPLY	chloroform	3	uG/L	
City: LEDYARD	bromodichloromethane	[illegible]	uG/L	
Date Collected: 03/17/87				
Pws ID: 6457070				
Name: LE GRAND WATER WORKS	chloroform	2	uG/L	
City: LEGRAND	bromodichloromethane	4	uG/L	
Date Collected: 12/29/86	dibromochloromethane	6	uG/L	
	bromoform	3	uG/L	
Pws ID: 9453071				
Name: LEHIGH WATER SUPPLY	No Contaminants Detected			
City: LEHIGH				
Date Collected: 02/02/87				
Pws ID: 6259072				
Name: LEIGHTON WATERWORKS	dibromochloromethane	1	uG/L	
City: LEIGHTON	bromoform	2	uG/L	
Date Collected: 05/18/87				
Pws ID: 9549073				
Name: LELAND WATER SUPPLY	No Contaminants Detected			
City: LELAND				
Date Collected: 05/18/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 5915004				
Name: LUCAS MUNICIPAL WATER SUPPLY	atrazine	2.10	uG/L
City: LUCAS	bladex	1.60	uG/L
Date Collected: 04/20/87	chloroform	52	uG/L
	bromodichloromethane	9	uG/L
	dibromochloromethane	1	uG/L
Pws ID: 0844005			
Name: LUTHER WATER SUPPLY	ethylbenzene	1	uG/L
City: LUTHER	p_m_xylene	4	uG/L
Date Collected: 06/15/87			
Pws ID: 5551006			
Name: LU VERNE WATER SUPPLY	No Contaminants Detected		
City: LUVERNE			
Date Collected: 03/16/87			
Pws ID: 5551006 Repeat			
Name: LU VERNE WATER SUPPLY	No Contaminants Detected		
City: LUVERNE			
Date Collected: 06/08/87			
Pws ID: 5047008			
Name: LYNNVILLE WATER DEPT	No Contaminants Detected		
City: LYNNVILLE			
Date Collected: 08/20/87			
Pws ID: 8133009			
Name: LYTTON WATER DEPARTMENT	chloroform	7	uG/L
City: LYTTON	bromodichloromethane	2	uG/L
Date Collected: 11/18/86			
Pws ID: 7841014			
Name: MACEDONIA WATER SUPPLY	alachlor	0.87	uG/L
City: MACEDONIA	atrazine	0.31	uG/L
Date Collected: 06/17/87	dual	0.64	uG/L
Pws ID: 0848015			
Name: MADRID WATER DEPT	chloroform	21	uG/L
City: MADRID	bromodichloromethane	18	uG/L
Date Collected: 03/16/87	dibromochloromethane	9	uG/L
Pws ID: 4341017			
Name: MAGNOLIA WATER SUPPLY	chloroform	1	uG/L
City: MAGNOLIA	bromodichloromethane	2	uG/L
Date Collected: 09/14/87	dibromochloromethane	3	uG/L
	bromoform	1	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 2258012 Repeat Name: MC GREGOR WATER DEPT City: MCGREGOR Date Collected: 03/10/87	No Contaminants Detected			
Pws ID: 1667076 Name: MECHANICSVILLE WATER DEPT City: MECHANICSVILLE Date Collected: 03/19/87	No Contaminants Detected			
Pws ID: 2948062 Name: MEDIAPOLIS WATER SUPPLY City: MEDIAPOLIS Date Collected: 02/23/87	No Contaminants Detected			
Pws ID: 6471063 Name: MELBOURNE WATER SUPPLY City: MELBOURNE Date Collected: 05/18/87	chloroform	9	uG/L	
	bromodichloromethane	6	uG/L	
	dibromochloromethane	4	uG/L	
	bromoform	1	uG/L	
Pws ID: 6300099 Name: MELCHER-DALLAS WATER SUPPLY City: MELCHER-DALLAS Date Collected: 09/23/87	No Contaminants Detected			
Pws ID: 7234069 Name: MELVIN WATERWORKS City: MELVIN Date Collected: 06/18/87	2_4_d	0.28	uG/L	
	chloroform	8	uG/L	
	bromodichloromethane	3	uG/L	
	dibromochloromethane	1	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 3956070 Name: MENLO WATER SUPPLY City: MENLO Date Collected: 01/28/87	chloroform	11	uG/L	
	bromodichloromethane	10	uG/L	
	dibromochloromethane	4	uG/L	
Pws ID: 1849071 Name: MERIDEN MUNICIPAL WATER SUPPLY City: MERIDEN Date Collected: 06/15/87	chloroform	1	uG/L	
	bromodichloromethane	1	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 7548072 Name: MERRILL MUNICIPAL WATER SUPPLY City: MERRILL Date Collected: 07/22/87	atrazine	0.42	uG/L	
	chloroform	2	uG/L	
	bromodichloromethane	4	uG/L	
	dibromochloromethane	7	uG/L	
	bromoform	4	uG/L	
	tetrachloroethene	5	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 7853043				
Name: NEOLA LIGHT & WATER		1_2_dichloroethane	2	uG/L
City: NEOLA				
Date Collected: 07/20/87				
Pws ID: 8562044				
Name: NEVADA WATER SUPPLY		No Contaminants Detected		
City: NEVADA				
Date Collected: 03/12/87				
Pws ID: 8562345				
Name: FERNALD WATER SUPPLY		No Contaminants Detected		
City: NEVADA				
Date Collected: 0[illegible]/14/87				
Pws ID: 0370047				
Name: NEW ALBIN WATER SUPPLY		bromodichloromethane	1	uG/L
City: NEW ALBIN		dibromochloromethane	1	uG/L
Date Collected: 02/23/87				
Pws ID: 1970051				
Name: NEW HAMPTON WATER SUPPLY		chloroform	3	uG/L
City: NEW HAMPTON		bromodichloromethane	1	uG/L
Date Collected: 04/13/87				
Pws ID: 1271058				
Name: NEW HARTFORD WATER SUPPLY		chloroform	1	uG/L
City: NEW HARTFORD				
Date Collected: 02/17/87				
Pws ID: 8264059				
Name: NEW LIBERTY WATER SUPPLY		No Contaminants Detected		
City: NEW LIBERTY				
Date Collected: 01/28/87				
Pws ID: 4458060				
Name: NEW LONDON MUNIC WATER DEPT		dibromochloromethane	3	uG/L
City: NEW LONDON		bromoform	31	uG/L
Date Collected: 03/16/87				
Pws ID: 4453318				
Name: WESTWOOD WATER SUPPLY		No Contaminants Detected		
City: NEW LONDON				
Date Collected: 07/20/87				
Pws ID: 8758061				
Name: NEW MARKET WATER SUPPLY		atrazine	0.59	uG/L
City: NEW MARKET		bladex	0.30	uG/L
Date Collected: 07/13/87		chloroform	48	uG/L
		bromodichloromethane	10	uG/L
		dibromochloromethane	2	uG/L

Public Water Supply — Compounds above Detection Limits

		bromodichloromethane	23	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 6203093				
Name:	BEACON WATER SUPPLY	atrazine	0.20	uG/L
City:	OSKALOOSA	chloroform	22	uG/L
Date Collected:	12/04/86	bromodichloromethane	12	uG/L
		dibromochloromethane	7	uG/L
Pws ID: 6273005				
Name:	OSKALOOSA MUNICIPAL WATER DEPT	chloroform	13	uG/L
City:	OSKALOOSA	bromodichloromethane	12	uG/L
Date Collected:	01/27/87	dibromochloromethane	6	uG/L
Pws ID: 6273005 Repeat				
Name:	OSKALOOSA MUNICIPAL WATER DEPT	No Contaminants Detected		
City:	OSKALOOSA			
Date Collected:	05/11/87			
Pws ID: 6273901				
Name:	MAHASKA RURAL WATER SYSTEM, IN	No Contaminants Detected		
City:	OSKALOOSA			
Date Collected:	06/08/87			
Pws ID: 6273901 Repeat				
Name:	MAHASKA RURAL WATER SYSTEM, IN	chlororform	8	uG/L
City:	OSKALOOSA	bromodichloromethane	9	uG/L
Date Collected:	03/18/87	dibromochloromethane	10	uG/L
		bromoform	2	uG/L
Pws ID: 5677007				
Name:	OSSIAN WATER SUPPLY	chloroform	7	uG/L
City:	OSSIAN	bromodichloromethane	1	uG/L
Date Collected:	03/17/87			
Pws ID: 9464008				
Name:	OTHO WATER SUPPLY	No Contaminants Detected		
City:	OTHO			
Date Collected:	07/26/87			
Pws ID: 6361001				
Name:	OTLEY PUBLIC UTILITIES INC	atrazine	0.64	uG/L
City:	OTLEY	bladex	0.51	uG/L
Date Collected:	06/22/87	chloroform	26	uG/L
		bromodichloromethane	12	uG/L
		dibromochloromethane	4	uG/L
Pws ID: 9758023				
Name:	OTO WATER SUPPLY	chloroform	2	uG/L
City:	OTO	bromodichloromethane	6	uG/L
Date Collected:	06/30/87	dibromochloromethane	11	uG/L
		bromoform	5	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 7209069				
Name: ASHTON MUNICIPAL WATER DEPT	chloroform	18	uG/L
City: ASHTON	bromodichloromethane	11	uG/L
Date Collected: 11/17/86	dibromochloromethane	5	uG/L
Pws ID 2406070			
Name: ASPINWALL WATER SUPPLY	chloroform	15	uG/L
City: ASPINWALL	bromodichloromethane	11	uG/L
Date Collected: 11/13/86	dibromochloromethane	6	uG/L
Pws ID: 7009071			
Name: ATALISSA MUNICIPAL WATER SUPPL	No Contaminants Detected		
City: ATALISSA			
Date Collected: 11/13/86			
Pws ID: 0603072			
Name: ATKINS MUNICIPALITY WATER WKS	chloroform	3	uG/L
City: ATKINS			
Date Collected: 09/24/87			
Pws ID: 1509074			
Name: ATLANTIC WATER/ELEC/POWER PLAN	atrazine	0.39	uG/L
City: ATLANTIC	chloroform	8	uG/L
Date Collected: 01/07/87	bromodichloromethane	11	uG/L
	dibromochloromethane	8	uG/L
Pws ID: 8104076			
Name: AUBURN WATER SUPPLY	No Contaminants Detected		
City: AUBURN			
Date Collected: 08/18/87			
Pws ID: 0505077			
Name: AUDUBON WATER SUPPLY	chloroform	7	uG/L
City: AUDUBON	bromodichloromethane	5	uG/L
Date Collected: 01/07/87	dibromochloromethane	2	uG/L
Pws ID: 1803079			
Name: AURELIA WATER SUPPLY	chloroform	1	uG/L
City: AURELIA	bromodichloromethane	1	uG/L
Date Collected: 07/13/87			
Pws ID: 7803080			
Name: AVOCA WATER WORKS	atrazine	0.26	uG/L
City: AVOCA	chloroform	1	uG/L
Date Collected: 01/07/87	bromodichloromethane	4	uG/L
	dibromochloromethane	7	uG/L
	bromoform	5	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 0510040 Name: BRAYTON WATER SYSTEM City: BRAYTON Date Collected: 11/25/86	alachlor	0.21	uG/L
	chloroform	2	uG/L
	1_2_dichloroethane	1	uG/L
	bromodichloromethane	4	uG/L
	dibromochloromethane	6	uG/L
	benzene	1	uG/L
	bromoform	3	uG/L
Pws ID: 1409041 Name: BREDA WATER SUPPLY City: BREDA Date Collected: 02/17/87	No Contaminants Detected		
Pws ID: 0908000 Name: BREMER UTILITIES City: BREMER Date Collected: 12/09/86	No Contaminants Detected		
Pws ID: 0115042 Name: BRIDGEWATER MUNI WATER WORKS City: BRIDGEWATER Date Collected: 12/01/86	bromodichloromethane	1	uG/L
	dibromochloromethane	3	uG/L
	bromoform	4	uG/L
Pws ID: 9209043 Name: BRIGHTON MUNICIPAL WATER SUPPL City: BRIGHTON Date Collected: 11/13/86	No Contaminants Detected		
Pws ID: 1222044 Name: BRISTOW MUNI WATER SUPPLY City: BRISTOW Date Collected: 07/07/87	chloroform	2	uG/L
	bromodichloromethane	3	uG/L
	dibromochloromethane	4	uG/L
	bromoform	1	uG/L
Pws ID: 4103045 Name: BRITT WATER WORKS City: BRITT Date Collected: 08/19/87	chloroform	1	uG/L
Pws ID: 9709046 Name: BRONSON WATER SUPPLY City: BRONSON Date Collected: 06/22/87	chloroform	1	uG/L
	bromodichloromethane	1	uG/L
Pws ID: 7909047 Name: BROOKLYN WATER DEPT City: BROOKLYN Date Collected 08/17/87	bromodichloromethane	1	uG/L
	dibromochloromethane	1	uG/L
	bromoform	2	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 4509024				
Name: CHESTER WATER SUPPLY	chloroform	3	uG/L	
City: CHESTER				
Date Collected: 07/27/87				
Pws ID: 3709001				
Name: CHURDAN WATER SUPPLY	chloroform	3	uG/L	
City: CHURDAN				
Date Collected: 04/08/87				
Pws ID: 0410026				
Name: CINCINNATI MUNICIPAL WATER CO	atrazine	2.50	uG/L	
City: CINCINNATI	bladex	1.10	uG/L	
Date Collected: 12/29/86	chloroform	46	uG/L	
	bromodichloromethane	7	uG/L	
Pws ID: 9420027				
Name: CLARE WATER DEPT	No Contaminants Detected			
City: CLARE				
Date Collected: 07/16/87				
Pws ID: 1630028				
Name: CLARENCE WATER SUPPLY	No Contaminants Detected			
City: CLARENCE				
Date Collected: 06/11/87				
Pws ID: 7329029				
Name: CLARINDA WATER PLANT	atrazine	0.20	uG/L	
City: CLARINDA	chloroform	54	uG/L	
Date Collected: 11/13/86	bromodichloromethane	17	uG/L	
	dibromochloromethane	2	uG/L	
Pws ID: 7329501				
Name: CLARINDA MENTAL HEALTH INST	chloroform	47	uG/L	
City: CLARINDA	bromodichloromethane	3	uG/L	
Date Collected: 11/12/86	dibromochloromethane	1	uG/L	
Pws ID: 7383901				
Name: PAGE I RURAL WATER DISTRICT	atrazine	0.65	uG/L	
City: CLARINDA	bladex	0.31	uG/L	
Date Collected: 07/15/87	chloroform	26	uG/L	
	bromodichloromethane	8	uG/L	
	dibromochloromethane	2	uG/L	
Pws ID: 9909031				
Name: CLARION WATER SUPPLY	No Contaminants Detected			
City: CLARION				
Date Collected: 07/20/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 4515087 Name: CRESCO WATERWORKS City: CRESCO Date Collected: 01/26/87	atrazine	0.28	uG/L
	1_1_1_trichloroethane	1	uG/L
	bromodichloromethane	1	uG/L
	trichloroethene	1	uG/L
	dibromochloromethane	2	uG/L
	tetrachloroethene	32	uG/L
Pws ID: 8080701 Name: SO. IOWA RWS-HIGHLAND/TINGLEY City: CRESTON Date Collected: 12/07/87	atrazine	0.67	uG/L
	bladex	0.27	uG/L
	chloroform	14	uG/L
	bromodichloromethane	4	uG/L
Pws ID: 8080701 Repeat Name: SO. IOWA RWS-HIGHLAND/TINGLEY City: CRESTON Date Collected: 12/07/87	atrazine	0.33	uG/L
	bladex	0.45	uG/L
	chloroform	28	uG/L
	bromodichloromethane	16	uG/L
	dibromochloromethane	4	uG/L
Pws ID: 8080701 Repeat Name: SO. IOWA RWS-HIGHLAND/TINGLEY City: CRESTON Date Collected: 12/08/87	atrazine	0.59	uG/L
	bladex	1.10	uG/L
	chloroform	140	uG/L
	bromodichloromethane	22	uG/L
	dibromochloromethane	2	uG/L
Pws ID: 8816089 Name: CRESTON WATER SUPPLY City: CRESTON Date Collected: 04/16/87	chloroform	63	uG/L
	bromodichloromethane	20	uG/L
	dibromochloromethane	2	uG/L
Pws ID: 1516093 Name: CUMBERLAND WATER SUPPLY City: CUMBERLAND Date Collected: 01/27/87	No Contaminants Detected		
Pws ID: 9123047 Name: CUMMING WATER TREATMENT PLANT City: CUMMING Date Collected: 01/13/87	chloroform	5	uG/L
	bromodichloromethane	4	uG/L
	dibromochloromethane	2	uG/L
Pws ID: 9725094 Name: CUSHING WATER SUPPLY City: CUSHING Date Collected: 09/23/87	atrazine	0.20	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 6015047 Repeat				
Name: DOON WATER SUPPLY		alachlor	1.20	uG/L
City: DOON		dual	14.00	uG/L
Date Collected: 10/26/87				
Pws ID: 2427049				
Name: DOW CITY WATER WORKS		No Contaminants Detected		
City: DOW CITY				
Date Collected: 05/27/87				
Pws ID: 2427049 Repeat				
Name: DOW CITY WATER WORKS		bromodichloromethane	2	uG/L
City: DOW CITY		dibromochloromethane	6	uG/L
Date Collected: 03/10/87		bromoform	12	uG/L
Pws ID: 9921050				
Name: DOWS WATER SUPPLY		No Contaminants Detected		
City: DOWS				
Date Collected: 06/23/87				
Pws ID: 2618051				
Name: DRAKESVILLE WATER SUPPLY		2_4_d	0.40	uG/L
City: DRAKESVILLE		atrazine	1.50	uG/L
Date Collected: 01/26/87		bladex	1.10	uG/L
		dual	0.40	uG/L
		chloroform	287	uG/L
		bromodichloromethane	27	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 3126052				
Name: DUBUQUE WATER WORKS		chloroform	14	uG/L
City: DUBUQUE		bromodichloromethane	4	uG/L
Date Collected: 01/28/87				
Pws ID: 1240081				
Name: DUMONT WATER SUPPLY		No Contaminants Detected		
City: DUMONT				
Date Collected: 08/17/87				
Pws ID: 9427082				
Name: DUNCOMBE WATER SUPPLY		chloroform	9	uG/L
City: DUNCOMBE		bromodichloromethane	8	uG/L
Date Collected: 04/08/87		dibromochloromethane	6	uG/L
		bromoform	1	uG/L
Pws ID: 0717084				
Name: DUNKERTON MUNI WATER SUPPLY		chloroform	1	uG/L
City: DUNKERTON				
Date Collected: 04/20/87				

Public Water Supply

Compounds above Datection Limits

Pws ID: 0520030 Name: EXIRA WATER DEPT City: EXIRA Date Collected: 03/16/87	chloroform	23	uG/L
	bromodichloromethane	19	uG/L
	dibromochloromethane	9	uG/L
Pws ID: 0520030 Repeat Name: EXIRA WATER DEPT City: EXIRA Date Collected: 05/11/87	bladex	0.35	uG/L
Pws ID: 1025031 Name: FAIRBANK WATER SUPPLY City: FAIRBANK Date Collected: 03/16/87	No Contaminants Detected		
Pws ID: 5731032 Name: FAIRFAX WATER SUPPLY City: FAIRFAX Date Collected: 03/11/87	chloroform	8	uG/L
	p_m_xylene	2	uG/L
Pws ID: 5131033 Name: FAIRFIELD WATER SUPPLY City: FAIRFIELD Date Collected: 04/22/87	atrazine	0.89	uG/L
	bladex	1.60	uG/L
	chloroform	38	uG/L
	bromodichloromethane	10	uG/L
	dibromochloromethane	1	uG/L
Pws ID: 5131705 Name: JEFFERSON COUNTY RURAL WATER City: FAIRFIELD Date Collected: 02/23/87	atrazine	1.10	uG/L
	bladex	5.40	uG/L
	chloroform	17	uG/L
	bromodichloromethane	3	uG/L
Pws ID: 3135018 Name: FARLEY WATER SUPPLY City: FARLEY Date Collected: 12/29/86	No Contaminants Detected		
Pws ID: 2228037 Name: FARMERSBURG WATERWORKS City: FARMERSBURG Date Collected: 11/11/86	No Contaminants Detected		
Pws ID: 8930038 Name: FARMINGTON WATER SUPPLY City: FARMINGTON Date Collected: 09/17/87	bromodichloromethane	1	uG/L
	dibromochloromethane	2	uG/L
	bromoform	1	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID:	3730098			
Name:	GRAND JCT MUNICIPAL WATER DEPT	chloroform	1	uG/L
City:	GRAND JUNCTION			
Date Collected:	01/05/87			
Pws ID:	2341099			
Name:	GRAND MOUND WATER SUPPLY	2_4_d	1.20	uG/L
City:	GRAND MOUND	chloroform	5	uG/L
Date Collected:	05/18/87	bromodichloromethane	4	uG/L
		dibromochloromethane	1	uG/L
Pws ID:	5842000			
Name:	GRANDVIEW MUNI WATER DEPT	chloroform	5	uG/L
City:	GRANDVIEW			
Date Collected:	05/18/87			
Pws ID:	2537001			
Name:	GRANGER MUNI WATER SUPPLY	2_4_d	0.20	uG/L
City:	GRANGER			
Date Collected:	06/11/87			
Pws ID:	8429002			
Name:	GRANVILLE WATER SUPPLY	No Contaminants Detected		
City:	GRANVILLE			
Date Collected:	08/19/87			
Pws ID:	8728003			
Name:	GRAVITY WATER SUPPLY	2_4_d	0.25	uG/L
City:	GRAVITY	chloroform	3	uG/L
Date Collected:	04/13/87	bromodichloromethane	2	uG/L
		dibromochloromethane	1	uG/L
Pws ID:	0528004			
Name:	GRAY MUNICIPAL WATER SUPPLY	chloroform	11	uG/L
City:	GRAY	bromodichloromethane	9	uG/L
Date Collected:	02/17/87	dibromochloromethane	8	uG/L
		bromoform	1	uG/L
Pws ID:	1253006			
Name:	GREENE MUNI WATER SUPPLY	chloroform	2	uG/L
City:	GREENE	bromodichloromethane	2	uG/L
Date Collected:	05/21/87	dibromochloromethane	2	uG/L
Pws ID:	0140007			
Name:	GREENFIELD MUNICIPAL UTILITIES	atrazine	0.66	uG/L
City:	GREENFIELD	bladex	0.59	uG/L
Date Collected:	11/25/86	chloroform	102	uG/L
		bromodichloromethane	22	uG/L
		dibromochloromethane	2	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 2835056 Repeat				
Name: HOPKINTON MUNI UTILITIES	No Contaminants Detected			
City: HOPKINTON				
Date Collected: 01/20/87				
Pws ID: 2835056 Repeat				
Name: HOPKINTON MUNI UTILITIES	No Contaminants Detected			
City: HOPKINTON				
Date Collected: 01/20/87				
Pws ID: 2835056 Repeat				
Name: HOPKINTON MUNI UTILITIES	No Contaminants Detected			
City: HOPKINTON				
Date Collected: 01/20/87				
Pws ID: 9738057				
Name: HORNICK WATER SUPPLY	No Contaminants Detected			
City: HORNICK				
Date Collected: 09/03/87				
Pws ID: 8400711				
Name: RURAL WATER SYSTEM #1(PLANT 1)	chloroform	25	uG/L	
City: HOSPERS	bromodichloromethane	16	uG/L	
Date Collected: 11/17/86	dibromochloromethane	5	uG/L	
Pws ID: 8400722				
Name: RURAL WATER SYSTEM #1(PLANT 2)	chloroform	12	uG/L	
City: HOSPERS	bromodichloromethane	10	uG/L	
Date Collected: 05/26/87	dibromochloromethane	6	uG/L	
	bromoform	1	uG/L	
Pws ID: 8439058				
Name: HOSPERS MUNICIPAL WATER DEPT	No Contaminants Detected			
City: HOSPERS				
Date Collected: 10/05/87				
Pws ID: 4254061				
Name: HUBBARD WATER SUPPLY	No Contaminants Detected			
City: HUBBARD				
Date Collected: 05/18/87				
Pws ID: 0789067				
Name: WASHBURN WATER COMPANY INC	No Contaminants Detected			
City: HUDSON				
Date Collected: 02/17/87				
Pws ID: 0737062				
Name: HUDSON WATER SUPPLY	chloroform	2	uG/L	
City: HUDSON	bromodichloromethane	2	uG/L	
Date Collected: 02/19/87	dibromochloromethane	2	uG/L	
	toluene	1	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 5640019				
Name: KEOKUK MUNICIPAL WATER WORKS		alachlor	0.22	uG/L
City: KEOKUK		atrazine	0.63	uG/L
Date Collected: 06/31/87		dual	0.25	uG/L
		chloroform	26	uG/L
		bromodichloromethane	4	uG/L
Pws ID: 8938026				
Name: KEOSAUQUA WATER WORKS		toluene	1	uG/L
City: KEOSAUQUA				
Date Collected: 04/15/87				
Pws ID: 5440028				
Name: KEOTA WATER DEPT		No Contaminants Detected		
City: KEOTA				
Date Collected: 04/21/87				
Pws ID: 5442029				
Name: KESWICK WATER SYSTEM		2_4_d	0.24	uG/L
City: KESWICK				
Date Collected: 06/15/87				
Pws ID: 0640030				
Name: KEYSTONE WATER SUPPLY		chloroform	5	uG/L
City: KEYSTONE				
Date Collected: 05/18/87				
Pws ID: 0543031				
Name: KIMBALLTON UTILITIES		No Contaminants Detected		
City: KIMBALLTON				
Date Collected: 07/21/87				
Pws ID: 7537032				
Name: KINGSLEY WATER SUPPLY		No Contaminants Detected		
City: KINGSLEY				
Date Collected: 06/01/87				
Pws ID: 8350033				
Name: KIRKMAN WATER SUPPLY		No Contaminants Detected		
City: KIRKMAN				
Date Collected: 07/09/87				
Pws ID: 2432034				
Name: KIRON WATER SUPPLY		atrazine	0.50	uG/L
City: KIRON		chloroform	1	uG/L
Date Collected: 07/13/87		bromodichloromethane	1	uG/L
		dibromochloromethane	1	uG/L
		bromoform	1	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 9549073 Repeat				
Name: LELAND WATER SUPPLY	chloroform	3	uG/L	
City: LELAND				
Date Collected: 03/18/87				
Pws ID: 7540174				
Name: LE MARS WATER COMPANY	No Contaminants Detected			
City: LEMARS				
Date Collected: 07/09/87				
Pws ID: 8748075				
Name: LENOX WATER SUPPLY	atrazine	0.62	uG/L	
City: LENOX	bladex	1.70	uG/L	
Date Collected: 09/29/87	chloroform	120	uG/L	
	bromodichloromethane	16	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 2742076				
Name: LEON WATER SUPPLY	atrazine	0.20	uG/L	
City: LEON	chloroform	213	uG/L	
Date Collected: 05/21/87	carbon_tetrachloride	1	uG/L	
	bromodichloromethane	37	uG/L	
	dibromochloromethane	3	uG/L	
	ethylbenzene	1	uG/L	
	p_m_xylene	3	uG/L	
	o_xylene	1	uG/L	
Pws ID: 6055077				
Name: LESTER WATER SUPPLY	No Contaminants Detected			
City: LESTER				
Date Collected: 05/12/87				
Pws ID: 6055077 Repeat				
Name: LESTER WATER SUPPLY	chloroform	2	uG/L	
City: LESTER	bromodichloromethane	2	uG/L	
Date Collected: 03/17/87	dibromochloromethane	1	uG/L	
Pws ID: 1535078				
Name: LEWIS WATER SUPPLY	chloroform	1	uG/L	
City: LEWIS	1_2_dichloroethane	1	uG/L	
Date Collected: 07/09/87	bromodichloromethane	2	uG/L	
	dibromochloromethane	2	uG/L	
	bromoform	1	uG/L	
Pws ID: 5148079				
Name: LIBERTYVILLE WATER WORKS	atrazine	0.75	uG/L	
City: LIBERTYVILLE	bladex	1.70	uG/L	
Date Collected: 05/19/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 7945018				
Name: MALCOM WATER SUPPLY		2_4_d	0.21	uG/L
City: MALCOM		chloroform	2	uG/L
Date Collected: 09/21/87		p_m_xylene	1	uG/L
Pws ID: 7450019				
Name: MALLARD WATER SUPPLY		chloroform	2	uG/L
City: MALLARD		bromodichloromethane	1	uG/L
Date Collected: 00/00/00				
Pws ID: 6545020				
Name: MALVERN WATER SUPPLY		chloroform	18	uG/L
City: MALVERN		bromodichloromethane	16	uG/L
Date Collected: 06/17/87		dibromochloromethane	8	uG/L
Pws ID: 2839021				
Name: MANCHESTER WATER SUPPLY		chloroform	1	uG/L
City: MANCHESTER		bromodichloromethane	1	uG/L
Date Collected: 02/17/87		dibromochloromethane	1	uG/L
Pws ID: 2436023				
Name: MANILLA MUNI SERVICE DEPT		chloroform	3	uG/L
City: MANILLA		bromodichloromethane	3	uG/L
Date Collected: 06/22/87		dibromochloromethane	2	uG/L
Pws ID: 9845024				
Name: MANLY WATER SUPPLY		No Contaminants Detected		
City: MANLY				
Date Collected: 03/16/87				
Pws ID: 1457025				
Name: MANNING WATER SUPPLY		1_1_dichloroethane	1	uG/L
City: MANNING		1_1_1_trichloroethane	1	uG/L
Date Collected: 06/24/87		bromodichloromethane	1	uG/L
		dibromochloromethane	1	uG/L
		bromoform	1	uG/L
Pws ID: 1400902				
Name: WEST CENTRAL RWA -NISH SYSTEM		chloroform	9	uG/L
City: MANNING		bromodichloromethane	7	uG/L
Date Collected: 08/18/87		dibromochloromethane	6	uG/L
		bromoform	1	uG/L
Pws ID: 1400903				
Name: WEST CENTRAL RWA-BOYER SYSTEM		chloroform	25	uG/L
City: MANNING		bromodichloromethane	11	uG/L
Date Collected: 08/18/87		dibromochloromethane	4	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 1754073				
Name: MESERVEY WATER SUPPLY	No Contaminants Detected			
City: MESERVEY				
Date Collected: 08/17/87				
Pws ID: 2952075				
Name: MIDDLETOWN WATER SUPPLY	atrazine	0.23	uG/L	
City: MIDDLETOWN	chloroform	58	uG/L	
Date Collected: 05/26/87	bromodichloromethane	13	uG/L	
	dibromochloromethane	3	uG/L	
Pws ID: 4953078				
Name: MILES WATER DEPARTMENT	atrazine	0.76	uG/L	
City: MILES	dual	0.24	uG/L	
Date Collected: 01/27/87				
Pws ID: 3050079				
Name: MILFORD MUNICIPAL UTILITIES	atrazine	0.26	uG/L	
City: MILFORD	chloroform	47	uG/L	
Date Collected: 04/22/87	bromodichloromethane	18	uG/L	
	dibromochloromethane	3	uG/L	
Pws ID: 3090081				
Name: WEST OKOBOJI WATER DEPT	chloroform	54	uG/L	
City: MILFORD	bromodichloromethane	14	uG/L	
Date Collected: 09/29/87	dibromochloromethane	3	uG/L	
Pws ID: 4852082				
Name: MILLERSBURG WATER DEPT	chloroform	1	uG/L	
City: MILLERSBURG	toluene	1	uG/L	
Date Collected: 02/19/87				
Pws ID: 9155083				
Name: MILO PUBLIC WATER SUPPLY	atrazine	0.30	uG/L	
City: MILO				
Date Collected: 04/23/87				
Pws ID: 8954084				
Name: MILTON WATER SUPPLY	No Contaminants Detected			
City: MILTON				
Date Collected: 02/13/87				
Pws ID: 2547085				
Name: MINBURN WATERWORKS	chloroform	1	uG/L	
City: MINBURN				
Date Collected: 05/27/87				
Pws ID: 7849086				
Name: MINDEN WATER SUPPLY	chloroform	1	uG/L	
City: MINDEN	bromodichloromethane	1	uG/L	
Date Collected: 01/29/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 4271062				
Name: NEW PROVIDENCE WATER SUPPLY		ethylbenzene	1	uG/L
City: NEW PROVIDENCE		o_xylene	1	uG/L
Date Collected: 02/18/87				
Pws ID: 6264063				
Name: NEW SHARON WATER SUPPLY		chloroform	1	uG/L
City: NEW SHARON				
Date Collected: 04/22/87				
Pws ID: 3165014				
Name: NEW VIENNA WATER SUPPLY		atrazine	0.37	uG/L
City: NEW VIENNA		chloroform	3	uG/L
Date Collected: 01/06/87		bromodichloromethane	3	uG/L
		dibromochloromethane	1	uG/L
		p_m_xylene	1	uG/L
Pws ID: 9159067				
Name: NEW VIRGINIA WATER SUPPLY		chloroform	7	uG/L
City: NEW VIRGINIA		bromodichloromethane	4	uG/L
Date Collected: 05/26/87		dibromochloromethane	1	uG/L
Pws ID: 0653050				
Name: NEWHALL WATER SUPPLY		chloroform	5	uG/L
City: NEWHALL				
Date Collected: 01/07/87				
Pws ID: 5059064				
Name: NEWTON WATER SUPPLY		chloroform	12	uG/L
City: NEWTON		bromodichloromethane	6	uG/L
Date Collected: 06/23/87		dibromochloromethane	4	uG/L
		bromoform	1	uG/L
Pws ID: 0260068				
Name: NODAWAY MUNICIPAL WATER		methylene_chloride	6	uG/L
City: NODAWAY		chloroform	1	uG/L
Date Collected: 04/27/87		bromodichloromethane	4	uG/L
		dibromochloromethane	8	uG/L
		bromoform	4	uG/L
Pws ID: 3423069				
Name: NORA SPRINGS WATER SUPPLY		No Contaminants Detected		
City: NORA SPRINGS				
Date Collected: 02/23/87				
Pws ID: 4858070				
Name: NORTH ENGLISH WATER DEPT		methylene_chloride	24	uG/L
City: NORTH ENGLISH		toluene	28	uG/L
Date Collected: 01/28/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 9083012				
Name: OTTUMWA WATER WORKS		chloroform	3	uG/L
City: OTTUMWA				
Date Collected: 08/19/87				
Pws ID: 9000742				
Name: WAPELLO RURAL WATER ASSOC		atrazine	0.41	uG/L
City: OTTUMWA		chloroform	2	uG/L
Date Collected: 09/16/87				
Pws ID: 5260017				
Name: OXFORD WATER SUPPLY		No Contaminants Detected		
City: OXFORD				
Date Collected: 11/14/86				
Pws ID: 5361020	Repeat			
Name: OXFORD JUNCTION WATER SUPPLY		alachlor	9.30	uG/L
City: OXFORD JUNCTION		atrazine	13.00	uG/L
Date Collected: 08/17/87		bladex	1.50	uG/L
		dual	8.50	uG/L
		sencor	0.30	uG/L
Pws ID: 5361020				
Name: OXFORD JUNCTION WATER SUPPLY		alachlor	20.00	uG/L
City: OXFORD JUNCTION		atrazine	14.00	uG/L
Date Collected: 06/15/87		bladex	11.00	uG/L
		dual	4.00	uG/L
		sencor	0.27	uG/L
		chloroform	1	uG/L
		bromodichloromethane	1	uG/L
Pws ID: 7561021				
Name: OYENS WATER SUPPLY		No Contaminants Detected		
City: OYENS				
Date Collected: 07/08/87				
Pws ID: 6562022				
Name: PACIFIC JUNCTION WATER SUPPLY		chloroform	3	uG/L
City: PACIFIC JUNCTION		bromodichloromethane	4	uG/L
Date Collected: 07/20/87		dibromochloromethane	4	uG/L
		bromoform	2	uG/L
Pws ID: 7622024				
Name: PALMER WATER SUPPLY		chloroform	2	uG/L
City: PALMER				
Date Collected: 06/17/87				
Pws ID: 8355025				
Name: PANAMA WATER WORKS		chloroform	20	uG/L
City: PANAMA		bromodichloromethane	5	uG/L
Date Collected: 02/25/87		dibromochloromethane	1	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID	Name	City	Date Collected	Compound	Value	Units
8300184	SHELBY CO RURAL WATER DISTRICT	AVOCA	00/00/00	chloroform	5	uG/L
				bromodichloromethane	4	uG/L
				dibromochloromethane	2	uG/L
7403081	AYRSHIRE WATER WORKS	AYRSHIRE	11/18/86	No Contaminants Detected		
9405082	BADGER WATER SUPPLY	BADGER	12/11/86	chloroform	5	uG/L
				bromodichloromethane	10	uG/L
				dibromochloromethane	11	uG/L
				bromoform	3	uG/L
3902083	BAGLEY WATER	BAGLEY	12/29/86	No Contaminants Detected		
4907084	BALDWIN WATER SUPPLY	BALDWIN	08/24/87	chloroform	2	uG/L
				bromodichloromethane	2	uG/L
				dibromochloromethane	2	uG/L
				bromoform	1	uG/L
				ethylbenzene	1	uG/L
				p_m_xylene	4	uG/L
				o_xylene	1	uG/L
5807085	BANCROFT WATER SUPPLY	BANCROFT	11/24/86	chloroform	1	uG/L
				bromodichloromethane	1	uG/L
3109086	BANKSTON PUBLIC WATER SYSTEM	BANKSTON	01/05/87	chloroform	5	uG/L
7905088	BARNES CITY WATER SUPPLY	BARNES CITY	11/24/86	atrazine	0.20	uG/L
				chloroform	39	uG/L
				bromodichloromethane	12	uG/L
				dibromochloromethane	5	uG/L
9408087	BARNUM WATER SUPPLY	BARNUM	07/16/87	No Contaminants Detected		

Public Water Supply Compounds above Detection Limits

Pws ID: 7514049				
Name: BRUNSVILLE MUN WATER SUPPLY	No Contaminants Detected			
City: BRUNSVILLE				
Date Collected: 06/16/87				
Pws ID: 8218050				
Name: BUFFALO WATER SUPPLY	chloroform	3	uG/L	
City: BUFFALO	bromodichloromethane	3	uG/L	
Date Collected: 11/20/86	dibromochloromethane	1	uG/L	
Pws ID: 9506052				
Name: BUFFALO CENTER MUNI WATER DEPT	chloroform	7	uG/L	
City: BUFFALO CENTER	bromodichloromethane	1	uG/L	
Date Collected: 08/18/87				
Pws ID: 2909053				
Name: BURLINGTON MUNICIPAL WATERWORK	chloroform	63	uG/L	
City: BURLINGTON	bromodichloromethane	15	uG/L	
Date Collected: 11/20/86	dibromochloromethane	2	uG/L	
Pws ID: 5510060				
Name: BURT WATER SUPPLY	No Contaminants Detected			
City: BURT				
Date Collected: 12/29/86				
Pws ID: 6309061				
Name: BUSSEY WATER SUPPLY	No Contaminants Detected			
City: BUSSEY				
Date Collected: 08/25/87				
Pws ID: 2320062				
Name: CALAMUS WATER SUPPLY	chloroform	19	uG/L	
City: CALAMUS	bromodichloromethane	4	uG/L	
Date Collected: 11/24/86				
Pws ID: 9417063				
Name: CALLENDER WATER SUPPLY	No Contaminants Detected			
City: CALLENDER				
Date Collected: 11/18/86				
Pws ID: 9615064				
Name: CALMAR WATER SUPPLY	alachlor	0.21	uG/L	
City: CALMAR				
Date Collected: 11/19/86				
Pws ID: 7109065				
Name: CALUMET WATER SUPPLY	chloroform	16	uG/L	
City: CALUMET	bromodichloromethane	10	uG/L	
Date Collected: 11/24/86	dibromochloromethane	5	uG/L	

Public Water Supply — Compounds above Detection Limits

Pws ID: 1228038				
Name: CLARKSVILLE WATER SUPPLY	No Contaminants Detected			
City: CLARKSVILLE				
Date Collected: 07/06/87				
Pws ID: 2203039				
Name: CLAYTON WATER SUPPLY	No Contaminants Detected			
City: CLAYTON				
Date Collected: 07/14/87				
Pws ID: 1716076				
Name: CLEAR LAKE WATER DEPT	chloroform	63	uG/L	
City: CLEAR LAKE	bromodichloromethane	15	uG/L	
Date Collected: 11/12/86	dibromochloromethane	1	uG/L	
Pws ID: 8012001				
Name: CLEARFIELD MUNICIPAL WATER	chloroform	10	uG/L	
City: CLEARFIELD	bromodichloromethane	3	uG/L	
Date Collected: 11/10/86				
Pws ID: 8000714				
Name: CLEARFIELD RURAL WATER ASSOCIA	chloroform	4	uG/L	
City: CLEARFIELD	bromodichloromethane	1	uG/L	
Date Collected: 12/29/86	dibromochloromethane	1	uG/L	
Pws ID: 1817045				
Name: CLEGHORN WATER SUPPLY	chloroform	7	uG/L	
City: CLEGHORN	bromodichloromethane	8	uG/L	
Date Collected: 04/13/87	dibromochloromethane	6	uG/L	
	bromoform	1	uG/L	
Pws ID: 6415046				
Name: CLEMONS WATER SUPPLY	No Contaminants Detected			
City: CLEMONS				
Date Collected: 01/20/87				
Pws ID: 3317047				
Name: CLERMONT WATER SUPPLY	atrazine	0.24	uG/L	
City: CLERMONT	chloroform	14	uG/L	
Date Collected: 07/14/87	bromodichloromethane	8	uG/L	
	dibromochloromethane	3	uG/L	
Pws ID: 2326048				
Name: IOWA-AMERICAN WATER CO.-CLINTO	chloroform	1	uG/L	
City: CLINTON				
Date Collected: 11/20/86				
Pws ID: 2725073				
Name: GARDEN GROVE WATER SUPPLY	atrazine	2.00	uG/L	
City: CLIO	bladex	0.90	uG/L	
Date Collected: 01/27/87	dual	0.41	uG/L	
	chloroform	41	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 4622095				
Name: DAKOTA CITY WATER SUPPLY		methylene_chloride	7	uG/L
City: DAKOTA CITY		chloroform	3	uG/L
Date Collected: 12/02/86		bromodichloromethane	6	uG/L
		dibromochloromethane	7	uG/L
		bromoform	3	uG/L
Pws ID: 2520098				
Name: DALLAS CENTER WATER SUPPLY		chloroform	10	uG/L
City: DALLAS CENTER		bromodichloromethane	8	uG/L
Date Collected: 01/05/87		dibromochloromethane	4	uG/L
Pws ID: 3720001				
Name: DANA WATER WORKS		chloroform	32	uG/L
City: DANA		bromodichloromethane	4	uG/L
Date Collected: 02/18/87				
Pws ID: 9729099				
Name: DANBURY WATER SUPPLY		carbon_tetrachloride	1	uG/L
City: DANBURY				
Date Collected: 09/17/87				
Pws ID: 2915000				
Name: DANVILLE WATER SUPPLY		chloroform	89	uG/L
City: DANVILLE		bromodichloromethane	18	uG/L
Date Collected: 01/05/87		dibromochloromethane	2	uG/L
Pws ID: 8222001				
Name: IOWA-AMERICAN WATER CO. (DAVEN		chloroform	50	uG/L
City: DAVENPORT		bromodichloromethane	5	uG/L
Date Collected: 11/19/86				
Pws ID: 2715009				
Name: DAVIS CITY WATER SUPPLY		No Contaminants Detected		
City: DAVIS CITY				
Date Collected: 05/14/87				
Pws ID: 2525010				
Name: DAWSON WATER WORKS		atrazine	0.81	uG/L
City: DAWSON				
Date Collected: 01/05/87				
Pws ID: 9425011				
Name: DAYTON MUNICIPAL WATER SUPPLY		No Contaminants Detected		
City: DAYTON				
Date Collected: 01/06/87				
Pws ID: 9630012				
Name: DECORAH WATER DEPT		chloroform	3	uG/L
City: DECORAH		bromodichloromethane	3	uG/L
Date Collected: 01/27/87		dibromochloromethane	2	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 4316087				
Name: DUNLAP WATER SUPPLY	No Contaminants Detected			
City: DUNLAP				
Date Collected: 00/00/00				
Pws ID: 1633090				
Name: DURANT WATER SUPPLY	bromodichloromethane	1	uG/L	
City: DURANT	dibromochloromethane	1	uG/L	
Date Collected: 01/05/87				
Pws ID: 3130091				
Name: DYERSVILLE MUNICIPAL WATER CO	chloroform	1	uG/L	
City: DYERSVILLE	p_dichlorobenzene	1	uG/L	
Date Collected: 07/10/87				
Pws ID: 8627095				
Name: DYSART WATER SUPPLY	chloroform	1	uG/L	
City: DYSART	bromodichloromethane	2	uG/L	
Date Collected: 09/22/87	dibromochloromethane	2	uG/L	
	bromoform	1	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 9926096				
Name: EAGLE GROVE WATER SUPPLY	chloroform	6	uG/L	
City: EAGLE GROVE	bromodichloromethane	1	uG/L	
Date Collected: 09/22/87				
Pws ID: 6115097				
Name: EARLHAM MUNICIPAL WATERWORKS	chloroform	7	uG/L	
City: EARLHAM	bromodichloromethane	11	uG/L	
Date Collected: 02/25/87	dibromochloromethane	13	uG/L	
Pws ID: 6115097 Repeat				
Name: EARLHAM MUNICIPAL WATERWORKS	No Contaminants Detected			
City: EARLHAM				
Date Collected: 04/28/87				
Pws ID: 8320098				
Name: EARLING WATER SUPPLY	chloroform	9	uG/L	
City: EARLING	bromodichloromethane	13	uG/L	
Date Collected: 05/20/87	dibromochloromethane	14	uG/L	
	bromoform	4	uG/L	
Pws ID: 2825099				
Name: EARLVILLE MUNI WATER SUPPLY	chloroform	1	uG/L	
City: EARLVILLE	bromodichloromethane	2	uG/L	
Date Collected: 06/18/87	dibromochloromethane	3	uG/L	
	bromoform	1	uG/L	

Public Water Supply — Compounds above Detection Limits

Pws ID: 1320039 Name: FARNHAMVILLE WATER SUPPLY City: FARNHAMVILLE Date Collected: 11/24/86	No Contaminants Detected		
Pws ID: 3615040 Name: FARRAGUT WATER SUPPLY City: FARRAGUT Date Collected: 03/12/87	chloroform bromodichloromethane dibromochloromethane	3 6 8	uG/L uG/L uG/L
Pws ID: 3615040 Repeat Name: FARRAGUT WATER SUPPLY City: FARRAGUT Date Collected: 04/21/87	No Contaminants Detected		
Pws ID: 3342041 Name: FAYETTE WATER SUPPLY City: FAYETTE Date Collected: 08/03/87	chloroform bromodichloromethane dibromochloromethane benzene bromoform	4 5 5 6 2	uG/L uG/L uG/L uG/L uG/L
Pws ID: 5515042 Name: FENTON MUNI WATER SUPPLY City: FENTON Date Collected: 09/30/87	chloroform bromodichloromethane	3 1	uG/L uG/L
Pws ID: 6432043 Name: FERGUSON WATER SUPPLY City: FERGUSON Date Collected: 06/16/87	1_1_1_trichloroethane	3	uG/L
Pws ID: 3414044 Name: FLOYD MUNI WATER SUPPLY City: FLOYD Date Collected: 09/15/87	chloroform bromodichloromethane dibromochloromethane	4 4 2	uG/L uG/L uG/L
Pws ID: 0135046 Name: FONTANELLE WATER WORKS City: FONTANELLE Date Collected: 04/13/87	chloroform bromodichloromethane dibromochloromethane o_dichlorobenzene	17 10 3 1	uG/L uG/L uG/L uG/L
Pws ID: 9525047 Name: FOREST CITY WATER SUPPLY City: FOREST CITY Date Collected: 09/16/87	No Contaminants Detected		

Public Water Supply Compounds above Detection Limits

Pws ID: 7736011				
Name: GRIMES WATER SUPPLY		No Contaminants Detected		
City: GRIMES				
Date Collected: 11/24/86				
Pws ID: 7930008				
Name: GRINNELL WATER DEPT		No Contaminants Detected		
City: GRINNELL				
Date Collected: 02/23/87				
Pws ID: 1528010				
Name: GRISWOLD WATER SUPPLY		dibromochloromethane	1	uG/L
City: GRISWOLD				
Date Collected: 12/01/86				
Pws ID: 3833013				
Name: GRUNDY CENTER WATER SUPPLY		No Contaminants Detected		
City: GRUNDY CENTER				
Date Collected: 06/23/87				
Pws ID: 3833013	Repeat			
Name: GRUNDY CENTER WATER SUPPLY		No Contaminants Detected		
City: GRUNDY CENTER				
Date Collected: 03/23/87				
Pws ID: 3225015				
Name: GRUVER WATER WORKS		chloroform	2	uG/L
City: GRUVER				
Date Collected: 08/17/87				
Pws ID: 3937016				
Name: GUTHRIE CENTER MUNI WATER WORK		bromodichloromethane	1	uG/L
City: GUTHRIE CENTER		dibromochloromethane	2	uG/L
Date Collected: 02/16/87				
Pws ID: 2242018				
Name: GUTTENBERG WATER UTILITY CITY		No Contaminants Detected		
City: GUTTENBERG				
Date Collected: 04/14/87				
Pws ID: 1444022				
Name: HALBUR WATER SUPPLY		chloroform	1	uG/L
City: HALBUR				
Date Collected: 02/17/87				
Pws ID: 3621023				
Name: HAMBURG WATER SUPPLY		chloroform	1	uG/L
City: HAMBURG				
Date Collected: 03/02/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 8444063				
Name: HULL WATER SUPPLY		chloroform	1	uG/L
City: HULL				
Date Collected: 04/22/87				
Pws ID: 4641064				
Name: HUMBOLDT MUNICIPAL WATER DEPT		bromodichloromethane	1	uG/L
City: HUMBOLDT		dibromochloromethane	4	uG/L
Date Collected: 05/20/87		bromoform	10	uG/L
Pws ID: 8538066				
Name: HUXLEY WATERWORKS DEPT		chloroform	2	uG/L
City: HUXLEY		bromodichloromethane	8	uG/L
Date Collected: 07/27/87		dibromochloromethane	21	uG/L
		bromoform	15	uG/L
Pws ID: 4728067				
Name: IDA GROVE WATER UTILITY		atrazine	0.38	uG/L
City: IDA GROVE		chloroform	1	uG/L
Date Collected: 11/12/86		1_2_dichloroethane	1	uG/L
		bromodichloromethane	4	uG/L
		dibromochloromethane	13	uG/L
		bromoform	16	uG/L
		tetrachloroethene	1	uG/L
Pws ID: 1037070				
Name: INDEPENDENCE WATER DEPT		atrazine	0.32	uG/L
City: INDEPENDENCE				
Date Collected: 02/18/87				
Pws ID: 9133075				
Name: INDIANOLA WATER SUPPLY		No Contaminants Detected		
City: INDIANOLA				
Date Collected: 09/28/87				
Pws ID: 6040076				
Name: INWOOD WATER SUPPLY		No Contaminants Detected		
City: INWOOD				
Date Collected: 03/17/87				
Pws ID: 6040076 Repeat				
Name: INWOOD WATER SUPPLY		No Contaminants Detected		
City: INWOOD				
Date Collected: 05/12/87				
Pws ID: 1946078				
Name: IONIA WATER SUPPLY		No Contaminants Detected		
City: IONIA				
Date Collected: 02/23/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 4155035				
Name: KLEMME WATER WORKS		chloroform	12	uG/L
City: KLEMME		dibromochloromethane	8	uG/L
Date Collected: 02/25/87				
Pws ID: 1340001				
Name: KNIERIM WATER SUPPLY		chloroform	6	uG/L
City: KNIERIM				
Date Collected: 09/21/87				
Pws ID: 6342036				
Name: KNOXVILLE WATER DEPT		No Contaminants Detected		
City: KNOXVILLE				
Date Collected: 01/13/87				
Pws ID: 6342711				
Name: MARION COUNTY RWD		No Contaminants Detected		
City: KNOXVILLE				
Date Collected: 05/18/87				
Pws ID: 9138041				
Name: LACONA WATER SUPPLY		No Contaminants Detected		
City: LACONA				
Date Collected: 03/17/87				
Pws ID: 9138041 Repeat				
Name: LACONA WATER SUPPLY		No Contaminants Detected		
City: LACONA				
Date Collected: 05/11/87				
Pws ID: 4840042				
Name: LADORA WATER SUPPLY		chloroform	1	uG/L
City: LADORA				
Date Collected: 05/26/87				
Pws ID: 1345043				
Name: LAKE CITY WATER SUPPLY		No Contaminants Detected		
City: LAKE CITY				
Date Collected: 01/26/87				
Pws ID: 9545044				
Name: LAKE MILL MUNICIPAL WATER WORK		No Contaminants Detected		
City: LAKE MILLS				
Date Collected: 04/27/87				
Pws ID: 9820010				
Name: FERTILE MUNICIPAL WATER		No Contaminants Detected		
City: LAKE MILLS				
Date Collected: 09/28/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 5140079 Repeat				
Name: LIBERTYVILLE WATER WORKS	No Contaminants Detected			
City: LIBERTYVILLE				
Date Collected: 03/17/87				
Pws ID: 5140079 Repeat				
Name: LIBERTYVILLE WATER WORKS	methylene_chloride	6	uG/L	
City: LIBERTYVILLE	chloroform	12	uG/L	
Date Collected: 07/13/87	bromodichloromethane	5	uG/L	
	dibromochloromethane	3	uG/L	
	bromoform	1	uG/L	
Pws ID: 1453080				
Name: LIDDERDALE WATER SUPPLY	No Contaminants Detected			
City: LIDDERDALE				
Date Collected: 09/29/87				
Pws ID: 4535081				
Name: LIME SPRINGS WATER SUPPLY	chloroform	2	uG/L	
City: LIME SPRINGS	bromodichloromethane	1	uG/L	
Date Collected: 11/17/86				
Pws ID: 8660002				
Name: LINCOLN WATER SUPPLY	No Contaminants Detected			
City: LINCOLN				
Date Collected: 02/17/87				
Pws ID: 2544083				
Name: LINDEN WATER WORKS	No Contaminants Detected			
City: LINDEN				
Date Collected: 02/02/87				
Pws ID. 9352084				
Name: LINEVILLE WATER SUPPLY	chloroform	39	uG/L	
City: LINEVILLE	bromodichloromethane	6	uG/L	
Date Collected: 03/17/87	p_m_xylene	1	uG/L	
Pws ID: 9352084 Repeat				
Name: LINEVILLE WATER SUPPLY	atrazine	2.50	uG/L	
City: LINEVILLE	bladex	1.90	uG/L	
Date Collected: 05/11/87				
Pws ID: 1147085				
Name: LINN GROVE WATER WORKS	No Contaminants Detected			
City: LINN GROVE				
Date Collected: 02/17/87				
Pws ID: 5748086				
Name: LISBON WATER SUPPLY	No Contaminants Detected			
City: LISBON				
Date Collected: 11/13/86				

Public Water Supply

Compounds above Detection Limits

Pws ID: 1351027 Name: MANSON WATER SUPPLY City: MANSON Date Collected: 11/24/86	No Contaminants Detected			
Pws ID: 6727028 Name: MAPLETON MUNICIPAL WATER PLANT City: MAPLETON Date Collected: 01/27/87	chloroform	2	uG/L	
Pws ID: 4950029 Name: MAQUOKETA MUNICIPAL WATER City: MAQUOKETA Date Collected: 05/21/87	chloroform	1	uG/L	
	bromodichloromethane	3	uG/L	
	trichloroethene	1	uG/L	
	dibromochloromethane	6	uG/L	
	bromoform	5	uG/L	
	tetrachloroethene	1	uG/L	
Pws ID: 1150030 Name: MARATHON LIGHT&WATER DEPT City: MARATHON Date Collected: 06/16/87	No Contaminants Detected			
Pws ID: 3420031 Name: MARBLE ROCK WATER SUPPLY City: MARBLE ROCK Date Collected: 03/11/87	chloroform	4	uG/L	
	bromodichloromethane	5	uG/L	
	dibromochloromethane	3	uG/L	
Pws ID: 3420031 Repeat Name: MARBLE ROCK WATER SUPPLY City: MARBLE ROCK Date Collected: 04/29/87	No Contaminants Detected			
Pws ID: 1830032 Name: MARCUS WATER SUPPLY City: MARCUS Date Collected: 06/15/87	No Contaminants Detected			
Pws ID: 4843033 Name: MARENGO WATER SUPPLY City: MARENGO Date Collected: 04/22/87	chloroform	8	uG/L	
	bromodichloromethane	11	uG/L	
	dibromochloromethane	7	uG/L	
	bromoform	1	uG/L	
Pws ID: 5751035 Name: MARION MUNICIPAL WATER DEPT City: MARION Date Collected: 04/24/87	No Contaminants Detected			

Public Water Supply Compounds above Detection Limits

Pws ID: 5052087				
Name: MINGO WATER SUPPLY	chloroform	18	uG/L	
City: MINGO	bromodichloromethane	8	uG/L	
Date Collected: 05/20/87	dibromochloromethane	6	uG/L	
	bromoform	1	uG/L	
Pws ID: 4344088				
Name: MISSOURI VALLEY WATER SUPPLY	chloroform	1	uG/L	
City: MISSOURI VALLEY	bromodichloromethane	2	uG/L	
Date Collected: 02/09/87	dibromochloromethane	4	uG/L	
Pws ID: 7751092				
Name: MITCHELLVILLE WATER SUPPLY	chloroform	8	uG/L	
City: MITCHELLVILLE	bromodichloromethane	8	uG/L	
Date Collected: 04/15/87	dibromochloromethane	6	uG/L	
	bromoform	1	uG/L	
Pws ID: 4347093				
Name: MODALE WATER SUPPLY	chloroform	3	uG/L	
City: MODALE				
Date Collected: 02/24/87				
Pws ID: 4349094				
Name: MONDAMIN WATER SUPPLY	chloroform	3	uG/L	
City: MONDAMIN	bromodichloromethane	1	uG/L	
Date Collected: 11/12/86				
Pws ID: 4955001				
Name: MONMOUTH WATER SUPPLY	trichloroethene	1	uG/L	
City: MONMOUTH				
Date Collected: 02/26/87				
Pws ID: 2264095				
Name: MONONA MUNICIPAL WATER DEPT	chloroform	1	uG/L	
City: MONONA	bromodichloromethane	2	uG/L	
Date Collected: 01/29/87	dibromochloromethane	1	uG/L	
Pws ID: 5054096				
Name: MONROE WATER SUPPLY	chloroform	2	uG/L	
City: MONROE	p_m_xylene	1	uG/L	
Date Collected: 11/12/86				
Pws ID: 7950097				
Name: MONTEZUMA MUNI WATER SUPPLY	atrazine	0.72	uG/L	
City: MONTEZUMA	bladex	0.45	uG/L	
Date Collected: 12/01/86				
Pws ID: 5343098				
Name: MONTICELLO WATER SUPPLY	chloroform	1	uG/L	
City: MONTICELLO	bromodichloromethane	2	uG/L	
Date Collected: 05/18/87	dibromochloromethane	2	uG/L	
	ethylbenzene	1	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 5252072				
Name: NORTH LIBERTY WATER SUPPLY	chloroform	1	uG/L	
City: NORTH LIBERTY				
Date Collected: 01/28/87				
Pws ID: 9855077				
Name: NORTHWOOD WATERWORKS	tetrachloroethene	4	uG/L	
City: NORTHWOOD				
Date Collected: 02/17/87				
Pws ID: 9164078				
Name: NORWALK WATER SUPPLY	2_4_d	0.20	uG/L	
City: NORWALK	chloroform	17	uG/L	
Date Collected: 00/00/00	bromodichloromethane	3	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 9100879				
Name: LAKEWOOD BENEFITED WATER DISTR	chloroform	5	uG/L	
City: NORWALK	bromodichloromethane	4	uG/L	
Date Collected: 01/14/87	dibromochloromethane	3	uG/L	
Pws ID: 0656081				
Name: NORWAY CITY WATER SUPPLY	chloroform	2	uG/L	
City: NORWAY	bromodichloromethane	1	uG/L	
Date Collected: 03/17/87				
Pws ID: 0656081 Repeat				
Name: NORWAY CITY WATER SUPPLY	No Contaminants Detected			
City: NORWAY				
Date Collected: 05/11/87				
Pws ID: 5200938				
Name: IOWA MEDICAL & CLASSIFICATION	No Contaminants Detected			
City: OAKDALE				
Date Collected: 05/22/87				
Pws ID: 7856084				
Name: OAKLAND MUNIC WATER UTILITY	chloroform	1	uG/L	
City: OAKLAND				
Date Collected: 03/18/87				
Pws ID: 7856084 Repeat				
Name: OAKLAND MUNIC WATER UTILITY	No Contaminants Detected			
City: OAKLAND				
Date Collected: 05/18/87				
Pws ID: 5868085				
Name: OAKVILLE WATER SUPPLY	chloroform	13	uG/L	
City: OAKVILLE	bromodichloromethane	2	uG/L	
Date Collected: 01/28/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 3971026				
Name: PANORA WATER WORKS		chloroform	53	uG/L
City: PANORA		bromodichloromethane	20	uG/L
Date Collected: 03/16/87		dibromochloromethane	5	uG/L
Pws ID: 1281028				
Name: PARKERSBURG WATER SUPPLY		No Contaminants Detected		
City: PARKERSBURG				
Date Collected: 02/23/87				
Pws ID: 4863029				
Name: PARNELL WATER SUPPLY		chloroform	1	uG/L
City: PARNELL				
Date Collected: 06/17/87				
Pws ID: 3746030				
Name: PATON WATER SUPPLY		chloroform	1	uG/L
City: PATON				
Date Collected: 09/08/87				
Pws ID: 7139032				
Name: PAULLINA MUNICIPAL WATER SUPPL		chloroform	2	uG/L
City: PAULLINA		bromodichloromethane	3	uG/L
Date Collected: 05/20/87		dibromochloromethane	3	uG/L
		bromoform	1	uG/L
		p_m_xylene	1	uG/L
Pws ID: 6368033				
Name: PELLA WATER WORKS DEPARTMENT		chloroform	32	uG/L
City: PELLA		bromodichloromethane	16	uG/L
Date Collected: 02/03/87		dibromochloromethane	6	uG/L
		toluene	1	uG/L
Pws ID: 2561036				
Name: PERRY MUNICIPAL WATER WORKS		chloroform	1	uG/L
City: PERRY				
Date Collected: 11/13/86				
Pws ID: 6300800				
Name: PERSHING UTILITIES CORP		No Contaminants Detected		
City: PERSHING				
Date Collected: 03/16/87				
Pws ID: 4360038				
Name: PERSIA MUNICIPAL WATER SUPPLY		chloroform	1	uG/L
City: PERSIA				
Date Collected: 07/18/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 5107089				
Name: BATAVIA WATER WORKS		No Contaminants Detected		
City: BATAVIA				
Date Collected: 11/12/86				
Pws ID: 4709090				
Name: BATTLE CREEK WATER SUPPLY		trichloroethene	1	uG/L
City: BATTLE CREEK				
Date Collected: 12/01/86				
Pws ID: 5003091				
Name: BAXTER WATER SUPPLY		chloroform	18	uG/L
City: BAXTER		bromodichloromethane	12	uG/L
Date Collected: 11/17/86		dibromochloromethane	5	uG/L
Pws ID: 3907092				
Name: BAYARD WATER SUPPLY		chloroform	4	uG/L
City: BAYARD				
Date Collected: 02/02/87				
Pws ID: 3803094				
Name: BEAMAN WATER SUPPLY		No Contaminants Detected		
City: BEAMAN				
Date Collected: 01/05/87				
Pws ID: 0800095				
Name: BEAVER WATER SUPPLY		p_m_xylene	2	uG/L
City: BEAVER		o_xylene	1	uG/L
Date Collected: 07/21/87				
Pws ID: 8709096				
Name: BEDFORD WATER WORKS		atrazine	0.44	uG/L
City: BEDFORD		bladex	1.10	uG/L
Date Collected: 06/16/87		chloroform	160	uG/L
		bromodichloromethane	25	uG/L
		dibromochloromethane	2	uG/L
Pws ID: 0610099				
Name: BELLE PLAINE WATER DEPT		chloroform	1	uG/L
City: BELLE PLAINE				
Date Collected: 05/18/87				
Pws ID: 4910000				
Name: BELLEVUE MUNI UTILITIES		No Contaminants Detected		
City: BELLEVUE				
Date Collected: 11/19/86				
Pws ID: 9900003				
Name: BELMOND WATER SUPPLY		chloroform	1	uG/L
City: BELMOND		tetrachloroethene	2	uG/L
Date Collected: 12/29/86				

Public Water Supply — Compounds above Detection Limits

Pws ID: 2322066				
Name: CAMANCHE WATER SUPPLY		No Contaminants Detected		
City: CAMANCHE				
Date Collected: 07/15/87				
Pws ID: 8509069				
Name: CAMBRIDGE WATER SUPPLY		chloroform	3	uG/L
City: CAMBRIDGE		bromodichloromethane	2	uG/L
Date Collected: 05/19/87		dibromochloromethane	1	uG/L
Pws ID: 9113071				
Name: CARLISLE WATER SUPPLY		chloroform	1	uG/L
City: CARLISLE		bromodichloromethane	3	uG/L
Date Collected: 05/19/87		dibromochloromethane	8	uG/L
		bromoform	7	uG/L
		tetrachloroethene	3	uG/L
Pws ID: 1415072				
Name: CARROLL MUNICIPAL WATER SUPPLY		chloroform	2	uG/L
City: CARROLL				
Date Collected: 05/13/87				
Pws ID: 1486074				
Name: WILLEY WATER SUPPLY		chloroform	24	uG/L
City: CARROLL		bromodichloromethane	7	uG/L
Date Collected: 09/08/87		dibromochloromethane	1	uG/L
		p_m_xylene	2	uG/L
Pws ID: 7809078				
Name: CARSON WATER SUPPLY		chloroform	1	uG/L
City: CARSON		bromodichloromethane	2	uG/L
Date Collected: 12/01/86		dibromochloromethane	3	uG/L
Pws ID: 7812079				
Name: CARTER LAKE WATER DISTRICT		chloroform	52	uG/L
City: CARTER LAKE		bromodichloromethane	17	uG/L
Date Collected: 11/25/86		dibromochloromethane	6	uG/L
Pws ID: 3118080				
Name: CASCADE MUNICIPAL WATER SUPPLY		No Contaminants Detected		
City: CASCADE				
Date Collected: 08/20/87				
Pws ID: 3914081				
Name: CASEY WATER SUPPLY		chloroform	8	uG/L
City: CASEY		bromodichloromethane	8	uG/L
Date Collected: 11/17/86		dibromochloromethane	4	uG/L

Public Water Supply — Compounds above Detection Limits

		bromodichloromethane	6	uG/L
Pws ID: 9340065				
Name: HUMESTON WATER PLANT		atrazine	4.30	uG/L
City: CLIO		bladex	1.00	uG/L
Date Collected: 09/24/87		dual	0.91	uG/L
		chloroform	260	uG/L
		bromodichloromethane	15	uG/L
Pws ID: 7720051				
Name: CLIVE WATER DEPT		chloroform	8	uG/L
City: CLIVE		bromodichloromethane	5	uG/L
Date Collected: 01/02/87		dibromochloromethane	2	uG/L
Pws ID: 8616052				
Name: CLUTIER WATER SUPPLY		No Contaminants Detected		
City: CLUTIER				
Date Collected: 12/29/86				
Pws ID: 5722053				
Name: COGGON WATER DEPARTMENT		alachlor	0.49	uG/L
City: COGGON		atrazine	1.60	uG/L
Date Collected: 07/08/87		bladex	0.20	uG/L
Pws ID: 7335054				
Name: COIN WATER SUPPLY		chloroform	34	uG/L
City: COIN		bromodichloromethane	14	uG/L
Date Collected: 12/29/86		dibromochloromethane	2	uG/L
Pws ID: 2809055				
Name: COLESBURG WATER SUPPLY		No Contaminants Detected		
City: COLESBURG				
Date Collected: 07/08/87				
Pws ID: 9009056				
Name: COLFAX WATER SUPPLY		No Contaminants Detected		
City: COLFAX				
Date Collected: 01/06/87				
Pws ID: 7341059				
Name: COLLEGE SPRINGS W'TER SUPPLY		1_2_dichloroethane	1	uG/L
City: COLLEGE SPRINGS				
Date Collected: 11/18/86				
Pws ID: 8515060				
Name: COLLINS WATER SUPPLY		No Contaminants Detected		
City: COLLINS				
Date Collected: 11/17/86				

Public Water Supply Compounds above Detection Limits

Pws ID: 9630001				
Name: FREEPORT WATER DISTRICT	chloroform	1	uG/L	
City: DECORAH	bromodichloromethane	1	uG/L	
Date Collected: 05/27/87				
Pws ID: 1433016				
Name: DEDHAM WATER SUPPLY	No Contaminants Detected			
City: DEDHAM				
Date Collected: 04/27/87				
Pws ID: 7915017				
Name: DEEP RIVER WATER SUPPLY	No Contaminants Detected			
City: DEEP RIVER				
Date Collected: 11/25/86				
Pws ID: 8315018				
Name: DEFIANCE WATER DEPT	chloroform	12	uG/L	
City: DEFIANCE	bromodichloromethane	11	uG/L	
Date Collected: 04/20/87	dibromochloromethane	5	uG/L	
Pws ID: 2813019				
Name: DELAWARE MUNICIPAL WATER SUPPL	chloroform	2	uG/L	
City: DELAWARE	bromodichloromethane	4	uG/L	
Date Collected: 09/21/87	dibromochloromethane	6	uG/L	
	bromoform	3	uG/L	
Pws ID: 2817020				
Name: DELHI WATER SUPPLY	No Contaminants Detected			
City: DELHI				
Date Collected: 09/28/87				
Pws ID: 2328024				
Name: DELMAR WATER SUPPLY	bromodichloromethane	1	uG/L	
City: DELMAR	dibromochloromethane	1	uG/L	
Date Collected: 11/24/83				
Pws ID: 2421025				
Name: DELOIT MUNI WATER SUPPLY	chloroform	2	uG/L	
City: DELOIT	bromodichloromethane	4	uG/L	
Date Collected: 04/20/87	dibromochloromethane	3	uG/L	
	bromoform	1	uG/L	
Pws ID: 5417026				
Name: DELTA WATER SUPPLY	chloroform	5	uG/L	
City: DELTA	bromodichloromethane	4	uG/L	
Date Collected: 02/17/87	dibromochloromethane	3	uG/L	
Pws ID: 2424027				
Name: DENISON WATER SUPPLY	No Contaminants Detected			
City: DENISON				
Date Collected: 01/18/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 8114000				
Name: EARLY MUNI WATER SUPPLY		atrazine	0.28	uG/L
City: EARLY		chloroform	10	uG/L
Date Collected: 07/13/87		bromodichloromethane	7	uG/L
		dibromochloromethane	4	uG/L
		bromoform	1	uG/L
Pws ID: 9049001				
Name: EDDYVILLE MUNI WATER DEPT		chloroform	1	uG/L
City: EDDYVILLE		bromodichloromethane	3	uG/L
Date Collected: 11/14/86		dibromochloromethane	5	uG/L
		bromoform	3	uG/L
Pws ID: 2220002				
Name: EDGEWOOD WATER SUPPLY		2_4_d	2.60	uG/L
City: EDGEWOOD		p_m_xylene	1	uG/L
Date Collected: 06/15/87				
Pws ID: 8631003				
Name: ELBERON WATER SUPPLY		chloroform	1	uG/L
City: ELBERON				
Date Collected: 04/22/87				
Pws ID: 9063004				
Name: ELDON WATER SUPPLY		No Contaminants Detected		
City: ELDON				
Date Collected: 06/14/87				
Pws ID: 4236002				
Name: STATE TRAINING SCHOOL		chloroform	3	uG/L
City: ELDORA				
Date Collected: 11/17/86				
Pws ID: 4236005				
Name: ELDORA WATER SUPPLY		chloroform	5	uG/L
City: ELDORA		bromodichloromethane	1	uG/L
Date Collected: 09/29/87				
Pws ID: 8230008				
Name: ELDRIDGE WATER SUPPLY		chloroform	5	uG/L
City: ELDRIDGE				
Date Collected: 02/17/87				
Pws ID: 3338001				
Name: ELGIN MUNICIPAL WS-SOUTH		chloroform	4	uG/L
City: ELGIN		bromodichloromethane	5	uG/L
Date Collected: 06/16/87		dibromochloromethane	5	uG/L
		bromoform	1	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 9641049				
Name: FT ATKINSON WATER WORKS		chloroform	5	uG/L
City: FORT ATKINSON		bromodichloromethane	3	uG/L
Date Collected: 11/12/86		dibromochloromethane	1	uG/L
Pws ID: 9433050				
Name: FT DODGE WATER SUPPLY		bromoform	1	uG/L
City: FORT DODGE				
Date Collected: 05/18/87				
Pws ID: 5600947				
Name: IOWA STATE PENITENTIARY		chloroform	41	uG/L
City: FORT MADISON		bromodichloromethane	4	uG/L
Date Collected: 04/21/87				
Pws ID: 5625062				
Name: FT MADISON MUNI WATER WORKS		alachlor	0.40	uG/L
City: FORT MADISON		chloroform	32	uG/L
Date Collected: 01/08/87		bromodichloromethane	6	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 1940068				
Name: FREDERICKSBURG WATER SUPPLY		No Contaminants Detected		
City: FREDERICKSBURG				
Date Collected: 03/16/87				
Pws ID: 6234070				
Name: FREMONT MUNICIPAL WATER PLANT		chloroform	5	uG/L
City: FREMONT		bromodichloromethane	1	uG/L
Date Collected: 02/17/87				
Pws ID: 9932071				
Name: GALT MUNICIPAL WATER SUPPLY		No Contaminants Detected		
City: GALT				
Date Collected: 09/22/87				
Pws ID: 4715072				
Name: GALVA WATER SUPPLY		atrazine	2.60	uG/L
City: GALVA		bladex	0.69	uG/L
Date Collected: 02/19/87		1_2_dichloroethane	1	uG/L
		benzene	3	uG/L
Pws ID: 2234074				
Name: GARNAVILLO WATER SUPPLY		chloroform	4	uG/L
City: GARNAVILLO		bromodichloromethane	1	uG/L
Date Collected: 04/13/87				
Pws ID: 4130075				
Name: GARNER WATER WORKS		chloroform	4	uG/L
City: GARNER				
Date Collected: 04/13/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 3544024				
Name: HAMPTON MUNI WATER WORKS	chloroform	1	uG/L	
City: HAMPTON	bromodichloromethane	1	uG/L	
Date Collected: 07/15/87				
Pws ID: 7833025				
Name: HANCOCK WATER SUPPLY	No Contaminants Detected			
City: HANCOCK				
Date Collected: 02/23/87				
Pws ID: 9830001				
Name: HANLONTOWN WATER SUPPLY SYSTEM	chloroform	19	uG/L	
City: HANLONTOWN	bromodichloromethane	4	uG/L	
Date Collected: 05/20/87				
Pws ID: 3549026				
Name: HANSELL WATER DEPT	No Contaminants Detected			
City: HANSELL				
Date Collected: 05/13/87				
Pws ID: 9442027				
Name: HARCOURT WATER SUPPLY	No Contaminants Detected			
City: HARCOURT				
Date Collected: 03/16/87				
Pws ID: 4634028				
Name: HARDY WATER SUPPLY	No Contaminants Detected			
City: HARDY				
Date Collected: 11/17/86				
Pws ID: 8335029				
Name: HARLAN MUNICIPAL UTILITIES	atrazine	0.25	uG/L	
City: HARLAN				
Date Collected: 02/23/87				
Pws ID: 5428031				
Name: HARPER WATER SUPPLY	chloroform	1	uG/L	
City: HARPER				
Date Collected: 05/21/87				
Pws ID: 7222034				
Name: HARRIS WATER SUPPLY	No Contaminants Detected			
City: HARRIS				
Date Collected: 01/07/87				
Pws ID: 9120035				
Name: HARTFORD WATER WORKS	No Contaminants Detected			
City: HARTFORD				
Date Collected: 05/19/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 5225079				
Name: IOWA CITY WATER DEPT	chloroform	51	uG/L
City: IOWA CITY	bromodichloromethane	25	uG/L
Date Collected: 02/18/87	dibromochloromethane	6	uG/L
Pws ID: 5225101			
Name: UNIVERSITY WATER SYSTEM	alachlor	0.41	uG/L
City: IOWA CITY	atrazine	1.80	uG/L
Date Collected: 07/08/87	bladex	0.66	uG/L
	dual	0.91	uG/L
	chloroform	109	uG/L
	bromodichloromethane	23	uG/L
	dibromochloromethane	6	uG/L
Pws ID: 4260097			
Name: IOWA FALLS WATER DEPT	chloroform	1	uG/L
City: IOWA FALLS	1_2_dichloroethane	1	uG/L
Date Collected: 03/18/87			
Pws ID: 4260097 Repeat			
Name: IOWA FALLS WATER DEPT	No Contaminants Detected		
City: IOWA FALLS			
Date Collected: 06/17/87			
Pws ID: 8447098			
Name: IRETON WATER SUPPLY	chloroform	1	uG/L
City: IRETON			
Date Collected: 02/19/87			
Pws ID: 8400733			
Name: SOUTHERN SIOUX RURAL WATER	No Contaminants Detected		
City: IRETON			
Date Collected: 03/17/87			
Pws ID: 8400733 Repeat			
Name: SOUTHERN SIOUX RURAL WATER	No Contaminants Detected		
City: IRETON			
Date Collected: 06/11/87			
Pws ID: 8340099			
Name: IRWIN MUNICIPAL SUPPLY	No Contaminants Detected		
City: IRWIN			
Date Collected: 03/16/87			
Pws ID: 3949000			
Name: JAMAICA WATER SUPPLY	chloroform	1	uG/L
City: JAMAICA			
Date Collected: 01/27/87			

Public Water Supply Compounds above Detection Limits

Pws ID: 4115092				
Name: CRYSTAL LAKE WATER SUPPLY	No Contaminants Detected			
City: LAKE MILLS				
Date Collected: 08/24/87				
Pws ID: 3045046				
Name: LAKE PK MUNICIPAL UTILITIES	chloroform	244	uG/L	
City: LAKE PARK	bromodichloromethane	22	uG/L	
Date Collected: 06/15/87	dibromochloromethane	1	uG/L	
Pws ID: 3045047				
Name: LAKE PARK COUNTRY CLUB DRIVE	chloroform	18	uG/L	
City: LAKE PARK	bromodichloromethane	12	uG/L	
Date Collected: 04/14/87	dibromochloromethane	4	uG/L	
Pws ID: 8127048				
Name: LAKE VIEW WATER SUPPLY	chloroform	6	uG/L	
City: LAKE VIEW	bromodichloromethane	8	uG/L	
Date Collected: 04/14/87	dibromochloromethane	8	uG/L	
	bromoform	1	uG/L	
	tetrachloroethene	5	uG/L	
Pws ID: 1145047				
Name: LAKESIDE WATER SUPPLY	chloroform	1	uG/L	
City: LAKESIDE	p_dichlorobenzene	1	uG/L	
Date Collected: 05/26/87				
Pws ID: 5540049				
Name: LAKOTA WATER SUPPLY	No Contaminants Detected			
City: LAKOTA				
Date Collected: 04/22/87				
Pws ID: 2740050				
Name: LANONI MUNICIPAL UTILITIES	atrazine	0.47	uG/L	
City: LANONI	chloroform	230	uG/L	
Date Collected: 09/23/87	bromodichloromethane	12	uG/L	
Pws ID: 1051051				
Name: LAMONT WATER SUPPLY	No Contaminants Detected			
City: LAMONT				
Date Collected: 03/13/87				
Pws ID: 1051051 Repeat				
Name: LAMONT WATER SUPPLY	No Contaminants Detected			
City: LAMONT				
Date Collected: 04/21/87				
Pws ID: 4945052				
Name: LA MOTTE WATER SUPPLY	No Contaminants Detected			
City: LAMOTTE				
Date Collected: 08/18/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 5748086 Repeat				
Name: LISBON WATER SUPPLY		alachlor	0.66	uG/L
City: LISBON				
Date Collected: 01/06/87				
Pws ID: 6462087				
Name: LISCOMB WATER SUPPLY		No Contaminants Detected		
City: LISCOMB				
Date Collected: 08/26/87				
Pws ID: 6060006				
Name: LITTLE ROCK WATER SUPPLY		chloroform	18	uG/L
City: LITTLE ROCK		bromodichloromethane	12	uG/L
Date Collected: 04/22/87		dibromochloromethane	5	uG/L
Pws ID: 4333089				
Name: LITTLE SIOUX WATER DEPART		No Contaminants Detected		
City: LITTLE SIOUX				
Date Collected: 08/22/87				
Pws ID: 4647090				
Name: LIVERMORE WATER SUPPLY		chloroform	1	uG/L
City: LIVERMORE				
Date Collected: 01/05/87				
Pws ID: 5157091				
Name: LOCKRIDGE MUNI WATER SUPPLY		chloroform	67	uG/L
City: LOCKRIDGE		bromodichloromethane	15	uG/L
Date Collected: 03/16/87		dibromochloromethane	1	uG/L
Pws ID: 5157091 Repeat				
Name: LOCKRIDGE MUNI WATER SUPPLY		atrazine	1.80	uG/L
City: LOCKRIDGE			3.80	uG/L
Date Collected: 05/20/87				
Pws ID: 4337092				
Name: LOGAN WATER SUPPLY		chloroform	1	uG/L
City: LOGAN		bromodichloromethane	2	uG/L
Date Collected: 06/15/87		dibromochloromethane	9	uG/L
		benzene	2	uG/L
		bromoform	18	uG/L
Pws ID: 1389001				
Name: LOHRVILLE WATER SUPPLY		2_4_d	0.20	uG/L
City: LOHRVILLE				
Date Collected: 06/15/87				
Pws ID: 5547094				
Name: LONE ROCK WATER SUPPLY		No Contaminants Detected		
City: LONE ROCK				
Date Collected: 06/08/87				

Public Water Supply

Compounds above Detection Limits

Pws ID: 5751040
Name: GLENBROOK COVE AREA
City: MARION
Date Collected: 02/18/87

atrazine	0.20	uG/L
chloroform	1	uG/L

Pws ID: 1552040
Name: MARNE WATER SUPPLY
City: MARNE
Date Collected: 01/26/87

bromodichloromethane	1	uG/L
dibromochloromethane	3	uG/L
bromoform	3	uG/L

Pws ID: 2256041
Name: MARQUETTE WATER SUPPLY
City: MARQUETTE
Date Collected: 01/28/87

No Contaminants Detected

Pws ID: 6469042
Name: MARSHALLTOWN WATER WORKS
City: MARSHALLTOWN
Date Collected: 09/28/87

No Contaminants Detected

Pws ID: 5337046
Name: MARTELLE WATER WORKS
City: MARTELLE
Date Collected: 02/16/87

chloroform	5	uG/L
bromodichloromethane	1	uG/L

Pws ID: 9147047
Name: MARTENSDALE WATER SUPPLY
City: MARTENSDALE
Date Collected: 06/14/87

No Contaminants Detected

Pws ID: 9147047 Repeat
Name: MARTENSDALE WATER SUPPLY
City: MARTENSDALE
Date Collected: 03/31/87

chloroform	4	uG/L
bromodichloromethane	2	uG/L
dibromochloromethane	1	uG/L

Pws ID: 1750040
Name: MASON CITY WATER DEPT
City: MASON CITY
Date Collected: 06/23/87

No Contaminants Detected

Pws ID: 1588065
Name: MASSENA WATER SUPPLY
City: MASSENA
Date Collected: 01/28/87

No Contaminants Detected

Pws ID: 8455066
Name: MATLOCK WATER SUPPLY
City: MATLOCK
Date Collected: 11/17/86

chloroform	33	uG/L
bromodichloromethane	21	uG/L
dibromochloromethane	6	uG/L

Public Water Supply — Compounds above Detection Limits

		p_m_xylene	2	uG/L
		o_xylene	1	uG/L
Pws ID: 8666002				
Name: MONTOUR WATER SUPPLY		chloroform	3	uG/L
City: MONTOUR		bromodichloromethane	5	uG/L
Date Collected: 04/27/87		dibromochloromethane	5	uG/L
		bromoform	1	uG/L
Pws ID: 5660003				
Name: MONTROSE WATER WORKS		chloroform	4	uG/L
City: MONTROSE		bromodichloromethane	7	uG/L
Date Collected: 03/02/87		dibromochloromethane	6	uG/L
Pws ID: 6731006				
Name: MOORHEAD WATER SUPPLY		atrazine	0.16	uG/L
City: MOORHEAD		1_1_dichloroethane	1	uG/L
Date Collected: 06/02/87		1_1_1_trichloroethane	1	uG/L
Pws ID: 9461007				
Name: MOORLAND WATER SUPPLY		No Contaminants Detected		
City: MOORLAND				
Date Collected: 02/17/87				
Pws ID: 0467008				
Name: MORAVIA PUBLIC WATER SUPPLY		alachlor	0.51	uG/L
City: MORAVIA		atrazine	1.90	uG/L
Date Collected: 06/12/87		bladex	1.90	uG/L
		chloroform	62	uG/L
		bromodichloromethane	17	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 5857011				
Name: MORNING SUN WATER DEPARTMENT		No Contaminants Detected		
City: MORNING SUN				
Date Collected: 02/23/87				
Pws ID: 0472012				
Name: MOULTON WATER DEPT		atrazine	3.20	uG/L
City: MOULTON		bladex	1.90	uG/L
Date Collected: 06/15/87		dual	0.82	uG/L
		chloroform	57	uG/L
		bromodichloromethane	15	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 0656001				
Name: MOUNT AUBURN WATER SUPPLY		chloroform	3	uG/L
City: MOUNT AUBURN		bromodichloromethane	1	uG/L
Date Collected: 02/17/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 7239086				
Name: OCHEYEDAN WATER WORKS	chloroform	3	uG/L	
City: OCHEYEDAN	bromodichloromethane	5	uG/L	
Date Collected: 09/29/87	dibromochloromethane	7	uG/L	
	bromoform	2	uG/L	
Pws ID: 8144087				
Name: ODEBOLT WATER SUPPLY	No Contaminants Detected			
City: ODEBOLT				
Date Collected: 02/23/87				
Pws ID: 3353088				
Name: OELWEIN MUNICIPAL WATER WORKS	No Contaminants Detected			
City: OELWEIN				
Date Collected: 03/11/87				
Pws ID: 3353088 Repeat				
Name: OELWEIN MUNICIPAL WATER WORKS	No Contaminants Detected			
City: OELWEIN				
Date Collected: 04/21/87				
Pws ID: 0858090				
Name: OGDEN WATER SUPPLY	No Contaminants Detected			
City: OGDEN				
Date Collected: 02/02/87				
Pws ID: 3003067				
Name: ARNOLDS PARK WATER DEPARTMENT	atrazine	0.23	uG/L	
City: OKOBOJI	chloroform	72	uG/L	
Date Collected: 01/13/87	bromodichloromethane	26	uG/L	
	dibromochloromethane	3	uG/L	
Pws ID: 3060091				
Name: OKOBOJI WATER SUPPLY	atrazine	0.36	uG/L	
City: OKOBOJI	chloroform	121	uG/L	
Date Collected: 12/02/86	bromodichloromethane	26	uG/L	
	dibromochloromethane	2	uG/L	
Pws ID: 3000099				
Name: CENTRAL WATER SYSTEM	chloroform	54	uG/L	
City: OKOBOJI	bromodichloromethane	14	uG/L	
Date Collected: 10/26/87	dibromochloromethane	1	uG/L	
Pws ID: 4465093				
Name: OLDS MUNICIPAL WATER DEPT	ethylbenzene	2	uG/L	
City: OLDS	p_m_xylene	6	uG/L	
Date Collected: 06/28/87	o_xylene	1	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 2154039
Name: PETERSON MUNICIPAL WATER SUPPL — No Contaminants Detected
City: PETERSON
Date Collected: 05/20/87

Pws ID: 2154039 Repeat
Name: PETERSON MUNICIPAL WATER SUPPL — No Contaminants Detected
City: PETERSON
Date Collected: 03/23/87

Pws ID: 9766041
Name: PIERSON WATER SUPPLY — No Contaminants Detected
City: PIERSON
Date Collected: 04/23/87

Pws ID: 0862042
Name: PILOT MOUND WATER SYSTEM — No Contaminants Detected
City: PILOT MOUND
Date Collected: 02/03/87

Pws ID: 4364044
Name: PISGAH WATER SUPPLY — No Contaminants Detected
City: PISGAH
Date Collected: 07/16/87

Pws ID: 0960045
Name: PLAINFIELD WATER SUPPLY — No Contaminants Detected
City: PLAINFIELD
Date Collected: 07/06/87

Pws ID: 0960045 Repeat
Name: PLAINFIELD WATER SUPPLY — No Contaminants Detected
City: PLAINFIELD
Date Collected: 05/26/87

Pws ID: 6377046
Name: PLEASANTVILLE WATER WORKS
City: PLEASANTVILLE
Date Collected: 02/23/87

bromodichloromethane	1	uG/L
dibromochloromethane	2	uG/L
bromoform	4	uG/L
p_m_xylene	1	uG/L
p_dichlorobenzene	1	uG/L

Pws ID: 7628047
Name: PLOVER WATER SUPPLY
City: PLOVER
Date Collected: 03/16/87

chloroform	14	uG/L
bromodichloromethane	17	uG/L
dibromochloromethane	12	uG/L

Pws ID: 1799048
Name: PLYMOUTH WATER SUPPLY — chloroform 1 uG/L
City: PLYMOUTH
Date Collected: 04/14/87

Public Water Supply — Compounds above Detection Limits

Pws ID: 1000005 Name: BENNETT CITY WATERWORKS City: BENNETT Date Collected: 11/12/86	No Contaminants Detected			
Pws ID: 0000011 Name: BIRMINGHAM WATER SUPPLY City: BIRMINGHAM Date Collected: 11/18/86	atrazine	0.89	uG/L	
	bladex	1.20	uG/L	
	chloroform	50	uG/L	
	bromodichloromethane	7	uG/L	
Pws ID: 4003012 Name: BLAIRSBURG WATER SUPPLY City: BLAIRSBURG Date Collected: 06/17/87	No Contaminants Detected			
Pws ID: 0007013 Name: BLAIRSTOWN WATER SUPPLY City: BLAIRSTOWN Date Collected: 01/06/87	No Contaminants Detected			
Pws ID: 9027014 Name: BLAKESBURG MUNICIPAL WATER WOR City: BLAKESBURG Date Collected: 11/17/86	atrazine	2.10	uG/L	
	bladex	1.00	uG/L	
	dual	0.43	uG/L	
	chloroform	69	uG/L	
	bromodichloromethane	11	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 7317016 Name: BLANCHARD WATER SUPPLY City: BLANCHARD Date Collected: 11/18/86	atrazine	0.25	uG/L	
	chloroform	21	uG/L	
	bromodichloromethane	7	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 6709017 Name: BLENCOE MUNICIPAL WATERWORKS City: BLENCOE Date Collected: 01/06/87	chloroform	2	uG/L	
	ethylbenzene	1	uG/L	
	p_m_xylene	4	uG/L	
	o_xylene	1	uG/L	
Pws ID: 8714018 Name: BLOCKTON WATER SUPPLY City: BLOCKTON Date Collected: 02/17/87	chloroform	163	uG/L	
	bromodichloromethane	148	uG/L	
	dibromochloromethane	105	uG/L	
	bromoform	15	uG/L	
Pws ID: 2613019 Name: BLOOMFIELD MUNI WATER DEPT City: BLOOMFIELD Date Collected: 01/06/87	atrazine	0.61	uG/L	
	bladex	0.67	uG/L	
	dual	0.25	uG/L	
	chloroform	123	uG/L	

Public Water Supply — Compounds above Detection Limits

Pws ID: 9[illegible]				
Name: CASTALIA WATER WORKS	No Contaminants Detected			
City: CASTALIA				
Date Collected: 11/10/86				
Pws ID: 6715003				
Name: CASTANA MUNICIPAL WATER SUPPLY	atrazine	0.32	uG/L	
City: CASTANA				
Date Collected: 11/18/86				
Pws ID: 0709004				
Name: CEDAR FALLS MUNI WATER UTILITY	2 4 d	0.25	uG/L	
City: CEDAR FALLS	chloroform	1	uG/L	
Date Collected: 06/15/87	bromodichloromethane	2	uG/L	
	dibromochloromethane	3	uG/L	
	bromoform	1	uG/L	
	tetrachloroethene	1	uG/L	
Pws ID: 5715093				
Name: CEDAR RAPIDS WATER PLANT	atrazine	0.64	uG/L	
City: CEDAR RAPIDS	chloroform	1	uG/L	
Date Collected: 11/24/86				
Pws ID: 5315005				
Name: CENTER JUNCTION WATER DEPT	chloroform	1	uG/L	
City: CENTER JUNCTION				
Date Collected: 08/12/87				
Pws ID: 5715006				
Name: CENTER POINT WATER SUPPLY	No Contaminants Detected			
City: CENTER POINT				
Date Collected: 08/17/87				
Pws ID: 0407008				
Name: CENTERVILLE MUNICIPAL WATERWOR	alachlor	0.28	uG/L	
City: CENTERVILLE	atrazine	2.50	uG/L	
Date Collected: 01/12/87	bladex	0.89	uG/L	
	dual	0.33	uG/L	
	chloroform	128	uG/L	
	bromodichloromethane	24	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 0400900				
Name: RATHBUN REGIONAL WATER ASSN IN	chloroform	41	uG/L	
City: CENTERVILLE	bromodichloromethane	6	uG/L	
Date Collected: 03/17/87				
Pws ID: 0400900 Repeat				
Name: RATHBUN REGIONAL WATER ASSN IN	atrazine	1.60	uG/L	
City: CENTERVILLE	bladex	1.20	uG/L	
Date Collected: 05/11/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 5000061				
Name: COLO WATER SUPPLY		No Contaminants Detected		
City: COLO				
Date Collected: 12/29/86				
Pws ID: 5000063				
Name: COLUMBUS CITY PUB WATER SUPP		chloroform	11	uG/L
City: COLUMBUS CITY				
Date Collected: 11/24/86				
Pws ID: 5015064				
Name: COLUMBUS JUNCTION WATER SUPPLY		chloroform	1	uG/L
City: COLUMBUS JUNCTION				
Date Collected: 09/24/87				
Pws ID: 3409066				
Name: COLWELL WATER SUPPLY		chloroform	2	uG/L
City: COLWELL				
Date Collected: 08/25/87				
Pws ID: 3009067				
Name: CONRAD WATER SUPPLY		chloroform	3	uG/L
City: CONRAD		bromodichloromethane	5	uG/L
Date Collected: 08/19/87		dibromochloromethane	5	uG/L
		bromoform	2	uG/L
Pws ID: 3009067	Repeat			
Name: CONRAD WATER SUPPLY		atrazine	0.72	uG/L
City: CONRAD				
Date Collected: 10/15/87				
Pws ID: 4000068				
Name: CONROY WATER SUPPLY		No Contaminants Detected		
City: CONROY				
Date Collected: 06/11/87				
Pws ID: 8720000				
Name: CONWAY MUNICIPAL WATER SUPPLY		alachlor	1.10	uG/L
City: CONWAY		chloroform	45	uG/L
Date Collected: 11/12/86		carbon tetrachloride	5	uG/L
		bromodichloromethane	15	uG/L
		dibromochloromethane	1	uG/L
		chlorobenzene	5	uG/L
Pws ID: 1427070				
Name: COON RAPIDS MUNI UTILITIES		chloroform	1	uG/L
City: COON RAPIDS				
Date Collected: 11/12/86				

Public Water Supply — Compounds above Detection Limits

Pws ID: 5617029			
Name: DENMARK MUNIC WATER SUPPLY	No Contaminants Detected		
City: DENMARK			
Date Collected: 12/30/86			
Pws ID: 0915630			
Name: DENVER WATER SUPPLY	No Contaminants Detected		
City: DENVER			
Date Collected: 07/16/87			
Pws ID: 5909028			
Name: DERBY MUNICIPAL WATER SYSTEM	atrazine	2.40	uG/L
City: DERBY	bladex	1.10	uG/L
Date Collected: 02/03/87	dual	0.60	uG/L
	chloroform	45	uG/L
	bromodichloromethane	5	uG/L
Pws ID: 7727031			
Name: DES MOINES WATER WORKS	chloroform	7	uG/L
City: DES MOINES	bromodichloromethane	2	uG/L
Date Collected: 01/28/87			
Pws ID: 7767092			
Name: PLEASANT HILL WATER DEPARTMENT	atrazine	0.34	uG/L
City: DES MOINES	bladex	0.11	uG/L
Date Collected: 07/15/87	chloroform	28	uG/L
	bromodichloromethane	5	uG/L
	dibromochloromethane	2	uG/L
Pws ID: 7700801			
Name: GREENFIELD PLAZA BENEFITED WAT	chloroform	7	uG/L
City: DES MOINES	bromodichloromethane	3	uG/L
Date Collected: 03/19/87	dibromochloromethane	2	uG/L
Pws ID: 7700801 Repeat			
Name: GREENFIELD PLAZA BENEFITED WAT	No Contaminants Detected		
City: DES MOINES			
Date Collected: 07/28/87			
Pws ID: 7774701			
Name: S.E. POLK RURAL WATER ASSN	chloroform	20	uG/L
City: DES MOINES	bromodichloromethane	4	uG/L
Date Collected: 08/24/87	dibromochloromethane	1	uG/L
Pws ID: 2529035			
Name: DE SOTO WATER SUPPLY	chloroform	2	uG/L
City: DESOTO	bromodichloromethane	8	uG/L
Date Collected: 11/24/86	dibromochloromethane	11	uG/L
	bromoform	5	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID	Name	City	Date Collected	Compound	Value	Units
2230010	ELGIN MUNICIPAL WS-NORTH	ELGIN	06/10/87	No Contaminants Detected		
0320013	ELK HORN MUNI WATER WORKS	ELK HORN	06/18/87	chloroform	10	uG/L
				bromodichloromethane	12	uG/L
				dibromochloromethane	9	uG/L
				bromoform	1	uG/L
0721014	ELK RUN HGTS WATER SUPPLY	ELK RUN HEIGHTS	06/16/87	chloroform	2	uG/L
				bromodichloromethane	4	uG/L
				dibromochloromethane	5	uG/L
				bromoform	2	uG/L
2223011	ELKADER MUNI WATER DEPT	ELKADER	06/23/87	chloroform	2	uG/L
				bromodichloromethane	1	uG/L
				dibromochloromethane	1	uG/L
7730012	ELKHART WATER SUPPLY	ELKHART	06/10/87	No Contaminants Detected		
6910015	ELLIOTT WATER SUPPLY	ELLIOTT	02/17/87	No Contaminants Detected		
8020001	ELLSTON MUNICIPAL WATER WORKS	ELLSTON	01/27/87	atrazine	1.50	uG/L
				bladex	0.33	uG/L
				dual	0.20	uG/L
				chloroform	85	uG/L
				bromodichloromethane	32	uG/L
				dibromochloromethane	3	uG/L
8000301	SUN VALLEY RURAL WATER PLANT	ELLSTON	01/27/87	atrazine	1.70	uG/L
				bladex	0.35	uG/L
				chloroform	106	uG/L
				bromodichloromethane	33	uG/L
				dibromochloromethane	3	uG/L
4000016	ELLSWORTH PUBLIC WATER SUPPLY	ELLSWORTH	09/22/87	chloroform	2	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: [illegible]
Name: [illegible] WATER SUPPLY — No Contaminants Detected
City: [illegible]
Date Collected: 04/20/87

Pws ID: 0537079
Name: [illegible]WIN WATER SUPPLY — No Contaminants Detected
City: [illegible]WIN
Date Collected: 01/26/87

Pws ID: 3539080
Name: GENEVA WATER WORKS — chloroform 1 uG/L
City: GENEVA — 1_2_dichloroethane 2 uG/L
Date Collected: 06/16/87

Pws ID: 6020081
Name: GEORGE WATER SUPPLY — atrazine 0.30 uG/L
City: GEORGE — dibromochloromethane 1 uG/L
Date Collected: 03/16/87 — bromoform 4 uG/L

Pws ID: 0531083
Name: GILBERT WATER SUPPLY — chloroform 3 uG/L
City: GILBERT
Date Collected: 06/15/87

Pws ID: 0733084
Name: GILBERTVILLE WATER WORKS — No Contaminants Detected
City: GILBERTVILLE
Date Collected: 04/09/87

Pws ID: 0733084 Repeat
Name: GILBERTVILLE WATER WORKS — No Contaminants Detected
City: GILBERTVILLE
Date Collected: 06/01/87

Pws ID: 2127085
Name: GILLETT GROVE WATER SUPPLY — No Contaminants Detected
City: GILLETT GROVE
Date Collected: 04/22/87

Pws ID: 6436087
Name: GILMAN WATER SUPPLY — chloroform 1 uG/L
City: GILMAN
Date Collected: 02/17/87

Pws ID: 7607088
Name: GILMORE CITY WATERWORKS — chloroform 1 uG/L
City: GILMORE CITY — bromodichloromethane 3 uG/L
Date Collected: 06/19/87 — dibromochloromethane 4 uG/L
— bromoform 3 uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 7120026
Name: HARTLEY MUNI WATER DEPT — No Contaminants Detected
City: HARTLEY
Date Collected: 01/08/87

Pws ID: 7940037
Name: HARTWICK WATER SYSTEM — No Contaminants Detected
City: HARTWICK
Date Collected: 07/20/87

Pws ID: 6320000
Name: HARVEY WATER WORKS — No Contaminants Detected
City: HARVEY
Date Collected: 02/23/87

Pws ID: 6827030
Name: HASTINGS WATER SUPPLY — No Contaminants Detected
City: HASTINGS
Date Collected: 03/16/87

Pws ID: 7609039
Name: HAVELOCK WATER SUPPLY — No Contaminants Detected
City: HAVELOCK
Date Collected: 07/15/87

Pws ID: 8434040
Name: HAWARDEN WATER SUPPLY — No Contaminants Detected
City: HAWARDEN
Date Collected: 11/24/86

Pws ID: 3346037
Name: HAWKEYE WATER SUPPLY — No Contaminants Detected
City: HAWKEYE
Date Collected: 04/13/87

Pws ID: 1031044
Name: HAZLETON WATER SUPPLY — toluene 1 uG/L
City: HAZLETON
Date Collected: 09/01/87

Pws ID: 8432042
Name: HEDRICK WATER SUPPLY — ethylbenzene 4 uG/L
City: HEDRICK — p_m_xylene 18 uG/L
Date Collected: 06/27/87 — o_xylene 5 uG/L

Pws ID: 6829043
Name: HENDERSON WATER DEPT — No Contaminants Detected
City: HENDERSON
Date Collected: 06/02/87

Public Water Supply — Compounds above Detection Limits

Pws ID: [illegible]				
Name: [illegible]VILLE WATER SUPPLY	chloroform	2	uG/L	
City: [illegible]VILLE	bromodichloromethane	3	uG/L	
Date Collected: 04/16/87	dibromochloromethane	2	uG/L	
	bromoform	1	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 3742004				
Name: JEFFERSON WATER DEPT	2_4_d	0.22	uG/L	
City: JEFFERSON	cis_1_2_dichloroethene	2	uG/L	
Date Collected: 06/15/87	chloroform	1	uG/L	
Pws ID: 1044006				
Name: JESUP MUNICIPAL WATER SUPPLY	No Contaminants Detected			
City: JESUP				
Date Collected: 06/11/87				
Pws ID: 1044006 Repeat				
Name: JESUP MUNICIPAL WATER SUPPLY	chloroform	2	uG/L	
City: JESUP	bromodichloromethane	4	uG/L	
Date Collected: 03/18/87	dibromochloromethane	4	uG/L	
	bromoform	1	uG/L	
Pws ID: 4027010				
Name: JEWELL WATER SUPPLY	chloroform	7	uG/L	
City: JEWELL	bromodichloromethane	2	uG/L	
Date Collected: 09/25/87				
Pws ID: 7740011				
Name: JOHNSTON MUNCIPAL WATER SUPPLY	chloroform	7	uG/L	
City: JOHNSTON	bromodichloromethane	3	uG/L	
Date Collected: 03/16/87	dibromochloromethane	1	uG/L	
Pws ID: 7740011 Repeat				
Name: JOHNSTON MUNCIPAL WATER SUPPLY	atrazine	0.24	uG/L	
City: JOHNSTON	bladex	0.40	uG/L	
Date Collected: 06/12/87				
Pws ID: 1238001				
Name: JOLLEY WATER SUPPLY	chloroform	1	uG/L	
City: JOLLEY				
Date Collected: 10/26/87				
Pws ID: 9213012				
Name: KALONA WATER DEPT	chloroform	12	uG/L	
City: KALONA	bromodichloromethane	15	uG/L	
Date Collected: 07/16/87	dibromochloromethane	14	uG/L	
	bromoform	3	uG/L	

Public Water Supply — Compounds above Detection Limits

Pws ID: 1440063
Name: LANESBORO WATER WORKS — chloroform 1 uG/L
City: LANESBORO
Date Collected: 06/17/87

Pws ID: 1440063 Repeat
Name: LANESBORO WATER WORKS — No Contaminants Detected
City: LANESBORO
Date Collected: 08/06/87

Pws ID: 0346064
Name: LANSING WATER SUPPLY — No Contaminants Detected
City: LANSING
Date Collected: 06/17/87

Pws ID: 0743067
Name: LA PORTE CITY UTILITIES — chloroform 1 uG/L
City: LAPORTE CITY — bromodichloromethane 2 uG/L
Date Collected: 11/21/86 — dibromochloromethane 3 uG/L

Pws ID: 6050069
Name: LARCHWOOD WATER SUPPLY — No Contaminants Detected
City: LARCHWOOD
Date Collected: 01/26/87

Pws ID: 1833060
Name: LARRABEE MUNICIPAL WATER WORKS — chloroform 10 uG/L
City: LARRABEE — bromodichloromethane 5 uG/L
Date Collected: 12/30/86 — dibromochloromethane 1 uG/L
— p_m_xylene 1 uG/L

Pws ID: 3554061
Name: LATIMER WATER SUPPLY — chloroform 2 uG/L
City: LATIMER
Date Collected: 06/26/87

Pws ID: 6452062
Name: LAUREL MUNICIPAL WATER WORKS — chloroform 12 uG/L
City: LAUREL — bromodichloromethane 6 uG/L
Date Collected: 03/19/87 — dibromochloromethane 5 uG/L
— bromoform 1 uG/L

Pws ID: 6452062 Repeat
Name: LAUREL MUNICIPAL WATER WORKS — No Contaminants Detected
City: LAURIEL
Date Collected: 08/18/87

Pws ID: 7614063
Name: LAURENS WATER SUPPLY — chloroform 1 uG/L
City: LAURENS
Date Collected: 02/11/87

Public Water Supply — Compounds above Detection Limits

Pws ID: [illegible] Repeat				
Name: LAKE ROCK WATER SUPPLY	No Contaminants Detected			
City: LAKE ROCK				
Date Collected: 05/17/87				
Pws ID: [illegible]				
Name: LAKE TREE MUNI WATER SYSTEM	chloroform	3	uG/L	
City: LAKE TREE				
Date Collected: 04/13/87				
Pws ID: [illegible]				
Name: LAKE GROVE MUNI WATER SUPPLY	No Contaminants Detected			
City: LAKE GROVE				
Date Collected: 05/20/87				
Pws ID: [illegible]				
Name: LARIMER WATER SUPPLY	chloroform	3	uG/L	
City: LARIMER	bromodichloromethane	1	uG/L	
Date Collected: 06/23/87				
Pws ID: 2340047				
Name: LAST NATION WATER SUPPLY	No Contaminants Detected			
City: LAST NATION				
Date Collected: 04/14/87				
Pws ID: [illegible]				
Name: LAVILIA MUNICIPAL WATER DEPART	2_4_d	0.34	uG/L	
City: LAVILIA	atrazine	2.40	uG/L	
Date Collected: 04/20/87	bladex	1.40	uG/L	
	chloroform	58	uG/L	
	bromodichloromethane	9	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 2340002				
Name: LAW MOOR WATER WORKS	chloroform	4	uG/L	
City: LAW MOOR	bromodichloromethane	5	uG/L	
Date Collected: 03/16/87	dibromochloromethane	4	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 1[illegible]				
Name: LAWDEN WATER SUPPLY	No Contaminants Detected			
City: LAWDEN				
Date Collected: 02/18/87				
Pws ID: 2[illegible]				
Name: LAWHA WATER WORKS	No Contaminants Detected			
City: LAWHA				
Date Collected: 01/29/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: [illegible]			
Name: MAURICE MUNI WATER SUPPLY	No Contaminants Detected		
City: MAURICE			
Date Collected: 11/24/86			
Pws ID: [illegible]			
Name: MAXWELL WATER DEPT	chloroform	9	uG/L
City: MAXWELL	bromodichloromethane	4	uG/L
Date Collected: 04/14/87	dibromochloromethane	1	uG/L
Pws ID: 3090701			
Name: OSCEOLA CO RWS-NORTH OKOBOJI	atrazine	0.19	uG/L
City: MAY CITY	chloroform	50	uG/L
Date Collected: 07/13/87	bromodichloromethane	16	uG/L
	dibromochloromethane	4	uG/L
Pws ID: 7177701			
Name: OSCEOLA COUNTY RWS-SOUTH	chloroform	22	uG/L
City: MAY CITY	bromodichloromethane	11	uG/L
Date Collected: 07/09/87	dibromochloromethane	5	uG/L
Pws ID: 7227701			
Name: OSCEOLA COUNTY RWS-NORTH	chloroform	24	uG/L
City: MAY CITY	bromodichloromethane	12	uG/L
Date Collected: 08/17/87	dibromochloromethane	6	uG/L
	bromoform	1	uG/L
Pws ID: [illegible]			
Name: MAYNARD WATER SUPPLY	chloroform	2	uG/L
City: MAYNARD	bromodichloromethane	1	uG/L
Date Collected: 04/14/87			
Pws ID: [illegible]			
Name: MC CALLSBURG WATER SUPPLY	chloroform	1	uG/L
City: MCCALLSBURG			
Date Collected: [illegible]			
Pws ID: [illegible]			
Name: MC GREGOR WATER DEPT	chloroform	1	uG/L
City: MCGREGOR	1_1_1_trichloroethane	76	uG/L
Date Collected: 02/17/87	carbon_tetrachloride	95	uG/L
	bromodichloromethane	2	uG/L
	dibromochloromethane	2	uG/L
Pws ID: [illegible] Repeat			
Name: MC GREGOR WATER DEPT	1_1_1_trichloroethane	4	uG/L
City: MCGREGOR	bromodichloromethane	1	uG/L
Date Collected: 03/10/87	dibromochloromethane	2	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 0000014				
Name: MOUNT AYR WATER TREATMENT PLAN		atrazine	0.42	uG/L
City: MOUNT AYR		dual	0.21	uG/L
Date Collected: 10/29/87		chloroform	170	uG/L
		bromodichloromethane	18	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 4450016				
Name: MOUNT PLEASANT MUNICIPAL UTILI		No Contaminants Detected		
City: MOUNT PLEASANT				
Date Collected: 06/23/87				
Pws ID: 5750021				
Name: MOUNT VERNON WATER SUPPLY		No Contaminants Detected		
City: MOUNT VERNON				
Date Collected: 06/18/87				
Pws ID: 9753022				
Name: MOVILLE WATER SUPPLY		No Contaminants Detected		
City: MOVILLE				
Date Collected: 06/24/87				
Pws ID: 2032023				
Name: MURRAY WATER WORKS		chloroform	1	uG/L
City: MURRAY		bromodichloromethane	2	uG/L
Date Collected: 04/21/87		dibromochloromethane	4	uG/L
		bromoform	6	uG/L
Pws ID: 7048001				
Name: MUSCATINE POWER & WATER		alachlor	0.65	uG/L
City: MUSCATINE		chloroform	2	uG/L
Date Collected: 02/02/87		1_1_1_trichloroethane	1	uG/L
		bromodichloromethane	3	uG/L
		dibromochloromethane	2	uG/L
Pws ID: 0477040				
Name: MYSTIC WATER SUPPLY		No Contaminants Detected		
City: MYSTIC				
Date Collected: 07/06/87				
Pws ID: 0477040 Repeat				
Name: MYSTIC WATER SUPPLY		atrazine	1.80	uG/L
City: MYSTIC		bladex	2.10	uG/L
Date Collected: 06/11/87		chloroform	58	uG/L
		bromodichloromethane	12	uG/L
		dibromochloromethane	1	uG/L
Pws ID: 1967041				
Name: NASHUA WATER SUPPLY		chloroform	1	uG/L
City: NASHUA		bromodichloromethane	2	uG/L
Date Collected: 01/26/87		dibromochloromethane	3	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 5388004				
Name: OLIN WATER SUPPLY	chloroform	2	uG/L
City: OLIN			
Date Collected: 12/30/86			
Pws ID: 6739095			
Name: ONAWA MUNICIPAL WATER PLANT	chloroform	14	uG/L
City: ONAWA	bromodichloromethane	5	uG/L
Date Collected: 07/13/87	dibromochloromethane	2	uG/L
Pws ID: 5388096			
Name: ONSLOW WATER SUPPLY	No Contaminants Detected		
City: ONSLOW			
Date Collected: 12/29/86			
Pws ID: 8474097			
Name: ORANGE CITY MUNI WATER DEPT	chloroform	26	uG/L
City: ORANGE CITY	bromodichloromethane	19	uG/L
Date Collected: 09/21/87	dibromochloromethane	13	uG/L
	bromoform	1	uG/L
Pws ID: 6660001			
Name: ORCHARD WATER WORKS	chloroform	2	uG/L
City: ORCHARD			
Date Collected: 02/24/87			
Pws ID: 0160099			
Name: ORIENT MUNICIPAL WATER SUPPLY	chloroform	84	uG/L
City: ORIENT	bromodichloromethane	23	uG/L
Date Collected: 05/18/87	dibromochloromethane	3	uG/L
	ethylbenzene	1	uG/L
	p_m_xylene	4	uG/L
	o_xylene	1	uG/L
Pws ID: 6663001			
Name: OSAGE MUNICIPAL WATER SUPPLY	No Contaminants Detected		
City: OSAGE			
Date Collected: 01/28/87			
Pws ID: 2000702			
Name: CLARKE RURAL WATER DISTRICT #1	alachlor	0.31	uG/L
City: OSCEOLA	atrazine	3.50	uG/L
Date Collected: 01/05/87	bladex	2.10	uG/L
	chloroform	188	uG/L
	bromodichloromethane	28	uG/L
	dibromochloromethane	1	uG/L
Pws ID: 2038038			
Name: OSCEOLA WATER WORKS	alachlor	1.50	uG/L
City: OSCEOLA	atrazine	5.20	uG/L
Date Collected: 05/26/87	bladex	11.00	uG/L
	chloroform	151	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID:	7613049			
Name:	POCAHONTAS WATER DEPT	No Contaminants Detected		
City:	POCAHONTAS			
Date Collected:	06/13/87			
Pws ID:	7770060			
Name:	POLK CITY WATER SUPPLY	chloroform	13	uG/L
City:	POLK CITY	bromodichloromethane	9	uG/L
Date Collected:	08/20/87	dibromochloromethane	3	uG/L
Pws ID:	1363061			
Name:	POMEROY WATER SUPPLY	No Contaminants Detected		
City:	POMEROY			
Date Collected:	06/11/87			
Pws ID:	1363061 Repeat			
Name:	POMEROY WATER SUPPLY	No Contaminants Detected		
City:	POMEROY			
Date Collected:	03/18/87			
Pws ID:	8365062			
Name:	PORTSMOUTH WATER SUPPLY	chloroform	9	uG/L
City:	PORTSMOUTH	bromodichloromethane	6	uG/L
Date Collected:	08/19/87	dibromochloromethane	3	uG/L
		ethylbenzene	1	uG/L
		p_m_xylene	4	uG/L
		o_xylene	2	uG/L
Pws ID:	0375053			
Name:	POSTVILLE WATER DEPT	chloroform	5	uG/L
City:	POSTVILLE	bromodichloromethane	6	uG/L
Date Collected:	02/23/87	dibromochloromethane	4	uG/L
Pws ID:	5064055			
Name:	PRAIRIE CITY WATER WORKS	chloroform	4	uG/L
City:	PRAIRIE CITY	bromodichloromethane	6	uG/L
Date Collected:	08/18/87	dibromochloromethane	7	uG/L
		bromoform	2	uG/L
Pws ID:	5772064			
Name:	PRAIRIEBURG RUNI WATER SUPPLY	No Contaminants Detected		
City:	PRAIRIEBURG			
Date Collected:	12/29/86			
Pws ID:	0270066			
Name:	PRESCOTT WATER SUPPLY	chloroform	6	uG/L
City:	PRESCOTT	bromodichloromethane	7	uG/L
Date Collected:	01/28/87	dibromochloromethane	4	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 4965057				
Name: PRESTON MUNI WATER SUPPLY	No Contaminants Detected			
City: PRESTON				
Date Collected: 09/21/87				
Pws ID: 7155059				
Name: PRIMGHAR MUNICIPAL WATER SUPPL	No Contaminants Detected			
City: PRIMGHAR				
Date Collected: 07/14/87				
Pws ID: 8273061				
Name: PRINCETON WATER SUPPLY	bromoform	1	uG/L	
City: PRINCETON				
Date Collected: 07/14/87				
Pws ID: 4552063				
Name: PROTIVIN WATER SUPPLY	atrazine	0.55	uG/L	
City: PROTIVIN				
Date Collected: 08/25/87				
Pws ID: 2667064				
Name: PULASKI MUNICIPAL WATER DEPT	atrazine	1.40	uG/L	
City: PULASKI	bladex	0.33	uG/L	
Date Collected: 07/13/87	dual	0.44	uG/L	
	chloroform	46	uG/L	
	bromodichloromethane	8	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 1855066				
Name: QUIMBY WATER SUPPLY	chloroform	8	uG/L	
City: QUIMBY	bromodichloromethane	3	uG/L	
Date Collected: 03/16/87	dibromochloromethane	1	uG/L	
Pws ID: 4283067				
Name: RADCLIFFE MUNICIPAL WATER	chloroform	15	uG/L	
City: RADCLIFFE	bromodichloromethane	4	uG/L	
Date Collected: 01/27/87	dibromochloromethane	1	uG/L	
Pws ID: 9575068				
Name: RAKE WATER SUPPLY	chloroform	2	uG/L	
City: RAKE				
Date Collected: 01/28/87				
Pws ID: 1471069				
Name: RALSTON WATER TREATMENT PLANT	tetrachloroethene	1	uG/L	
City: RALSTON				
Date Collected: 06/19/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 7774008				
Name: RUNNELLS WATER SUPPLY	No Contaminants Detected			
City: RUNNELLS				
Date Collected: 05/14/87				
Pws ID: 7774008 Repeat				
Name: RUNNELLS WATER SUPPLY	p_m_xylene	1	uG/L	
City: RUNNELLS				
Date Collected: 03/04/87				
Pws ID: 5939009				
Name: RUSSELL WATER SUPPLY	dibromochloromethane	1	uG/L	
City: RUSSELL	bromoform	7	uG/L	
Date Collected: 02/02/87				
Pws ID: 7465010				
Name: RUTHVEN WATER SUPPLY	chloroform	2	uG/L	
City: RUTHVEN	bromodichloromethane	1	uG/L	
Date Collected: 04/15/87				
Pws ID: 4675012				
Name: RUTLAND WATER SUPPLY	chloroform	4	uG/L	
City: RUTLAND	bromodichloromethane	4	uG/L	
Date Collected: 01/12/87	dibromochloromethane	2	uG/L	
Pws ID: 2864013				
Name: RYAN WATER SUPPLY	No Contaminants Detected			
City: RYAN				
Date Collected: 12/29/86				
Pws ID: 4975014				
Name: SABULA WATER SUPPLY	No Contaminants Detected			
City: SABULA				
Date Collected: 02/17/87				
Pws ID: 8150015				
Name: SAC CITY MUNICIPAL WATER PLANT	No Contaminants Detected			
City: SAC CITY				
Date Collected: 05/20/87				
Pws ID: 6673016				
Name: ST ANSGAR WATER SUPPLY	atrazine	0.25	uG/L	
City: SAINT ANSGAR				
Date Collected: 02/12/87				
Pws ID: 6482017				
Name: ST ANTHONY WATER SYSTEM	No Contaminants Detected			
City: SAINT ANTHONY				
Date Collected: 03/10/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 5478074				
Name: SOUTH ENGLISH WATER SUPPLY	chloroform	1	uG/L
City: SOUTH ENGLISH			
Date Collected: 09/23/87			
Pws ID: 2100701			
Name: CLAY COUNTY RURAL WATER ASSOC	chloroform	18	uG/L
City: SPENCER	bromodichloromethane	11	uG/L
Date Collected: 07/21/87	dibromochloromethane	5	uG/L
Pws ID: 2171071			
Name: SPENCER MUNI WATER UTILITY	chloroform	10	uG/L
City: SPENCER	bromodichloromethane	9	uG/L
Date Collected: 07/15/87	dibromochloromethane	7	uG/L
	bromoform	2	uG/L
Pws ID: 2122067			
Name: FOSTORIA MUNI WATER SUPPLY	chloroform	17	uG/L
City: SPENCER	bromodichloromethane	11	uG/L
Date Collected: 02/04/87	dibromochloromethane	4	uG/L
Pws ID: 2974001			
Name: SPERRY WATER SUPPLY	No Contaminants Detected		
City: SPERRY			
Date Collected: 09/21/87			
Pws ID: 9686077			
Name: SPILLVILLE WATER SUPPLY	chloroform	4	uG/L
City: SPILLVILLE	bromodichloromethane	4	uG/L
Date Collected: 05/23/87	dibromochloromethane	3	uG/L
	bromoform	1	uG/L
Pws ID: 3070078			
Name: SPIRIT LAKE WATERWORKS	chloroform	34	uG/L
City: SPIRIT LAKE	bromodichloromethane	11	uG/L
Date Collected: 02/24/87	dibromochloromethane	5	uG/L
Pws ID: 3087057			
Name: WAHPETON WATER SUPPLY	atrazine	0.39	uG/L
City: SPIRIT LAKE	chloroform	46	uG/L
Date Collected: 01/10/87	bromodichloromethane	19	uG/L
	dibromochloromethane	2	uG/L
Pws ID: 4984086			
Name: SPRINGBROOK WATER DEPT INC	No Contaminants Detected		
City: SPRINGBROOK			
Date Collected: 02/02/87			

Public Water Supply — Compounds above Detection Limits

Pws ID: 7866031				
Name: TREYNOR WATER DEPT		chloroform	2	uG/L
City: TREYNOR				
Date Collected: 05/26/87				
Pws ID: 0975032				
Name: TRIPOLI WATER SUPPLY		chloroform	53	uG/L
City: TRIPOLI		bromodichloromethane	3	uG/L
Date Collected: 05/19/87				
Pws ID: 1182035				
Name: TRUESDALE WATER SUPPLY		No Contaminants Detected		
City: TRUESDALE				
Date Collected: 02/19/87				
Pws ID: 6167036				
Name: TRURO WATERWORKS		chloroform	2	uG/L
City: TRURO		bromodichloromethane	1	uG/L
Date Collected: 06/16/87				
Pws ID: 7869037				
Name: UNDERWOOD WATER SUPPLY		bromodichloromethane	1	uG/L
City: UNDERWOOD		dibromochloromethane	1	uG/L
Date Collected: 06/30/87		bromoform	1	uG/L
Pws ID: 4291038				
Name: UNION WATER SUPPLY		atrazine	0.29	uG/L
City: UNION		chloroform	4	uG/L
Date Collected: 11/24/86		carbon_tetrachloride	4	uG/L
		bromodichloromethane	6	uG/L
		dibromochloromethane	5	uG/L
		ethylbenzene	1	uG/L
		p_m_xylene	1	uG/L
Pws ID: 0680041				
Name: URBANA WATER SUPPLY		chloroform	1	uG/L
City: URBANA		p_m_xylene	1	uG/L
Date Collected: 07/13/87		o_xylene	1	uG/L
Pws ID: 7780042				
Name: URBANDALE WATER DEPARTMENT		chloroform	15	uG/L
City: URBANDALE		bromodichloromethane	2	uG/L
Date Collected: 09/25/87		dibromochloromethane	1	uG/L
Pws ID: 6762043				
Name: UTE WATER SUPPLY		No Contaminants Detected		
City: UTE				
Date Collected: 08/25/87				

Public Water Supply — Compounds above Detection Limits

Pws ID: 7073010				
Name: WEST LIBERTY WATER UTILITY	p_m_xylene	1	uG/L
City: WEST LIBERTY			
Date Collected: 06/18/87			
Pws ID: 5691012			
Name: WEST POINT MUNI WATER SYSTEM	No Contaminants Detected		
City: WEST POINT			
Date Collected: 07/13/87			
Pws ID: 3[illegible]3014			
Name: WEST UNION WATER SUPPLY	carbofuran	1.00	uG/L
City: WEST UNION	chloroform	1	uG/L
Date Collected: 09/22/87	bromodichloromethane	2	uG/L
	dibromochloromethane	3	uG/L
	bromoform	2	uG/L
Pws ID: 7589008			
Name: WESTFIELD WATER SUPPLY	No Contaminants Detected		
City: WESTFIELD			
Date Collected: 09/22/87			
Pws ID: 3379009			
Name: WESTGATE WATER SUPPLY	chloroform	7	uG/L
City: WESTGATE			
Date Collected: 09/24/87			
Pws ID: 8380011			
Name: WESTPHALIA WATER SYSTEM	chloroform	10	uG/L
City: WESTPHALIA	bromodichloromethane	5	uG/L
Date Collected: 09/29/87	dibromochloromethane	3	uG/L
Pws ID: 2458023			
Name: WESTSIDE WATER SUPPLY	chloroform	23	uG/L
City: WESTSIDE	bromodichloromethane	10	uG/L
Date Collected: 09/28/87	dibromochloromethane	4	uG/L
	p_m_xylene	1	uG/L
Pws ID: 5493016			
Name: WHAT CHEER WATER SUPPLY	No Contaminants Detected		
City: WHAT CHEER			
Date Collected: 07/01/87			
Pws ID: 5493016 Repeat			
Name: WHAT CHEER WATER SUPPLY	bromodichloromethane	1	uG/L
City: WHAT CHEER	dibromochloromethane	2	uG/L
Date Collected: 03/24/87	bromoform	2	uG/L

CHAPTER 7
RULES OF PRACTICE IN CONTESTED CASES

561- 7.1(17A, 455A) Definitions When used in this chapter:

"Agency" means the commission or the director, as appropriate, having statutory jurisdiction over a particular contested case.

"Commission" means the natural resource commission or the environmental protection commission, as designated in Iowa Code chapter 455A as having appellate jurisdiction over a particular matter.

"Department" means the department of natural resources.

"Director" means the director of the department or an authorized representative.

"Party" means a person named and admitted as a party.

561--7.2(17A, 455A) Scope and applicability. This chapter shall govern procedure in contested cases as defined in Iowa Code subsection 17A.2(2). Contested cases generally include, but are not limited to, appeals of administrative orders issued by the director and appeals of license or permit conditions, license or permit denials or suspensions.

561--7.3(17A, 455A) Waiver of procedures. The parties to a contested case may, by written stipulation representing an informed, mutual consent, waive any provision of this chapter or of the Iowa Code relating to contested case proceedings.

561--7.4(17A, 455A) Informal procedure prior to hearing.

7.4(1) Any person who desires to pursue informal settlement of any contested case may request a meeting with appropriate staff. The request shall be in writing and shall be delivered to the director with a copy to the Government Liaison Bureau. Upon receipt of the request, all formal contested case procedures are stayed, except in the case of emergency orders as provided in 7.16. If informal settlement is unsuccessful, formal contested case procedures may be instituted in accordance with 561--7.5(455B).

7.4(2) Prehearing procedures for emergency orders are set forth in rule 7.17(455A).

561--7.5(17A, 455A) Commencement of cases. A contested case commences when a notice of hearing is delivered to a party. A notice of hearing will be prepared and issued by the presiding officer when the department receives a notice of appeal from a person other than the department, or a petition from the department, as provided in this rule.

7.5(1) Notice of appeal. Any person appealing an action of the department shall file a written notice of appeal within thirty days of receipt of notice of the department's action, unless a shorter time period is specified by the particular rules or statutes governing the subject matter. The notice of appeal shall state the name and address of the appellant, identify the specific portion or portions of the action of the department that is being appealed, and include a short and plain statement of the reasons the specific action is being appealed.

7.5(2) Petition from the department. When the department seeks to suspend or revoke a permit or license, institute licensee disciplinary proceedings, or otherwise commence a contested case, it shall file a petition as described in 7.8(1).

would have on the expeditious progress of the case. Any person already a party in the case may file an answer to a petition to intervene, making specific reference to the factors set forth in this paragraph and paragraph "c" of this subrule, within ten days of receipt of the petition.

b. Filing and service. A petition for leave to intervene shall be filed and contemporaneously served upon all parties in the case before the prehearing conference, or in the absence of a prehearing conference, no later than twenty days prior to the date for which the contested case hearing is scheduled. Any petition filed after such time shall include, in addition to the information required in paragraph "a" of this subrule, a statement of good cause for failure to file in a timely manner. An untimely petition for leave to intervene shall be granted only upon finding that circumstances justified the untimely filing, and the intervenor shall be bound by any agreements, arrangements, and other matters previously made in the case.

c. Disposition. Leave to intervene shall be granted only if the petitioner demonstrates both that common questions of law or fact exist and that intervention would not unduly prolong or otherwise prejudice the adjudication of the rights of the original parties. In evaluating the merits of the petition for leave to intervene, the presiding officer shall consider the extent to which the petitioner will be adversely affected by a final order and the extent to which the interests of the petitioner are not being adequately represented by the original parties.

7.10(6) Consolidation and severance.

a. Consolidation. The presiding officer may, with or without motion, consolidate any or all matters at issue in two or more cases where there exist common parties or common questions of law or fact, and where consolidation would expedite or simplify consideration of the issues. Consolidation shall not affect the right of any party to raise issues that could have been raised if consolidation had not occurred.

b. Severance. The presiding officer may, with or without motion, for good cause shown, order any case severed with respect to any or all parties or issues.

561--7.11(17A, 455A) Time.

7.11(1) Computation. In computing any period of time prescribed or allowed by this chapter or by an applicable statute, the day of the act, event or default from which the designated period begins to run shall not be included. The last day of the period shall be included, unless it is a Saturday, Sunday or legal holiday; otherwise Saturdays, Sundays and legal holidays shall be included in computing the period.

7.11(2) Extension. When by this chapter, or by notice given thereunder, an act is required or allowed to be done within a specified time, the presiding officer may, at any time, exercise discretion and;

a. With or without motion or notice, for good cause, order the period extended if request therefor is made before the expiration of the period originally prescribed or as extended by a previous order, or

b. Upon motion made after the expiration of the specified period, permit the act to be done where the failure to act was the result of excusable neglect.

7.11(3) Mail. Any documents which may be filed with the department by mail pursuant to these rules shall be deemed filed on the date of postmark.

561--7.12(17A, 455A) Presiding officer.

order of the presiding officer becomes the final decision or order of the agency without further proceedings unless there is an appeal to, or review or motion of, the agency within the time provided in 7.15(7)"a".

7.15(3) Decisions and orders.

a. By whom prepared. The presiding officer who presided at the reception of evidence shall prepare a proposed or final decision or order in each case. Findings of fact shall be prepared by the officer presiding at the reception of the evidence in a case unless the officer becomes unavailable. If the officer is unavailable, the findings of fact may be prepared by another person qualified to be a presiding officer who has read the record, unless demeanor of witnesses is a substantial factor. If demeanor is a substantial factor and the presiding officer is unavailable, the portions of the hearing involving demeanor shall be heard again or the case shall be dismissed.

b. Content of decision or order. The proposed or final decision or order shall:

(1) Be in writing or stated in the record.

(2) Include findings of fact. Findings of fact, if set forth in statutory language, shall be accompanied by a concise and explicit statement of underlying facts supporting the findings. If a party submitted proposed findings of fact in accordance with 7.15(1), the decision or order shall include a ruling upon each proposed finding.

(3) Include conclusions of law, supported by cited authority or reasoned opinion.

c. Delivery. A copy of the proposed decision or order shall be delivered to the parties either by personal service or by certified mail, return receipt requested.

7.15(4) The record.

a. Content of record. The record shall include:

(1) All pleadings, motions and intermediate rulings;

(2) All evidence received or considered and all other submissions;

(3) A statement of all matters officially noticed;

(4) All questions and offers of proof and objections and rulings thereon;

(5) All proposed findings and exceptions;

(6) The decision, opinion or report by the presiding officer.

b. By whom prepared. The presiding officer shall prepare the record for each case.

7.15(5) Appeal and review. Any party may appeal a proposed decision to the agency having jurisdiction of the case. An agency may review any proposed decision in a case under its jurisdiction.

a. Time allowed.

(1) Appeal by party. An appeal by a party to the agency having jurisdiction of that proceeding shall be taken within thirty days after receipt of the proposed decision or order.

(2) Agency decision to review. Any agency may decide on its own to review a proposed decision, notwithstanding the absence of a timely appeal by a party. A decision to review shall be made at the next regular meeting of the commission or by the director within thirty (30) days following the issuance of the proposed decision or order of the presiding officer.

b. Notice. Appeal is taken and perfected by filing with the director a notice signed by the appellant or the appellant's attorney. It shall specify the parties taking the appeal and the final decision or order or part thereof appealed from. The notice shall set forth, with particularity, the conclusions of law or findings of fact appealed from. The director shall mail or deliver a copy of such notice to the attorneys for all parties of record

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF:	)	FINDINGS OF FACT,
	)	CONCLUSIONS OF LAW,
City of Wapello	)	AND ORDER
Wastewater Facility No. 58-79-0-01	)	DIA No. NHS 880066

On July 30, 1987, the Iowa Department of Natural Resources (Department) issued Administrative Order No. 87-WW-48 to the City of Wapello. The order required the City of Wapello to comply with the implementation schedule set forth to meet secondary treatment effluent limits and to pay an administrative penalty of $500.00. On August 14, 1987, The city of Wapello appealed from the issuance of Administrative Order 87-WW-48. A Notice of Hearing set the hearing for October 27, 1987. The City of Wapello filed its Petition on September 29, 1987. The Department filed its Answer on October 19, 1987.

The hearing was held on October 27, 1987 in the fourth floor conference room, Wallace State Office Building, 900 E. Grand, Des Moines, Iowa 50319. Representing the parties were Diana Hansen, counsel for the Department and Roger A. Huddle, counsel for the City of Wapello. The undersigned hearing officer presided.

The Record

The evidentiary record in this case consists of the recorded testimony of the witnesses, the above pleadings, and the following Exhibits:

Department Exhibit A.	-	Inspection Report and Cover Letter dated 9-20-84.
Department Exhibit B.	-	Letter dated 5-11-87 to the city from department.
Department Exhibit C.	-	Inspection Report and Cover Letter dated 4-17-86.
Department Exhibit D.	-	City of Wapello Plan of Action and Cover Letter dated 6-18-86.
Department Exhibit E.	-	Approval of Wapello Plan of Action dated 10-1-86.
Department Exhibit F.	-	Report of 11-17-86 visit to Wapello Wastewater Treatment Plant (WWTP).
Department Exhibit G.	-	Letter to Department dated 1-20-87 from Ronald R. Meyer.

removal respectively. However, the rules require 30 day average removal. The exhibits submitted did not reflect actual percentage removal because they showed a uniform value of 200 BOD influent, not actual influent values.

No standards or guidelines are provided to determine whether 50% removal could be considered adequate removal in this particular case. The accuracy of the 50% figure is questionable since there has been unreported bypassing. Since bypassing was not reported, the frequency and amount of bypassing cannot be determined, nor can its effect on the 30 day average percentage removal be determined. For this reason, the city has not carried its burden of proof of establishing that its treatment works provided significant biological treatment.
(Testimony of Edward Moreno, Ron Meyer, Appellant Exhibit 1, Department Exhibit H; 567 Iowa Administrative Code 62.3(3)(f)(3);62.3(2)(a)

17. At one time the Department recommended that the city separate its sewer systems, but the city has determined that separation of their sewer systems would not be economically feasible.
(Testimony of Ron Meyer)

18. The city's treatment facility is properly maintained and operated. However, the CBOD5 concentrations consistently achievable through proper operation and maintenance of the treatment works exceed the standard secondary effluent limits.
(Testimony of Edward Moreno; Ron Meyer; Appellant;Exhibit 1; Department Exhibit T; Appellant Exhibit 3, Department Exhibit,J,K,L)

19. BOD5 (Biological oxygen demand) and CBOD5 (carbonaceous biological oxygen demand) are different forms of the same test. CBOD5 is a nitrification inhibitive test. The results between the two tests vary by 5mg/l. BOD5 can be converted to CBOD5 by subtracting 5mg/l.
(Testimony of Edward Moreno)

20. Wapello's monthly operating reports have utilized a BOD5 test. Using the conversion formula above, the reports from January 30, 1985 until June 30, 1987 (a thirty month period) show that Wapello exceeded the equivalent to secondary limits of 40 CBOD5 mg/l in three of the thirty months shown. In February, 1987 CBOD5 was 50 mg/l. In January, 1986 CBOD5 was 48 mg/l. In August, 1985 CBOD5 was 43 mg./l.

21. Considerable conflicting testimony was received regarding the proper interpretation of the "95th percentile value of the thirty (30) day average effluent quality achieved by the upgraded or existing treatment works in a period of at least two (2) years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions." An EPA designed computer program for use in calculating the 95th percentile for treatment works determined to be eligible for Test Limits,was run by

The rule in question uses two similar, though not identical, phrases. 567 I.A.C 62.3(3)(a) states in pertinent part "The CBOD5 and SS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works..." (emphasis added.) Later in the same rule, effluent concentrations consistently achievable through proper operation and maintenance is defined as: "The 95th percentile value of the thirty (30) day average effluent quality achieved by the upgraded or existing treatment works in a period of at least two (2) years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions..."

Generally, rules of statutory construction and interpretation also govern construction and interpretation of rules and regulations of administrative agencies. Messina v. Iowa Department of Job Service, 341 NW2d52 (Iowa 1983). It is a rule of statutory construction that when the same or substantially the same phrases appear in the statute, they will be given consistent meaning absent contrary legislative intent. Kehde v. Iowa Department of Job Service, 318 NW2d 202 (Iowa 1982).

In this case, "consistently achievable" and "Consistently complying" are substantially the same phrases. They should be given consistent meaning, since no contrary intent is expressed in the rule. This result is also supported by the Technical Support Document for Proposed Regulations under section 304(2)(4) of the Clean Water Act, published by the U.S. Environmental Protection Agency, (Exhibit P) which states at page 32:

A commonly accepted level of reliability in wastewater engineering and design of wastewater treatment facilities is a 95th percentile for a 30-day average effluent value. Designing for a higher capital and operating costs that are, in most cases, considered to be less cost-effective in terms of pollutant removal achieved. Given an appropriate long-term average effluent value and an appropriate variability factor, the 95th percentile 30-day average value would reflect a value that the facility would be expected to attain at least 95 percent of the time, or 19 months out of every 20 months. In a typical 5-year period period, design value would predict that the 95th percentile effluent concentration would be exceeded only 3 times on a monthly average basis when design conditions are achieved. Throughout the useful life of the facility, especially when the facility was operated below design conditions, the frequency occurrence of exceedances would of course be less.

If the 95% value as expressed in this document were accepted, then Wapello's figures would represent compliance approximately 90% of the time, since they failed to meet TEST limit in 3 out of 30 months. If 62 months of data are examined, the City failed to achieve TEST limits 9 times, which is significantly less than 90%. (Department Exhibit T)

8. The Permits Division of the Office of Water Enforcement and

NPDES permit as it pertains to its plan of action to achieve and maintain compliance with these final effluent limitations. Accordingly, administrative order issued July 30, 1987 allegedly finding the City in non-compliance and ordering it to comply with a compliance schedule set forth in the order and further ordering a civil penalty in the sum of $500.00 The City of Wapello promptly appealed the same on September 2 1987 and submitted its petition for a contested case proceeding which brought this matter before this hearing officer.

II. COMPLIANCE SCHEDULE

While the City of Wapello denies it has not complied with the compliance schedule set forth and approved in its plan of action and NPDES permit that is not the primary issue in this proceeding. The City of Wapello readily concedes its waste water treatment facility cannot meet the standard secondary effluent limitations originally set forth in the Federal Water Pollution Control Act and as adopted by the Department as part of Chapter 567 of the Iowa Administrative Code, specifically Chapter 62 et. seq. These standards secondary effluent limitations impose a CBOD thirty day average not to exceed 25 mg./l. and suspended solids (SS) thirty day average not to exceed 30 mg./l.

An interesting observation was submitted by City Engineer Ron Meyer. He is convinced that the upgrading of the plant facilities in the City of Wapello as set forth in the proposed plan of action will not assure compliance with the standard secondary effluent limitations particularly if it rains. Unless someone can predict the exact amount of rainfall,

changed over the years, the most recent update being in 1984. On September 20, 1984, the agency published the revised secondary treatment regulations (see Exhibit O, memorandum p-1).

> "These regulations change the treatment limitations and permitting process for trickling filters and waste stabilization ponds that qualify as "equivalent to secondary" treatment. The major change is a shift away from uniform limitations for all secondary facilities to an individual, case by case limits decision for specific POTWs."
>
> "The office of water enforcement and permits encourages the continued use of trickling filters and ponds through the application of equivalent secondary limits. EPA was to draft regulations to implement this legislation and assist the states and locales in compliance."

To implement the directive of Congress, EPA consulted the legislative history and concluded that several clear doctrines should form the basis of the regulations. These doctrines are:

> (a) Certain classes of biological treatment facilities that are capable of achieving significant reductions in BOD and suspended solids, but cannot consistently achieve secondary treatment, should be defined as separate and distinct from secondary treatment facilities.
>
> (b) These facilities (equivalent to secondary) are cheaper and easier to operate and, therefore are utilized by smaller communities. Provisions established by EPA should provide for continued use of these technologies where possible.
>
> (c) The technology based effluent limitations approach used to establish secondary treatment should be retained for "equivalent to secondary" limits.
>
> (d) Water quality must not be adversely affected by the application of equivalent secondary treatment.
>
> (e) Costly treatment upgrading or replacement should be avoided where equivalent facilities are operating efficiently. (e.g. achieving their original design performance levels).
>
> (f) Regulations should address variations and facility performance due to geographic, climatic or seasonal conditions." (See Department Exhibit O--Guidance Manual for Permit and Compliance Personnel).

to secondary as it pertains to the "consistent compliance." In fact, they may be within 2.88 mg./l. on a thirty day monthly average under anyones interpretation.

The question then becomes, does it make sense--and more importantly, is it consistent with the congressional mandates--that the City of Wapello be required to spend in excess of $300,000.00 or $400,000.00 to upgrade its waste water treatment facilities in an attempt to meet the standard secondary effluent limitations when in fact it already complies, or at the very least is extremely close, to the effluent limitations under the equivalent to secondary standards? Forcing such compliance would appear to be totally inconsistent with the congressional mandates and legislative history of the Federal Water Pollution Control Act. These relaxed standards were developed to not only allow, but <u>encourage</u> smaller communities and particularly those with waste stabilization ponds and combined sewer systems as in the City of Wapello to meet these more relaxed eligibility requirements.

The Department's only response when the City of Wapello wants to discuss equivalent to secondary is a term they have chosen to develop called "hydraulic overloading." No where in the EPA or DNR departmental rules is such a term defined. And, as testified to by City Engineer Ron Meyer, hydraulic overloading cannot be defined without knowing the amount of given rainfall going into the system. Hydraulic overloading is a self serving definition and has no application beyond the calculation of the effluent limitations as set forth in the procedural guide. It is

Public Water Supply — Compounds above Detection Limits

Pws ID: 4039071				
Name: RANDALL WATER SUPPLY	No Contaminants Detected			
City: RANDALL				
Date Collected: 01/27/87				
Pws ID: 3649072				
Name: RANDOLPH WATER WORKS	atrazine	0.88	uG/L	
City: RANDOLPH	chloroform	5	uG/L	
Date Collected: 09/22/87	bromodichloromethane	7	uG/L	
	dibromochloromethane	7	uG/L	
	bromoform	1	uG/L	
Pws ID: 0965073				
Name: READLYN WATER SUPPLY	chloroform	8	uG/L	
City: READLYN				
Date Collected: 11/25/86				
Pws ID: 6950075				
Name: RED OAK WATER SUPPLY	1_1_1_trichloroethane	2	uG/L	
City: RED OAK	bromodichloromethane	2	uG/L	
Date Collected: 01/07/87	dibromochloromethane	2	uG/L	
	tetrachloroethene	2	uG/L	
Pws ID: 2564074				
Name: REDFIELD WATER WORKS	chloroform	1	uG/L	
City: REDFIELD	bromodichloromethane	3	uG/L	
Date Collected: 08/19/87	dibromochloromethane	8	uG/L	
	bromoform	9	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 2870073				
Name: REINBECK WATER SUPPLY	No Contaminants Detected			
City: REINBECK				
Date Collected: 02/09/87				
Pws ID: 1170078				
Name: REMBRANDT WATER SUPPLY	No Contaminants Detected			
City: REMBRANDT				
Date Collected: 04/15/87				
Pws ID: 7568079				
Name: REMSEN MUNICIPAL UTILITIES	atrazine	1.30	uG/L	
City: REMSEN	chloroform	8	uG/L	
Date Collected: 02/23/87	bromodichloromethane	12	uG/L	
	dibromochloromethane	14	uG/L	
	bromoform	3	uG/L	
Pws ID: 4669080				
Name: RENWICK MUNIC WATER SUPPLY	No Contaminants Detected			
City: RENWICK				
Date Collected: 02/02/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 6161031				
Name: ST CHARLES WATER SUPPLY		chloroform	24	uG/L
City: SAINT CHARLES		bromodichloromethane	10	uG/L
Date Collected: 07/09/87		dibromochloromethane	3	uG/L
Pws ID: 9176019				
Name: SAINT MARYS WATER CORP		carbon_tetrachloride	1	uG/L
City: SAINT CHARLES				
Date Collected: 07/20/87				
Pws ID: 2277020				
Name: SAINT OLAF WATER SUPPLY		No Contaminants Detected		
City: SAINT OLAF				
Date Collected: 01/12/87				
Pws ID: 5675022				
Name: ST PAUL WATER SUPPLY		No Contaminants Detected		
City: SAINT PAUL				
Date Collected: 02/17/87				
Pws ID: 4478023				
Name: SALEM WATER SUPPLY		No Contaminants Detected		
City: SALEM				
Date Collected: 02/24/87				
Pws ID: 9770024				
Name: SALIX WATER SUPPLY		chloroform	1	uG/L
City: SALIX				
Date Collected: 01/07/87				
Pws ID: 7165025				
Name: SANBORN WATER SUPPLY		chloroform	1	uG/L
City: SANBORN		bromodichloromethane	1	uG/L
Date Collected: 03/02/87		dibromochloromethane	1	uG/L
Pws ID: 8156028				
Name: SCHALLER WATER SUPPLY		No Contaminants Detected		
City: SCHALLER				
Date Collected: 01/07/87				
Pws ID: 2446029				
Name: SCHLESWIG MUNIC WATER SUPPLY		chloroform	2	uG/L
City. SCHLESWIG		bromodichloromethane	6	uG/L
Date Collected: 07/13/87		dibromochloromethane	14	uG/L
		bromoform	9	uG/L
Pws ID: 3759031				
Name: SCRANTON WATER SYSTEM		chloroform	7	uG/L
City: SCRANTON				
Date Collected: 11/24/86				

Public Water Supply Compounds above Detection Limits

Pws ID: 5782087				
Name: SPRINGVILLE WATER SUPPLY	chloroform	4	uG/L	
City: SPRINGVILLE	bromodichloromethane	2	uG/L	
Date Collected: 11/24/86	dibromochloromethane	1	uG/L	
Pws ID: 6677089				
Name: STACYVILLE WATER SUPPLY	chloroform	2	uG/L	
City: STACYVILLE	bromodichloromethane	4	uG/L	
Date Collected: 11/24/86	dibromochloromethane	4	uG/L	
Pws ID: 4045090				
Name: STANHOPE WATER DEPT	chloroform	3	uG/L	
City: STANHOPE	bromodichloromethane	6	uG/L	
Date Collected: 08/20/87	dibromochloromethane	6	uG/L	
	bromoform	2	uG/L	
Pws ID: 6965091				
Name: STANTON WATER SUPPLY	No Contaminants Detected			
City: STANTON				
Date Collected: 11/17/86				
Pws ID: 1681092				
Name: STANWOOD WATER SUPPLY	No Contaminants Detected			
City: STANWOOD				
Date Collected: 09/16/87				
Pws ID: 6484093				
Name: STATE CENTER MUNI WATER DEPT	chloroform	1	uG/L	
City: STATE CENTER	bromodichloromethane	2	uG/L	
Date Collected: 06/17/87	dibromochloromethane	2	uG/L	
	bromoform	1	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 4289094				
Name: STEAMBOAT ROCK WATER DEPT	No Contaminants Detected			
City: STEAMBOAT ROCK				
Date Collected: 11/13/86				
Pws ID: 8973095				
Name: STOCKPORT WATER SUPPLY	No Contaminants Detected			
City: STOCKPORT				
Date Collected: 02/02/87				
Pws ID: 7063096				
Name: STOCKTON MUNI WATER SUPPLY	toluene	1	uG/L	
City: STOCKTON	p_m_xylene	1	uG/L	
Date Collected: 08/26/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 2452044				
Name: VAIL WATER SUPPLY	No Contaminants Detected			
City: VAIL				
Date Collected: 08/25/87				
Pws ID: 0685045				
Name: VAN HORNE WATER WORKS	atrazine	0.21	uG/L	
City: VAN HORNE	chloroform	2	uG/L	
Date Collected: 06/22/87	bromodichloromethane	4	uG/L	
	dibromochloromethane	9	uG/L	
	bromoform	5	uG/L	
Pws ID: 2570046				
Name: VAN METER MUNICIPAL WATER WORK	bromodichloromethane	1	uG/L	
City: VAN METER	dibromochloromethane	1	uG/L	
Date Collected: 06/22/87	bromoform	1	uG/L	
Pws ID: 7642047				
Name: VARINA WATER SUPPLY	No Contaminants Detected			
City: VARINA				
Date Collected: 02/23/87				
Pws ID: 1785032				
Name: VENTURA WATER WORKS	chloroform	3	uG/L	
City: VENTURA				
Date Collected: 11/24/86				
Pws ID: 4875050				
Name: VICTOR MUNICIPAL WATER DEPT	chloroform	3	uG/L	
City: VICTOR				
Date Collected: 08/25/87				
Pws ID: 6985051				
Name: VILLISCA MUNICIPAL WATER DEPT	chloroform	3	uG/L	
City: VILLISCA	bromodichloromethane	6	uG/L	
Date Collected: 10/26/87	dibromochloromethane	10	uG/L	
	bromoform	4	uG/L	
Pws ID: 9486052				
Name: VINCENT WATER SUPPLY	chloroform	6	uG/L	
City: VINCENT	bromodichloromethane	2	uG/L	
Date Collected: 09/28/87	dibromochloromethane	1	uG/L	
Pws ID: 0688053				
Name: VINTON MUNICIPAL WATER DEPT	chloroform	2	uG/L	
City: VINTON				
Date Collected: 11/12/86				

Public Water Supply Compounds above Detection Limits

Pws ID: 2394017				
Name: WHEATLAND CITY WATER SUPPLY	No Contaminants Detected			
City: WHEATLAND				
Date Collected: 08/20/87				
Pws ID: 6769018				
Name: WHITING WATER SUPPLY	No Contaminants Detected			
City: WHITING				
Date Collected: 04/22/87				
Pws ID: 5595020				
Name: WHITTEMORE MUNI WATER SUPPLY	chloroform	1	uG/L	
City: WHITTEMORE				
Date Collected: 12/29/86				
Pws ID: 4293021				
Name: WHITTEN WATER SUPPLY	chloroform	3	uG/L	
City: WHITTEN	bromodichloromethane	2	uG/L	
Date Collected: 01/12/87	dibromochloromethane	1	uG/L	
Pws ID: 4070022				
Name: WILLIAMS WATER SUPPLY	chloroform	40	uG/L	
City: WILLIAMS	bromodichloromethane	51	uG/L	
Date Collected: 12/29/86	dibromochloromethane	31	uG/L	
	bromoform	3	uG/L	
Pws ID: 4884023				
Name: WILLIAMSBURG PUBLIC WATER SUPP	chloroform	4	uG/L	
City: WILLIAMSBURG				
Date Collected: 01/12/87				
Pws ID: 7078026				
Name: WILTON WATER SUPPLY	chloroform	15	uG/L	
City: WILTON	bromodichloromethane	6	uG/L	
Date Collected: 09/23/87	dibromochloromethane	2	uG/L	
Pws ID: 7791027				
Name: WINDSOR HEIGHTS WATER DEPT.	chloroform	10	uG/L	
City: WINDSOR HEIGHTS	bromodichloromethane	2	uG/L	
Date Collected: 09/18/87	dibromochloromethane	1	uG/L	
Pws ID: 4493028				
Name: WINFIELD MUNI WATER DEPT	chloroform	2	uG/L	
City: WINFIELD	bromodichloromethane	1	uG/L	
Date Collected: 08/24/87	dibromochloromethane	1	uG/L	
	bromoform	1	uG/L	
Pws ID: 6171029				
Name: WINTERSET MUNICIPAL WATERWORKS	chloroform	42	uG/L	
City: WINTERSET	bromodichloromethane	17	uG/L	
Date Collected: 01/27/87	dibromochloromethane	3	uG/L	

561--7.6(17A, 455A) Notice of hearing.

7.6(1) Content. The notice of hearing shall contain:

a. The names of the parties,

b. A statement of the time, place and nature of the hearing,

c. A statement of the legal authority and jurisdiction under which the hearing is to be held,

d. A reference to the particular section of the statutes and rules involved,

e. A short and plain statement of the matters asserted, and

f. The time within which a petition or answer must be filed.

g. In those cases where the department files the petition, the notice shall include a copy of the petition and a statement that in the event an answer is not timely filed in accordance with 7.8(2), judgment may be entered for the relief requested in the petition.

7.6(2) Delivery. Delivery of the notice of hearing shall be by certified mail, return receipt requested, personal service, or as otherwise required by statute.

561--7.7(17A, 455A) Time for response. A person served with a notice of hearing shall file a petition or answer as required by 7.8(17A, 455A) within twenty days of service of the notice of hearing. Failure to so file may, upon motion, result in the presiding officer entering a default against the person failing to file.

561--7.8(17A, 455A) Pleadings. Pleadings are the parties' written statements of their respective claims or defenses. They do not include motions. The only allowable pleadings shall be the petition and the answer.

7.8(1) Petition.

a. Who must file. In all cases where an action of the department is appealed, the party aggrieved by the action shall file the petition. In those cases where the department seeks to suspend or revoke a license or permit, the department shall file the petition.

b. Time for filing. Any petition required to be filed by the party other than the department shall be filed within twenty days of delivery of the notice of hearing, unless the presiding officer allows additional time.

c. Content. The petition shall state in separate numbered paragraphs the following: The basis for the agency's jurisdiction over the matter, a detailed discussion of the relief demanded, and the facts, including supporting documentation relied upon for such relief, the particular provisions of the statutes and rules involved, on whose behalf it is filed, and the name, address and telephone number of the petitioner and the petitioner's attorney, if any.

7.8(2) Answer.

a. Who must file. In all cases where an action of the department is appealed, the department shall file the answer. In those cases where the department seeks to suspend or revoke a license or permit, the holder of the license or permit shall file the answer.

b. Time for filing. The answer shall be filed within twenty days of receipt of the petition.

c. Content of answer. The answer shall show on whose behalf it is filed, and specifically admit or deny each allegation or paragraph of the petition. It shall state any facts deemed to show a defense. It may raise points of law appearing on the face of the petition, and may contain as many defenses, legal or equitable, as the pleader may claim, which defenses may be inconsistent.

7.12(1) Qualification. Except as otherwise provided in this subrule, a hearing officer shall preside at contested case hearings.

a. On motion of a party or on its own motion, the agency may order that the hearing be conducted before the agency or an appeal board appointed pursuant to Iowa Code section 17A.11(1).

b. In a hazardous waste facility site licensing proceeding pursuant to Iowa Code section 455B.477, the hearing shall be before the environmental protection commission, with at least a quorum present, and with a hearing officer present to assist the commission in assuring that the requirements of Iowa Code chapter 17A are met.

c. In the case of an appeal to or review on motion of the agency of a proposed decision of the hearing officer or appeal board, the agency shall preside.

7.12(2) Disqualification.

a. Grounds for disqualification.

(1) A presiding officer shall not participate in the making of a proposed or final decision if such individual has prosecuted or advocated in connection with that case, the specific controversy underlying that case or another pending factually related controversy that may culminate in a case, involving the same parties.

(2) A presiding officer shall not be subject to the authority, direction or discretion of any person who has prosecuted or advocated in connection with that case, the specific controversy underlying that case or a pending factually related case or controversy, involving the same parties.

(3) A member of an agency having jurisdiction of a case shall not participate in the making of a final decision or order if such member is employed by, receives directly or indirectly personal income from, or has other substantial connection with a person subject to permit or enforcement action pending before the commission.

(4) A presiding officer shall not be biased for or against any party.

b. Affidavit asserting disqualification. A party may file an affidavit asserting disqualification of a presiding officer under this subrule at any time, except that an affidavit against a member of the commission on appeal or review of the proposed decision shall be filed prior to any hearing on appeal or review of the proposed decision. A determination on whether the individual challenged should participate shall be made by the agency before further participation by the individual challenged.

561--7.13(17A, 455A) Separation of functions and ex parte communications.

7.13(1) Separation of functions. A compliance officer of the department shall perform the investigative and prosecuting functions for the department. Additional employees of the department may be designated by the director to perform such functions as necessary during the course of the case. No person performing such functions shall participate or advise in any decision arising out of that case except as witness or counsel in public proceedings. All employees of the department other than those performing the investigative and prosecuting functions in the case shall be available to advise the agency and presiding officer on any of their functions relating to the case and any appeal.

7.13(2) Communications initiated by hearing officer or agency member.

a. Except as provided in "b" and "c", after commencement the presiding officer and members of the agency having jurisdiction of the case shall not communicate, directly or indirectly, in connection with any issue of fact or law in that case with any person or party.

other than appellant, or to any such party who has no attorney of record, at the party's last known address. No failure of the director to mail or deliver any such notice shall affect the validity of the appeal.

c. Date of appeal or review. The director shall schedule appeal or review for a date after the end of the briefing period provided in paragraph "e", and shall notify the parties of the date.

d. Agency review. On appeal from or review of the proposed decision, the agency has all the power which it would have in initially making the final decision except as it may limit the issues on notice to the parties.

e. Presentations by parties on appeal. Within twenty days of the date the appeal is perfected or the agency decides to review the proposed decision or order, each party may file exceptions and present briefs to the agency. Within twenty days thereafter, each party may file a brief which takes specific exception to matters contained in an opposing brief. Request for opportunity to present oral arguments shall be filed at least ten days prior to the date set for consideration of the case. In cases where a regular agency meeting does not occur within the time limitation for final decisions or orders, the agency may shorten or extend the briefing period, provided that the briefing periods shall be at least twenty days before the date of consideration and not longer than would cause the date of consideration to occur later than the next regular meeting of the agency following any meeting that occurs sooner than the twenty-day minimum briefing period.

f. Final argument. The final argument and the conclusion of the hearing is deemed to have occurred at the end of the briefing period, or when oral arguments have been permitted, at the end of such presentation.

7.15(6) Applications for rehearing.

a. By whom filed. Any party may file an application for rehearing.

b. Content of application. The application shall state on whose behalf it is filed, state the specific grounds for rehearing, and state the relief sought.

c. Time of filing. The application shall be filed with the director within twenty days after the receipt of any final decision.

d. Notice to other parties. A copy of such application shall be timely mailed by the applicant to all parties of record not joining therein.

e. Disposition. Any application shall be deemed denied unless the agency grants the application within twenty days after its filing.

7.15(7) Stays of agency actions.

a. When available.

(1) Any party appealing the issuance of an order, other than an emergency order which is governed by 7.17, may petition the presiding officer for a stay of the order pending review of the order. The petition for stay shall be filed with the notice of appeal (see 7.5(1) of these rules), and shall state the reasons justifying a stay.

(2) Any party adversely affected by a final decision and order may petition the agency which issued the decision for a stay of that decision and order pending judicial review. The petition for stay shall be filed with the director within ten days of receipt of the final decision and order, and shall state the reasons justifying an stay.

b. When granted. The presiding officer or agency, as appropriate, shall grant a stay when it concludes that substantial legal or factual questions exist as to the propriety of the department's order, the party will suffer substantial and irreparable injury without the stay, and the interest of the public will not be significantly harmed.

Department Exhibit H.	-	Inspection Report and Cover Letter dated 6-5-87.
Department Exhibit I.	-	Descriptive information on Wapello WWTP.
Department Exhibit J.	-	Tables for 1986, 1987 shows monthly operating report data for Wapello WWTP.
Department Exhibit K.	-	Table of 1985 monthly report data from WWTP.
Department Exhibit L.	-	Table of 1983, 1984 monthly report data from WWTP.
Department Exhibit M.	-	Computer printout of 1982-1984 data from WWTP.
Department Exhibit N.	-	Letter to Steve Williams and personal computer program.
Department Exhibit O.	-	EPA-Guidance for Permits and Compliance Personnel - Secondary Treatment Redefinition.
Department Exhibit P.	-	Technical Support Document for Proposed Regulation under Section 304(d)(4) of the Clean Water Act, as amended.
Department Exhibit Q.	-	Copy of NPDES permit dated February 19, 1987 for City of Wapello.
Department Exhibit R.	-	Copy of NPDES operation permit issued 11-17-82 to Wapello.
Department Exhibit S.	-	Letter to Roger Huddle dated 6-18-87 from LaVoy Haage.
Department Exhibit T.	-	Secondary Redefinition Calculation Program for City of Wapello.
Appellant Exhibit 1.	-	Table of 1985-1987 data entered into computer program.
Appellant Exhibit 2.	-	Table of calculations used in computer program.
Appellant Exhibit 3.	-	Calculated limits for Wapello based on the Secondary Redefinition Calculation program.

Department personnel using 30 months of operating data from the Wapello WWTP. The results were a 30 day average for BOD5 of 49 mg/L and for TSS of 79 mg/l. Department personnel used the program as a tool and conceded that they did not fully understand the statistical theories and methods underlying it. When called to explain how the 95% value for TSS could be higher than any individual TSS value entered, Moreno testified that he assumed the program took into consideration the wide variability in TSS values for the period (13-76) and this accounted for the 95% value being higher than the highest TSS value. The same program was run on 62 months of data and the results were 63 mg/l BOD5 for the 30 day average an 77mg/l TSS for the 30 day average.
(App Exhibit 1,2,3; Department Exhibit, N,T; Testimony of Edward Moreno, Steven Williams)

22. The City of Wapello consulted its own expert, Professor Warren Bol, University of Iowa, Business Administration Department. Using his own calculations and the same data as that used by the Department, Boe calculated the 95% to be 47.88 mg/l BOD5 for the 30 day average and 70.89 mg/l TSS for the 30 day average.
(Testimony of Ron Meyer; Appellant Exhibits 4 and 5)

23. The Wapello Wastewater Treatment Plant was designed to handle a maximum organic loading of 3701bs. BOD5 per day. The plant has often exceeded the 3701bs. BOD5 per day maximum and at one time received a loading of 10001bs. For these reasons the Department concluded that Wapello's treatment facility is "organically overloaded."
(Testimony of Edward Moreno; Department Exhibits A,C)

CONCLUSIONS OF LAW

1. 567 Iowa Administrative Code 69.6(6) provides:

64.6(6) POTW compliance-plan of action required. The owner of a publicly owned treatment works (POTW) must prepare and implement a plan of action to achieve and maintain compliance with final effluent limitations in its NPDES permit, as specified below:

a. The director shall notify the owner of a POTW of the plan of action requirement, and of an opportunity to meet with department staff to discuss the plan of action requirements. The POTW owner shall submit a plan of action within six (6) months of such notice, unless a longer time is needed and is authorized in writing by the director.

b. The plan of action will vary in length and complexity depending on the compliance history and physical status of the particular POTW. It must identify the deficiencies and needs of the system, describe the causes of such deficiencies or needs, propose specific measures (including an implementation schedule) that will be taken to correct the deficiencies or meet the needs, and discuss the method of financing the improvements proposed in the plan of action.
The plan may provide for a phased construction approach to meet

Permits, U.S. Environmental Protection Agency, has prepared a document entitled " Guidance for Permits and Compliance Personnel-Secondary Treatment Redifinition." (Department Exhibit O). That document states, "where eligibility is unclear, the burden of proof for performance data or other information on the facility is the responsibility of the municipality." (Exhibit O, at V-2). The same document earlier states, "Obviously a treatment works that is operating beyond its design hydraulic or organic loading limit is not considered an eligible facility. If overloading or structural failure are causing poor performance, the solution to the problem is construction, not effluent limitation adjustment." (Department Exhibit O,p.3) (emphasis original). Wapello's treatment works has exceeded both its design hydraulic and organic loading in the past two years. (See Findings of Fact 11,23.)

9. The Wapello Wastewater Treatment Facility is clearly operating beyond its design hydraulic and organic loading limits. Furthermore, it is not currently capable of consistently complying with 567 Iowa Administrative Code 62.3(3) "f,""g" and "h." It fails to meet treatment equivalent to secondary treatment effluent limits at least twice as often as would be allowed under a 95% test of reliability. Therefore, at this time the City of Wapello is not eligible for treatment equivalent to secondary treatment limits pursuant to 62.3(3). The city argues that it should be allowed to upgrade its facility to meet TEST limits. However, no specific information was presented concerning the nature and expected results of such an upgrade. Therefore, there is insufficient evidence upon which to conclude that Wapello would be eligible for TEST limits if allowed to upgrade.

10. The city further argues that it is unconstitutional for the Department to issue an Administrative Order finding the city in non-compliance when it has eight or nine months in which to meet or fall within the eligibility requirements of Section 567-62.3(3) for treatment equivalent to secondary. Administrative Order 87-WW-48 seeks compliance with the implementation schedule, which the Department is authorized and ordered to require pursuant to 567 Iowa Administrative Code 64.6(6), as well as federal regulations implementing the Clean Water Act, 40 CFR§§123.25, 122.47(a)(i). The city has been accorded sufficient due process. The city was given ample opportunity to submit its own plan of action and its own implementation schedule. After the implementation schedule was established in the NPPES permit in February, 1987, the city had the right to appeal, which it did not do. Iowa Code 455B.174(4). The administrative rules on treatment equivalent to secondary treatment had been in effect for over six months at the time the NPDES permit was issued.

The Department has lawfully sought to enforce the implementation schedule contained in the NPDES permit by its issuance of Administrative Order No. 87-WW-48.

this system is not designed, and cannot (under the proposed plan of action), be designed to meet these stringent limitations.

It is the contention of the City of Wapello it meets the guidelines for the more special considerations of "treatment equivalent to secondary" treatment limitations. These are more specifically set forth in IAC 567-62.3 (3). As described below, these somewhat relaxed effluent standards were adopted following a recognition by the United States Congress of the inability of certain types of treatment facilities--particularly in small communities--to meet the more stringent limitations, and an encouragement to comply with the more relaxed limitations under "treatment equivalent to secondary."

The Department spent considerable time in the administrative hearing presenting exhibits concerning Wapello's plan of action (see specifically Department Exhibit D and the approval in Department Exhibit E) and discussing the fact the City of Wapello has never submitted any formal revised plan of action dealing with its contention that it meets the effluent limitations described as "equivalent to secondary." The Department never gave the City the opportunity to do so.

Please note and remember that the regulations concerning the relaxed treatment standards of equivalent to secondary were not adopted and become part of the Iowa Administrative Code until December 3, 1986. This is more than two years after the submission and approval of the City of Wapello's plan of action. As addressed by City Engineer Ron Meyer in his testimony, after being advised of these relaxed treatment standards, he began discussing them immediately with officials of DNR.

The legislative history further acknowledges continued use of trickling filters and waste stabilization ponds (such as that utilized by the City of Wapello) particularly for smaller communities and establish criteria for the administrator to consider effluent limitations on a case by case basis and to take into account differing geographic/climatic conditions as well as seasonal and geographic variability. Also special considerations were made where treatment works were affected by wet weather flows due to combined sewer systems. (Again, as is the case in the City of Wapello) (see Department Exhibit F, Legislative History B-4 through 6).

The administrative regulations recognize "special considerations" for treatment works with combined sewers (e.g. City of Wapello) during periods of wet weather and that they may be unable to meet the percentage removal requirements. See IAC 567-62.3 (2). Nonetheless, note the testimony of City Engineer Ron Meyer that the City is exceeding the 65 percentage removal level and can show a history of between 72 to 80 percent removal. Even DNR officials acknowledge the City is meeting this percentage removal requirement. In other words, the treatment facility itself is apparently doing its job in removing a significantly high percentage of the effluent coming into the system before it is discharged into the Iowa River.

V. THE CITY OF WAPELLO'S WASTE WATER TREATMENT FACILITY DESERVES CONSIDERATION OF EFFLUENT LIMITATIONS PRESCRIBED FOR TREATMENT EQUIVALENT TO SECONDARY TREATMENT

IAC 567-62.3 (3) has already been cited several times. This sub-rule describes the minimum level of effluent quality attainable

interesting to note that even EPA's own technical support document (Department Exhibit P) appears very clear as to the definition and application of this 95th percentile but the Iowa Department of Natural Resources appears to ignore this document and come up with its own definition (see for example Exhibit P, Section I, Page 2; Section IV, Page 32; Section V, Page 48; and most importantly Section VIII, Page 63). This latter reference (Department Exhibit P, Section VIII, Page 63-64) would appear to be very clear in discussing the implementation of NPDES permit adjustments particularly as they would pertain to equivalent to secondary eligibility requirements.

In summary, this talks about establishing a CBOD and SS effluent quality that is based on the 95th percentile of the thirty day average of each for a period of the past two years excluding certain upsets or other unusual conditions. (In the case of the City of Wapello data was available for the past thirty months). Under anyones definition, without any upgrading or modification of the City of Wapello's current waste water treatment facility, the City is extremely close to meeting these eligibility requirements. It would appear to be in direct conflict with the intent of this legislation at both the federal and state level to require the City of Wapello to undergo such a massive modification of its treatment facility to then try and meet more stringent standard secondary limitations. If the City is determined to be eligible for treatment equivalent to secondary come July 1, 1988, they are then required to meet these relaxed effluent limitations set forth in Chapter 567-62.3 (3) f and g (setting a CBOD thirty day average of 40 mg./l. and SS of

Public Water Supply Compounds above Detection Limits

Pws ID: 6480081				
Name: RHODES WATER SUPPLY	No Contaminants Detected			
City: RHODES				
Date Collected: 09/29/87				
Pws ID: 4558001				
Name: RICEVILLE WATER SUPPLY	chloroform	4	uG/L	
City: RICEVILLE	p_m_xylene	2	uG/L	
Date Collected: 09/24/87				
Pws ID: 5470083				
Name: RICHLAND WATER SUPPLY	No Contaminants Detected			
City: RICHLAND				
Date Collected: 03/16/87				
Pws ID: 5470083 Repeat				
Name: RICHLAND WATER SUPPLY	No Contaminants Detected			
City: RICHLAND				
Date Collected: 05/11/87				
Pws ID: 2441084				
Name: RICKETTS WATER DEPT	vinyl_chloride	3	uG/L	
City: RICKETTS	chloroform	12	uG/L	
Date Collected: 09/23/87	bromodichloromethane	11	uG/L	
	dibromochloromethane	8	uG/L	
	bromoform	1	uG/L	
Pws ID: 9680085				
Name: RIDGEWAY WATER SUPPLY	chloroform	2	uG/L	
City: RIDGEWAY	bromodichloromethane	3	uG/L	
Date Collected: 08/18/87	dibromochloromethane	2	uG/L	
Pws ID: 1374086				
Name: RINARD WATER SUPPLY	atrazine	0.64	uG/L	
City: RINARD	bladex	0.53	uG/L	
Date Collected: 04/14/87				
Pws ID: 3275087				
Name: RINGSTED WATER SUPPLY	chloroform	1	uG/L	
City: RINGSTED	bromodichloromethane	1	uG/L	
Date Collected: 12/30/86	toluene	1	uG/L	
Pws ID: 3754088				
Name: RIPPEY MUNI WATER SUPPLY	chloroform	3	uG/L	
City: RIPPEY				
Date Collected: 02/10/87				
Pws ID: 9260090				
Name: RIVERSIDE WATER SUPPLY	chloroform	3	uG/L	
City: RIVERSIDE				
Date Collected: 07/08/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 7955032				
Name: SEARSBORO WATER SUPPLY	No Contaminants Detected			
City: SEARSBORO				
Date Collected: 07/21/87				
Pws ID: 9774033				
Name: SERGEANT BLUFF WATER SUPPLY	alachlor	0.29	uG/L	
City: SERGEANT BLUFF	chloroform	3	uG/L	
Date Collected: 12/29/86	bromodichloromethane	10	uG/L	
	dibromochloromethane	12	uG/L	
	bromoform	4	uG/L	
Pws ID: 9368035				
Name: SEYMOUR MUNICIPAL UTILITY WATE	atrazine	1.90	uG/L	
City: SEYMOUR	bladex	1.60	uG/L	
Date Collected: 08/24/87	dyfonate	0.56	uG/L	
	chloroform	55	uG/L	
	bromodichloromethane	12	uG/L	
	dibromochloromethane	1	uG/L	
Pws ID: 7380036				
Name: SHAMBAUGH MUNI WATER SUPPLY	No Contaminants Detected			
City: SHAMBAUGH				
Date Collected: 07/21/87				
Pws ID: 7380036 Repeat				
Name: SHAMBAUGH MUNI WATER SUPPLY	chloroform	4	uG/L	
City: SHAMBAUGH	bromodichloromethane	6	uG/L	
Date Collected: 06/15/87	dibromochloromethane	7	uG/L	
	bromoform	2	uG/L	
Pws ID: 3570037				
Name: SHEFFIELD WATER SUPPLY	No Contaminants Detected			
City: SHEFFIELD				
Date Collected: 01/12/87				
Pws ID: 8369038				
Name: SHELBY WATER SUPPLY	chloroform	14	uG/L	
City: SHELBY	bromodichloromethane	4	uG/L	
Date Collected: 09/28/87	dibromochloromethane	3	uG/L	
	bromoform	1	uG/L	
Pws ID: 7778039				
Name: SHELDAHL WATER SUPPLY	No Contaminants Detected			
City: SHELDAHL				
Date Collected: 03/16/87				
Pws ID: 7170040				
Name: SHELDON WATER DEPT	chloroform	1	uG/L	
City: SHELDON	bromodichloromethane	1	uG/L	
Date Collected: 01/05/87				

Public Water Supply Compounds above Detection Limits

Pws ID: 1178097				
Name: STORM LAKE WATER TREATMENT PLA		chloroform	1	uG/L
City: STORM LAKE				
Date Collected: 04/22/87				
Pws ID: 8584000				
Name: STORY CITY WATER DEPT		chloroform	2	uG/L
City: STORY CITY				
Date Collected: 02/17/87				
Pws ID: 3880001				
Name: STOUT WATER SUPPLY		No Contaminants Detected		
City: STOUT				
Date Collected: 11/14/86				
Pws ID: 4051002				
Name: STRATFORD MUNI WATER DEPT		No Contaminants Detected		
City: STRATFORD				
Date Collected: 11/24/86				
Pws ID: 2279003				
Name: STRAWBERRY POINT WATER SUPPLY		No Contaminants Detected		
City: STRAWBERRY POINT				
Date Collected: 11/24/86				
Pws ID: 7580011				
Name: STRUBLE WATER SYSTEM		chloroform	1	uG/L
City: STRUBLE				
Date Collected: 09/21/87				
Pws ID: 0180001				
Name: STUART WATER SUPPLY		chloroform	3	uG/L
City: STUART		bromodichloromethane	7	uG/L
Date Collected: 04/15/87		dibromochloromethane	10	uG/L
		bromoform	4	uG/L
Pws ID: 5076005				
Name: SULLY MUNI WATER WORKS		No Contaminants Detected		
City: SULLY				
Date Collected: 01/27/87				
Pws ID: 0970006				
Name: SUMMER WATER SUPPLY		No Contaminants Detected		
City: SUMMER				
Date Collected: 01/28/87				
Pws ID: 3073001				
Name: SUPERIOR WATER SYSTEM		chloroform	15	uG/L
City: SUPERIOR		bromodichloromethane	7	uG/L
Date Collected: 11/12/86		dibromochloromethane	2	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: 2285055				
Name: VOLGA CITY WATER SUPPLY	chloroform	3	uG/L	
City: VOLGA CITY	bromodichloromethane	3	uG/L	
Date Collected: 05/19/87	dibromochloromethane	2	uG/L	
Pws ID: 8285058				
Name: WALCOTT WATERWORKS	chloroform	1	uG/L	
City: WALCOTT				
Date Collected: 09/16/87				
Pws ID: 8255060				
Name: MAYSVILLE MUNICIPAL WATER DEPT	No Contaminants Detected			
City: WALCOTT				
Date Collected: 05/09/87				
Pws ID: 8255060 Repeat				
Name: MAYSVILLE MUNICIPAL WATER DEPT	No Contaminants Detected			
City: WALCOTT				
Date Collected: 03/23/87				
Pws ID: 5792059				
Name: WALKER WATER WORKS	chloroform	1	uG/L	
City: WALKER	bromodichloromethane	1	uG/L	
Date Collected: 06/18/87	dibromochloromethane	1	uG/L	
	bromoform	1	uG/L	
	toluene	1	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 8166061				
Name: WALL LAKE WATER SUPPLY	chloroform	5	uG/L	
City: WALL LAKE	bromodichloromethane	2	uG/L	
Date Collected: 06/16/87	dibromochloromethane	2	uG/L	
	bromoform	1	uG/L	
Pws ID: 3290060				
Name: WALLINGFORD MUNC WATERWORKS	chloroform	4	uG/L	
City: WALLINGFORD	bromodichloromethane	2	uG/L	
Date Collected: 03/09/87	dibromochloromethane	1	uG/L	
	p_m_xylene	1	uG/L	
Pws ID: 7872062				
Name: WALNUT MUNICIPAL UTILITIES	No Contaminants Detected			
City: WALNUT				
Date Collected: 01/07/87				
Pws ID: 5879063				
Name: WAPELLO MUNICIPAL WATER WORKS	chloroform	7	uG/L	
City: WAPELLO	bromodichloromethane	9	uG/L	
Date Collected: 11/17/86	dibromochloromethane	4	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 1083031				
Name: WINTHROP WATER SUPPLY		chloroform	2	uG/L
City: WINTHROP				
Date Collected: 11/24/86				
Pws ID: 1870032				
Name: WIOTA WATER WORKS		chloroform	1	uG/L
City: WIOTA		1_1_1_trichloroethane	1	uG/L
Date Collected: 04/22/87				
Pws ID: 4170033				
Name: WODEN WATER SUPPLY		No Contaminants Detected		
City: WODEN				
Date Collected: 06/22/87				
Pws ID: 4388034				
Name: WOODBINE WATER DEPT		bromodichloromethane	2	uG/L
City: WOODBINE		dibromochloromethane	4	uG/L
Date Collected: 07/21/87		bromoform	6	uG/L
Pws ID: 2052001				
Name: WOODBURN WATER SUPPY		chloroform	38	uG/L
City: WOODBURN		bromodichloromethane	14	uG/L
Date Collected: 09/18/87		dibromochloromethane	3	uG/L
Pws ID: 0800923				
Name: WOODWARD STATE HOSPITAL		No Contaminants Detected		
City: WOODWARD				
Date Collected: 01/06/87				
Pws ID: 2576036				
Name: WOODWARD WATER SUPPLY		chloroform	12	uG/L
City: WOODWARD		bromodichloromethane	1	uG/L
Date Collected: 03/16/87				
Pws ID: 2576706				
Name: XENIA RWA		chloroform	1	uG/L
City: WOODWARD				
Date Collected: 07/20/87				
Pws ID: 9970037				
Name: WOOLSTOCK WATER SUPPLY		No Contaminants Detected		
City: WOOLSTOCK				
Date Collected: 01/05/87				
Pws ID: 3189001				
Name: WORTHINGTON WATER SUPPLY		chloroform	2	uG/L
City: WORTHINGTON				
Date Collected: 07/14/87				

It shall state the name, address and telephone number of the person filing the answer and the attorney, if any.

d. Matters admitted and defenses waived. Any allegation in the petition not denied in the answer shall be deemed admitted. Any defense not raised in the answer which could have been raised at that time on the basis of facts then known shall be deemed waived, except for subject matter jurisdiction.

e. Failure to answer. If the party required to file an answer by this subrule fails to file an answer within twenty days of receipt of the notice of hearing or petition, a default may, upon motion, be entered by the presiding officer.

7.8(3) Amendment. Any pleading may be amended before a pleading has been filed responding to it. The presiding officer, in furtherance of justice, may allow later amendments, including those to conform to the proof and which do not substantially change the claim or defense. The presiding officer may impose terms or grant a continuance without terms, as a condition of such allowance.

7.8(4) Filing and service of pleadings. The original of all pleadings shall be filed with the presiding officer and a copy of all pleadings shall be contemporaneously served upon the other parties. Filing and service of pleadings shall be by first-class mail or personal service. No return of service shall be required.

7.8(5) Docketing. Upon receipt of a pleading, the presiding officer shall docket the pleading in a docket kept for that purpose and shall assign a number to the case which number shall be placed on all subsequent pleadings filed in the case.

7.8(6) Form. All pleadings shall:

a. Contain a caption in the following form:

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES
DES MOINES, IOWA

IN THE MATTER OF	)PETITION (OR ANSWER)
(State name and address	)
of party other than the	)NO. _____
department)	

b. Be legibly printed or typewritten on white paper. The impression shall be on one side of the paper only and the lines shall be double spaced, except quotations of two or more lines, which shall be single spaced and indented. Standard letter-size paper (8-1/2" x 11") shall be used.

c. Be signed by the person filing the pleading.

561--7.9(455B) Defaults and orders thereon.

7.9(1) Defaults defined. The respondent shall be in default when it fails to timely file an answer within the time prescribed for filing an answer. Any party shall be in default when it fails to comply with an order of the presiding officer.

7.9(2) How entered. If the party is in default, the presiding officer on motion of the adverse party shall enter such default against the party.

7.9(3) Order issued. Whenever the respondent fails to timely answer, or any party fails to comply with an order of the presiding officer and default is entered, the relief requested by the party moving for default may be granted in an order.

7.9(4) Setting aside default. On motion and for good cause shown, the presiding officer may set aside a default or order thereon for mistake,

b. The presiding officer or members of the agency having jurisdiction of the case may so communicate upon notice and opportunity for all parties to participate. Notice of the time and place of the discussion and the issues of fact or law to be discussed shall be delivered by first-class mail to the parties. The discussion shall not extend to issues of fact or law not specified in the notice unless all parties participate in the discussion. The time of the discussion shall not be sooner than ten days after receipt of the notice.

c. The presiding officer or members of the agency having jurisdiction of the case may communicate with members of the department and may have the aid and advice of persons other than those with a personal interest in, either the case under consideration or a pending factually related case involving the same parties.

7.13(3) Communications initiated by parties.

a. Parties, including the department or their representatives in a case, shall not communicate directly or indirectly in connection with any issue of fact or law in that case with the presiding officer or members of the agency having jurisdiction of the case.

b. Paragraph "a" shall not apply if the requirements of 7.13(2)"b" are satisfied.

c. The presiding officer or members of the agency should refuse to discuss issues of fact or law with parties unless notice and opportunity for hearing has been given. The presiding officer or members of the agency shall deliver, by first-class mail, a copy of any written communication or summary of oral communication received from a party directly or indirectly related with any issue of fact or law in the case to the other parties and shall include the written communication or summary in the record.

d. The presiding officer may require the recipient of a prohibited communication to submit the communication if written or a summary of the communication if oral for inclusion in the record of the proceedings.

e. The presiding officer may take any of the following actions as sanctions for violations: The presiding officer may make a decision against a party who violates the rules; the presiding officer may make a recommendation that the agency censure, suspend or revoke a privilege to practice before the agency; the presiding officer may recommend that the director censure agency personnel.

561--7.14(17A, 455A) Hearing procedures.

7.14(1) Conduct of proceedings. A hearing shall be conducted by a presiding officer who shall:

a. Open the record and receive appearances;
b. Administer oaths, and issue subpoenas;
c. Enter the notice of hearing into the record;
d. Receive testimony and exhibits presented by the parties;
e. In the hearing officer's discretion, interrogate witnesses;
f. Rule on objections and motions;
g. Close the hearing;
h. Issue an order containing finings of fact, conclusions of law.

7.14(2) Counsel. Any party may be represented by counsel or other representative at the party's own expense.

7.14(3) Appearance pro se. If a party other than the department appears on the party's own behalf without counsel or other representative, the presiding officer shall explain to the party the rules of practice and procedure and generally conduct the hearing in a less formal manner than that used when a

c. Vacation. A stay may be vacated by the issuing authority upon application of the department or any other party.

561--7.16(17A, 455A) License suspension or revocation and other licensee disciplinary proceedings.

7.16(1) Notice. Except as provided in 7.16(6), prior to the suspension or revocation of a license, the department shall give notice of the intended action, and an opportunity to be heard at an evidentiary hearing conducted according to the provisions of this chapter.

7.16(2) Content of notice. The notice shall inform the licensee of the department's intent to suspend or revoke the license or otherwise discipline the licensee and shall include facts or conduct which warrant the intended action, a statement of the legal authority and jurisdiction under which the hearing is to be held, and a statement that the licensee may show at such a hearing that the licensee meets all lawful requirements to retain the license or otherwise not be subject to disciplinary action.

7.16(3) Delivery of notice. Delivery of notice in licensee proceedings may be by personal service or by restricted certified mail.

7.16(4) Mandatory hearings. Where required by statute (e.g. Iowa Code section 455B.217), a hearing shall be held prior to revocation or suspension of a license. The petition shall be filed at the same time the notice is filed. The presiding officer shall prepare the notice of hearing upon receipt of the notice of intended action and petition and the procedure shall follow that of this chapter.

7.16(5) Requested hearing. In the case of revocation or suspension of licenses other than those within 7.16(4), the department shall give notice as required in 7.16(1) and 7.16(2), which notice shall include a statement that the person notified has the right to a hearing in accordance with this chapter and that the person entitled to such a hearing may invoke the right within thirty days of receipt of the notice. Upon receipt of the request for a hearing, the presiding officer shall prepare a notice of hearing. Within ten days of receiving notice of hearing, the department shall file a petition and the procedure shall follow that of this chapter.

7.16(6) Emergency suspension. A license may be suspended without notice and opportunity to be heard if the agency having jurisdiction finds that the public health, safety or welfare imperatively requires emergency action, and incorporates a finding to that effect in its order. The order shall be served in the same manner provided in 7.16(3). If a license is summarily suspended in accordance with this paragraph, the department shall promptly thereafter give notice and an opportunity to be heard and determine the matter.

7.16(7) Effective date of suspension or revocation.

a. With respect to license suspension or revocation pursuant to this rule, except an emergency suspension pursuant to 7.16(6), the suspension or revocation shall be effective upon failure of the permittee to request a hearing within the time required in 7.16(5) or upon the issuance of an order suspending or revoking the permit after hearing.

b. With respect to a license suspension pursuant to 7.16(6), the license suspension is effective upon service of the order, and shall remain effective until rescinded by the agency or until the suspension is terminated by order after hearing.

561--7.17(17A, 455A) Special procedure for emergency orders. The procedures prescribed in this rule are available in those cases involving an emergency order issued by the department.

Appellant Exhibit 4. - Computer graph based on data in Exhibit 1.

Appellant Exhibit 5. - Results of 95% computations.

Findings of Fact

1. The Clean Water Act, 33 U.S.Code Section 1251 et. seq, as amended by the Clean Water Act of 1977, P.L. 95-217, and Municipal Waste Water Treatment Construction grant Amendments of 1981, P.L. 97-117 requires all publically owned treatment works (POTW) to meet the established secondary effluent limits no later than July 1, 1988. The Department's Municipal Improvement Program (MIP) (567 Iowa Administrative Code 64.6(6) requires cities operating wastewater treatment facilities which are now out of compliance with permit limitations to prepare a Plan of Action to achieve and maintain compliance with final effluent limitations in its NPDES permit.
(Testimony of Edward Moreno)

2. On September 20, 1984 the City of Wapello (Wapello) was notified by the Department that its final effluent exceeded effluent limitations in July and August, 1983 and January and February, 1984. Wapello was requested to submit a plan of action within six months which demonstrates how existing treatment facilities would be brought into compliance by 1988.
(Testimony of Edward Moreno; Department Exhibit A)

3. On June 18, 1986 Wapello submitted its Plan of Action, which was prepared by Meyer Engineering Service, to the Department. Wapello's existing wastewater treatment facilities consist of a two-cell waste stabilization lagoon constructed and placed in operation in 1968. The existing system consists of combined sewers (storm and waste), separate sewers, and wastewater pumping stations. The lagoon was designed for 2200 Population Equivalent and peak flow of 0.415 mgd. At 0.415 mgd the detention time is 60 days.
(Department Exhibit D; Testimony of Edward Moreno, Ron Meyer)

4. The submitted Plan of Action proposed the renovation of the existing wastewater lagoons to an aerated facultative pond facility. Construction would include installation of five bubble diffused aerators, feeder piping and appurtenant fittings, construction of a control building, and installation of a quiescent cell baffle curtain wall, renovation of existing control piping and structures and construction of new control piping and structures.
(Department Exhibit D)

5. The Plan of Action estimated total construction costs at $306,000 and proposed the following implementation schedule:

interim and final limitations, where financing is such that a long-term project is necessary to meet final limitations, and shorter-term projects may provide incremental benefits to water quality in the interim.
Information on the purpose and preparation of the plan can be found in the departmental document entitled "Guidance on Preparing a Plan of Action", available through the records center of the department.

c. Upon submission of a complete plan of action to the department, the plan should be reviewed and approved or disapproved within sixty (60) days unless a longer time is required and the POTW owner is so notified.

d. The NPDES permit for the facility shall be amended to include the implementation schedule or other actions developed through the plan to achieve and maintain compliance.
This rule is intended to implement Iowa Code chapter 455B, division III, part 1, (455B.171 to 455B.187).

2. The Standard Secondary effluent limits for POTW are set forth 567 Iowa Administrative Code 62.3.

567-62.3(455B) Secondary treatment information: effluent standards for publicly owned treatment works and privately owned domestic sewage treatment works.

62.3(1) General. The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the pollutant measurements carbonaceous biochemical oxygen demand (CBOD5), the five (5)-day measure of the pollutant parameter carbonaceous biochemical oxygen demand; suspended solids (SS), the pollutant parameter total suspended solids; and pH, the measure of the relative acidity or alkalinity. All requirements for each pollutant measurement shall be achieved by publicly owned treatment works and privately owned domestic sewage treatment works except as provided for in subrules 62.3(2) and 62.3(3).

Effluent limitations on pollutants other than carbonaceous biochemical oxygen demand (five day), suspended solids and pH may be imposed in the NPDES permit. Such limitations will reflect pretreatment requirements that may be imposed on users of the treatment works.

a. Carbonaceous biochemical oxygen demand (five (5) day) - CBOD5.

(1) The thirty (30)-day average shall not exceed 25 mg./l/

(2) The seven (7)-day average shall not exceed 40 mg./l/

(3) The thirty (30)-day average percent removal shall not be less than 85 percent (85%).

b. Suspended solids - SS.

(1) The thirty (30)-day average shall not exceed 30 mg/l.

(2) The seven (7)-day average shall not exceed 30 mg/l.

(3) The thirty (30)-day average percent removal shall not be less than 85 percent (85%).

c. pH: The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that:

(1) Inorganic chemicals are not added to the waste stream as

11. Administrative Order No. 87-WW-48 imposes an administrative penalty of $500.00 pursuant to Iowa Code section 455B.109 and Chapter 567--10 of the Iowa Administrative Code. At the time the Order was issued the city had failed to submit its preliminary engineering report, which had been due by March 31, 1987. The city had not notified the department that it did not intend to submit the preliminary engineering report on time, nor did it request an extension.

The Administrative Order assessed a $250.00 penalty due to the gravity of the violation and an additional $250.00 for culpability. Under the rule the city had the legal right to try to establish its eligibility for treatment equivalent to secondary treatment effluent limits at any time, however this right does not vitiate its obligation to comply with its NPDES permit and the implementation schedule. Since no formal written request for TEST eligibility was made by the City, it is difficult to determine the exact date when the subject was first raised by the City. The earliest documented oral request was sometime in May. (Department Exhibit B)
This would not excuse Wapello's failure to meet its March 31st deadline.

It is therefore ORDERED that the issuance of Administrative Order No. 87-WW-48 by the Department is AFFIRMED.

Dated this 13th day of January, 1988.

Margaret LaMarche
Hearing Officer
Iowa Department of Inspections and Appeals

ML/nlh

cc: Diana Hansen
Roger Huddle

(Particularly note Department Exhibits H and S). Everytime the issues of "equivalent to secondary" was discussed, the Department responded with an arbitrary and unsupported response that the City's treatment facility is "hydraulically overloaded" and therefore cannot qualify for this classification. At no time did the Department submit any documentation or rationale as to why the City of Wapello's treatment facility would not so qualify. Furthermore, pursuant to the regulations, IAC 567-62.3 (3 treatment works shall be eligible at anytime for consideration of effluent limitations described for a treatment equivalent to secondary (emphasis added).

Several witnesses testified to an informal meeting between the City and the Department held approximately three weeks before this administrative hearing. It was during that meeting that apparently the first formal discussions were held concerning whether Wapello would qualify under the relaxed treatment standards. At that time considerable discussion apparently took place in an attempt to identify the CBOD and SS effluent limitations for the City of Wapello based upon actual data for the previous 30 months. As testified to by City Engineer Ron Meyer and DNR officials Ed Moreno and Levoy Haage, virtually everyone left that meeting confused and somewhat dumbfounded over the effluent limitations apparently developed by the EPA computer model. No one could explain this model nor more importantly explain whether the final CBOD and SS limitations for the City of Wapello were valid based upon the input data.

by facilities eligible for treatment equivalent to secondary treatment in terms of pollutant measurements of CBOD and SS. There appears to be no disagreement between Department and City officials that the City of Wapello's treatment facility meets the first four of these eligibility requirements:

> (a) It is conceded the City cannot consistently achieve CBOD and SS effluent concentration within the minimum levels for standard secondary effluent limitations, (b) the City uses a waste stabilization pond as its principal process, (c) the treatment works provides significant biological treatment of municipal waste water, (d) the facility was constructed prior to January 1, 1982.

The key analysis throughout most of the administrative hearing was whether the treatment works was one that did not receive organic or hydraulic loadings which prevented the facility from consistently complying with the effluent limitations set forth in Section 62.3 (3) f, g, and h. Chapter 567-62.3 (3) (e). Likely the thing most clear from the hearing itself is that the administrative rules of both EPA and DNR are as unclear to DNR officials as anyone else--maybe more so. Three officials from DNR testified, including the Supervisor of the Field Office pertaining to the City of Wapello and the Supervisor of the Permit Section of DNR itself. Suffice it to say, all three gave different and conflicting (and most times confusing) interpretations of the DNR administrative rules as it pertains to waste water treatment permit systems. Most importantly, their different interpretations came into play as it pertained to Chapter 567-62.3 (3) i (1). This is the constant reference to the so-called "95th percentile."

./1.). It should be noted the City of Wapello has always met the effluent limitations for each of these thirty months. And, in only ree of the thirty months has it failed to meet the CBOD limitations 40 (as adjusted from the BOD calculations) and has an average that is thin 2.88 mg./l. over these thirty months based on the 95th percentile the statutory effluent limitations.

With compliance being within fractions with absolutely no changes modifications to the current system, it would appear to be consistent th the regulations both environmentally and economically to allow the ty to modify its "plan of action" to make such minor modifications as ay be necessary so come July 1, 1988, the City can consistently comply ith the effluent limitations for treatment equivalent to secondary.

(It might be noted as an aside as is referenced in the technical upport document, EPA has utilized an average calculation to convert OD effluent limits to CBOD effluent limits by utilizing a plus or minus mg./l. adjustment. Query, if compliance is in fact so close, certainly ny adjustment for this average must be taken into consideration?)

Most importantly, as reiterated throughout the legislative history nd subsequent departmental rules, the administration of this act must ssure that effluent limitations are set that will not adversely affect ater quality. The City of Wapello's waste water treatment facility ventually discharges into the Iowa River. City Engineer Ron Meyer was uite clear with no disagreement from the Department that the City of Vapello's waste water treatment facility and its discharge does not

Public Water Supply — Compounds above Detection Limits

Pws ID: 3600071				
Name: RIVERTON WATER WORKS	chloroform	33	uG/L	
City: RIVERTON	bromodichloromethane	7	uG/L	
Date Collected: 08/27/87	dibromochloromethane	1	uG/L	
Pws ID: 6065092				
Name: ROCK RAPIDS MUNIC WATER WORKS	atrazine	0.25	uG/L	
City: ROCK RAPIDS	chloroform	11	uG/L	
Date Collected: 02/04/87	bromodichloromethane	11	uG/L	
	dibromochloromethane	7	uG/L	
Pws ID: 6000733				
Name: LYON-SIOUX RWS-DOON	No Contaminants Detected			
City: ROCK RAPIDS				
Date Collected: 01/05/87				
Pws ID: 6000744				
Name: LYON-SIOUX RWS-BOYDEN	chloroform	3	uG/L	
City: ROCK RAPIDS	bromodichloromethane	8	uG/L	
Date Collected: 01/06/87	dibromochloromethane	7	uG/L	
Pws ID: 6000755				
Name: LYON-SIOUX RWS-BIG SIOUX	chloroform	11	uG/L	
City: ROCK RAPIDS	bromodichloromethane	15	uG/L	
Date Collected: 01/27/87	dibromochloromethane	8	uG/L	
Pws ID: 6000800				
Name: LYON-SIOUX RWS-ROCK RAPIDS	chloroform	12	uG/L	
City: ROCK RAPIDS	bromodichloromethane	14	uG/L	
Date Collected: 04/23/87	dibromochloromethane	11	uG/L	
	bromoform	1	uG/L	
Pws ID: 8482701				
Name: ROCK VALLEY RURAL WATER DIST	No Contaminants Detected			
City: ROCK VALLEY				
Date Collected: 12/09/86				
Pws ID: 8482096				
Name: ROCK VALLEY WATER SUPPLY	No Contaminants Detected			
City: ROCK VALLEY				
Date Collected: 01/05/87				
Pws ID: 3430091				
Name: ROCKFORD CITY WATER SUPPLY	chloroform	3	uG/L	
City: ROCKFORD	bromodichloromethane	2	uG/L	
Date Collected: 02/02/87	dibromochloromethane	1	uG/L	
Pws ID: 1773007				
Name: ROCKWELL WATER SUPPLY	No Contaminants Detected			
City: ROCKWELL				
Date Collected: 02/02/87				

Public Water Supply

Compounds above Detection Limits

Pws ID: 1286042
Name: SHELL ROCK MUNI WATER SUPP
City: SHELL ROCK
Date Collected: 11/24/86

chloroform	1	uG/L
bromodichloromethane	2	uG/L
dibromochloromethane	2	uG/L

Pws ID: 0670043
Name: SHELLSBURG WATER SUPPLY
City: SHELLSBURG
Date Collected: 09/17/87

chloroform	1	uG/L

Pws ID: 7383045
Name: SHENANDOAH WATER DEPT
City: SHENANDOAH
Date Collected: 09/29/87

chloroform	1	uG/L
bromodichloromethane	2	uG/L
dibromochloromethane	7	uG/L
bromoform	11	uG/L

Pws ID: 7245047
Name: SIBLEY MUNICIPAL UTILTIES
City: SIBLEY
Date Collected: 08/25/87

ethylbenzene	1	uG/L
p_m_xylene	1	uG/L

Pws ID: 3661048
Name: SIDNEY WATER SUPPLY
City: SIDNEY
Date Collected: 09/21/87

bromodichloromethane	1	uG/L
dibromochloromethane	3	uG/L
bromoform	3	uG/L

Pws ID: 3661048 Repeat
Name: SIDNEY WATER SUPPLY
City: SIDNEY
Date Collected: 10/29/87

No Contaminants Detected

Pws ID: 5475050
Name: SIGOURNEY MUNI WATER WORKS
City: SIGOURNEY
Date Collected: 01/13/87

chloroform	3	uG/L
bromodichloromethane	5	uG/L
dibromochloromethane	3	uG/L

Pws ID: 6573052
Name: SILVER CITY WATER SUPPLY
City: SILVER CITY
Date Collected: 09/22/87

1_1_dichloroethane	1	uG/L
chloroform	9	uG/L
bromodichloromethane	15	uG/L
dibromochloromethane	18	uG/L
bromoform	4	uG/L

Pws ID: 8486053
Name: SIOUX CENTER MUNI WATER DEPT
City: SIOUX CENTER
Date Collected: 11/12/86

chloroform	7	uG/L
bromodichloromethane	10	uG/L
dibromochloromethane	5	uG/L

Public Water Supply Compounds above Detection Limits

Pws ID: 7177007				
Name: SUTHERLAND WATER SUPPLY	No Contaminants Detected			
City: SUTHERLAND				
Date Collected: 03/16/87				
Pws ID: 1778008				
Name: SWALEDALE WATER SUPPLY	chloroform	1	uG/L	
City: SWALEDALE	bromodichloromethane	1	uG/L	
Date Collected: 11/12/86				
Pws ID: 6380047				
Name: SWAN WATER WORKS	alachlor	1.40	uG/L	
City: SWAN	sencor	0.34	uG/L	
Date Collected: 07/14/87				
Pws ID: 5584009				
Name: SWEA CITY WATER SUPPLY	chloroform	19	uG/L	
City: SWEA CITY	bromodichloromethane	5	uG/L	
Date Collected: 11/19/86	dibromochloromethane	1	uG/L	
Pws ID: 3667012				
Name: TABOR WATER SUPPLY	chloroform	4	uG/L	
City: TABOR	bromodichloromethane	5	uG/L	
Date Collected: 09/21/87	dibromochloromethane	5	uG/L	
	bromoform	1	uG/L	
Pws ID: 8670701				
Name: POWESHIEK WATER ASSOCIATION	chloroform	20	uG/L	
City: TAMA	bromodichloromethane	5	uG/L	
Date Collected: 11/02/87	dibromochloromethane	4	uG/L	
	bromoform	1	uG/L	
Pws ID: 8670013				
Name: TAMA WATER SUPPLY	2_4_d	0.32	uG/L	
City: TAMA	chloroform	1	uG/L	
Date Collected: 06/15/87	bromodichloromethane	1	uG/L	
Pws ID: 1479015				
Name: TEMPLETON WATER SUPPLY	chloroform	6	uG/L	
City: TEMPLETON	bromodichloromethane	7	uG/L	
Date Collected: 01/05/87	dibromochloromethane	5	uG/L	
Pws ID: 3080016				
Name: TERRIL MUNI WATERWORKS	No Contaminants Detected			
City: TERRIL				
Date Collected: 02/02/87				
Pws ID: 3080016 Repeat				
Name: TERRIL MUNI WATERWORKS	chloroform	14	uG/L	
City: TERRIL	bromodichloromethane	6	uG/L	
Date Collected: 08/23/87	dibromochloromethane	3	uG/L	

Public Water Supply Compounds above Detection Limits

Pws ID: 9271060				
Name: WASHINGTON WATER DEPARTMENT	No Contaminants Detected			
City: WASHINGTON				
Date Collected: 01/30/87				
Pws ID: 1880073				
Name: WASHTA WATER SUPPLY	chloroform	5	uG/L	
City: WASHTA	bromodichloromethane	5	uG/L	
Date Collected: 02/23/87	dibromochloromethane	3	uG/L	
Pws ID: 0790074				
Name: WATERLOO WATER WORKS	chloroform	2	uG/L	
City: WATERLOO	bromodichloromethane	4	uG/L	
Date Collected: 08/20/87	dibromochloromethane	4	uG/L	
	bromoform	1	uG/L	
Pws ID: 3376001				
Name: WAUCOMA WATER SUPPLY	chloroform	1	uG/L	
City: WAUCOMA	p_m_xylene	1	uG/L	
Date Collected: 07/13/87				
Pws ID: 2573080				
Name: WAUKEE WATER SUPPLY	No Contaminants Detected			
City: WAUKEE				
Date Collected: 11/18/86				
Pws ID: 0390082				
Name: WAUKON WATER DEPT	chloroform	1	uG/L	
City: WAUKON	bromodichloromethane	1	uG/L	
Date Collected: 06/18/87	dibromochloromethane	1	uG/L	
Pws ID: 0990085				
Name: WAVERLY WATER DEPARTMENT	chloroform	2	uG/L	
City: WAVERLY	bromodichloromethane	4	uG/L	
Date Collected: 04/23/87	dibromochloromethane	5	uG/L	
	bromoform	1	uG/L	
Pws ID: 4490091				
Name: WAYLAND WATER SUPPLY	No Contaminants Detected			
City: WAYLAND				
Date Collected: 01/26/87				
Pws ID: 2178092				
Name: WEBB WATER SUPPLY	No Contaminants Detected			
City: WEBB				
Date Collected: 04/13/87				
Pws ID: 5491093				
Name: WEBSTER MUNICIPAL WATER WORKS	No Contaminants Detected			
City: WEBSTER				
Date Collected: 07/20/87				

Public Water Supply Compounds above Detection Limits

Pws ID:	5394020			
Name:	WYOMING WATER SYSTEM	No Contaminants Detected		
City:	WYOMING			
Date Collected:	11/18/86			
Pws ID:	3980040			
Name:	YALE WATER SUPPLY	chloroform	5	uG/L
City:	YALE	bromodichloromethane	2	uG/L
Date Collected:	07/22/87	dibromochloromethane	1	uG/L
Pws ID:	3980040 Repeat			
Name:	YALE WATER SUPPLY	No Contaminants Detected		
City:	YALE			
Date Collected:	08/04/87			
Pws ID:	1383001			
Name:	YETTER MUNICIPAL WATER SUPPLY	chloroform	1	uG/L
City:	YETTER			
Date Collected:	11/24/86			
Pws ID:	8880041			
Name:	ZEARING WATER DEPARTMENT	chloroform	22	uG/L
City:	ZEARING	bromodichloromethane	1	uG/L
Date Collected:	08/24/87			

inadvertence, surprise, excusable neglect or unavoidable casualty. The motion must be filed promptly after the discovery of the grounds thereof, but in no case shall the motion be filed more than ten days after receipt of the order.

7.9(5) Appeal of denial of motion to set aside default.

(a) The exclusive remedy for an order based on default shall be a timely motion to set aside default and if denied, followed by an appeal to the agency having jurisdiction of the matter. The appeal is limited to the grounds for denial of the motion to set aside default. Review is limited to whether the denial of the motion was arbitrary or capricious and whether there is a showing of good cause to set aside default due to mistake, inadvertence, surprise, excusable neglect or avoidable casualty.

(b) Upon a finding by the agency of good cause, the default shall be set aside. The hearing shall be completed, with proper notice, before appeal on the subject matter of the case shall be permitted.

561--7.10(17A, 455A) Prehearing procedures.

7.10(1) Motions.

a. General. All motions, except those made orally on the record during a hearing, shall be in writing and shall state with particularity the grounds therefor, shall set forth the relief or order sought, and shall be filed with the presiding officer and contemporaneously served upon all parties.

b. Response to motions. Any party may file a response to any written motion within ten days after service of such motion, except as otherwise provided by the presiding officer. Failure to file a response within the designated period may be deemed a waiver of objection to the granting of motion.

c. Disposition. The presiding officer shall rule on a motion after the designated time for response has expired. A motion involving separate grounds or parts shall be disposed of by separate ruling on each and shall not be sustained or overruled generally.

7.10(2) Discovery.

a. In general. The discovery procedures available to parties in civil actions are available to parties.

b. Departmental records in general.

(1) The records of the department are available for public inspection, as required by Iowa Code chapter 22 and as provided in 571--Chapter 2, IAC.

(2) Except as provided in paragraph "c" of this subrule, identifiable departmental records that are not available for public inspection but that are discoverable and relevant to disputed material facts shall, upon request, promptly be made available to a party. However, such records may be protected from further disclosure by order of the presiding officer.

c. Prior statements or reports of witnesses. When a party relies on a witness who has made prior statements or reports with respect to the subject matter of the witness' testimony, it shall, upon request, make such statements or reports available to a party for use on cross-examination unless such statement is confidential under 561--Chapter 2. If the statement or report is confidential under 561--Chapter 2, it may be made available, but it may be made subject to a protective order.

d. Disclosure of evidence and witnesses. At a prehearing conference or within some reasonable time set by the presiding officer prior to the hearing, each party shall make available, upon request, to the other parties the names of expert and other witnesses the party expects to call, together with a brief narrative summary of their expected testimony and a list of all documents and exhibits which the party expects to introduce into evidence. Thereafter,

party is represented by counsel or other representative. It should be the purpose of the presiding officer to assist to the extent necessary any party who appears without a representative to allow the party to fairly present evidence, testimony and arguments on the issues.

7.14(4) Attendance and participation of the public. Every hearing before an agency of the department or a hearing officer or appeal board shall be open to the public.

7.14(5) Recording of hearing.

a. Method of recording. Oral proceedings in connection with a hearing in a case shall be recorded either by mechanized means or by certified shorthand reporters. Parties requesting that the hearing be recorded by certified shorthand shall bear the costs.

b. Transcription. Oral proceedings in connection with a hearing in a case or any portion of the oral proceedings shall be transcribed at the request of any party with the expense of the transcription charged to the requesting party.

c. Copies of tapes of oral proceedings may be obtained from the presiding officer at the requestor's expense.

d. Retention time. The recording or stenographic notes of oral proceedings or the transcription thereof shall be filed and maintained by the department for at least five years from the date of the decision.

7.14(6) Fees. Each party bears all costs and expenses, including fees, for its own witnesses.

7.14(7) Failure to appear. If a party fails to appear after proper service of notice of hearing, the presiding officer may adjourn the hearing, or may proceed with the hearing and make a proposed decision in the absence of the party. Adjournment may be granted by the presiding officer on the presiding officer's own motion in the interest of justice.

7.14(8) Evidence.

a. Admissibility in general. Evidence that is relevant and material shall be admitted unless it is unduly repetitious. Relevant and material evidence may be admitted even though inadmissible in a jury trial. Evidence not provided to a party upon request, upon issuance of a subpoena, through discovery, pre-hearing procedures, or during informal procedures shall not be admissible by the party who failed to provide the evidence at the hearing unless it is necessary to avoid a manifest injustice.

b. Privilege. The rules of privilege recognized by law shall be given effect.

c. Objections. If a party objects to admission or rejection of any evidence or the limitation of the scope of any examination or cross-examination, the party shall state briefly the grounds for such objection. The objection, the ruling thereon, and the reasons for the ruling shall be noted in the record.

d. Offer of proof. Whenever evidence is deemed inadmissible, the party offering such evidence may make an offer of proof which shall be noted in the record. The offer of proof for excluded oral testimony shall consist of a brief statement describing the nature of the evidence excluded. If the evidence excluded consists of a document or exhibits, it shall be inserted in the record. In the event that the agency decides that the presiding officer's ruling in excluding the evidence was erroneous and prejudicial, the hearing may be reopened to permit the taking of such evidence or, where appropriate, the agency may evaluate the evidence and proceed to a final decision.

e. Verification. Subject to paragraphs "a" to "d", when a hearing will be expedited, and the interests of the parties will not be prejudiced

7.17(1) Stay of order. A person named in an emergency order may request a stay of the order by contacting the director by telephone or by delivery of a written request for stay to the department.

a. Upon receipt of a request for stay, the director shall schedule a hearing to take place within five days of receipt of the request or such longer time as agreed upon by the appellant. The person requesting the stay shall be notified of the time and place of the hearing.

b. The scope of the hearing on a request for stay shall be limited to, and the decision whether to grant a stay shall be based upon, the following factors:

(1) Will the requestor suffer irreparable injury if a stay is not granted,

(2) Is the requestor likely to prevail on the merits when the appeal of the order is heard,

(3) Where lies the public interest, and

(4) Is the rule or statute upon which the order is founded clearly invalid.

c. The decision to grant or deny a stay shall conform with 7.15(2) of these rules.

7.17(2) Decision on merits. When agreed to by the parties, the appeal of an emergency order may be decided based upon the evidence presented at the hearing for stay. Otherwise, a hearing on the merits shall proceed in accordance with 7.7(17A, 455A) to 7.15(17A, 455A) of these rules.

These rules are intended to implement Iowa Code sections 17A.3 and 455A.

_____

Date

_____

Larry J. Wilson, Director

(EP7.MIN/sc)

A. Complete and submit preliminary Engineering Report March, 1987.

B. Complete and Submit Construction Plans and Specifications November, 1987.

C. Bid letting and Contract Award February, 1988.

D. Complete Construction July 1, 1988.

6. The Department approved Wapello's Plan of Action on October 1, 1986.
(Department Exhibit E)

7. A Department inspection report dated December 17, 1986 noted that while the lagoons are to be operated on a storage/drawdown method, because of I/I (influent/inflow) they have discharged continuously for most of 1986. An effluent sample was taken and analyzed and concentrations were well within permit limitations.
(Department Exhibit F; Testimony of Edward Moreno)

8. On February 19, 1987 an NPDES permit, no. 58-79-0-01, was issued to the City of Wapello for the discharge from the Wapello Waste Stabilization Lagoon. A Compliance Implementation Schedule was incorporated into the NPDES permit which required Wapello to complete certain phases of the construction under the Plan of Action by March 31 and November 30, 1987 and February 28 and July 1, 1988. The permit also imposed interim effluent limits of 45 CBOD5(30-day average), 70 CBOD5(7 day ave), 80 Suspended solids (30 day ave.) and 120 SS (7 day average).
(Department Exhibit Q)

9. On May 8, 1987 Wapello appealed the implementation schedule to the Department. The Department denied Wapello's request for an evidentiary hearing on the grounds of untimely appeal.
(Department Exhibit S)

10. The Wapello Wastewater Treatment System was inspected by the Department on May 19, 1987. The inspection report noted two violations of the NPDES permit: failure to record all effluent flows and failure to report bypassing on the Monthly operation Reports (MOR). The inspection report also noted that Wapello had requested an administrative hearing to appeal the need to proceed with the approved Plan of Action and that the city's engineer contends that the wastewater treatment facility is eligible for "equivalent to secondary" classification.
(Department Exhibit H)

11. Standard Secondary Effluent Limits are 25 CBOD5 mg/ liter for 30 day average and 80 mg/l Suspend Solids (SS) for the 30 day average. Treatment Equivalent to Secondary Treatment effluent limits for this facility would be 40 CBOD mg/ liter for 30 day average and the same limits as standard for suspended solids.

12. A review of Wapello's monthly operating reports for the

part of the treatment process, and
(2) Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

3. 567 Iowa Administrative Code 62.3(3) provides:

62.3(3) Treatment equivalent to secondary treatment. This subrule describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment in terms of the pollutant measurements CBOD5, SS and pH. Treatment works shall be eligible at any time for consideration of effluent limitations described for treatment equivalent to secondary treatment if:

a. The CBOD5 and SS effluent concentrations through proper operation and maintenance of the treatment works exceed the minimum level of the effluent quality set forth in 62.3(1) "a" and 62.3(1) "b"; and

b. A trickling filter or waste stabilization pond is used as the principal process; and

c.The treatment works provide significant biological treatment of municipal wastewater; and

d. The facility was not constructed since January 1, 1972, in order to achieve design effluent limits set forth in 62.3(1) "a,""b", and "c" or predecessor rules on secondary treatment. An eligible trickling filter or waste stabilization pond may have undergone an upgrade to achieve the effluent requirements specified in this subrule. Nothing in this subrule shall be construed to allow a facility to circumvent the design standards of chapter 64 in the replacement or construction of the individual treatment units; and

e. The treatment works is one that does not receive organic or hydraulic loadings which prevent the facilities from consistently complying with 62.3(3)"f,""g," and "h."

All requirements for the specified pollutant measurements in paragraphs "f,""g," and "h" following in this subrule shall be achieved except as provided for above in 62.3(2) or paragraph "i" of this subrule below.

f. CBOD5 limitations:
(1) The thirty (30)-day average shall not exceed 45mg/l.
(2) The seven (7)-day average shall not exceed 60 mg/l.
(3) The thirty (30)-day average percent removal shall not be less than 65 percent (65%).

g. SS limitations. Except where SS values have been adjusted in accordance with subrule
62.3(2), paragraph "c" above:

(1) The thirty (30)-day average shall not exceed 45 mg/l.
(2) The seven (7)-day average shall not exceed 65 mg/l.
(3) The thirty (3)-day average percent removal shall not be less than 65 percent (65%).

h. pH. The requirements of above subrule 62.3(1), paragraph "c," shall be met.

i. Permit adjustments. More stringent limitations are required if the thirty (30)-day average and seven (7)-day average CBOD5 and SS effluent values that could be achievable

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES

In The Matter Of:	)	DIA No. NHS 880066
	)	
City of Wapello	)	
Waste Water Facility	)	
No. 58-79-0-01	)	BRIEF OF THE CITY OF WAPELLO

COMES NOW the City of Wapello and submits its brief in support of its petition pursuant to the directions of the hearing officer and following hearing on October 27, 1987.

I. STATEMENT OF FACTS

The City of Wapello, Iowa, owns and operates waste water treatment Facility No. 58-79-0-01. The City holds NPDES Permit No. 58-79-0-01 which governs the operation of this facility. Waste water treatment is provided for the City by a two cell waste stabilization lagoon. The lagoon system was constructed in 1968. Waste water from domestic and commercial sources in the City are collected and transported to the lagoon in separate sanitary and combined sanitary/storm water sewers, two main pumping stations and force main.

The system was originally designed for a nominal detention time of sixty (60) days at a flow rate of 450,000 gallons per day. This design and system has been approved beginning in 1968 by the Iowa Department of Natural Resources (DNR) and the U. S. Environmental Protection Agency (EPA) or their predecessors. This system has never been designed for a 180 day detention period.

Section 304 (d) (4) of the Clean Water Act (The Federal Water Pollution Control Act of 1972, 33 U.S.C.A. 1251 et. seq., as amended by

What was not fully developed at the hearing but could offer a very logical explanation for the lack of understanding by DNR officials as to the equivalent to secondary limitations would be the likelihood that very few, if any, cities can meet the eligibility requirements for these relaxed standards. IAC 567-62.3 (3) sets forth the eligibility requirements for facilities to be considered under the equivalent to secondary limitations. It is very unlikely that any city can meet items 62.3 (3) (a) - (e) as does the City of Wapello. This is because the unique nature of the City of Wapello in having a system constructed in 1968 and the special circumstances of having a combined storm water and sanitary sewage system (this special consideration is addressed in Section 62.3 (2)). I would surmise DNR officials in the State of Iowa have not had to deal with this equivalent to secondary eligibility before it being addressed by the City of Wapello. Therefore, they cannot fully explain the eligibility requirements nor more importantly the calculations devised for determining the effluent limitations for those treatment facilities that fall within the equivalent to secondary limitations.

III. CONSTITUTIONALITY OF ADMINISTRATIVE ORDER PRIOR TO COMPLIANCE DATE

Administrative Order 87-WW-48 deals with the alleged failure of the City of Wapello to maintain the compliance schedule for its "plan of action". This plan was designed so the City can supposedly meet the final effluent limitations of its NPDES permit by July 1, 1988 as per the EPA mandate. However, if the City can qualify for the more relaxed

The key to analyzing the administrative rules as they pertain to treatment equivalent to secondary would appear to be an interpretation of the words "consistently complying" as set forth in Section 62.3 (3) e, and the words "consistently achievable" as set forth in Section 62.3.(3) It appears clear to the City this is defined to mean the 95th percentile of the 30 day average of effluent quality achieved by the facility in a period of at least two years excluding upsets and other unusual conditions. The City has interpreted this to mean that the CBOD and SS effluent limitations established for a facility eligible for treatment equivalent to secondary would be established by calculating this 95th percentile. This number cannot be greater than the CBOD limitation of 45 mg./l. thirty day average and SS limitation of 80 mg./l. thirty day average as set forth in Section 567-62.3 (3) f and g (except as adjusted by Section 62.3 (2) for combined sewers and waste stabilization ponds).

The Department went through a series of calculations and presented testimony indicating these averages for the City of Wapello based upon the thirty months of input data from January 1, 1985 through June 30, 1987 indicated a CBOD (as converted from a BOD level) of 44 mg./l. thirty day average and an SS of 79 mg./l. thirty day average. Steve Williams, an Environmental Specialist with DNR, attempted to present testimony as to how these calculations were achieved but admitted quite frankly he did not understand the program and all he did was punch in the numbers. He was the only DNR official willing to admit that the 95th percentile meant exactly what most people think it means--compliance

adversely affect the water quality in the Iowa River. And in essence, is that not the key consideration to be addressed?

Finally, a couple of brief points about the statistics without belaboring the point. The statistics come into play in two areas. First, as everyone has conceded, under any set of numbers and any of the statistical methods discussed the City meets the criteria of Section 62.3 (3) a. In other words, the lagoon system cannot be expected to consistently meet "standard secondary" requirements.

Secondly, the statistics have some bearing in considering meeting the criteria of Section 62.3 (3), sub-section c and e. The background documents defined "consistently" as the 95th percentile and also in many references defined "significant" as 65 percent removal of BODs. (for example see Department's Exhibit P, page 63).

The Department, in both of their analyses, (the 30 month and five year) did not input actual influent concentrations, but rather used an arbitrary value of 200 mg./l. in all cases. They indicated at the informal hearing that this was because they were conceding the City met the criteria of Section 62.3 (2) a, due to our combined sewer system and that an attainable percentage removal level can therefore not be defined as we contend. In any case, the percent removal figures in the Department's analysis have no meaning because of the arbitrary influent concentration input.

Inputting the actual influent concentrations shows that on an average annual basis, the City has achieved an 81 plus percent removal

Public Water Supply — Compounds above Detection Limits

Pws ID:	1370000			
Name:	ROCKWELL CITY WATER SUPPLY	chloroform	7	uG/L
City:	ROCKWELL CITY	bromodichloromethane	25	uG/L
Date Collected:	04/27/87	dibromochloromethane	33	uG/L
		bromoform	14	uG/L
Pws ID:	7420022			
Name:	RODMAN WATER SYSTEM	No Contaminants Detected		
City:	RODMAN			
Date Collected:	04/22/87			
Pws ID:	0370001			
Name:	ROLAND WATER SUPPLY	atrazine	0.47	uG/L
City:	ROLAND			
Date Collected:	04/21/87			
Pws ID:	7639002			
Name:	ROLFE WATER SUPPLY	No Contaminants Detected		
City:	ROLFE			
Date Collected:	04/27/87			
Pws ID:	4475001			
Name:	ROME WATER SUPPLY	atrazine	0.64	uG/L
City:	ROME	bladex	1.40	uG/L
Date Collected:	08/18/87	chloroform	24	uG/L
		bromodichloromethane	7	uG/L
		dibromochloromethane	3	uG/L
Pws ID:	6279003			
Name:	ROSE HILL WATER SUPPLY	chloroform	52	uG/L
City:	ROSE HILL	bromodichloromethane	8	uG/L
Date Collected:	08/25/87	dibromochloromethane	6	uG/L
		bromoform	1	uG/L
Pws ID:	9980004			
Name:	ROWAN MUNI WATER SUPPLY	chloroform	4	uG/L
City:	ROWAN			
Date Collected:	01/26/87			
Pws ID:	2166006			
Name:	ROYAL MUNI WATER UTILITIES	chloroform	2	uG/L
City:	ROYAL	bromodichloromethane	1	uG/L
Date Collected:	04/20/87	p_m_xylene	1	uG/L
		o_xylene	2	uG/L
Pws ID:	3440007			
Name:	RUDD WATERWORKS	No Contaminants Detected		
City:	RUDD			
Date Collected:	01/12/87			

Public Water Supply

Compounds above Detection Limits

Pws ID: 9770004
Name: SIOUX CITY WATER SUPPLY
City: SIOUX CITY
Date Collected: 11/17/86

chloroform	14	uG/L
bromodichloromethane	20	uG/L
dibromochloromethane	14	uG/L
bromoform	3	uG/L

Pws ID: 1175056
Name: SIOUX RAPIDS WATER DEPT
City: SIOUX RAPIDS
Date Collected: 04/13/87

alachlor	0.48	uG/L
atrazine	3.50	uG/L
bladex	2.50	uG/L
dual	2.90	uG/L
chloroform	1	uG/L
bromodichloromethane	2	uG/L
dibromochloromethane	3	uG/L
bromoform	3	uG/L

Pws ID: 8580067
Name: SLATER MUNI WATER DEPT
City: SLATER
Date Collected: 07/21/87

No Contaminants Detected

Pws ID: 8580067 Repeat
Name: SLATER MUNI WATER DEPT
City: SLATER
Date Collected: 03/24/87

chloroform	16	uG/L
bromodichloromethane	7	uG/L
dibromochloromethane	1	uG/L

Pws ID: 9780050
Name: SLOAN WATER SUPPLY
City: SLOAN
Date Collected: 11/18/86

chloroform	26	uG/L
bromodichloromethane	15	uG/L
dibromochloromethane	4	uG/L

Pws ID: 9783060
Name: SMITHLAND WATER SUPPLY
City: SMITHLAND
Date Collected: 05/21/87

No Contaminants Detected

Pws ID: 6749061
Name: SOLDIER WATER SUPPLY
City: SOLDIER
Date Collected: 11/19/86

No Contaminants Detected

Pws ID: 5282062
Name: SOLON WATER DEPT
City: SOLON
Date Collected: 06/15/87

chloroform	6	uG/L
bromodichloromethane	1	uG/L
p m_xylene	1	uG/L

Pws ID: 1381073
Name: SOMERS WATER WORKS
City: SOMERS
Date Collected: 11/13/86

No Contaminants Detected

Public Water Supply — Compounds above Detection Limits

Pws ID:	5000017			
Name:	THOMPSON WATER WORKS	chloroform	5	uG/L
City:	THOMPSON			
Date Collected:	11/12/86			
Pws ID:	4000018			
Name:	THOR WATER WORKS	chloroform	1	uG/L
City:	THOR			
Date Collected:	11/13/86			
Pws ID:	1701019			
Name:	THORNTON WATER SUPPLY	No Contaminants Detected		
City:	THORNTON			
Date Collected:	02/23/87			
Pws ID:	3671021			
Name:	THURMAN WATER WORKS	chloroform	1	uG/L
City:	THURMAN			
Date Collected:	01/06/87			
Pws ID:	5200021			
Name:	TIFFIN WATER SUPPLY	chloroform	1	uG/L
City:	TIFFIN			
Date Collected:	08/24/87			
Pws ID:	1000022			
Name:	TIPTON WATER SUPPLY	chloroform	4	uG/L
City:	TIPTON	bromodichloromethane	1	uG/L
Date Collected:	08/20/87			
Pws ID:	5570026			
Name:	TITONKA WATER SUPPLY	chloroform	1	uG/L
City:	TITONKA	p_m_xylene	1	uG/L
Date Collected:	02/23/87			
Pws ID:	0670027			
Name:	TOLEDO WATER SUPPLY	No Contaminants Detected		
City:	TOLEDO			
Date Collected:	08/30/87			
Pws ID:	4300029			
Name:	TRACY WATER SUPPLY	chloroform	4	uG/L
City:	TRACY	bromodichloromethane	6	uG/L
Date Collected:	02/03/87	dibromochloromethane	3	uG/L
Pws ID:	0001030			
Name:	TRAER MUNI WATER PLANT DBA	chloroform	1	uG/L
City:	TRAER	bromodichloromethane	1	uG/L
Date Collected:	11/10/86	dibromochloromethane	2	uG/L

Public Water Supply — Compounds above Detection Limits

Pws ID: [illegible]				
Name: WEBSTER CITY WATER SUPPLY		No Contaminants Detected		
City: WEBSTER CITY				
Date Collected: 08/20/87				
Pws ID: 5170006				
Name: WELLMAN MUNICIPAL WATERWORKS		bromoform	1	uG/L
City: WELLMAN				
Date Collected: 07/21/87				
Pws ID: 3000097				
Name: WELLSBURG WATER SUPPLY		p_m_xylene	1	uG/L
City: WELLSBURG				
Date Collected: 08/22/87				
Pws ID: 5802098				
Name: WESLEY WATER SUPPLY		No Contaminants Detected		
City: WESLEY				
Date Collected: 12/29/86				
Pws ID: 7470099				
Name: WEST BEND WATER DEPT		No Contaminants Detected		
City: WEST BEND				
Date Collected: 08/26/87				
Pws ID: 7470099 Repeat				
Name: WEST BEND WATER DEPT		No Contaminants Detected		
City: WEST BEND				
Date Collected: 10/06/87				
Pws ID: 1694000				
Name: WEST BRANCH WATER WORKS		atrazine	1.10	uG/L
City: WEST BRANCH		dual	1.10	uG/L
Date Collected: 07/21/87		chloroform	7	uG/L
		bromodichloromethane	2	uG/L
Pws ID: 2900002				
Name: WEST BURLINGTON MUNI WTR SUPPL		No Contaminants Detected		
City: WEST BURLINGTON				
Date Collected: 08/30/87				
Pws ID: 9281006				
Name: WEST CHESTER MUNI WTR SUPPLY		chloroform	1	uG/L
City: WEST CHESTER				
Date Collected: 07/13/87				
Pws ID: 7700007				
Name: WEST DES MOINES WATER WORKS		No Contaminants Detected		
City: WEST DES MOINES				
Date Collected: 08/20/87				

IOWA DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 15 DECISION

NOTICE OF INTENDED ACTION: CHAPTER 7 - CONTESTED CASE PROCEDURES

The Commission is requested to approve the filing of a Notice of Intended Action to adopt the attached rules regarding contested case procedures. The Director has recently filed these rules as proposed DNR rules, and the Natural Resource Commission has proposed to adopt these by reference. As with other procedural rules of the department, our intent is to place the complete text of the rules in Part 561 of the Iowa Administrative Code, which includes the general DNR rules. The Commissions and other rulemaking entities of the departement concurrently adopt them simply by cross-reference. These particular rules were modelled in large part after the WAMM rules on this subject, under which the department is still operating for contested cases within the Environmental Protection Division.

Mike Murphy
Government Liaison Bureau
March 8, 1988

88068DNR0006

witnesses, documents, or exhibits may be added and narrative summaries of expected testimony amended upon motion by a party. However, witnesses, documents or exhibits may be added following a prehearing conference held in accordance with subrule 7.10(4) only if the moving party can show that they were not readily identifiable with reasonable diligence prior to the prehearing conference and that the addition is necessary to prevent manifest injustice.

7.10(3) Subpoenas. Subpoenas shall be issued to a party on request after commencement. Requests shall be made to the presiding officer.

7.10(4) Prehearing conference.

a. Matters considered. After filing of the pleadings, the presiding officer may, and shall upon the request of one of the parties, direct the parties to appear at a specified time and place before the presiding officer for a prehearing conference to consider, so far as is applicable to the particular hearing:

(1) The possibility or desirability of waiving any provisions of this chapter or of Iowa Code chapter 17A by written stipulation representing an informed, mutual consent;

(2) The necessity or desirability of amending pleadings;

(3) Agreeing to the admission of facts, documents or records not controverted, to avoid unnecessary introduction of evidence;

(4) Limiting the number of witnesses;

(5) Settling on facts of which the presiding officer is to be asked to take official notice;

(6) Stating and simplifying the factual and legal issues to be decided in the contested case;

(7) The procedure at the hearing;

(8) Such other matters as may aid, expedite or simplify the disposition of the proceeding.

b. Stipulations. Since stipulations are encouraged, it is expected and anticipated that the parties proceeding to a hearing will stipulate to evidence to the fullest extent to which complete or qualified agreement can be reached, including all material facts that are not or should not fairly be in dispute.

c. Privilege. Facts disclosed in the course of the prehearing conference are privileged and, except by agreement, shall not be used for or against participating parties either before the hearing, during the hearing, or elsewhere unless fully substantiated by other evidence.

d. Order or statement of agreement. Any action taken at the prehearing conference shall be recorded in an appropriate order, unless the parties enter upon a written stipulation as to such matters or agree to a statement thereof made on the record by the presiding officer.

e. Objections. When an order is issued at the termination of the prehearing conference, a reasonable time shall be allowed to the parties to present objections on the ground that it does not fully or correctly embody the agreement at such conference. Thereafter, the terms of the order or modification thereof shall determine the subsequent course of the proceedings relative to matters it includes, unless modified to prevent manifest injustice.

7.10(5) Intervention.

a. Petition. A person who may be aggrieved or adversely affected by the disposition of a case may file a petition for leave to intervene in that case. The petition shall set forth the grounds for the proposed intervention, the position and interest of the petitioner, and the likely impact intervention

substantially, any part of the evidence may be required to be submitted in verified form. With the approval of the presiding officer, a witness may insert into the record, as testimony, statements of fact or opinion prepared by the witness or written answers to interrogatories, or may submit as an exhibit the prepared statement of the witness provided that the statements or answers must not include legal arguments. Before any statement or answer is read or admitted into evidence, the witness shall deliver to the presiding officer and opposing party a copy of it. The admissibility of the evidence contained in the statement shall be subject to the same rules as if the testimony were produced in the usual manner and the witness shall be subject to oral cross-examination on the contents of the statements. Approval for this procedure may be denied when it appears to the presiding officer that the memory or demeanor of the witness is of importance.

f. Documentary evidence. Documentary evidence may be received in the form of copies or excerpts if the original is not readily available. Upon request, parties shall be given an opportunity to compare the copy with the original, if available.

g. Examination and cross-examination. Witnesses at the hearing shall be examined orally, under oath. Witnesses at the hearing, or persons whose testimony has been submitted in written form, shall be subject to cross-examination by any parties as necessary for a full and true disclosure of facts. The presiding officer may limit the examination or cross-examination or both when necessary for orderly presentation of evidence.

h. Official notice. Official notice may be taken of all facts of which judicial notice may be taken and of other facts within the specialized knowledge of the agency. Parties shall be notified at the earliest practicable time, either before or during the hearing, or by reference in preliminary reports, preliminary decisions or otherwise, of the facts proposed to be noticed, and their source, including any staff memoranda or data. The parties may contest such facts before decision is announced.

i. Evaluation of evidence. The agency's experience, technical competence, and specialized knowledge may be utilized in evaluating the evidence.

7.14(9) Conduct at hearings. All persons shall conduct themselves in a courteous and dignified manner. Attorney's conduct is subject to the requirements of Disciplinary Rule DR 7-106 and Ethical Considerations EC 7-19 to EC 7-39. Contemptuous conduct is grounds for removal from the hearing.

561--7.15(17A, 455A) Posthearing procedures and orders.

7.15(1) Filing by parties of briefs and proposed findings. Within thirty days after the last evidence is taken, each party may file with the presiding officer proposed findings of fact, conclusions of law, and a proposed order or decision, complying with 7.15(2), and a brief in support thereof. A copy of each such document shall be served upon each other party. Each party may, within the same period, file with the presiding officer a brief concerning any relevant matters at the hearing. Within twenty days thereafter, each party may file a brief which takes specific exception to matters contained in an opposing brief or which contains alternative findings of fact, conclusions of law and proposed order. Briefing schedule, including waiver of briefs, shall be determined at the close of the hearing.

7.15(2) Final decision or order.

a. When the agency presides at the reception of evidence, the decision of the agency is a final decision.

b. When the agency does not preside at the reception of evidence, the presiding officer shall make a proposed decision The proposed decision or

IOWA DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 16 DECISION

CONTESTED CASE APPEAL: CITY OF WAPELLO

On July 30, 1987, the Director issued Administrative Order No. 87-WW-48 to the City of Wapello, requiring the City to comply with an implementation schedule for wastewater facility improvements and to pay a $500.00 penalty. The City appealed that order and the matter proceeded to administrative hearing on October 27, 1987. The parties subsequently filed written briefs with the hearing officer, and the hearing officer issued the Proposed Findings of Fact, Conclusions of Law, and Order on January 13, 1988. The decision affirms the Director's Order.

The City has appealed this order to the Commission. The written briefs of the City and the Department, and the Proposed Decision, have been distributed to the Commissioners. The entire record, including hearing tapes and exhibits are available for your review. The attorneys for the City and Department will present oral argument and respond to your questions. You may then affirm the Proposed Decision, or modify or reverse it, substituting your own findings of fact and conclusions of law based on your conclusions from your review of the record and legal argument.

Mike Murphy
Government Liaison Bureau
March 8, 1988

88021DNR0019

period from January 1986 to March 1987 revealed that the Wastewater Treatment Plant exceeded its average flow limitation of .415MGD in June, July, and October, 1986. The maximum flow limitation of .623 MGD was exceeded in February, April, June, July, August, September, October and December, 1986 and March, 1987. The facility is subject to bypassing in wet weather. (Testimony of Edward Moreno; Department Exhibit H,J,K)

13. The city's NPDES permit, no 58-79-0-1, which expired 8-31-87, required the treatment facility to draw down its storage lagoon in the spring and/or fall to take advantage of the higher than average stream flows at those times of the year. This requirement is consistent with the Iowa Wastewater Facilities Design Standards (Chapter 18C) for Wastewater Treatment Ponds which requires controlled discharge facilities do have a storage capacity of 180 days, (18C.5.3). The Wapello Wastewater Treatment Facility was constructed prior to the effective date of the Design Standards. However, Wapello did not appeal the twice per year draw down limitation in its NPDES permit. (Department Exhibit R; Testimony of Edward Moreno)

14. The following table contains the average and maximum days detention time for the Wapello Wastewater Treatment Plant for 1982-1986:

1982	53/26
1983	63.5/42
1984	85/46
1985	92/49
1986	63/24

The city met the average detention time of 60 days for all years shown except 1982. (Department Exhibit I, Testimony of Edward Moreno)

15. The Department notified the City of Wapello that it was not eligible for "equivalent to secondary" classification because the treatment facility is "hydraulically overloaded." (Testimony of Edward Moreno; Department Exhibit B)

16. Wapello did not establish that it provides significant biological treatment of municipal wastewater. Under the rules pertaining to "treatment equivalent to secondary treatment" the thirty (30) day average percent removal shall not be less than 65 percent (65%). Special consideration is allowed for combined sewer systems which may not be able to meet the percentage removal requirements during wet weather. For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage removal can be defined, and if so what the level should be.

One of the department's witnesses testified that Wapello is achieving at least 50% removal. The city's engineer testified that in 1985 and 1986 Wapello achieved 81% and 75% average annual

through proper operation and maintenance of the upgraded or existing treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations. These more stringent limitations shall be maintained and not relaxed unless as specified in subrule 62.3(2)"b."

Effluent concentrations consistently achievable through proper operation and maintenance are:

(1) The 95th percentile value of the thirty (30)-day average effluent quality achieved by the upgraded or existing treatment works in a period of at least two (2) years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and

(2) A seven (7)-day average value equal to 1.5 times the value derived for the thirty (30)-day average above.

This subrule shall only be applied when the existing or upgraded facility has achieved its design organic loading as specified in the most recent construction permit or its accompanying documentation. The determination of the effluent concentration consistently achievable through proper operation and maintenance shall only be based on the effluent quality data following the period when the design organic loading has been achieved.

4. 567 Iowa Administrative Code 62.3(2)(a) provides:

62.3(2) Special considerations.

a. Combined sewers. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under 62.3(1)"a"(3) and 62.3(1)"b"(3), or 62.3(3)"f"(3) and 62.3(3)"g"(3) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage removal level can be defined, and if so. what the level should be.

5. The Department concedes that the City of Wapello satisfies the requirements of 567 I.A.C. 62.3(3)(a)(b) and (d).

6. Findings of Fact number 16 is hereby incorporated as though fully set forth .

7. Much of the testimony at the hearing centered on whether the "treatment works is one that does not receive organic or hydraulic loadings which prevent the facilities from consistently complying with 62.3(3)"f,""g" and "h". The evidence is clear that the city failed to comply with the treatment equivalent to secondary treatment (test) effluent limits in three out of thirty months. Is this consistent compliance? The Department argues that "consistent compliance" is compliance 100% of the time. The city argues that a 95% formula should be utilized in evaluating consistent compliance and that some violations of effluent limits are necessarily anticipated.

the Clean Water Act of 1977, P.L. 95-217, and Municipal Waste Water Treatment Construction Grant Amendments of 1981,P.L. 97-117) established minimum levels of effluent quality attainable by municiapl waste water treatment facilities. The most recent amendment to the Act set a timetable for meeting these effluent limitations of July 1, 1988. Pursuant to the adoption of these rules by the Iowa Department of Natural Resources (DNR), the City of Wapello begain working with DNR officials to submit a "plan of action" to define how the City of Wapello intended to meet these effluent limitations from its waste water treatment facility. Apparently, the plan of action was submitted June 18, 1986 and accepted by the Department on October 1, 1986.

It is interesting to note that the final regulations implementing this legislation were not adopted and become part of the Iowa Administrativ Code until December 3, 1986. As will be discussed further below, this is particularly true as it pertains to the so-called relaxed limitations for those facilities that deserve "special considerations" for treatment levels defined as "treatment equivalent to secondary."

The intent of the Federal Water Pollution Control Act was to require all municipal waste water treatment facilities to meet final effluent limitations by July 1, 1988. The specific effluent limitations applicable to each facility depends upon the type of facility and whether it can fall within certain "specific considerations" that will be more further discussed below.

It is the contention of the Department that the City of Wapello has violated the implementation schedule approved by the Department in its

treatment standards of equivalent to secondary under Chapter 567-62.3 (3) this "plan of action" might not even be necessary--or in the alternative, it can be down graded so as not to require the costly modifications to the City's treatment facility to meet the standard secondary effluent limitations.

Under Chapter 567-62.3 (3) treatment works shall be eligible at anytime for consideration of effluent limitations for treatment equivalent to secondary. As noted throughout the hearing, this has become the key analysis as it pertains to the City of Wapello.

It is the contention of the City that it cannot be held in non-compliance when it still has some eight or nine months in which to meet or fall within the eligibility requirements of Section 567-62.3 (3) for treatment equivalent to secondary. Taking such administrative action without allowing the City an opportunity to comply prior to July 1, 1988 is a depriviation of due process and in violation of the Fifth and Fourteenth Amendments to the Constitution of the United States and Article I, Sec. 9 of the Constitution of the State of Iowa.

IV. CONGRESSIONAL HISTORY AND EPA GUIDANCE MANUAL

It is noted earlier, the regulations applicable to the waste water treatment facility of the City of Wapello are merely adoption of rules mandated by the Federal Water Pollution Control Act, 33 U.S.C.A., Section 1311. The first definition of secondary treatment effluent limitations was established August 17, 1973. This is well after the Wapello waste water treatment facility was constructed and approved in 1968. The definition of secondary treatment effluent limitations has

95 percent of the time (e.g. 19 months out of 20 or 57 months out of 60). However, he could not explain an SS level of 79 mg./l. thirty day average that was to be the 95th percentile when that number was higher than any of the input data. In other words, it would appear on its face to be more than 100 percent.

The City attempted to clarify this information by presenting testimony of City Engineer Ron Meyer through the assistance of Dr. Bowe the head of the Department of Business and Finance at the University of Iowa and an apparent expert in the area of statistics. Utilizing a 95th percentile of the same thirty months of input data, they reached a thirty day average CBOD of 47.88 mg./l. and an SS average of 70.89 mg./l These would appear to be much more consistent with the input data. Also, these calculations are consistent with the definition of the 95th percenti and its application to the effluent limitations under treatment equivalent to secondary as testified to by City Engineer Ron Meyer.

The conclusion of this analysis is that according to the definition of equivalent to secondary as set forth by the administration rules and interpreted by the City of Wapello, the City has "consistently achieved" effluent limitations within the statutory guidelines 95 percent of the time. Therefore, the treatment facility of the City of Wapello would appear to be eligible for the relaxed effluent limitations of treatment equivalent to secondary.

Maybe more importantly, even under the "strained" interpretations apparently set forth by the Department, the City of Wapello is extremely close to meeting the eligibility requirements of treatment equivalent

of BODs in 1985 and 75 plus percent in 1986, both well above the 65 percent level defined as "significant" in the background documents.

From this standpoint two conclusions can be drawn. First, the City meets the criteria of Section 62.3 (3) c, in that we are providing "significant" biological treatment, a point that I don't recall has ever been in dispute by anyone. Secondly, the data has meaning in regard to Section 62.3 (3) e. Mr. Moreno's phrase "hydraulically overloaded" does not appear in this section. Rather, it says "does not receive organic or hydraulic loadings which prevent the facilities from consistently complying." In argument to Mr. Moreno's position, and as a wrap up to this entire issue, it seems obvious that since the City has been providing "significant" treatment, it could not have been receiving loadings that would prevent it.

WHEREFORE, the City of Wapello prays that Administrative Order No. 87-WW-48 be reversed, and that the City of Wapello be determined to be eligible for consideration of effluent limitations for treatment equivalent to secondary; or, in the alternative, that the City of Wapello be given an opportunity to submit a revised plan of action that is consistent with its eligibility for treatment equivalent to secondary so that its waste water treatment facility can consistently achieve such effluent limitations come July 1, 1988.

Respectfully submitted,

Roger K. Huddle
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Weaver Building
Wapello, Iowa 52653
ATTORNEY FOR CITY OF WAPELLO

cc: Diana L. Hansen
Iowa Department of Natural Resources

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF:	
City of Wapello Wastewater Facility No. 58-79-0-01	Department's Brief DIA No.: NHS 880066

COMES NOW, the Iowa Department of Natural Resources (hereinafter referred to as the Department), the respondent in this matter, and submits the Department's brief.

I. STATEMENT OF THE CASE

The Department issued Administrative Order 87-WW-48 dated July 30, 1987. The Order required the City to meet an implementation schedule for upgrading the City's wastewater treatment facility, to meet final effluent limitations by July 1, 1988 and to pay a penalty of $500. The City of Wapello filed an appeal with the Director of the Department dated August 14, 1987. The Petition of the City filed with the Hearing Officer was dated September 25, 1987 and received by the Department on September 29, 1987. The Department filed an Answer to the Petition on October 19, 1987. Pursuant to a Notice of Hearing dated September 9, 1987 a contested case hearing was held on October 27, 1987.

II. STATEMENT OF FACTS

1. The City of Wapello was notified by a letter dated September 20, 1984 that it was required to submit a plan of action for the City's wastewater treatment facility to the Department within six months. The plan was requested due to the wastewater treatment facility's inadequate effluent quality and failure of the facility to meet permit limitations. (See Department Exhibit A).

The plan of action was requested pursuant to the municipal improvement program. This program was intended to bring municipal wastewater treatment facilities into compliance with the effluent limitations mandated by the federal clean water act by July 1, 1988. Edward Moreno, Field Office 6 Supervisor, testified at the hearing that the plan of action was to identify the treatment facility's deficiencies that would prevent the facility from meeting final effluent limits. The plan was also to address how the City would overcome the deficiencies of its facility in order to meet the federal compliance date and how the City intended to finance the necessary improvements to its treatment facility. The plan of action was also intended to upgrade the

through June 30, 1987. Mr. Meyer arrived at a figure of 48 mg/l for BOD_5 as the 95th percentile (Appellant Exhibit 5).

Although the appellant questioned the reliability of the EPA program and calculations, no evidence was introduced by the appellant to establish that the EPA program was in error or that the BOD_5 results received in Appellant's Exhibit 3 and Department Exhibit T were in error. In fact the result of Appellant's Exhibit 5 for BOD_5 is almost identical to the Department's BOD_5 result as shown by Appellant's Exhibit 3.

12. Ronald Meyer, the City's engineering consultant, admitted that the City is not always meeting the treatment equivalent to secondary limit for $CBOD_5$ of 40 mg/l. Mr. Meyer, in essence, requested that the City be allowed to upgrade its facilities to meet treatment equivalent to secondary treatment standards for $CBOD_5$ rather than standard secondary treatment limitations for $CBOD_5$.

Argument

The Appellant has failed to establish that it meets the criteria found in Department rule 567--62.3(3). Iowa Administrative Code (I.A.C.) for treatment equivalent to secondary treatment and therefore, is ineligible for such treatment. The City is required to upgrade its facility to meet standard secondary treatment limits rather than treatment equivalent to secondary limitations.

The proper application of department rule 567--62.3(3) is the main issue in this proceeding. This rule provides:

62.3(3) Treatment equivalent to secondary treatment. This subrule describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment in terms of the pollutant measurements $CBOD_5$, SS and pH. Treatment works shall be eligible at any time for consideration of effluent limitations described for treatment equivalent to secondary treatment if:

a. The $CBOD_5$ and SS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works exceed the minimum level of the effluent quality set forth in 62.3(1)"a" and 62.3(1)"b"; and
b. A trickling filter or waste stabilization pond is used as the principal process; and
c. The treatment works provide significant biological treatment of municipal wastewater; and
d. The facility was not constructed since January 1, 1972, in order to achieve design effluent limits set forth in 62.3(1)"a,""b," and "c" or predecessor rules on secondary treatment. An eligible trickling filter or waste stabilization pond may have undergone an upgrade to achieve the

Conclusion

The Department maintains that the City has failed to establish that it is eligible for treatment equivalent to secondary treatment effluent limitations and therefore, should be required to upgrade its existing facility to meet standard secondary treatment requirements. The Department requests that the Hearing Officer uphold Administrative Order 87-WW-48, including the $500 administrative penalty.

Respectfully submitted,

Iowa Department of Natural Resources

By: Diana L. Hansen

Diana L. Hansen
Legal Services Section
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, IA 50319

Attorney for the Department

Copy to:

Roger A. Huddle
Attorney for the City of Wapello

I hereby certify that I have this day served the foregoing document upon all parties or attorney for parties of record in this proceeding by mailing by first class mail to each such party or copy thereof, in properly addressed envelope.

Dated at Des Moines, Iowa, this 30th day

of November 1987

By Diana L. Hansen

Department of Natural Resources
Henry A. Wallace Building
Des Moines, Iowa 50319-0034

based on the evidence presented at the hearing the City has not met this burden of proof.

The City engineer testified that hydraulic overloading was given as the reason for the Department's denial of the City's request for treatment equivalent to secondary treatment. He defined hydraulic overloading as significantly exceeding what the facility was designed for and stated that hydraulic overloading should not matter in determining eligibility for this treatment. The engineer in his testimony did not explain or give any adequate engineering justification as to why this facility was not hydraulically overloaded. Additionally, in view of the engineer's statement at the hearing that his plan of action would not allow the facility to meet secondary treatment permits and his prior written statement on page one of the plan of action that the newly designed facility would meet state prescribed effluent standards, any statement by the City's engineer that the facility is not hydraulically overloaded, without adequate written engineering justification to support this conclusion, would be suspect and should be viewed with skepticism.

Numerous exhibits and witness testimony at the hearing established that this facility is subject to bypassing during wet weather. Using the City's engineer's definition of hydraulic overloading as significantly exceeding what the facility was designed for, it is obvious that the facility is hydraulically overloaded since it can not handle all of the flows entering the facility during wet weather. The engineer's plan of action admits that the facility bypasses during wet weather when the influent exceeds the pump capacity.

5. The Petitioner maintained in its brief that the Department's administrative order deprived the City of due process under the state and federal constitutions. First of all, the Department maintains that the City did not raise this issue in its petition and should therefore, be precluded from raising this issue at this time. The Department was not given any notice that this would be an issue at the evidentiary hearing.

Secondly, the Department maintains that even if the Petitioner is allowed to raise this issue at this point in the proceeding, the Petitioner has based this argument upon a misreading of the administrative order. The order found that the City had not complied with the approved plan of action that was included in its NPDES permit by not timely submitting the preliminary engineering report. Violations of NPDES permit

the City clearly can not meet 40 $CBOD_5$. Thus, the City did not meet the criteria for eligibility for Test limits under 62.3(3)"a"-"e". Even ignoring these criteria it can not meet the TEST effluent limit of 40 $CBOD_5$ (45 BOD_5) on even the 95th percentile basis that the city proposes.

The City's brief, page 11, contains a discussion comparing subrule 62.3(3)"e" I.A.C. to subrule 62.3(3)"i". As pointed out previously in this brief, 62.3(3)"e" provides the fifth criteria for determining eligibility for TEST. In this last step of five that the City must meet, the City must establish that hydraulic and organic overloading of its facility do not preclude this facility from meeting the TEST limit for $CBOD_5$ of 40 $CBOD_5$. Department witnesses stated that this facility is hydraulically and organically overloaded and that due to this overloading the facility cannot meet TEST limits at all times. Subrule 62.3(3)"e" refers to "consistly complying" with TEST limits. The Department interprets this to mean compliance with TEST limits at all times. The City appears to interpret this as meaning compliance with TEST limits on a 95th percentile basis. The City then defines 95th percentile as meaning 95 percent of the time. Steve Williams, a Department witness, explained that EPA's determination of 95th percentile for the purpose of calculating TEST permit limits for a facility that previously has been determined eligible for TEST was to be used for a facility that can meet a more stringent limit than 40 $CBOD_5$. He also explained that EPA's computer program, which is used by the Department, was developed to make this 95th percentile determination. Mr. Williams explained that EPA's calculations used various statistical formulas and concepts that take into account the variability of a facility's data to determine the figure that would represent the effluent limit that a facility could meet on a 95th percentile basis. (See Department Exhibit N, page 1, the discussion of what the computer program is designed to calculate, and pages 1-2 of the user's manual). Review of the EPA documents concerning the computer program and the concept of 95th percentile indicates that the term is not meant to be simply 95 percent of the time as proposed by the City. The SS figure obtained by the Department based on 30 months of MOR data for the City was possibly due to the extremely wide variances in SS for this facility. The result obtained was a figure that was calculated to be an effluent figure that the City could meet on a 95th percentile basis. Actually, the SS figure obtained by the computer analysis is not a facility since the SS limit for this waste stabilization facility is set by subrule 567--62.3(2)"c" I.A.C.

wet weather influent flow (as defined in the department's design standards 900—64.2(9)"b." Chapter 14.4.5.1 b) comprised of domestic wastewater plus infiltration plus inflow equals less than 275 gallons per day per capita.

e. Upgraded facilities designed to operate in a split flow mode. The department may substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements in 62.3(1) only (not 62.3(3) provided that the treatment works is designed to split part of the primary treated wastewater flow around the secondary treatment unit(s). The design to accommodate split flow must be approved by the department and consistent with applicable design standards for wastewater treatment facilities. The requirements of 62.3(2)"d" would apply to facilities considered under this subrule. This subrule shall not be considered for facilities eligible for treatment equivalent to secondary treatment under 62.3(3).

Any applicant requesting a permit limit adjustment must include as part of the request an analysis of the I/I sources in the system and a plan for the elimination of all inflow sources such as roof drains, manholes and storm sewer interconnections. Infiltration sources that can be economically eliminated or minimized shall be corrected.

f. Dilution. Nothing in this subrule or any other rule of the department shall be construed to encourage dilution of sewage as a means of complying with secondary treatment effluent standards. Reasonable efforts to prevent and abate infiltration of groundwater into sewers, and prevention or removal of any significant source of inflow, are required of all persons responsible for facilities subject to these standards.

62.3(3) Treatment equivalent to secondary treatment. This subrule describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment in terms of the pollutant measurements $CBOD_5$, SS and pH. Treatment works shall be eligible at any time for consideration of effluent limitations described for treatment equivalent to secondary treatment if:

a. The $CBOD_5$ and SS effluent concentrations consistently achievable through proper operation and maintenance of the treatment works exceed the minimum level of the effluent quality set forth in 62.3(1)"a" and 62.3(1)"b"; and

b. A trickling filter or waste stabilization pond is used as the principal process; and

c. The treatment works provide significant biological treatment of municipal wastewater; and

d. The facility was not constructed since January 1, 1972, in order to achieve design effluent limits set forth in 62.3(1)"a," "b," and "c" or predecessor rules on secondary treatment. An eligible trickling filter or waste stabilization pond may have undergone an upgrade to achieve the effluent requirements specified in this subrule. Nothing in this subrule shall be construed to allow a facility to circumvent the design standards of chapter 64 in the replacement or construction of the individual treatment units; and

e. The treatment works is one that does not receive organic or hydraulic loadings which prevent the facilities from consistently complying with 62.3(3)"f," "g," and "h."

All requirements for the specified pollutant measurements in paragraphs "f," "g," and "h" following in this subrule shall be achieved except as provided for above in 62.3(2) or paragraph "i" of this subrule below.

f. $CBOD_5$ limitations

(1) The thirty-day average shall not exceed 40 mg/l.

(2) The seven-day average shall not exceed 60 mg/l.

(3) The thirty-day average percent removal shall not be less than 65 percent.

g. SS limitations. Except where SS values have been adjusted in accordance with subrule 62.3(2), paragraph "c," above:

(1) The thirty-day average shall not exceed 45 mg/l.

(2) The seven-day maximum shall not exceed 65 mg/l.

(3) The thirty-day average percent removal shall not be less than 65 percent.

h. pH. The requirements of above subrule 62.3(1), paragraph "c" shall be met.

i. Permit adjustments. More stringent limitations are required if the thirty-day average and seven-day average $CBOD_5$ and SS effluent values that could be achievable through proper operation and maintenance of the upgraded or existing treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations. These more stringent limitations shall be maintained and not relaxed unless as specified in subrule 62.3(2)"b."

Effluent concentrations consistently achievable through proper operation and maintenance are:

(1) The 95th percentile value for the thirty-day average effluent quality achieved by the upgraded or existing treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and

(2) A seven-day average value equal to 1.5 times the value derived for the thirty-day average above.

This subrule shall only be applied when the existing or upgraded facility has achieved its design organic loading as specified in the most recent construction permit or its accompanying documentation. The determination of the effluent concentration consistently achievable through proper operation and maintenance shall only be based on the effluent quality data following the period when the design organic loading has been achieved.

[Filed 4/30/86, effective 6/25/86]
[Published 5/21/86]

EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement, 5/21/86.

ARC 6541

WATER, AIR AND WASTE MANAGEMENT[900]

WATER, AIR AND WASTE MANAGEMENT COMMISSION

Pursuant to the authority of Iowa Code sections 455B.105 and 455B.245, the Water, Air and Waste Management Commission amends 900—Chapter 91, "Criteria for Award of Grants," Iowa Administrative Code, governing the state's Priority System for municipal wastewater treatment construction grants. The amend-

Public Participation - statement of Cindy Hildebrand

IOWA AUDUBON COUNCIL

Cindy Hildebrand
Legislative Chair
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515-232-3807

March 21, 1988

STATEMENT REGARDING PROPOSED NEW WAIVER RULE FOR CHANNEL CHANGES

Members of the Environmental Protection Commission, my name is Cindy Hildebrand and I am here today on behalf of the Iowa Audubon Council. We appreciate your giving our organization time on your agenda. I'm here to present our concerns and suggestions regarding possible changes in the way your Commission handles permitless or illegal channel changes.

As I understand it, your concern over this issue was heightened by the Greiner case, which involved a channel change which took place twenty years ago. It was argued that requiring engineering plans after the channel change had been in place for so long was unreasonable. The Commission decided to waive the requirement for engineering plans in that case; and in addition, you are now considering a possible rules change. My understanding of the rules change is that if there were an affidavit that a channel change had taken place a certain number of years ago, that time yet to be determined, the requirement for engineering plans would be waived.

I understand that you have not yet decided whether this rules change will take place, and that you are considering it partly because of a bill in the Legislature which would involve a five-year statute of limitations concerning all floodplain projects. You have pointed out, and we completely agree with you, that the bil in question is a bad idea, and would hamper the authority of your Commission. However, we feel that the proposed rules change is also a bad idea, and that it would also hamper the authority of your Commission. We hope that after considering the issues at stake, you will decide to handle any future problems in this area differently, perhaps with language that I'll suggest.

To review a little background --as you undoubtedly know, the DNR floodplain program suffers in effect from a triple whammy -- it doesn't get any federal funds, it is underfunded and understaffed, and it is often misunderstood. The permit process is sometimes viewed, even in the press, as just troublesome bureaucratic red tape. But the purposes of the floodplain program are to protect lives and property from flood damage and to ensure the wise use, protection, and conservation of the water resources of the state. These purposes are legitimate and necessary, and are part of the Iowa Code.

Section 455B.264 of the Code states in part regarding flood plain projects, "In determining the effect of the proposal, the department shall consider fully its effect on flooding of or flood control for any

facility to eliminate bypassing. (See Department Exhibit S).

2. Despite the Department's request that the City submit a plan of action by February 20, 1985, the actual plan of action was not submitted till much later. The City was granted at least one extension. By a letter dated April 17, 1986, the City was requested to submit the plan of action by May 1, 1986 (Department Exhibit C). The City of Wapello submitted a plan of action on or about June 18, 1986. (Department Exhibit D.)

The plan of action stated that the City's existing facility consisted of a two cell waste stabilization lagoon that was constructed in 1968. The lagoon system was designed for 370 lb/day BOD_5 and a peak flow of 0.415 mgd. Detention time at 0.415 mgd was stated to be 60 days. The plan stated that the proposed improvements to the facility would provide a facility to meet the needs of the City for the next twenty years.

3. By a letter dated October 1, 1986, the Department approved the plan of action submitted by the City with certain additional conditions. (See Department Exhibit C). The approved plan improvements included conversion of the existing two cell controlled discharge lagoon system to an aerated lagoon with the installation of five bubble diffused aerators, appropriate piping and control equipment, and a baffle curtain wall. The approval letter also requested that the design basis for upgrading the treatment facility be included in the preliminary engineering report. The letter requested clarification concerning pump capacities for the lift stations. Included in the letter was an implementation schedule for the improvements to the City's treatment facility. The schedule indicated that construction would be completed by July 1, 1988.

An Administrative Order was issued to this facility on August 14, 1987. The Order established a new implementation schedule for construction of improvements and required the facility to meet final effluent limitations by July 1, 1988. The Order imposed a $500 administrative penalty.

5. Edward Moreno, Supervisor of Field Office 6, testified at the hearing that at some point during the Spring, 1987, the City's engineer discussed with him the eligibility of the City for less stringent effluent limits that are known as treatment equivalent to secondary treatment limits (TEST). Moreno testified that these limits for $CBOD_5$ are 40 mg/l, 30 day average, and 60 mg/l, 7 day average. Standard secondary treatment limits for $CBOD_5$ are 25 mg/l, 30 day average, and 40 mg/l, 7 day average.

effluent requirements specified in this subrule. Nothing in this subrule shall be construed to allow a facility to circumvent the design standards of chapter 64 in the replacement or construction of the individual treatment units; and

e. The treatment works is one that does not receive organic or hydraulic loadings which prevent the facilities from consistently complying with 62.3(3)"f, "g," and "h."

All requirements for the specified pollutant measurements in paragraphs "f," "g," and "h" following in this subrule shall be achieved except as provided for above in 62.3(2) or paragraph "i" of this subrule below.

f. $CBOD_5$ limitations.

(1) The thirty (30)-day average shall not exceed 40 mg/l.

(2) The seven (7)-day average shall not exceed 60 mg/l.

(3) The thirty (30)-day average percent removal shall not be less than 65 percent (65%).

g. SS limitations. Except where SS values have been adjusted in accordance with subrule 62.3(2), paragraph "c" above:

(1) The thirty (30)-day average shall not exceed 45 mg/l.

(2) The seven (7)-day average shall not exceed 65 mg/l.

(3) The thirty (30)-day average percent removal shall not be less than 65 percent (65%).

h. pH. The requirements of above subrule 62.3(1), paragraph "c," shall be met.

i. Permit adjustments. More stringent limitations are required if the thirty (30)-day average and seven (7)-day average $CBOD_5$ and SS effluent values that could be achievable through proper operation and maintenance of the upgraded or existing treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations. These more stringent limitations shall be maintained and not relaxed unless as specified in subrule 62.3(2)"b."

Effluent concentrations consistently achievable through proper operation and maintenance area:

(1) The 95th percentile value of the thirty (30)-day average effluent quality achieved by the upgraded or existing treatment works in a period of at least two (2) years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and

(2) A seven (7)-day average value equal to 1.5 times the value derived for the thirty (30)-day average above.

This subrule shall only be applied when the existing or upgraded facility has achieved its design organic loading as specified in the most recent construction permit or its accompanying documentation. The determination of the effluent concentration consistently achievable through proper operation and maintenance shall only be based on the effluent quality data following the period when the design organic loading has been achieved.

BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF:	
City of Wapello Wastewater Facility No. 58-79-0-01	Department's Reply Brief DIA No.: NHS 880066

COMES NOW, the Iowa Department of Natural Resources (hereinafter referred to as the Department), the Respondent in this matter, and hereby submits its Reply Brief to the Hearing Officer.

1. Compliance with the Plan of Action Implementation Schedule. The Petitioner denies on page three of its brief that it has not complied with the compliance schedule which was set forth in its plan of action, approved by the Department, and placed in the City's NPDES permit. The Petitioner additionally states this is not the primary issue in this proceeding. Although the issue of applicability of the secondary treatment standards and treatment equivalent to secondary treatment (T.E.S.T.) standards under subrules 567--62.3(1) through 62.3(3) Iowa Administrative Code (I.A.C.) is the initial issue to be decided, once it is found that this facility is not eligible for T.E.S.T. limits it must be determined whether the facility is in compliance with the approved plan of action. This determination is of significance since the lateness of submission of the original plan of action, notification of the city that its plan of action implementation schedule was approved, placement of the approved schedule in the City's NPDES permit, and subsequent noncompliance by the City form the basis of the $500 administrative penalty in the order. Department Exhibits A, C, and D establish that the City was dilatory in submitting the original plan of action. Department Exhibits E and Q show the approved compliance schedule for this facility, which required that a preliminary engineering report be submitted by the City for construction of the required facilities by March 31, 1987. By a letter dated May 11, 1987, Department Exhibit B, the City was informed that it had not submitted the required preliminary engineering report and was therefore not in compliance with its NPDES permit and the approved compliance schedule. A

requirements are violations of Department rule 567--64.3(1) IAC. The Departmen'ts order did not find that the City had failed to meet the July 1, 1988 federal deadline for meeting secondary treatment limits. At the time the order was issued no formal written request for treatment equivalent to secondary treatment had been made by the City. Field Office 6 had responded in writing prior to the order concerning an oral request for such treatment. The request for treatment equivalent to secondary treatment was raised next in the appeal of the administrative order without submittal of any written engineering justification to the Department in support of the request.

Although subrule 567--62.3(3) IAC states that a facility "shall be eligible at any time for consideration of treatment equivalent to secondary treatment", once there is a final decision in this matter that decision should serve as res judicata in a subsequent proceeding based upon the same issue and involving the same parties. The phrase "at any time" should give each facility the opportunity to raise this issue before the Department and have it adjudicated in an administrative hearing and subsequent appeals concerning the decision from that hearing. Once a final decision is reached, however, the facility should be precluded from raising the issue in subsequent administrative proceedings based upon the same facts that were presented at the earlier hearing or based upon facts that could have been presented at the previous hearing. Otherwise, the Department is precluded from enforcement of a legitimate administrative order that has been upheld by the hearing officer and finalized in subsequent appeals merely because the Petitioner may at some time in the future raise an issue that has already been decided adversely to the Petitioner. If the argument is applicable to preclude enforcement of a legitimate administrative order at this time, it appears that the next step would be to claim that the July 1, 1988 date for compliance with federal effluent limits is not enforceable for the same reason. The Department maintains that there has been no violation of due process requirements by the administrative order and that any future eligibility for treatment equivalent to secondary treatment is merely speculative at this time. Future requests that the facility is eligible for this special treatment should be precluded based on the evidence presented at the hearing in this matter if the Hearing Officer finds against the City on the issue of eligibility for treatment equivalent to secondary treatment and that decision is upheld in subsequent appeals.

Despite the City's quarrel with the Department's use of the EPA program to determine the 95th percentile for setting a permit limit for a facility that can achieve less than 40 $CBOD_5$, the City stated that 48 mg/l BOD_5 (43 mg/l $CBOD_5$) should be the appropriate 95th percentile figure based on 30 months of the City's MOR data. The figure determined as the 95th percentile from use of the EPA computer program was 49 mg/l BOD_5 or 44 mg/l $CBOD_5$. The City's figure of 48 and the Department's figure of 49 both exceed the TEST permit limit of 40 mg/l $CBOD_5$ which is equivalent to 45 mg/l BOD_5. The Department's use of the computer program with the entry of 62 months of MOR data gave a figure of 63 mg/l BOD_5, a figure that the City has ignored. These results indicate that the City is in error on page 12 of its brief when it states that the "city has 'consistently achieved' effluent limitations within the statutory guidelines 95 percent of the time" and is thus eligible for TEST effluent limits. For the City to even make this claim a 95th percentile calculation would have to have resulted in a figure of <u>less than</u> 45 mg/l BOD_5 (40 $CBOD_5$) rather than <u>greater than</u> 45 mg/l BOD_5 (40 $CBOD_5$) as was obtained in both the City's and the Department's calculations. The City's interpretation as discussed on pages 11 and 12 of the city's brief again shows the City's lack of understanding of the Department's rules.

8. On page 13 of the City's brief, the argument is raised that determination of whether a facility is subject to hydraulic overloading to deny a City's eligibility for TEST limits is not within EPA's guidelines or support documents. The Department maintains that the City can not raise for the first time in its brief the issue of the validity of the Department's rule concerning treatment equivalent to secondary treatment. The City did not contest the validity of the Department's rule in its petition and should not be allowed to do so at this point in the proceeding.

9. On page 15 of the City's brief, the City appears to propose that it be allowed to upgrade its facility to meet the treatment equivalent to secondary treatment limits. The Department maintains that this proposal is not a viable alternative. If the City upgrades its present system by converting it to an aerated lagoon system, it should be required to construct the aerated lagoon system in a manner that would result in an effluent that would meet secondary treatment standards.

Attachment — Item #17

IOWA PEACE INSTITUTE

BOX 480, GRINNELL, IOWA 50112 U.S.A. 515/236-4880

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March 14, 1988

Larry Wilson, Director
Department of Natural Resources
Wallace Building
Des Moines, Iowa 50319

Dear Mr. Wilson:

In compliance with your request for a thirty day progress report, I enclose a memorandum from Micheal Thompson who is handling the Iowa City Waste Water Treatment mediation.

Please feel free to call me if you have any questions or comments.

Sincerely yours,

Jean Lloyd-Jones

Jean Lloyd-Jones, Chair
Iowa Peace Institute

cc: Steve Atkins
Terrence L. Timmins
Susan Phillips
Don Sehr

JLJ/kkg

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proposed works and adjacent lands and property, on the wise use and protection of water resources, on the quality of water, on fish, wildlife, and recreational facilities or uses, and on all other public rights and requirements."

It is the duty of the person who wants to straighten a channel to go through the permit process, just as other people doing other kinds of projects must meet other environmental requirements. When someone has simply changed a channel and ignored the requirements, the DNR is faced with the difficult job of determining what environmental damage may have been done. To do that, the department needs engineering plans. Requiring those plans is not just hassling the landowner or imposing unreasonable costs. It is the legitimate means of carrying out the responsibilities of the department which are assigned by law.

As of now, it is our understanding that there are only eight funded FTE positions in the floodplain program. These individuals are expected to issue permits, perform inspections, deal with complaints, provide sessions on floodplain insurance, help deal with floods and perform related duties. In addition, they are apparently expected to monitor the eighteen thousand miles of streams and rivers in Iowa for floodplain violations. This puts the DNR in an impossible position, and it's not surprising that many illegal channel changes are not found for several years. It's also not surprising that while investigating one illegal channel change, DNR staff members sometimes find others which are older.

There seems to be a notion among some people -- why, it is hard for me to understand -- that illegal channel changes really aren't environmental violations. If anything, adverse effects caused by channel changes are MORE permanent than many other environmental insults. The effects of a chemical spill, while catastrophic, may be temporary. But a channel change may not only permanently destroy wildlife habitat, but it can also increase the amount of flooding downstream, increase soil erosion, and increase siltation. These become ongoing problems for downstream landowners and the public.

In fact, I've heard that on several occasions when someone is confronted with an illegal channel change, he or she responds by saying that the channel change was necessitated by someone else's previous illegal channel change upstream. I've been occasionally contacted myself by landowners who felt very aggrieved that their land is suffering because of other people's channel changes.

Even in cases where no complaint is made, the environmental insult exists, just as a hazardous spill is an environmental insult even if it occurs in a remote area. Why should someone who straightens a channel illegally and is not caught for several years be exempt from the very reasonable requirement that engineering plans be submitted so that the DNR can at least assess the extent of any environmental damage?

The channel changer already benefits because the floodplain program is underfunded and understaffed, and has limited ability to find illegal changes. The channel changer also benefits economically from any additional acres brought into production, which seems to be the main

During the discussion with the City's engineer, Edward Moreno informed the engineer that the City was not in compliance with the approved implementation schedule. At that point Ronald Meyer, the engineer, indicated to Moreno that the City was proposing to not proceed with the approved improvements and would be considering treatment equivalent to secondary treatment. Moreno informed Meyer that the City's facility did not qualify for treatment equivalent to secondary treatment since the facility was hydraulically overloaded, was being operated as a continuous discharge facility, and was not consistently meeting effluent limits.

Following the conversations with Ronald Meyer, a letter to the City was drafted by Edward Moreno and signed by Timothy O'Connor, Field Office 6, on or about May 11, 1987. (Department Exhibit B). That letter stated that the Wapello treatment facility did not qualify for treatment equivalent to secondary treatment since the facility was hydraulically overloaded. That letter additionally cited the City for being in violation of the plan of action schedule that had been incorporated into the City's N.P.D.E.S. permit.

6. On May 19, 1987 Edward Moreno conducted an inspection of the Wapello wastewater treatment facility. Following the inspection, his report and a cover letter dated June 5, 1987 signed by Timothy J. O'Conner were sent to the City. (See Department Exhibit H). The inspection report summarized testing results during 1986 and 1987 that did not meet the final effluent limit for $CBOD_5$ of 25 mg/l, 30 day average. The report noted that the City would have been unable to meet standard secondary treatment for eight months of the period from January 1, 1986 through March 31, 1987. Mr. Moreno stated in his report that the facility had been discharging continuously for most of 1986 and 1987 even though the facility was originally designed as a fill and draw system. He also stated that the facility's operator had not been correctly reporting all effluent discharges.

The June 5, 1987 cover letter to the inspection report signed by Timothy J. O'Conner, Field Office 6, noted that the facility had not adhered to the compliance schedule contained in the City's N.P.D.E.S. permit. Mr. O'Conner also stated that a request for treatment equivalent to secondary treatment was inappropriate because the facility is hydraulically overloaded that the City should have raised this issue earlier in preparation of its plan of action. (See Department Exhibit H).

7. Edward Moreno, Supervisor of Field Office 6, testified concerning the proper operation of this facility. He stated that the facility was being operated at the present time as a continuous discharge facility rather than as a fill and draw (controlled discharge) facility. This method of operation is contrary to the method of operation required by

The Department's position is that a facility is eligible for treatment equivalent to secondary treatment if it meets the five criteria contained in subrule 62.3(3)"a" - "e". If a facility meets these criteria under the Department's subrule, the facility will be allowed the use of a effluent limits that are less stringent than the effluent limits known as secondary treatment effluent limits.

The Department maintains that application of these five criteria to the City's wastewater treatment facility demonstrates that this facility is not eligible for treatment equivalent to secondary treatment. The City should be required to complete the construction detailed in the City's plan of action which will ensure that the City's wastewater treatment facility meets standard secondary treatment effluent limits.

Subrule 62.3(3)"a" concerns whether the $CBOD_5$ and SS effluent concentrations that are consistently achievable through proper operation and maintenance of the facility exceed standard secondary treatment limits for these parameters. The record shows that this facility cannot meet standard secondary treatment limits. There was also testimony at the hearing that there has been proper maintenance of the facility. Edward Moreno of Field Office 6 testified that this facility has not been operated properly in that it is being operated as a continuous discharge facility. The last two permits issued to this facility have required that it be operated in a fill and draw mode of operation. The facility, even though it was only designed for a detention time one-third of the detention time required today for this type of facility under the Department's design standards, was designed as a fill and draw facility. Additionally, the facility is also subject to bypassing which shows that the facility is not being operated properly. The facility does not meet this criterion since it is not properly operated even though its effluent quality does not meet standard secondary treatment limits.

The second criterion concerns whether a trickling filter or waste stabilization pond is involved as the principal process. The facility meets this step since it uses a waste stabilization pond as its treatment process.

Under 62.3(3)"c" the facility must provide significant biological treatment of municipal wastewater. The facility provides some degree of biological treatment although the exact degree of treatment may not meet the 65 percent removal requirements of treatment equivalent to secondary treatment due to dilution from the combined sewer system.

Under 62.3(3)"d" the facility is required to have been constructed prior to 1972. The City's facility was constructed in 1968. It has not been upgraded to meet either

letter dated June 5, 1987 to the City, Department Exhibit H, further documents the City's noncompliance. The City offered no evidence that it has submitted the required engineering report or is otherwise in compliance with the schedule proposed by the City and adopted by the Department.

Edward Moreno, Department Field Office 6, testified that he first discussed treatment equivalent to secondary treatment with the City's engineer at some point during spring, 1987 and that the Department's May 11, 1987 letter was sent to the City as a result of that discussion. The City engineer's letter dated January 20, 1987 indicated that he still intended to provide a preliminary engineering report with a detailed design basis for the plan of action project as of that date despite the engineer's contention at the hearing that he discussed treatment equivalent to secondary treatment near the end of 1986. The letter contained no reference to treatment equivalent to secondary treatment or request for consideration of the City's facility for this treatment. The City's NPDES permit contained the City's compliance schedule that required the preliminary engineering report by March 31, 1987. This permit was issued on February 18, 1987. This permit also included the permit requirement that this facility be operated as a controlled discharge facility with only spring and fall drawdowns. No appeal of any of the permit conditions was received from the City. The City did not contest the schedule, request treatment equivalent to secondary treatment, or request a different mode of operation in a formal appeal of the permit. It appears to the Department that the issue of treatment equivalent to secondary treatment arose when the City was either delinquent in submitting the preliminary engineering report or close to the due date for submittal of the required report.

2. The City in its brief, page three, found it "interesting" that the City engineer testified that his plan of action would not assure compliance with standard secondary treatment limitations. The Department would point out that the purpose of the plan of action requirement pursuant to Department rule 567--64.6(6) I.A.C. is to develop a plan that will result in compliance with the final effluent limitations specified in the City's NPDES permit. If the City's plan does not do this, then it appears that the City's engineer has not fulfilled his duty to the City to develop an adequate plan of action. It is also contrary to the engineer's statement on page one of the plan of action that the plan will "permit the City to continue to develop and accommodate growth while meeting State prescribed wastewater effluent

6. The City's brief on pages 7 through 9 discusses the Congressional history and EPA guidance documents concerning secondary treatment. The EPA manual concerning Guidance for Permits and Compliance Personnel states six principles for facilities deemed equivalent to secondary treatment. One principle states that where a facility is operating sufficiently and achieving its original design performance level, upgrading or replacement should be avoided (page 2 of the EPA Guidance for Permits). Despite this statement, the guidance document additionally states that "Obviously a treatment works that is operating beyond its design hydraulic or organic loading limit is not considered an eligible facility. If overloading or structural failure are causing poor performance, the solution to the problem is construction, not effluent limitation adjustment.

Both Edward Moreno and Lavoy Haage testified that the facility is organically and hydraulically overloaded. Mr. Moreno testified that the facility receives organic loadings in excess of the 370 pounds of BOD_5 the facility was designed to treat. He stated that one result was 1000 BOD_5 pounds. Mr. Moreno stated that the facility was hydraulically overloaded based on present design standards which call for 180 days of detention time. However, data taken from MORs and used to calculate detention times for the years 1982 through 1986 showed that the average detention time of 60 days was not met during the year 1982, or for 20 percent of the data years available. Additionally, Mr. Moreno stated that records concerning maximum flow were important since they showed that on certain days due to precipitation the facility is flushed out and that the flow entering the plant would exceed the capacity of the plant to hold it, thus pushing other water out of the lagoon system. Due to this factor detention times were less than thirty days for certain periods in 1982 and 1986. Additionally, the facility has reported monthly and maximum influent flows that exceed the permit limits for influent flows.

Statements were made on page nine of the City's brief that the Department's staff acknowledge the City is meeting "this percentage removal requirement." The Department questions this conclusion in view of Ed Moreno's statement at the hearing that during precipitation events the City might only achieve a 50 percent decrease, or percent removal. The City additionally did not present any data at the hearing to establish the basis for its engineer's statements that the City could show a history of 72 to 80 percent removal. In view of the large amount of water entering the combined system during rainfall events and

WHEREFORE, the Department requests that the Hearing Officer find that the City's wastewater treatment facility is not eligible for treatment equivalent to secondary treatment and uphold the administrative order, including the penalty issued to the City.

Respectfully Submitted,

IOWA DEPARTMENT OF NATURAL RESOURCES

by Diana L. Hansen

Diana L. Hansen
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Henry A. Wallace Building
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Weaver & Huddle
Weaver Building
Wapello, IA 52653
Attorney for the City

18th
December 1987
Diana L. Hansen

Iowa City/University of Iowa/Johnson County/DNR Mediation
Monthly Report

Following the initiation of mediation by the Iowa Peace Institute, an intervention team was developed. This team consists of Micheal Thompson and Phil Brown as mediators and Robert Himschoot, Attorney. Mike Thompson has functioned as the lead mediator.

The team has accomplished numerous activities that include:

initiating private meetings with the University of Iowa, Iowa City, and the Johnson County Board of Supervisors regarding groundrules for mediation including costs of mediation;

forming negotiation teams with the University of Iowa and Iowa City;

consulting with the preceding groups and with Iowa Department of Natural Resources personnel;

scheduling the initial joint mediation session for Friday March 18, 1988;

finding a "neutral" mediation site for the initial session at the ACT offices in Iowa City;

beginning the information gathering stage of the mediation process;

reconciling the use of mediation within the framework of the Iowa Open Meeting Statues; and

establishing communications with the press on a productive basis.

The preceding accomplishments suggest that the parties are committed to the concept of mediation. However, Johnson County has decided to continue negotiations without a mediator in hopes of reaching settlement. While the Board of Supervisors is not ready to utilize mediation, a number of them are interested in its application.

Although the actual mediation process has not begun, the presence of mediation has had an impact -- it has promoted additional negotiations by the parties -- negotiations that suggest the parties are committed to resolution. These negotiations have slowed the actual scheduling of mediation, but it has allowed the parties to clarify the issues and limit the implications of the

reason for channel changes. Why give that person yet another advantage by saying in effect, "if you aren't caught for x number of years, your i .egal channel change becomes a freebie?"

As to the argument that engineering plans are expensive, my understanding is that they may run from a few hundred dollars to two thousand, which is obviously a significant expense. However, the actual channel change also costs money. In addition, the longtern profits from any new productive acres can add up to considerably more than two thousand dollars. If the landowner is ready to pay the cost of changing the channel and enjoy resulting economic benefits, he or she should be prepared to pay for engineering plans as well. Complying with environmental requirements often costs money, which is one reason that environmental laws are needed. Your Commission has to deal with that reality at every meeting, and it doesn't seem logical for one kind of environmental violation to be singled out for a special waiver provision.

In addition, this kind of waiver could set a precedent. If twenty years is chosen as the magic number, you may well face complaints not only from people who have straightened channels more recently and had to submit plans, as well as from people who feel their land was damaged by the channel changes receiving waivers, but also from people who straightened channels twenty or more years ago, were caught, and have already paid for plans. In fact I understand that three neighbors of the Greiners who did some illegal straightening had already settled with the state, and I wonder how they feel about the waiver in the Greiner case.

Your Commission already faces continuous pressure from people who want their violations treated more leniently. Your rules serve in part as protection from that continuous pressure, both for you and for the public interest. Inserting this kind of waiver would lessen that protection, and make your job more difficult in the future.

I can see only one reasonable argument for any kind of time consideration regarding channel changes, and that is that when the DNR becomes aware of an illegal straightening, it should take action with reasonable promptness. This is a legitimate requirement. Therefore, I'd suggest that if any rules change is made, it should be language to the effect that the DNR must take action within a certain number of years of becoming aware of the illegal channel change, and that otherwise, requirements for engineering plans would be waived.

Your Commission would be justified in pointing out to people who complain about engineering plan requirements because their illegal channel changes are several years old that they should have gotten their permits in the first place, that they have been enjoying any benefits of the channel change for considerable time, and that they may have caused environmental damage and sent trouble downstream. If you determine that a rules change is really necessary, please use the idea we have suggested, and don't provide an automatic waiver which would mean more trouble for the environment, more trouble for landowners, and more trouble for yourselves. Thank you for your attention.

this facility's N.P.D.E.S. permit. Edward Moreno also stated that the facility is sometimes flushed out due to the heavy flows entering the facility during heavy rainfall events.

The June 18, 1987 letter from Lavoy Haage, Wastewater Permits Section Chief, to the City indicated that this facility is additionally subject to frequent bypassing during wet periods. (Department Exhibit S). Frequent bypassing indicates that this facility is not able to handle the flows entering it at all times and is operated contrary to Department policy.

8. Edward Moreno testified that the City's wastewater treatment facility was organically overloaded. He stated that review of the City's monthly operating reports indicated that the facility frequently has an influent BOD_5 which exceeds 370 lb./day, the BOD_5 loading for which the facility was designed. He also noted that at one point the facility received a loading of 1,000 lb.

Edward Moreno stated that this facility was also hydraulically overloaded based on present design standards which call for 180 days detention for controlled discharge facilities. Department Exhibit E shows that the average detention time for this system was less than 180 days from 1982 through 1986. The Exhibit shows that from 1983 through 1986 the facility met its design detention time of 60 days on an average basis while in 1982 the average detention time was 53 days. Edward Moreno noted that during extreme precipitation the detention time is less than average for certain days.

Edward Moreno further testified that this facility receives hydraulic and organic loadings that prevent this facility from complying with the effluent limits for treatment equivalent to secondary treatment. He stated that this facility does not meet treatment equivalent to secondary limits. Edward Moreno testified that the facility did not meet the criteria in the Department's rule to be eligible for treatment equivalent to secondary treatment.

Lavoy Haage, Wastewater Permits Section Chief, additionally testified that this facility was hydraulically and organically overloaded. He stated that in view of this overloading the Wapello wastewater treatment facility did not qualify for treatment equivalent to secondary treatment limits.

9. Edward Moreno testified that the Department used a computer program to determine what the BOD_5 limit might have been had the facility been considered eligible for treatment equivalent to secondary treatment. He stated that the program used had been obtained from EPA and was used to

standard secondary treatment or treatment equivalent to secondary treatment limits.

Subrule 62.3(3)"e" requires that the facility "does not receive organic or hydraulic loadings which prevent the facilities from consistently complying with 62.3(3)"f", "g," "h." Subrules 62.3(3)"f", "g", and "h" refer respectively to the treatment equivalent to secondary treatment (TEST) limits for $CBOD_5$, SS, and pH. Thus, under this subrule a facility must not receive hydraulic or organic loadings that prevent it from meeting TEST limits.

The Department maintains that based upon the testimony of Edward Moreno and Lavoy Haage that this facility is hydraulically and organically overloaded. The facility does not have the detention time mandated by the present design standards and has not always achieved the average detention time for which the facility was designed. The facility does not achieve the 180 day detention time mandated by the present design standards for this type of facility. Additionally, average and maximum influent loadings have often exceeded the design limit of .415 mgd stated in the plan of action and permit limits. In wet weather this facility has needed to bypass and can be flushed out during heavy rainfall events.

Edward Moreno further testified that this facility is organically overloaded. He stated that the facility receives organic loadings in excess of the 370 lb/day for which the facility was designed.

In the opinion of the Department's witnesses this facility receives organic and hydraulic loadings that prevent it from achieving the treatment equivalent to secondary treatment limits. The Department's exhibits show that this facility does not meet treatment equivalent to secondary limits for $CBOD_5$ on a consistent basis. The Department views the phrase "consistently complying" found in this subrule as meaning compliance with TEST limits all of the time. The data available for the three months prior to the hearing indicated that the facility did not meet treatment equivalent to secondary limits for August, 1987 and was close to the TEST limit in July, 1987 and September, 1987. The exhibits listing BOD_5 show additional months where the facility did not meet the TEST $CBOD_5$ limit. These BOD_5 results show that the facility can not meet TEST $CBOD_5$ limits at all times. The Department maintains that it is unable to do so due to the hydraulic and organic loadings that the facility receives.

Another issue that needs to be resolved is the applicability of subrule 62.3(3)"i" I.A.C. Subrule 62.3(3) provides that if the facility is found eligible for treatment equivalent to secondary treatment (TEST), then it must meet the

standards." If the engineer is unable to now certify that he has developed an adequate plan of action, despite such a statement in the plan of action, the Department maintains that the engineer's judgment concerning whether the facility now meets treatment equivalent to secondary treatment, whether the facility provides significant biological treatment and whether the facility is hydraulically overloaded could be equally subject to question.

3. At the hearing Edward Moreno, Field Office 6, maintained that no formal request or revised plan of action was submitted by the City requesting treatment equivalent to secondary treatment. The Petitioner maintained that the Department did not give the City adequate opportunity to submit a formal request for treatment equivalent to secondary treatment. (See page 4 of the City's brief.) The Department maintains that the City has had adequate time to submit a formal written request for treatment equivalent to secondary treatment supported by adequate engineering justification. Additionally, the burden of establishing that the City was eligible for such special treatment was upon the City.

The City maintained in its brief that the Department's rules concerning treatment equivalent to secondary treatment went into effect on December 3, 1986. The brief also states that the City's engineer began discussing these relaxed treatment standards immediately after this date with DNR officials. Attached to this reply brief is a copy of the Iowa Administrative Bulletin, ARC 6556 (May 21, 1986) which states that the effective date of the Department's secondary treatment rules, including the subrules pertaining to treatment equivalent to secondary treatment, was June 25, 1986. The cover letter to the City's plan of action was dated June 18, 1986. This, notice of the final Department rules concerning secondary treatment and treatment equivalent to secondary treatment were published before the City even submitted a plan of action. This is directly contrary to the statement in the City's brief, page four, that the Department rules went into effect more than two years after the submission and approval of the City's plan of action. Obviously, the City's statement that the Department never gave the City an opportunity to submit a formal revised plan of action dealing with its contention that it meets the effluent limitations described as "equivalent to secondary" is in error.

4. <u>Burden of Proof Concerning Whether the City Qualifies for Relaxed Standards</u>. The City appears to maintain that the Department has the burden of proof,

resulting dilution, it is highly unlikely that this high a percentage of removal can be obtained at all times and especially during precipitation events.

7. Despite the City's assertion on page 10 of its brief, it is questionable as to whether the City's present facility provides significant biological treatment of municipal wastewater. The City's brief then states that the "key analysis throughout most of the administrative hearing was whether the treatment works was one that did not receive organic or hydraulic loadings which prevented the facility from consistently complying with the effluent limitations set forth in section 62.3(3) f, g, and h." The Department additionally disputes the City's contention that Department witnesses did not understand the Department rules and gave different, conflicting, and often confusing interpretations of administrative rules as they pertain to wastewater treatment permit systems. The Department maintains that the testimony of the Department's witnesses regarding rule interpretations concerning treatment equivalent to secondary treatment indicated that the witnesses were knowledgeable concerning Department wastewater rules. It did appear at the hearing, however, that the City's questions of such witnesses on cross examination were often either confusing due to a lack of basic understanding of wastewater treatment systems and rules, in particular the secondary treatment rules, or were deliberately designed to attempt to confuse the witnesses and to try to obtain responses that the City could later claim were conflicting and confusing.

This lack of understanding or misreading of Department rules on the part of the City is exhibited in the City's discussion of subrule 567--62.3(3)"i". The City ignored in its questions at the hearing of Department witnesses and in its brief the fact that the City is required to meet the criteria of 62.3(3)"a"-"e" in order to be eligible for treatment equivalent to secondary treatment (TEST). If the facility is determined eligible, then the City is required to meet TEST effluent limits for $CBOD_5$, SS (unless the facility is a waste stabilization ponds, as in this case, required to meet the limit of 62.3(2)"c" for SS), and pH. This requirement is set forth in the statement following 62.3(3)"e" that "All requirements for the specified pollutant measurements in paragraphs "f", "g", and "h" following in this subrule shall be achieved except as provided for above in 62.3(2) or paragraph "i" of this subrule below." Despite the City's discussion of the phrases "consistently complying" in subrules 62.3(3)"e" and 62.3(3)"i", subrule 62.3(3)"i" is not applicable unless two

through the imposition of permit conditions, or permit revocation or denial. In the case of an existing permit the department will modify or revoke the permit as provided in subrule 52.7(1). For a pending permit application the department will render an initial decision pursuant to rule 50.8(455B) which denies the application or subjects the permit to appropriate conditions.

900—54.8(455B) Recurring complaints. If a complainant accepts compensation from a permittee for settlement of a well interference conflict, any future complaint by the complainant against the same permittee will not be considered unless: A significant change in the permitted withdrawal occurs; the permittee utilized simplified test pumping procedures or other less than optimal verification methods, as described in Bulletin No. 23; or the permittee provided compensation to resolve less than the estimated worst-case well interference. A complainant who accepts compensation from an applicant is still eligible for compensation if subsequent well interference is proven to be greater than resolved in the original settlement.

If a previous complaint was dismissed or settled without compensation, a new complaint must include justification for reconsideration. Justification may include a significant change in withdrawals by the suspect permittee or water level measurements from the complainant's well which indicate more well interference than found in the previous complaint. A physical change to withdrawal facilities may be considered a significant change to a permitted use (e.g., moving the withdrawal location, installing a new well, or installing a higher-capacity pump).

A complaint which was dismissed due to failure to co-operate, as provided in rule 54.2(455B), will be reconsidered when the required co-operation is demonstrated. However, it will be treated as a new complaint.

900—54.9(455B) Variances. Variance to these rules may be granted by the department provided just cause can be demonstrated. Requests for variances and supporting information shall be submitted in writing to the department.

900—54.10(455B) Appeal procedures. Determinations of the department under subrules 54.5(5), 54.6(2) and 54.7(4) may be appealed by following the procedure in subrule 7.5(1).

These rules are intended to implement 1985 Iowa Code Supplement section 455B.281.

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EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement, 5/21/86.

ARC 6556

WATER, AIR AND WASTE MANAGEMENT[900]

WATER, AIR AND WASTE MANAGEMENT COMMISSION

Pursuant to the authority of Iowa Code sections 17A.4, 455B.105 and 455B.176, the Water, Air and Waste Management Commission amends Chapters 60 and 62, Iowa Administrative Code, relating to secondary treatment and effluent standards for publicly owned treatment works and privately owned domestic sewage treatment works.

Notice of Intended Action was published in the September 11, 1985, Iowa Administrative Bulletin as ARC 5811 and amended to extend the comment period in the November 6, 1985, Iowa Administrative Bulletin as ARC 6121. Two public hearings were held on October 1, 1985, and November 18, 1985. Changes from the proposed rules reflected in this adoption are:

1. The adopted rule adds definitions in Item 1, rule 60.2(455B) for the terms:

"Excessive infiltration/inflow" which is referred to in the discussion of secondary treatment. This change is to provide clarification to permittees attempting to secure special considerations specified in these rules.

"Seven-day average" and "thirty-day average" which are included to provide consistency of definitions in the EPA regulations on secondary treatment.

2. Item 2, subrules 62.3(1), 62.3(2)"c" and 62.3(3) have included an effluent limit corresponding to a seven-day average. This is to reflect consistency with EPA regulations on secondary treatment.

3. Item 2, subrule 62.3(2)"d"(3) eliminates the language within the subrule on the method of determining excessive I/I in a sewer system. The method of determining excessive I/I is reflected in the definition above.

4. Item 2, subrule 62.3(2)"d"(3) clarifies the term "total influent flow" to read "an average wet weather influent flow (as defined in the department's design standards, 900—64.2(9)'b,' Chapter 14.4.5.1.b)". Additionally, words "per day" were included following the words "275 gallons" to provide technically correct units.

5. In Item 2, a new subrule 62.3(2)"e" was added to include facilities designed to operate in a split flow mode and make them eligible for either a lower percent removal requirement or a mass leading limit for the percent removal requirements. This consideration reflects the public input from the extended comment period.

6. In Item 2, a new subrule 62.3(2)"f" was added to include a discussion on preventing dilution of sewage as a means of complying with secondary treatment effluent standards.

7. Item 2, subrule 62.3(3) clarifies that treatment works shall be eligible for consideration of equivalent to secondary treatment "at any time."

8. Item 2, subrule 62.3(3)"d" clarifies what type of alterations can be made to a facility and still be eligible for equivalent to secondary treatment.

9. Item 2, subrule 62.3(3)"e" and the deletion of subrule 62.3(3)"f" were made to increase eligibility of hydraulically and organically overloaded facilities for equivalent to secondary treatment.

These rules are intended to implement Iowa Code chapter 455B, division III, part 1.

These rules are intended to become effective June 25, 1986.

ITEM 1. Rule 900—60.2(455B) is amended by adding the following definitions:

"Carbonaceous biochemical oxygen demand (five day)" means the amount of oxygen consumed in the biological processes that break down carbonaceous organic matter in water by aerobic biochemical action in five days at 20°C.

conflict. Iowa City and Johnson County are continuing negotiations without the presence of a mediator. These negotiations have culminated in counterproposals that are under consideration. These negotiations are to be reviewed on Tuesday March 15, 1988. Upon that date the County Supervisors will determine if they wish to utilize the services of the mediation team.

Other activities undertaken since the initiation of mediation include a private consultation with Dr. James Laue of the Conflict Clinic. (Dr. Laue has conducted this kind of mediation for a number of groups, and he is nationally known for this type of intervention). This consultation focused upon technical assistance for the session. The session reinforced the mediators' belief that the process initiated has merit.

Despite the accomplishments, a number of concerns are apparent. These include:

the absence of a public team that cannot be developed in the short time frame;

inquiries by the press that reflect the public scrunity this conflict has generated; and

time constraints.

These issues can result in an impasse, but each can be utilized to promote settlement and are not seen as major concerns. However, it is critical to recognize the importance of these issues during the early stages of the mediation.

In conclusion, the parties are willing to utilize mediation, and the first joint session will occur within the week. Any questions should be directed to Micheal Thompson at 515 244-8216 (office) or 515 224-9206 (home).

determine permit limits once a facility had been determined eligible for treatment equivalent to secondary treatment limits. Use of this EPA computer program and 30 months of data for this facility indicated that the BOD_5 limit for this facility had it been found eligible for TEST limits would be 49 mg/l which is above the treatment equivalent to secondary limit of 40 mg/l $CBOD_5$ (45 mg/l BOD_5). Moreno stated that data for the three months prior to the hearing indicated a BOD_5 of 42 mg/l for July, 1987; 53 mg/l for August, 1987; and 42 mg/l for September, 1987.

10. Steven Williams, an environmental specialist for the Department, testified concerning use of the EPA computer program. He stated that the purpose of the program was to set the permit effluent limits for a facility that has already been determined eligible for treatment equivalent to secondary treatment (TEST). He said that the program was developed as a tool for permit writers to formulate permit limits for facilities determined eligible for such limits. Steven Williams stated that the program was not developed to make the eligibility determination.

Appellant Exhibits 1, 2 and 3 illustrate the City's data for BOD_5 from January 1, 1985 through June 30, 1987, the calculations used by the EPA program, and the effluent limit for BOD_5 calculated based on twenty-four months of data from the City had the City been found eligible for TEST limits. Use of the program gave 49 mg/l BOD_5 as a value this facility would meet on a 95th percentile basis based upon the data entered and the variability of that data. Mr. Williams stated that based on this data, 49 mg/l BOD_5 would be the value that this facility could be expected to rarely exceed and would be met 95 percent of the time. Mr. Williams noted that this value was higher than the statutory limit and that he could not set a limit higher than the statutory limit.

Steven Williams stated that the program was originally used by him for this facility using 30 months of data. He stated that you need at least 24 months of data to run this program and that the more data you have, the better the predictions would be. Department Exhibit T illustrates the use of the program using 62 months of data beginning February 1, 1982. The value for BOD_5 received using this data indicated that 63 mg/l BOD_5 was the value that this facility could be expected to meet 95 percent of the time, a figure which greatly exceeds the 40 mg/l $CBOD_5$ (or 45 mg/l BOD_5), the treatment equivalent to secondary limit.

11. Ronald Meyer, the City's consulting engineer, stated that he was unable to follow or understand the EPA calculations used in Appellant's Exhibits 1, 2 and 3. He used different calculations to determine the 95 percentile for BOD_5 based upon the City's MOR data for January 1, 1985

TEST limits for $CBOD_5$, SS and pH unless there is a special consideration under 62.3(2) or unless subparagraph "i" is applicable. Subparagraph "i" applies only to facilities that can meet more stringent limits than the TEST limits. It does not apply to facilities that can not meet the appropriate TEST limits set forth earlier in 62.3(3)"f", "g", and "h". Subrule 62.3(3)"i" does not apply to the City's facility since the Department has determined that the City is not eligible for TEST limits. The City's facility additionally can not meet TEST limits based on past data from this facility. Testimony of the City's engineer also confirms the testimony of the Department's witnesses to the effect that the City's facility does not meet TEST limits for $CBOD_5$.

The City's engineer requested that the City be allowed to upgrade the facility to meet TEST limits rather than secondary treatment limits. The Department maintains that since the facility has been determined ineligible for TEST limits, it should be required to upgrade to meet standard secondary treatment limits. Compliance with the Department's design standards for the conversion of the existing facility to an aerated lagoon system should enable the facility to meet secondary treatment limits.

Based upon the above application of department rule 62.3(3), the City has not established that its facility is eligible for treatment equivalent to secondary treatment effluent limits. Therefore, the City is required to upgrade its present wastewater treatment facilities to meet standard secondary treatment limitations. The plan of action submitted by the City's engineer and approved by the Department will enable the City to meet standard secondary treatment limits.

The City's petition requested that the administrative penalty of $500 be rescinded. The Department maintains the penalty is appropriate in view of the compliance deadlines missed by the City in submitting its plan of action initially and adhering to the compliance schedule approved by the Department and placed in the reissuance of the City's N.P.D.E.S. permit. The City has been made aware of due dates for submittal of the plan of action and timely completion of events listed in the plan of action and the reissued permit. In view of these factors, the Department maintains that it was well within its authority under Iowa Code section 455B.109 and Chapter 567--10 I.A.C. in assessing an administrative penalty of $500.

concerning the issue of whether the City's wastewater treatment facility is eligible for treatment equivalent to secondary treatment. (See Petitioner's Brief, page 5.) The Petitioner maintained that at no time did the Department submit any documentation or rationale as to why the City of Wapello's treatment facility would not so qualify.

The Petitioner has also referred to the Department's response to oral requests by the City's engineer without the submittal of any written engineering justification by the engineer for treatment equivalent to secondary treatment as arbitrary and unsupported. The Department maintains that its conclusion that the facility was hydraulically overloaded as expressed in letters dated May 11, 1987 and June 5, 1987 was based on the available information concerning the facility and was an accurate assessment based upon such information. The information available to the Department at that time showed that the facility could not handle all of the flows entering the system during wet weather and was subject to bypassing in wet weather. It was also obvious to the Department at that time that the facility did not meet the present detention time requirement of 180 days for facilitative lagoon systems and that the facility was discharging continuously rather than being operated in the storage/drawdown method of operation required by the facility's permit.

The Department refers the Hearing Officer to the recent case of Harland v. Iowa Department of Job Service, 412 N.W. 2nd 904 (Iowa 1987). This case provides support for the Department's contention that the burden of proof in this matter is the Petitioner's and that the Petitioner failed to meet this burden of proof concerning the issue of whether the City's wastewater treatment facility is eligible for treatment equivalent to secondary treatment. The Supreme Court stated that "generally the burden of proof is on the party asserting the affirmative in an administrative proceeding. (Citations omitted), see also Iowa R. App. P. 14 (f)(5) ('Ordinarily the burden of proof on an issue is upon the party who would suffer loss if the issue were not established.')" This proceeding was initiated by the City filing an appeal of the Department's Administrative Order. In the appeal the City contended that the City was eligible for treatment equivalent to secondary treatment. Since the City is the party asserting the affirmative and would suffer loss if the issue is not established, the Department contends that the City has the burden of proof on this issue. The Department additionally maintains that

conditions are met. The first condition is that the facility must be found eligible for treatment equivalent to secondary treatment effluent limits under the criteria in subrule 62.3(3)"a" through "e". The second condition that must be met is found in 62.3(3)"i". This subrule is applicable only if a facility that is eligible for the TEST limits, including 40 mg/l $CBOD_5$, can meet a more stringent limit. In other words the facility determined eligible for TEST must be able to meet a $CBOD_5$ limit of less than 40 mg/l before this rule is applicable to the $CBOD_5$ parameter. This subrule is clearly inapplicable to a facility that has been found ineligible for TEST limits after applying the criteria in subrule 62.3(3)"a" through "e". Even where a facility is eligible for TEST limits, subrule "i" only applies to facilities that can meet a limit more stringent than 40 $CBOD_5$, which the City concedes that it can not meet. The Hearing Officer is referred to page 13, lines 8 through 10, and page 14, lines 15 through 18, of the City's brief and the testimony of the City's engineer.

The City appears to be stating in its brief that it is eligible for TEST treatment even though the City may not be meeting TEST limits at the present time and that its limits should be calculated based on what the City defines 95th percentile to mean. The Department's subrule 62.3(3) clearly provides the applicable TEST effluent limits in 62.3(3)"f", "g" and "h". The $CBOD_5$ test limit is 40 mg/l for the 30 day average, despite the City's erroneous reference to 45 mg/l as the $CBOD_5$ limitation on pages 5 and 11 of its brief. The 95th percentile analysis for determining permit limits defined and provided by EPA in its guidance documents is to be applied only to facilities that can achieve less than 40 $CBOD_5$ (45 BOD_5). See Department Exhibit N, Secondary Treatment Redefinition Calculation Program for Permit Limitations, page 1. The City additionally ignores the fact that the 95th percentile interpretation and computer application that the City is attacking is that of EPA as adopted by the Department. It is inconsistent for the City to attack the Department's use of the EPA formulas and computer program as giving erroneous results and then to cite the same EPA reference materials that discuss and refer to this computer program as providing support for the City's arguments. The City concedes that even when using its allegedly superior definition of 95th percentile rather than EPA's formulas and computer program, that it can not meet 40 CBOD at least 95% of the time. If the City's criteria of being in compliance 95 percent of the time, 19 of 20 months or 57 of 60 months, is applied to the 30 months or 62 months of MDR data supplied as exhibits at the hearing,

"Excessive infiltration/inflow (I/I)" as referred to in the discussion of secondary treatment is the quantity of I/I which is more economical to remove from the sewer system than to transport and treat at a wastewater facility. Within the cost-effectiveness analysis performed to determine excessive I/I, the transportation and treatment costs will be based on the percent removal requirements specified in the appropriate subrule 62.3(1) or 62.3(3).

"Seven-day average" means the arithmetic mean of pollutant parameter values for samples collected in a period of seven consecutive days.

"Significantly more stringent limitation" relates to secondary treatment CBOD5 and SS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration based limitations (i.e., less than 20 mg/l in the case of CBOD5), or the percent removal limitations in subrules 62.3(1) and 62.3(3), if such limits would, by themselves, force significant construction or other significant capital expenditure.

"Thirty-day average" means the arithmetic mean of pollutant parameter values of samples collected in a period of thirty consecutive days.

ITEM 2. Rule 900—62.3(455B) is amended by striking existing subrules 62.3(1) and 62.3(2), replacing such subrules with the following subrules, and adding new subrule 62.3(3).

62.3(1) General. The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the pollutant measurements carbonaceous biochemical oxygen demand (CBOD5), the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand; suspended solids (SS), the pollutant parameter total suspended solids; and pH, the measure of the relative acidity or alkalinity. All requirements for each pollutant measurement shall be achieved by publicly owned treatment works and privately owned domestic sewage treatment works except as provided for in subrules 62.3(2) and 62.3(3).

Effluent limitations on pollutants other than carbonaceous biochemical oxygen demand (five day), suspended solids and pH may be imposed in the NPDES permit. Such limitations will reflect pretreatment requirements that may be imposed on users of the treatment works.

a. Carbonaceous biochemical oxygen demand (five day) - CBOD5.

(1) The thirty-day average shall not exceed 25 mg/l.

(2) The seven-day average shall not exceed 40 mg/l.

(3) The thirty-day average percent removal shall not be less than 85 percent.

b. Suspended solids - SS.

(1) The thirty-day average shall not exceed 30 mg/l.

(2) The seven-day average shall not exceed 45 mg/l.

(3) The thirty-day average percent removal shall not be less than 85 percent.

c. pH: The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that:

(1) Inorganic chemicals are not added to the waste stream as part of the treatment process, and

(2) Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

62.3(2) Special considerations.

a. Combined sewers. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under 62.3(1)"a"(3) and 62.3(1)"b"(3), or 62.3(3)"f"(3) and 62.3(3)"g"(3) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage removal level can be defined, and if so, what the level should be.

b. Industrial wastes. For certain industrial categories, the discharge of CBOD5 and SS permitted (under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act) may be less stringent than the values given in 62.3(1)"a"(1), 62.3(1)"b"(1), 62.3(3)"f"(1), and 62.3(3)"g"(1). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for CBOD5 and SS in 62.3(1)"a"(1), 62.3(1)"b"(1), 62.3(3)"f"(1), and 62.3(3)"g"(1) may be adjusted upwards provided that:

(1) The permitted discharge of such pollutants, attributable to the industrial category, would not be greater than that which would be permitted (under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act) if such industrial category were to discharge directly into waters of the state, and

(2) The flow or loading of such pollutants introduced by the industrial category exceeds 10 percent of the design flow or loading of the publicly owned treatment works.

When such an adjustment is made, the values for CBOD5 or SS in 62.3(1)"a"(2), 62.3(1)"b"(2), 62.3(3)"f"(2), and 62.3(3)"g"(2) should be adjusted proportionately.

c. Waste stabilization ponds. Departmental secondary treatment standards for waste stabilization ponds are the same as those found in subrule 62.3(1) concerning secondary treatment with the exception of the standards for suspended solids which are as follows:

(1) SS, the thirty-day average shall not exceed 80 mg/l.

(2) SS, the seven-day average shall not exceed 120 mg/l.

d. Less concentrated influent wastewater for separate sewers. The department may substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements in 62.3(1) and 62.3(3) provided that the permittee demonstrates that:

(1) The treatment works is consistently meeting or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater.

(2) To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and

(3) The less concentrated influent wastewater is not the result of excessive infiltration/inflow (I/I). A system is considered to have nonexcessive I/I when an average

IOWA DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 20 DECISION

REFERRALS TO THE ATTORNEY GENERAL

The Director requests the referral of the following to the Attorney General for appropriate legal action. Litigation reports have been provided to the Commissioners and are confidential pursuant to Iowa Code section 22.7(4).

Lakewood Sanitary District (tabled) - wastewater.
Broadview Courts (Dubuque) - water supply.
City of Long Grove - wastwater.
City of Sidney - wastewater.

Mike Murphy
March 4, 1988

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