EPC COMMISSION MINUTES & AGENDA

MONTH May

YEAR 1987

ADM-1-1-1
May 1987

MINUTES
ENVIRONMENTAL PROTECTION COMMISSION

Best Western Newton Inn
Newton, Iowa

May 20, 1987

The meeting of the Environmental Protection Commission was held at the Best Western Newton Inn in Newton, Iowa on May 20, 1987 convening at 8:30 a.m.

MEMBERS PRESENT

Richard Timmerman, Clark Yeager, Charlotte Mohr, Gary Priebe, Nancylee Siebenmann, Catherine Dunn, and Robert Schlutz.

MEMBERS ABSENT

Donna Hammitt, Keith Uhl

ADOPTION OF AGENDA

The following was added to the agenda:

Appointment -- City of Dysart -- 2:00 p.m.

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

ELECTION OF OFFICERS

Chairman Schlutz turned the meeting over to Vice-Chairman Timmerman for election of Chairman.

Charlotte Mohr nominated Robert Schlutz for Chairman, and moved that the nominations cease. Seconded by Catherine Dunn Motion carried unanimously.

Vice-Chairman Timmerman turned the meeting over to Chairman Schlutz for election of the remaining officers.

Nancylee Siebenmann nominated Richard Timmerman for Vice-Chairman, and Gary Priebe moved that the nominations cease. Seconded by Catherine Dunn Motion carried unanimously.

Nancylee Siebenmann nominated Charlotte Mohr for Secretary, and Gary Priebe moved that the nominations cease. Seconded by Clark Yeager Motion carried unanimously.

ADOPTION OF MINUTES

The following correction was made to the minutes of April 20-21, 1987:

Page 15, ADJOURNMENT should be corrected to read RECESS.

Motion was made by Richard Timmerman to approve the minutes of April 20-21, 1987 as amended. Seconded by Catherine Dunn. Motion carried unanimously.

MONTHLY REPORTS

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

The following monthly reports are enclosed 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.

Iowa Department of Natural Resources
Environmental Protection Commission
RULEMAKING STATUS REPORT
May 1, 1987

PROPOSAL	DRAFT TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 6 - Declaratory Rulings	1/20/87	2/11/87		--	4/21/87	4/21/87	5/20/87	6/24/87
2. Ch. 40, 41 - Fluoride MCL	4/20/87	*6/17/87		7/06/87 7/08/87 7/10/87				
3. Ch. 43 - Water Supply Grants	4/20/87	*6/17/87		7-06-87 7-08-87 7-10-87				
4. Ch. 50 - 52 Water Allocation (Conservation)	4/20/87	*6/17/87		7-06-87 7-08-87 7-10-87				
5. Ch. 64 - Design Standards (12, 14, 16, 18C)	2/17/87	3/11/87	4/13/87	4/01/87 4/03/87 4/06/87	5/20/87	*5/20/87	*6/17/87	*7/22/87
6. Ch. 65 - Feedlots	11/12/86	12/03/86	1/06/86	12/23/86 12/30/86 1/05/87	5/20/87	*5/20/87	*6/17/87	*7/22/87
7. Ch. 100, 103 - Landfill Groundwater Monitoring	3/16/87	5/20/87		6/09/87 6/10/87 6/11/87				
8. Ch. 135 - Underground Tank Monitoring	11/15/86	1/14/87	2/10/87	2/03/87 2/05/87 2/10/87	4/21/87	4/21/87	5/20/87	6/24/87

*Projected

MONTHLY VARIANCE REPORT 04/30/87

No.	Facility	Program	Engineer	Subject	Decision	Date
1	Albia, City of	Wastewater Const.	Garden & Associates	Interconnecting Piping	approved	04/15/87
2	Birmingham, City of	Wastewater Const.	French-Reneker	Sewer Grade	approved	04/17/87
3	Woodbury County	Flood Plain	Woodbury Co. & IDOT	Freeboard	approved	04/13/87
4	Dakota City, City of	Flood Plain	MER Engineering, Inc	Freeboard	approved	04/15/87
5	DeWitt, City of	Wastewater Oper.	Beling Consultants	Effluent Limit	denied	04/07/87
6	Creston, City of	Wastewater Oper.		Monitoring Freq.	approved	04/20/87
7	Iowa City, City of	Wastewater Oper.	Harry E. Boren, Supt	Monitoring Freq.	approved	04/21/87

Numbers in Parentheses Represent Reports For The Same Period In Fiscal Year 1986

		Substance Type			Mode					
Month	Total # of Incidents Reported	Petroleum Product	Agri. Chemical	Other Chemicals and Substances	Handling and Storage	Pipeline	Highway Incident	RR Incident	Fire	Other
Oct	79	45	0	34	53		18	2	0	6
Nov	24	12	3	9	17	0	5	1	0	1
Dec	43	36	1	6	24	1	14	1	0	3
Jan	48	32	3	13	37	0	9	0	1	1
Feb	41	25	1	15	30	1	5	1	2	2
Mar	55	35	5	15	37	0	12	4	1	1
Apr	78 (66)	32 (36) UST-13	25 (11)	21 (19)	51 (48) UST-13	3 (2)	16 (11)	3 (1)	2 (0)	3 (4)

Total # of Incidents Per Field Office

Field Office	01	02	03	04	05	06
This Period	16	12	10	07	13	20

REPORTS OF HAZARDOUS CONDITIONS

During the period of April 1, 1987 through April 30, 1987, reports of 78 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
4-07-87 Cerro Gordo	Apparently vandals opened the valves on three fuel storage tanks sometime before working hours on April 7, 1987, when the loss of 15,000 gallons of diesel fuel was discovered one mile south of Plymouth, Iowa. The product ran through a farm yard and into a field. It entered a tile line and reached a tributary to the Shell Rock River, causing a fish kill.	Mr. Jerry Fritz Rural Route #2 Mason City, Iowa 50401	Sumps were dug in order to pump up product. Contaminated soil was removed. Booms and pads were placed on the river. A bypass dam was installed at the tile outfall. Fuel was pumped off the water at the confluence of the creek and the river.
4-13-87 Floyd	A bushing failed on a storage tank located two miles west of Charles City, Iowa on April 13, 1987, and 9,000 gallons of 28% nitrogen fertilizer spilled onto a gravel parking lot and ran to a small creek that discharges to a sink hole 200 feet north of the site.	Denny's Ag Supply P.O. Box 192 HWY 14 West Charles City, Iowa 50616	The top six to eight inches of soil were excavated for application on land. A berm was constructed around the storage tank. Neighboring wells will be monitored quarterly for one year.

Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
City of Waterloo Waterloo (1)	Wastewater	Treatment violations	Order/Penalty	4/14/87
City of Leighton Leighton (5)	Drinking Water	Radioactivty, Chlorination and public notice violations	Order	4/14/87
Dr McDonald's Limited Ft. Dodge (2)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Clarmond Country Club Clarion (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Lake Keokuk Yaht Club Keokuk	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
I-35 Truckstop Restaurant Willimas (2)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
E.J. Rath, Inc. Missouri Valley (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Frederika's Tap Frederika (1)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Wheatland, City of Wheatland (6)	Wastewater	Compliance Schedule	Order	4/17/87
Sports Wade, Inc. Weldon (5)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
City of Baxter Baxter (5)	Wastewater	Noncompliance to Municipal Improvement Program	Order	4/8/87
Chicago C&P RR Waterloo (2)	Wastewater	Violation of Discharges	Order/Penalty	4/8/87
Moore Oil Company Cedar Rapids (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Fontana Park Picnic Buchanan Co. Cons. Bd. Hazelton (1)	Drinking Water	Failure to sample for nitrate	Order	4/8/87
Four Roads Inn Fairbank (1)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Delano's Lounge Washington (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Fox Roller Rink Cammanche (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Kingsbury Inn Columbus Junction (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
The Midway Holy Cross (1)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
City of Oxford Oxford (6)	Construction	Construction w/o permit	Order	4/8/87

Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Surburban Club Davenport (6)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
Telegrove Water Assn. Davenport (6)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
The Bank Turin (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
City of Crescent Crescent (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/27/87
Broadview Courts Dubuque (1)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/27/87
Marv's Lakeside Tap Davenport (6)	Drinking Water	Failure to monitor nitrate; failure to monitor bacteria	Order/Penalty Order/Penalty	4/27/87 4/27/87
J.I. Case Co., Inc. Bettendorf (6)	Wastewater	Prohibited discharge	Order/Penalty	4/27/87
Des Moines Metro SLF Des Moines (5)	Solid Waste	Cover; sludge disposal	Order/Penalty	4/30/87

Summary of Administrative Penalties

The following administrative penalties are due:

NAME/LOCATION	AMOUNT	DUE DATE
*Shelter Shield (Buffalo Center)	$1,000	12-03-86
*Lawrence Payne (Ottumwa)	700	12-05-86
*Country Corner Cafe (Pacific Junction)	400	12-21-86
*Cedar Hills Apartments (Dubuque)	1,000	12-29-86
**K & K Truckshop (Lenox)	212	12-29-86
*Chico's Supper Club (Burr Oak)	863	2-10-87
City of Clemons	512	3-04-87
Redwood Resort (Ruthven)	289	3-07-87
OK Lounge (Marion)	448	3-29-87
City of Dysart	400	3-13-87
Shady Oaks Golf Course (Ackworth)	212	4-04-87
IBP, inc. (Columbus Junction)	1,000	4-15-87
Page County Pig, Inc. (Page County)	500	4-25-87
Indian Creek Country Club (Nevada)	62	5-01-87
Blake Grove Retreat (Ackley)	50	5-01-87
Silvercrest Golf & Counti. Club (Decorah)	50	5-01-87
Derner's of Milford (Milford)	800	5-08-87
Rhinehart Construction Co. (N. Dallas SLF)	800	5-15-87
Tim's Town Pump (Mitchell)	760	5-22-87
Berge/Rognes Bros. Excavating (Northwood)	600	5-23-87
City of Swan	530	----
Gladyth McConnell (Edgerville)	1,000	5-24-87
Giese Construction Co. (Eagle Grove)	1,000	5-25-87
Chicago Central & Pacific RR (Fort Dodge)	1,000	6-08-87
Delano's Lounge (Ainsworth)	336	6-08-87
The Midway (Holy Cross)	336	6-08-87
The Moore Oil Co. (West Branch)	336	6-09-87
Fox Roller Rink (Camanche)	172	6-10-87
City of Waterloo	1,000	6-14-87
Four Roads Inn (Fairbank)	50	6-15-87
Sport Wade, Inc. (Weldon)	224	6-20-87
Suburban Club (West Burlington)	448	6-20-87

NAME/LOCATION	AMOUNT	DUE DATE
E.J. Rath, Inc. (Missouri Valley)	50	
Dr. Macdonald's, Ltd. (Fort Dodge)	224	
Clarmont Country Club (Clarion)	174	
Lake Keokuk Yacht Club (Keokuk)	224	
Telegrove Water Assn. (Davenport)	224	
The Bank (Turin)	212	
City of Crescent	312	
Broadview Courts (Dubuque)	324	
Mary's Lakeside Tap (Davenport)	336	
Mary's Lakeside Tap (Davenport)	200	
J.I. Case, Inc. (Bettendorf)	500	
Des Moines Metro SLF	1,000	
Monti-View MHP (Monticello)	200	7-06-87
Frederika's Tap (Frederika)	50	8-01-87

* Referred to the Attorney General
** On Payment Schedule

The following administrative penalties have been appealed:

NAME/LOCATION	AMOUNT
*Finlan Landfill (Chickasaw County)	$1,000
Besch/Ralston (Fort Dodge)	500
Kula and Boge (Martelle)	1,000
McConnell; Yoder Feed (Ottumwa)	1,000
Handi-Klasp, Inc. (Webster City)	1,000
NW States Cement (Mason City)	1,000
City of Kellogg	1,000
Munn and Traum (Davenport)	100
Ken Turner (Fort Madison)	1,000
Lakewood Sanitary District	1,000
Kingsbury Inn (Columbus Junction)	336
Scotty's Auction Service (Davenport)	100

The following administrative penalties were paid in April:

NAME/LOCATION	AMOUNT
Cargill, Inc. (Eddyville)	$1,000
Grandview Corners (Grandview)	50
Walter Groenweg (Rock Valley)	150
First Place Lanes (Audubon)	50
Van Buren County SLF	500
Kossuth County SLF	300
Lehigh Portland Cement (Mason City)	1,000
Ag Processing, Inc. (Eagle Grove)	1,000
I-35 Truckstop (Williams)	224
Iowa Power and Light (Council Bluffs)	600
1st Pleasant View Subdivision (Clarion)	74

* Referred to the Attorney General
** On Payment Schedule

Department of Natural Resources
Environmental Protection Commission
Contested Cases
May 1, 1987

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
10-26-83 1-20-85	Frit Industries	Administrative Order Hazardous Waste Registry	HW	Landa	Settlement close.
9-14-84	Belmond, et. al.	Administrative Order	HC	Landa	Proposed decision 11-4-85; appealed.
10-17-85	City of Bevington	Administrative Order	WW	Hansen	Hearing continued.
1-23-86	Oelwein Soil Service	Administrative Order	WW	Landa	Hearing continued.
5-21-86	Besch and Ralston	Administrative Order	SW	Landa	Settlement close; Removal begun.
6-12-86	ADM - Clinton	Administrative Order	Air	Landa	Hearing continued.
7-30-86	IBP - Columbus Junction	NPDES Permit	WW	Hansen	Hearing held 1-14-87; Second hearing 5-21-87.
9-10-86	Farmer's Mutual Coop	Administrative Order	WW/SW	Landa	Proposed Consent Order 3-23-87
9-10-86	Kula and Boge	Administrative Order	SW	Landa	Negotiating before filing. Removal started.
10/27/86	Union County/Wittstock	Permit Issuance	FP	Clark	Remanded by District Court.
10/28/86	Lamoni Municipal Utilities	Administrative Order	WW	Hansen	Negotiating before setting hearing.
10/29/86	Handi-Klasp Company, Inc.	Administrative Order	AQ/WW SW	Landa	Hearing set for 4-16-87.
11/14/86	Gale Conrad	Permit Condition	FP	Clark	Hearing held for 4-14-87.
11/18/86	Northwestern States	Administrative Order	WW	Landa	Settled.
12-03-86	City of Waukee	Administrative Order	WS	Hansen	Hearing continued.
12/11/86	Eloise Reese	Permit Condition	FP	Clark	Hearing continued.
12/24/86	Francis Heeberlin	Administrative Order	FP	Clark	Hearing continued.
12/30/86	Agripro Seeds	Permit Denial	AQ	Landa	Hearing settled.
1/29/87	Seaward Development	None - Public Hearing	FP	Clark	Hearing held 4-09-87.
2/ /87	Aspro, Inc.	Administrative Order	AQ	Landa	Hearing continued.
2/18/87	City of Kellogg	Administrative Order	WW	Murphy	Negotiating before filing.
3/03/87	Turner, Mildred and Kenneth	Administrative Order	SW	Landa	Hearing continued.
3/10/87	Lakewood Sanitary District	Administrative Order	WW	Hansen	Hearing set for 5-07-87.
3/16/87	Deere and Company	Administrative Order	WW	Murphy	Negotiating before filing.
3/18/87	Meyer/Greiner/Vogel	Administrative Order	FP	Clark	New Case.
3/19/87	City of Mt. Pleasant	Administrative Order	WW	Hansen	Negotiating before filing.
3/25/87	City of Long Grove	Design Denial	WW	Hansen	New Case.
3/25/87	Traum and Munn	Administrative Order	SW	Kennedy	Negotiating before filing.
4/06/87	Scotty's Auction Service	Administrative Order	SW	Kennedy	Negotiating before filing.
4/14/87	Chicago Central RR	Administrative Order	WW	Landa	Negotiating before filing.
4/15/87	Kingsbury Inn	Administrative Order	WS	Murphy	New Case.

A lengthy discussion followed regarding underground storage tank rules and EPA regulations, also sanitary landfills and monitoring of same.

Clark Yeager stated that, at some time in the future, he would like information regarding the liability on an operator of a landfill or a service station; also, he would like to see how the fee money, which is collected by the department, is used.

Allan Stokes distributed a Draft Work Plan for Water Quality Monitoring Programs at Des Moines Metro Landfill. Discussion followed regarding the various reports.

STATUS OF FLOODPLAIN PERMIT CASES

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

As requested, the staff will update the Commission as to the status of two floodplain permit cases, Chichaqua (Polk County v. INRC) and Union County Bridge (Wittstock v. IDWAWM).

Union County Bridge -- Allan Stokes stated that Union County proposed to build a bridge structure and the Department granted a permit to do so. It was appealed by a neighbor who believed they would be adversely impacted. DWAWM upheld the issuance of the floodplain development permit. Arlo Wittstock, adjoining landowner, filed an appeal and the district court entered an order on 10/17/86 remanding it back to the Department for further hearing. Mr. Wittstock filed a motion to enlarge and amend the findings, conclusions and judgments, whereupon the court entered an order on 12/24/86 clarifying what they meant when they remanded the case back to the Department. The ruling was that the Commission's decision to uphold the granting of the permit was supported by substantial evidence for the criteria which was considered. On remanding it back to the Commission, they stated that the Commission must reconvene a hearing to take testimony regarding the statutory criteria impacting fish and wildlife.

The matter stayed in limbo temporarily. The Department has recently been informed that funding will be coming in 1987 and Union County will want to move ahead with the bridge. Legal Bureau will have to schedule a hearing in the near future to address the issue of the criteria impacting fish and wildlife.

Chichaqua -- Mr. Stokes stated that this is a wildlife refuge which is between drainage districts #4 and #52 in Polk County. The tile lines in district #4 were silting up and, rather than cleaning out the silted up tile lines, the county straightened and dredged the old Skunk River channel believing that tile lines were silting up because the water was not moving fast enough through the channel; therefore, they cut out some oxbows and straightened out a natural meandered river. They did not get a permit to do this, and a stop work order was issued. The county submitted plans for an after-the-fact permit which was denied by the Natural Resources Council. The county was ordered to restore the area. It was appealed all the way to the Supreme Court, and in November of 1985 the Supreme Court upheld the Natural Resource Council's decision. Polk County then submitted restoration plans which should

have been completed by the end of the 1986 construction season. Due to adverse weather in 1986 and problems with negotiating contracts, restoration was not completed. Bids were let in 1987 and problems occurred with bidders. The county now plans to readvertise for bids to carry out their action plan.

PUBLIC PARTICIPATION

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

NOTICE OF INTENDED ACTION -- 567 CHAPTER 23

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

The Department requests approval to file the attached Notice of Intended Action to initiate action to amend the rules to adopt the federally enforceable standard of 5.0 lbs. SO_2 per million Btu input for existing solid fuel burning sources located in 89 counties (other than Black Hawk, Clinton, Des Moines, Dubuque, Jackson, Lee, Linn, Louisa, Muscatine and Scott Counties). This will eliminate the dual standards which presently exist in the 89 counties.

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code Section 455B.133, the Environmental Protection Commission proposes to amend Chapter 23, "Emission Standards for Contaminants," Iowa Administrative Code, by revising the sulfur dioxide emission standards for solid fuel (coal) burning stationary sources (principally coal-fired industrial and utility boilers and cement kilns) that are not subject to the federal new source performance standards.

Background

In 1972, the state of Iowa first submitted to the United States Environmental Protection Agency (EPA) a state implementation plan for meeting federal ambient air quality standards for sulfur dioxide (SO_2). That plan contained an SO_2 emission limit of 6 lbs. of SO_2 per million British thermal units (Btu) of heat input for all solid fuel burning sources in Iowa. The plan also provided for the reduction from 6 lbs. to 5 lbs. per million Btu's from all sources by January, 1975. These limits were approved by the EPA on May 31, 1972 (37 FR 10865).

In 1974, the state adopted new rules providing for a delay of the reduction to 5 lbs. per million Btu from January, 1975 to July, 1978. This proposal was submitted to the EPA on July 17, 1975. On October 1, 1976, EPA published notice that no approval or disapproval action would be taken on the July, 1975 submittal because the state had adopted subsequent revisions to the affected sections of the rules.

The existing subrule 567--23.3(3), Iowa Administrative Code, was adopted on April 15, 1976, and became effective July 19, 1976. This subrule provides that for ten eastern Iowa counties, the eight bordering Illinois plus Black Hawk and Linn Counties, all solid fuel burning sources are limited to 6 lbs. per million Btu's. (This is unchanged from the original 1972 plan). In the remaining 89 counties, no emission limits are specified for existing

sources with less than 500 million Btu heat input per hour. In these 89 counties, emissions from existing sources with more than 500 million Btu of heat input per hour are limited to 8 lbs. per million Btu. Throughout the state, new sources of less than 250 million Btu's are limited to 6 lbs. per million Btu; for new fossil fuel burning sources greater than 250 million Btu input the source performance standards apply.

On June 1, 1977 (42 Fed. Reg. 27892), the Environmental Protection Agency formally determined that the proposed revisions to the SO_2 emission limits, other than the 6 lb. limit for the 10 eastern counties and the new sources which have a capacity of 250 million Btu or less per hour heat input, were inadequate to maintain the National Ambient Air Quality Standards for sulfur dioxide. The approval of only a portion of the emission limitations adopted by Iowa resulted in a dual set of standards. The state and federal standards for the 10 eastern counties and for new sources with capacities of 250 million Btu or less are consistent. However, the state and federal standards for the remaining 89 counties are significantly different. As they currently exist, the state standard for sources over 500 million Btu is 8 lbs. per million Btu and for those sources of 500 million Btu or less, there is no limit prescribed. The federal standard limits SO_2 emissions to 5 lbs. per million Btu for all solid fuel burning sources located in these 89 counties. (A more complete history of this rule is found in the IAB Volume 5, Number 26 published on June 22, 1983 as ARC 3813.)

The present rules were promulgated by the Iowa Department of Environmental Quality on April 15, 1976, and have only been approved in part by the Federal Environmental Protection Agency. In order to eliminate the dual standards which presently exist because of this EPA action, to provide a clear direction for Iowa industries and utilities, and to provide for the minimum short-term impact to Iowa's economy while preserving the existing air quality the Commission revises the rules as follows:

1. To simplify and clarify this subrule, former subrule 23.3(3)a(2) is revised and is renumbered as 23.3(3)a(1). The emission limitation set by this subrule for the ten eastern Iowa counties specifically listed was approved by the Environmental Protection Agency on June 1, 1977, and remains in its entirety.

2. Subparagraph 23.3(3)a(1) is renumbered as 23.3(3)(a)(2) and is revised to set new emission limitations for the existing solid fuel burning units in the remaining 89 counties in Iowa. The rule which was promulgated by the DEQ limiting these sources to 8 lbs. of SO_2 per million Btu was not approved by the EPA. To conform to the existing federally approved standard, a previously proposed DEQ emission limitation of 5 lbs. per million Btu for existing sources is now, once more, proposed. The standards for new sources which have a capacity of 250 million Btu or less per hour heat input are not affected by this revision.

3. Subrule 23.3(3)a(5) is repealed in this entirety. The Environmental Protection Agency refused to approve this standard because it failed to provide for compliance with the National Ambient Air Quality Standards.

The rule which is proposed at this time is nearly identical to rulemaking that was proposed in 1983. The notice of intended action was published in the June 22, 1983 Iowa Administrative Bulletin as ARC 3813. There will be three public hearings to receive comments on this proposed amendment. The first will be July 6, 1987 at 11:00 a.m. in the Trowbridge Hall Conference Room, Geological Survey Bureau, Department of Natural Resources, 123 North Capitol Street, Iowa City, Iowa. The second hearing will be held on July 7, 1987 at 10:00 a.m. in the fifth floor conference room of the Wallace State Office

Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. The third hearing will be held July 10, 1987 at 11:00 a.m. in Room 006, Continuing Education Building, Iowa Western Community College, 2700 College Road, Council Bluffs, Iowa. Written comments will be received by the Department of Natural Resources at the Des Moines address given above for an additional ten days after the final hearing.

This proposed amendment is intended to implement Iowa Code section 455B.133.

The following amendment is proposed:

ITEM 1. Subrule 567--23.3(3), paragraph "a" is amended by striking subparagraphs (1) and (2) and inserting in lieu thereof the following:

(1) No person shall allow, cause, or permit the emission of sulfur dioxide into the atmosphere from an existing solid fuel-burning unit, (i.e., a unit which was in operation or for which components had been purchased, or which was under construction prior to September 23, 1970), in an amount greater than 6 pounds, replicated maximum two-hour average, per million Btu of heat input if such unit is located within the following counties: Black Hawk, Clinton, Des Moines, Dubuque, Jackson, Lee, Linn, Louisa, Muscatine and Scott.

(2) No person shall allow, cause, or permit the emission of sulfur dioxide into the atmosphere from an existing solid fuel-burning unit, (i.e., a unit which was in operation or for which components had been purchased, or which was under construction prior to September 23, 1970), in an amount greater than 5 pounds, replicated maximum two-hour average, per million Btu of heat input if such unit is located within the remaining 89 counties of the state not listed in subparagraph 23.3(3)a(1).

Further amend subrule 567--23.3(3), paragraph "a," by striking subparagraph (5).

_____
Date

_____
Larry J. Wilson, Director

Motion was made by Catherine Dunn to approve Notice of Intended Action--Chapter 23, Air Quality Rules--Sulphur Dioxide Standards. Seconded by Charlotte Mohr. Motion carried unanimously.

REVISIONS TO CHAPTERS 40 AND 41 -- WATER SUPPLIES RULES

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

The Commission is requested to approve the Notice of Intended Action for changes in Chapters 40 and 41 of the IAC.

Changes are proposed in Chapters 40 and 41 of the Iowa Administrative Code to adjust the maximum contaminant level (MCL) for fluoride from 2.2 mg/l to 4.0 mg/l, to clarify sampling requirements for fluoride for systems having more than one source and to give the department the authority to alter the

frequency for fluoride monitoring under pre-set conditions. These changes are being proposed as a result of the 1986 amendments to the Safe Drinking Water Act.

Upon authorization by the Commission, three public hearings on the proposed changes in the rules will be held throughout the state beginning on July 6, 1987, and written and oral comments will be received through July 20, 1987. The results of the comments and recommendations are scheduled to be brought back to the Commission at the September, 1987 meeting.

With these revisions, 38 of the 44 water systems currently in violation of the fluoride maximum contaminant level will be removed from the violation status.

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.105 as amended by 1986 Iowa Acts, Senate File 2175, section 1887, and 1985 Iowa Code supplement section 455B.173 as amended by 1986 Iowa Acts, Senate File 2175, section 1899A, the Environmental Protection Commission for the Department of Natural Resources gives notice of intended action to amend the subrules which contains the maximum contaminant level and monitoring requirements for fluoride in drinking water standards.

Revisions to 567-40(455B) and 567-41(455B) include adjusting the maximum contaminant level for fluoride from 2.2 mg/l to 4.0 mg/l, clarifying sampling requirements for fluoride for systems having more than one source and giving the department the authority to alter the frequency for fluoride monitoring under preset conditions. These changes are the result of revisions to the federal primary drinking water standards contained in the 1986 amendments to the Safe Drinking Water Act.

Any interested person may file written suggestions or comments on the proposed rule changes through July 20, 1987. Such written materials should be directed to Roy Ney, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. Persons who want to convey their views orally may contact Roy Ney at 515/281-8945 by that date. Persons are also invited to present oral or written comments at public hearings which will be held on July 6, 1987 at 10:00 a.m. at the Iowa Department of Natural Resources, Geological Survey Bureau, Trowbridge Hall, 123 North Capitol, Iowa City, Iowa 52242; on July 8, 1987 at 10:00 a.m. in the fifth floor east conference room, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034; and on July 10 1987 at 11:00 a.m. at Iowa Western Community College, Continuing Education Building, Room 006, Council Bluffs, Iowa 51501.

Copies of the proposed rules may be obtained from Roy Ney, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319.

These rules are intended to implement Iowa Code Chapter 455B, Division III, Part I, as amended by 1986 Iowa Acts, Senate File 2175, sections 1899, 1899A and 1899B.

Motion was made by Catherine Dunn to approve Notice of Intended Action--Chapters 40 and 41, Water Supplies Rules. Seconded by Richard Timmerman. Motion carried unanimously.

CHAPTER 43 -- WATER SUPPLY GRANTS AUTHORIZED UNDER 455B.309

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

The Commission is requested to approve the Notice of Intended Action for Chapter 43 of the IAC.

Chapter 43 of IAC is proposed to implement the award of grants to water supplies for the abatement or elimination of threats to public health and safety resulting from contamination of a water supply source as authorized under Iowa Administrative Code Chapter 455B, Subsection 309.4. The source of the grant funds is the landfill tonnage fee.

Upon authorization by the Commission, three public hearings on the proposed rules will be held throughout the state beginning on July 6, 1987, and written and oral comments will be received through July 20, 1987. The results of the comments and recommendations are scheduled to be brought back to the Commission at the September, 1987 meeting.

Implementation of these rules will allow the department to award approximately 10 grants per year to water supplies within the state to assist in the correction of water quality violations.

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.105 as amended by 1986 Iowa Acts, Senate File 2175, section 1887, and 1985 Iowa Code supplement section 455B.173 as amended by 1986 Iowa Acts, Senate File 2175, section 1899A, the Environmental Protection Commission for the Department of Natural Resources gives Notice of Intended Action to adopt rules setting out the procedures for applying for water supply grant funds as authorized under Iowa Code section 455B.309(3) and to provide the method by which applications will be evaluated and grants awarded.

Chapter 43(455B) includes the procedures to apply for water supply grant funds and to provide the method by which applications will be evaluated and grants awarded. It is the intent of the rules to award grants to projects that will result in abatement or elimination of water quality problems within a very short time frame. The grant fund is created from monies received from the landfill tonnage fee pursuant to 455B.309

Grant eligible projects and project costs are detailed in the chapter. Procedures for ranking grant applications, awarding grants, payment of grant funds to the grantee and conditions under which forfeiture of grant funds may occur are outlined in this chapter.

Any interested person may file written suggestions or comments on the proposed rule changes through July 20, 1987. Such written materials should be directed to Roy Ney, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. Persons who want to convey their views orally may contact Roy Ney at 515/281-8945 by that date. Persons are also invited to present oral or written comments at public hearings which will be held on July 6, 1987 at 10:30 a.m. at the Iowa Department of Natural Resources, Geological Survey Bureau, Trowbridge Hall, 123 North Capitol, Iowa City, Iowa 52242; on July 8, 1987 at 10:30 a.m. in

the fifth floor conference room, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034; and on July 10, 1987 at 11:30 a.m. at Iowa Western Community College, Continuing Education Building, Room 006, Council Bluffs, Iowa 51501.

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

These rules are intended to implement Iowa Code Chapter 455B, Division III, Part I, as amended by 1986 Iowa Acts, Senate File 2175, sections 1899, 1899A and 1899B.

Robert Schlutz stated that he feels that there should be something in the rules regarding response time to an applicant in case of an emergency.

Motion was made by Nancylee Siebenmann to approve, with additional attention to emergency response needs, Notice of Intended Action--Chapter 43, Water Supply Grants Authorized Under 455B.309. Seconded by Catherine Dunn. Motion carried unanimously.

WATER CONSERVATION AND PRIORITY ALLOCATION RULES: REVISIONS TO CHAPTERS 50, 51 AND 52

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

The Department requests Commission approval of the attached Notice of Intended Action.

The staff will discuss the proposed amendments and additions to Chapters 50, 51 and 52 of the Iowa Administrative Code, Environmental Protection (567). These amendments include provisions for requiring water conservation and for restricting water withdrawals during severe shortages by category of water use in accordance with the State Water Plan. Authority for these rules comes from changes to the Iowa Code sections 455B.265, 455B.266, and 455B.271.

The proposed rule revisions change the classifications for types of water use in conformance with the priority allocation categories of water use. General provisions for water conservation are made as a requirement for all water withdrawal permits. Specific criteria for emergency conservation have been established for permits for water withdrawal from sources which are susceptible to short-term water shortages. Specific permit conditions for emergency conservation will be based on a water conservation plan prepared by the permittee. Events for triggering emergency conservation and/or priority allocation restrictions are described and the priority allocation plan (455B.266) is reiterated.

Copies of these rules were distributed to the Commission at the April meeting.

ENVIRONMENTAL PROTECTION COMMISSION (567)
NOTICE OF INTENDED ACTION

Pursuant to the authority of Iowa Code sections 455A.6, 455B.105, and 455B.263, the Environmental Protection Commission intends to amend Chapter 50, "Scope of Division - Definitions - Forms - Rules of Practice," Chapter 51,

"Water Permit or Registration - When Required" and Chapter 52, "Criteria and Conditions for Authorizing Withdrawal, Diversion and Storage of Water."

Iowa Code sections 455B.265, 455B.266 and 455B.271 provide the authorization and conditions under which the Department may require water use permits to contain water conservation conditions and may suspend or restrict water use by category of use.

The Department intends to require water conservation in water use permits by adding new rule 52.9(455B). General water conservation conditions will be placed in all permits and specific conditions will be placed in permits for withdrawal from sources of water which are susceptible to short-term shortages. Specific water conservation permit conditions will be based on a water conservation plan prepared by the permittee or applicant. Proposed rule 52.10(455B) describes circumstances and procedures for implementing emergency conservation and priority allocation restrictions. It also reiterates the priority allocation list of water uses from Iowa Code section 455B.266.

These proposed rules categorize water use into six basic classes: domestic, industrial, irrigation, livestock, power generation, and recreational and aesthetic. Water use will no longer be classified by only the dominant use of the permitted withdrawal (i.e., municipal, municipal-type, industrial, or irrigation). As a result, water use by a municipal system will likely include domestic, industrial, irrigation, and recreational and aesthetic uses. Other water systems are also likely to include more than one class of water use.

The water use classification becomes important in the implementation of the priority allocation plan as proposed in rule 52.10(455B). The classification of most water uses is clear-cut. However, it may not always be evident as to what category a particular use may fall. This is particularly true of the industrial and recreational and aesthetic use classes. The Department's determination of specific water uses which will be included in the industrial and recreational and aesthetic use classes is provided in amended rule 50.2(455B). Comments on these use classifications are requested.

Proposed subrule 52.9(3)"c"(1) calls for water conservation plans to contain emergency water conservation provisions which reduce consumptive use of water by at least fifty percent over similar periods of normal use, except for irrigation use. Proposed subrule 52.9(3)"c"(3) limits irrigation to the equivalent of one inch of water per irrigated acre per week during periods when emergency conservation is required. These criteria are somewhat arbitrary and are proposed as a general guideline with exceptions permitted when justified. An alternative approach would be to assign specific maximum water use rates applicable to specific types of water use. For example, different irrigation rates could be set for different crops and different industrial water use rates could be established for different types of industry. Input is requested regarding the acceptability of the proposed approach and suggestions for preferable approaches.

Any interested person may file written comments on the above referenced rule changes through July 20, 1987, with the Administrator of the Environmental Protection Division, Department of Natural Resources, 900 East Grand Avenue, Des Moines, Iowa 50319-0120. Persons are also invited to present oral or written comments at public hearings which will be held on July 6, 1987 at 1:00 p.m. in the Trowbridge Hall Conference Room, Geological Survey Bureau, Department of Natural Resources, 123 North Capitol Street, Iowa City, Iowa; on July 8, 1987 at 1:00 p.m. in the Fifth Floor Conference Room, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa; and on July 10, 1987 at 1:00 p.m. in Room 006, Continuing Education Building, Iowa Western Community College, 2700 College Road, Council Bluffs, Iowa.

These rules are intended to implement Iowa Code sections 455B.265, 455B.266 and 455B.271.

Motion was made by Charlotte Mohr to approve Notice of Intended Action--Revisions to Chapters 50, 51 and 52, Water Conservation and Priority Allocation Rules. Seconded by Clark Yeager. Motion carried unanimously.

AUTHORIZATION FOR HEARING, FY 88 CONSTRUCTION GRANT PROJECT LIST

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

It is requested that the Commission authorize the department to hold a public hearing on June 30, 1987 to receive comments on the proposed FY88 Construction Grant Project List. The public hearing is the next step on the schedule of events, which was presented to you at the April meeting, leading to the adoption of a FY88 State Priority List.

The proposed FY88 funding list and summary identifies those projects which qualify to receive the anticipated grant funds allotted to Iowa during FY88.

Following the public hearing and comment period on the proposed FY88 funding list, staff will address all comments and prepare final recommendations for consideration at the August Commission meeting. Pending final approval, the FY88 Construction Grants Project List would become effective on October 1, 1987.

The FY88 Construction Grants Project List was distributed to the Commission at the April meeting.

PROPOSED

STATE OF IOWA
IOWA DEPARTMENT OF NATURAL RESOURCES

FISCAL YEAR 1988
CONSTRUCTION GRANTS STATE PROJECT PRIORITY LIST

FOR COMMENT AT PUBLIC HEARING

CONSTRUCTION GRANTS FUNDING SUMMARY

The attached funding summary is condensed from the Fiscal year 1988 State Project Priority List. It includes, in priority order, projects anticipated to be funded with available federal allotments and projected allotments through Fiscal Year 1988. Projects from the Fiscal Year 1987 Fundable List which have not been awarded a grant are shown in the first column. Projects in the second column comprise the proposed Fiscal Year 1988 Fundable List, providing a federal appropriation is made. The Fiscal Year 1988 Fundable List is based on an assumed allotment of $32,851,200.

It is emphasized that the list as shown is dependent upon supplemental Fiscal Year 1987 appropriations of an additional $16,296,200 for Iowa and

appropriation of the full Fiscal year 1988 authorization of $32,851,200 for Iowa.

DRAFT
FY 1988 CONSTRUCTION GRANTS STATE PROJECT PRIORITY LIST

Step	Project	Estimated EPA Grant Assistance FY 1987	FY 1988
3	Des Moines ICA (segmented)	12,865,940	19,710,670
3	Ames (segmented)	5,692,490	2,644,180
4	Rock Valley**	670,010	
4	Dakota City**		222,420
4	Randall*		441,650
4	Clearfield*/**	550,820	
4	Atalissa*/**	262,350	
4	Waucoma*		385,000
4	Menlo	784,020	
4	Parnell*		305,800
4	Lineville*		770,000
4	Ricketts**		86,290
4	Panama*/**		242,880
4	Welton*/**	258,610	
	Fiscal Year Funding Estimates	$21,084,240	$24,8908,890

Funding for projects shown is based on a supplemental FY 1987 allotment to Iowa of $16,296,200 and an assumed FY 1988 allotment to Iowa of $32,851,200. Variation of actual allotments from these assumptions may require a revision of the list.

Project Step Key:

3 Construction

4 Combination grant for design and construction. Available only when the grant is less than $3 million, the project is not segmented, and the population is under 25,000.

* Unsewered community

** Small community alternative technology. These projects are eligible for a 20 percent bonus grant for qualifying portions in addition to the 55 percent grant shown.

FY 1988 SUMMARY OF FUNDS

I.	Estimated EPA Assistance Required		
	A. Estimated assistance for projects		$45,893,1
	B. Designated reserve for grant increases		6,028,656
	C. Reserve for grant increases for alternative technology		
	FY 1986	$ 88,566	
	FY 1987	$1,144,294	
	FY 1988	$1,149,792	2,382,652
	D. Reserve for grant increases for innovative technology		
	FY 1987	$ 164,256	
	FY 1988	$ 164,256	328,512
	E. Reserve for state management assistance 205(g)		
	FY 1987	$1,314,048	
	FY 1988	$1,314,048	2,628,096
	F. Reserve for water quality management planning 205(j)(1)		
	FY 1986	$ 144,770	
	FY 1987	$ 328,512	
	FY 1988	$ 328,512	801,794
	G. Reserve for nonprofit management planning 205(j)(5)		
	FY 1987	$ 162,962	
	FY 1988	$ 328,512	941,474
	H. Reserve for advances of allowances (no need projected for FY 1988)		
	Total grant needs		$58,554,314
II.	Nonadditive Set-Aside Reserve Funds		
	A. Reserve for alternative systems for small communities		
	FY 1987	$1,314,048	
	FY 1988	$1,314,048	
		$2,628,096	
	B. Quota for unsewered communities		
	FY 1987	$1,642,560	
	FY 1988	$1,642,560	
		$3,285,120	
III.	Available Funds		
	A. FY 1972-86 Carryover Balances (5/1/87)		$ 1,297,373
	B. FY 1987 Allotment Balance (5/1/87)		8,109,5
	C. Additional Anticipated FY 1987 Allotment		16,296,200
	D. Anticipated FY 1988 Allotment		32,851,200
			$58,554,314

Chairman Schlutz requested that the Commission be given a quarterly status report on the Construction Grants State Project Priority List.

Motion was made by Catherine Dunn to approve authorization of a hearing on the Proposed FY88 Construction Grant Project List. Seconded by Clark Yeager. Motion carried unanimously.

REVISION OF CHAPTER 65 -- ANIMAL FEEDING OPERATIONS RULES

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

The Department requests Commission approval of the proposed amendments to the Chapter 65 rules.

On November 20, 1986, the Commission approved a Notice of Intended Action to hold public hearings and receive comments on proposed amendments to the Chapter 65 rules. Public hearings were held in December and January in Des Moines, Iowa City and Storm Lake. No comments were received at these hearings.

Written comments were received from eight persons, and both oral and written comments were received from the Administrative Rules Review Committee. The attached Public Participation Responsiveness Summary lists the persons commenting, summarizes the major areas of comment, and presents the Department's proposed response to each area of comment. As a result of the comments received, two additional amendments to the Chapter 65 rules are being recommended:

- Addition to rule 65.7 of a requirement that upon transfer of legal responsibility for a permitted animal feeding operation, the person to whom responsibility is transferred must provide to the Department all information needed to enable the permit to be modified; and

- Addition to Appendix A of a fifth waste control alternative, with this alternative allowing a feedlot operator to only conduct waste disposal operations twice a year -- once during the period from April 1 to May 31 and again during the October 1 to November 30 period.

In response to a January 6, 1987 request by the Administrative Rules Review Committee, an economic impact statement on the proposed rule amendments was prepared. The Commission approved this statement on March 17, and it was subsequently published in the Iowa Administrative Bulletin.

If the Commission approves the Chapter 65 rule amendments in May, the amended rules will become effective July 22, 1987.

ENVIRONMENTAL PROTECTION COMMISSION (567)
Adopted Rule

Pursuant to the authority of Iowa Code sections 455A.6, 455B.105 and 455B.173, the Environmental Protection Commission of the Iowa Department of Natural Resources adopts amendments to Chapter 65 - "Animal Feeding Operations."

The Notice of Intended Action was published in the December 3, 1986, IAB as ARC 7189. The only changes from the proposed amendments were minor wording changes suggested by commentors; addition of a sentence to rule 65.7(455B)

clarifying that the transferee of a permit shall provide information to the department upon request, to enable appropriate modification of the permit; and addition of a fifth waste disposal option for permitted open feedlots. All of these changes were in response to comments and are within the scope of the notice.

These rules are intended to implement Iowa code chapter 455B, Division III, Part I, and Iowa code section 455B.134(3)(e).

These rules will become effective July 22, 1987.

Item 1. Amend 567--65.1(455B) by striking the subrule numbers, placing the definitions in alphabetical order, striking the definitions of "animal enclosure," "application for construction permit," and "application for operation permit," and amending or adding definitions as follows:

"Anaerobic lagoon" means an impoundment, the primary function of which is to store and stabilize organic wastes. The impoundment is designed to receive wastes on a regular basis and the design waste loading rates are such that the predominant biological activity in the impoundment will be anaerobic. An anaerobic lagoon does not include:

a. A runoff control basin which collects and stores only precipitation induced runoff from an open feedlot feeding operation; or

b. A waste slurry storage basin which receives waste discharges from confinement feeding operations and which is designed for complete removal of accumulated wastes from the basin at least semi-annually; or

c. Any anaerobic treatment system which includes collection and treatment facilities for all off gases.

"Animal capacity" means the maximum number of animals which the owner or operator will ~~be~~ confined~~, as determined by the applicant,~~ in ~~the~~ an animal feeding operation at any one time.

"Animal feeding operation" means ~~an animal enclosure~~ a lot, yard, corral, building, or other area in which animals are confined and fed and maintained for 45 days or more in any twelve-month period. Two or more animal ~~enclosures~~ feeding operations under common ownership or management are deemed to be a single animal feeding operation if ~~the enclosures~~ they are adjacent or utilize a common area or system ~~is utilized~~ for waste ~~the~~ disposal ~~of waste from the enclosures~~.

"Animal unit" means a unit of measurement used to determine the animal capacity of an animal feeding operation containing two or more species of animals. The animal unit capacity of an operation is determined by multiplying the number of animals of each species by the appropriate equivalency factor from Table 1, and summing the resulting totals for all animal species contained in the operation.

TABLE 1
Animal Unit Equivalency Factors

Animal Species	Equivalency Factor
Slaughter and feeder cattle	1.0
Mature dairy cattle	1.4
Swine, butcher and breeding (over 55 lbs.)	0.5
Sheep or lambs	0.1
Horses	2.0
Turkeys	0.018
Chickens, broiler or layer	0.01

"Confinement feeding operation" means an totally roofed animal feeding operation ~~consisting of one or more totally roofed animal enclosures in which animals are confined and fed or maintained for 45 days or more in any twelve-month period and~~ in which wastes are stored or removed as a liquid or semi-liquid.

"Construction permit" means a written approval of the ~~executive director~~ department to construct a ~~waste-disposal system~~ waste control facility or part ~~thereof~~ of one ~~in accordance with the plans and specifications approved by the department.~~

"Discontinued animal feeding operation" means an animal feeding operation whose use has been discontinued and the owner or operator does not intend to resume its use for a period of twelve months or more.

"Man-made waste drainage system" means a drainage ditch, flushing system, or other drainage device which was constructed by man and is used for the purpose of transporting wastes.

"New animal feeding operation" means an animal feeding operation whose construction was ~~commenced~~ begun ~~on or~~ after ~~August 16, 1976~~ July 22, 1987, or whose operation is ~~again commenced~~ resumed after having been discontinued for a period of twelve months or more ~~of discontinued operation.~~

"Open feedlot" means an unroofed or partially roofed animal feeding operation ~~consisting of one or more unroofed or partially roofed animal enclosures in which animals are confined and fed or maintained for 45 days or more in any twelve-month period and~~ in which no crop, vegetation, or forage growth or residue cover is ~~sustained~~ maintained during the period ~~of confinement~~ that animals are confined in the operation.

"Operation permit" means a written permit ~~by the executive director specifying the conditions and requirements under which the operation of a waste-disposal system or part thereof or discharge source is authorized, and, if applicable, the conditions and requirements under which the discharge of wastes from said disposal system or part thereof or discharge source to a water of the state is authorized~~ of the department authorizing the operation of a waste control facility or part of one.

Item 2. Amend 567--65.2(455B) as follows:

567--65.2(455B) Minimum waste control requirements. Waste control facilities shall be constructed and maintained to meet the minimum waste control requirements stated in the following paragraphs~~:~~ ~~provided that if site topography, operating procedures, experience and available information indicate that adequate water pollution control can be achieved with less than the minimum requirements, the minimum requirements may be waived; provided further that if site topography, operating procedures, experience and other available information indicate that more than minimum requirements will be necessary to achieve adequate water pollution control, additional control provisions may be required.~~

65.2(1) The minimum level of waste control for any animal-feeding operation shall be the removal of settleable solids from the wastes prior to discharge into a water of the state.

a. Settleable solids ~~removal~~ may be ~~accomplished~~ removed by use of solids settling basins, terraces, diversions, or other solids-removal methods. Construction of solids-settling facilities shall not be required where existing site conditions provide adequate settleable solids removal.

b. Removal of ~~S~~settleable waste solids ~~removal~~ shall be considered adequate when the ~~waste flow~~ velocity of waste flows has been reduced to less than 0.5 foot per second for a minimum of five minutes. ~~Settleable solids-removal~~

~~facilities shall provide, as a minimum, adequate volume~~ Sufficient capacity shall be provided in the solids settling facilities to store settled ~~waste~~ solids between periods of waste disposal and to provide ~~the specified~~ required flow-velocity reduction ~~and retention~~ for ~~runoff~~ waste flow volumes resulting from precipitation events of lesser intensity than the ten-year, one-hour frequency ~~precipitation~~ event. ~~For settleable solids removal from~~ Solids settling facilities receiving open feedlot runoff, shall provide a minimum of one square foot of surface area ~~shall be provided in the solids-removal facilities~~ for each eight cubic feet of runoff per hour resulting from the ten-year, one-hour frequency-precipitation event. ~~Wastes removed from the animal-feeding operation and settled waste solids shall be disposed of by land disposal in accordance with 65.2(6).~~

65.2(2) The minimum level of waste control for an open feedlot covered by the operation permit application requirements of 65.3(1), ~~65.3~~ or 65.3(42) shall be retention of all waste flows from the feedlot areas and ~~from~~ all other waste-contributing areas resulting from the twenty-five-year, twenty-four-hour ~~frequency~~ precipitation event. ~~As an alternative to providing the above specified level of waste control, a feedlot may take such actions as are necessary to eliminate the conditions under which the feedlot was required to apply for a permit, provided that elimination of such conditions will provide an adequate level of waste control. All waste removed from the feedlot and its waste-control facilities shall be disposed of by land disposal in accordance with 65.2(6).~~ Open feedlots which design, construct, and operate waste control facilities in accordance with the requirements of any of the waste control alternatives listed in Appendix A of these rules shall be considered to be in compliance with this rule, unless waste discharges from the waste control facility cause a violation of state water quality standards. If water quality standards violations occur, the department may impose additional waste control requirements upon the feedlot, as specified in 65.2(4).

Control of wastes from open feedlots may be accomplished through use of waste retention basins, terraces, or other runoff control methods. Diversion of uncontaminated surface drainage prior to contact with feedlot or waste storage areas may be required. Waste solids settling facilities shall precede the waste retention basins or terraces.

65.2(3) The minimum level of waste control for a confinement feeding operation shall be the retention of all wastes produced in the confinement enclosures between periods of waste disposal ~~and land disposal of such wastes in accordance with 65.2(6).~~ In no case shall wastes from a confinement feeding operation be discharged directly into a water of the state or into a tile line that discharges to waters of the state.

a. Control of wastes from confinement feeding operations may be accomplished through use of earthen waste storage structures (such as lagoons or earthen waste storage basins), formed waste storage tanks (such as concrete, steel, or wood tanks), or other waste control methods. ~~Adequate waste storage~~ Sufficient capacity shall be provided in the waste control facilities to ~~retain~~ store all wastes ~~produced~~ between periods of waste disposal. Additional capacity shall be provided if precipitation or wastes from other sources ~~are to be handled by~~ can enter the waste ~~disposal system~~ control facilities.

b. Wastes shall be removed from the waste control facilities as necessary to prevent overflow or discharge of wastes from the facilities. Wastes stored in earthen waste storage structures (lagoons or earthen waste storage basins) shall be removed from the structures as necessary to maintain a minimum of two

feet of freeboard in the structure, unless a greater level of freeboard is required to maintain the structural integrity of the structure or prevent waste overflow.

c. To ensure that adequate capacity exists in the waste control facilities to retain all wastes produced during periods when waste disposal operations cannot be conducted (due to inclement weather conditions, lack of available land disposal areas, or other factors), waste shall be removed from the waste control facilities as needed prior to these periods.

65.2(4) If site topography, operation procedures, experience, or other factors indicate that a greater or lesser level of waste control than that specified in 65.2(1), 65.2(2), or 65.2(3) is required to provide an adequate level of water pollution control for a specific animal feeding operation, the department may establish different minimum waste control requirements for that operation.

65.2(~~4~~5) In lieu of ~~providing~~ using the ~~applicable level of~~ waste control methods specified in 65.2(1), 65.2(2), or 65.2(3), the department may ~~permit~~ allow the use of waste treatment or other methods of waste control ~~when the department~~ if it determines that an adequate level of waste control will ~~be provided~~ result.

65.2(~~5~~6) No direct ~~waste~~ discharge shall be allowed from an animal feeding operation into a publicly owned lake ~~or impoundment or into~~, a sinkhole, or an agricultural drainage well.

65.2(~~6~~7) All wastes removed from an animal feeding operation or its waste control facilities shall be disposed of by land application in a manner which will not cause surface or ground water pollution. Disposal in accordance with the land disposal guidelines ~~adopted by the Iowa water quality commission on June 23, 1976,~~ listed in Appendix B of these rules shall be deemed as compliance with this requirement.

65.2(8) As soon as practical but not later than six months after the use of an animal feeding operation is discontinued, all wastes shall be removed from the discontinued animal feeding operation and its waste control facilities and be disposed of by land application.

Item 3. Strike 567--65.3(455B) and replace it with the following:

567--65.3(455B) Operation permit required. An animal feeding operation shall apply for and obtain an operation permit if any of the following conditions exist:

65.3(1) The capacity of an open feedlot exceeds any of the following:

a. 1,000 beef cattle
b. 700 dairy cattle
c. 2,500 butcher and breeding swine (over 55 lbs.)
d. 10,000 sheep or lambs
e. 55,000 turkeys
f. 500 horses
g. 1,000 animal units

65.3(2) Wastes from the operation are discharged into a water of the state through a man-made waste drainage system or are discharged directly into a water of the state which originates outside of and traverses the operation, and the capacity of the operation exceeds:

a. 300 beef cattle
b. 200 dairy cattle
c. 750 butcher and breeding swine (over 55 lbs.)
d. 3,000 sheep or lambs
e. 16,500 turkeys
f. 30,000 broiler or layer chickens

g. 150 horses
h. 300 animal units

65.3(3) The department notifies the operation in writing that, in accordance with the departmental evaluation provisions of 65.4(2)"a", application for an operation permit is required.

Item 4. Adopt a new rule 567--65.4(455B) as follows:

567--65.4(455B) Departmental evaluation.

65.4(1) The department may evaluate any animal feeding operation to determine if any of the following conditions exist:

a. Wastes from the operation are being discharged into a water of the state and the operation is not providing the applicable minimum level of waste control as specified in 65.2(1), 65.2(2), or 65.2(3);

b. Wastes from the operation are causing or may reasonably be expected to cause pollution of a water of the state; or

c. Wastes from the operation are causing or may reasonably be expected to cause a violation of state water quality standards.

65.4(2) If departmental evaluation determines that any of the conditions listed in 65.4(1) exist, the operation shall:

a. Apply for an operation permit if the operation receives a written notification from the department that it is required to apply for an operation permit. However, no operation with an animal capacity less than that specified in 65.3(2) shall be required to apply for a permit unless wastes from the operation are discharged into a water of the state through a man-made waste drainage system or are discharged into a water of the state which traverses the operation.

b. Institute necessary remedial actions to eliminate the conditions if the operation receives a written notification from the department of the need to correct the conditions. This paragraph shall apply to all permitted and unpermitted animal feeding operations, regardless of animal capacity.

Item 5. Change existing 567--65.4(455B) to 567--65.5(455B) and further amend it as follows:

900--65.5(455B) Operation permits.

65.5(1) Existing animal feeding operations holding an operation permit. Animal feeding operations which hold a valid ~~state~~ operation permit issued ~~by the department or the Iowa department of health~~ prior to ~~August 16, 1976,~~ July 22, 1987, ~~shall~~ are not ~~be~~ required to reapply for ~~a state~~ an operation permit ~~but shall submit such information as deemed necessary by the executive director to determine conformity of the operation with rules of the department within ninety days of receipt of a request for such information from the executive director. The previous sentence notwithstanding,~~ However, ~~such~~ the operations ~~shall make application~~ are required to apply for permit renewal in accordance with 65.45(10) ~~for continued operation beyond the permit expiration date.~~

65.5(2) Existing animal feeding operations not holding an operation permit. Animal feeding operations in existence on ~~August 16, 1976, and~~ July 22, 1987, which are covered by the operation permit provisions of 65.3(1) ~~to 65.3(4)~~ or 65.3(2) but have not obtained a permit shall ~~make application~~ apply for ~~a state~~ an operation permit prior to ~~April 1, 1977~~ December 22, 1987. Once ~~proper~~ application has been made ~~and the application is in process, continued operation of~~ the animal feeding operation is authorized to continue to operate without a permit ~~is authorized unless and~~ until the application has either been approved or disapproved by the ~~executive director~~ department.

65.5(3) Expansion of existing animal feeding operations. A person intending to expand an existing animal feeding operation which will, upon completion of the expansion, will be covered by the operation permit provisions of 65.3(1) to 65.3(4) or 65.3(2) shall apply for a state an operation permit at least ninety one hundred eighty days prior to the date operation of the expanded facility is scheduled unless a shorter period of time is approved by the executive director. The previous sentence notwithstanding, a person intending to expand an existing animal feeding operation which would, upon completion, be subject to 40 C.F.R. subsection 125.54 as amended by 41 Federal Register 11460 (March 18, 1976) shall apply for a state operation permit at least one hundred eighty days prior to the date operation of the expanded facility is scheduled. A person shall not begin eOperation of the expanded portion of the facility without first obtaining shall not begin until an operation permit from the executive director has been obtained.

65.5(4) New animal feeding operations. A person intending to initiate begin a new animal feeding operation which will, upon completion, will be covered by the operation permit provisions of 65.3(1) to 65.3(4) or 65.3(2) shall apply for a state an operation permit at least ninety one hundred eighty days prior to the date operation of the new animal-feeding facility is scheduled, unless a shorter period of time is approved by the executive director. The previous sentence notwithstanding, a person intending to initiate a new animal-feeding operation which operation would, upon completion, be subject to 40 C.F.R. subsection 125.54 as amended by 41 Federal Register 11460 (March 18, 1976) shall apply for a state operation permit at least one hundred eighty days prior to the date operation of the new animal-feeding facility is scheduled. A person shall not begin eOperation of such the new facility without first obtaining shall not begin until an operation permit from the executive director has been obtained.

65.5(5) Permits required as a result of departmental investigation evaluation. An animal feeding operation which is required to apply for a state an operation permit as a result of departmental investigation evaluation (in accordance with the provisions of 65.3(5) 65.4(2)"a") shall make application apply for an operation permit within ninety days of receiving written notification by the executive director of the need to apply for obtain a permit. Once proper application has been made and the application is in process, continued operation of the animal feeding operation without an operation permit is authorized to continue to operate without a permit is authorized unless and until the application has either been approved or disapproved by the executive director department.

65.5(6) Voluntary operation permit applications. Applications for operation permits received from animal feeding operations not meeting the operation permit requirements of 65.3(1) to 65.3(3) will be acknowledged by the department and returned to the applicant. Operation permits will not be issued for facilities not meeting the permit requirements of 65.3(1) to 65.3(3).

65.5(67) Application forms. An application for an operation permit shall be made on a form provided by the department. The application shall be complete and shall include contain such detailed information as deemed necessary to by the executive director department. The application shall be signed by the person who is legally responsible for the animal feeding operation and its associated waste disposal control system.

65.4(7) Deadline for acting on operation-permit applications for new or expanded operations. The executive director shall issue or deny an operation

~~permit for new or expanded operation within ninety days of receipt of a complete application unless a longer period of time is required and the applicant is so notified in writing prior to expiration of the ninety-day period. Notwithstanding the ninety-day requirement of 65.4(3) and 65.3(4), operation of the approved system may commence immediately after the issuance of an operation permit.~~

65.5(8) Compliance schedule. When necessary to comply with a present standard or a standard which must be met at a future date, an operation permit shall include a schedule for ~~alteration~~ modification of the permitted facility to meet ~~said~~ the standard. ~~Such~~ The schedule shall not relieve the permittee of the duty to obtain a construction permit pursuant to ~~65.5(1)~~ 65.6(1).

65.5(9) Permit conditions. Operation permits shall contain ~~such~~ conditions ~~as are deemed~~ considered necessary by the ~~executive director~~ department to assure compliance with all applicable rules of the department, to assure the waste disposal system is properly operated and maintained, to protect the public health and beneficial uses of state waters, and to prevent water pollution from waste storage or disposal operations. Self-monitoring and reporting requirements which may be imposed on animal feeding operations are specified in departmental rule 63.4(1).

65.5(10) Permit renewal. An operation permit may be ~~granted~~ issued for any period of time not to exceed five years. An ~~A~~application for renewal of an operation permit must be submitted to the department at least one hundred ~~twenty~~ eighty days ~~in advance of~~ prior to the date the permit expires. Each permit to be renewed shall be subject to the provisions of those rules of the department which apply to the ~~operation~~ facility at the time of renewal.

~~a. An operation permit which contains an expiration date will be reviewed at the time of renewal to determine the need for an operation permit in accordance with 65.3(1) to 65.3(5). An~~ A permitted animal-feeding operation which does not meeting the operation-permit requirements of 65.3(1) to 65.3(~~5~~3) will be exempted from the need to retain that permit at the time of permit renewal, and the existing operation permit will not be renewed.

~~b. An operation permit which does not contain an expiration date will be reviewed to determine the need for an operation permit in accordance with 65.3(1) to 65.3(5). An animal-feeding operation not meeting the operation-permit requirements of 65.3(1) to 65.3(5) will be exempted from the need to retain that permit at the time of permit review, and the existing operation permit will be revoked. An animal-feeding operation which meets the operation-permit requirements of 65.3(1) to 65.3(5) will be notified of the need to retain an operation permit at the time of permit review, and the existing operation permit shall be modified to include an expiration date.~~

65.5(11) Permit modification, suspension, or revocation. The ~~executive director~~ department may modify, suspend, or revoke in whole or ~~in~~ part any operation permit for cause. Cause for modification, suspension, or revocation of a permit may includes the following:

a. Violation of any term or condition of the permit.

b. Obtaining a permit by misrepresentation of fact or failure to disclose fully all material facts.

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

d. Failure to submit the records and information ~~as~~ that the ~~executive director~~ department ~~shall~~ requires ~~both generally and as a condition of the operation permit~~ in order to assure compliance with the operation and discharge conditions ~~specified in~~ of the permit.

Item 6. Change existing 567--65.5(455B) to 567--65.6(455B) and further amend it as follows:

567--65.6(455B) Construction permits.

65.6(1) Animal feeding operations ~~for which~~ required to obtain a construction permit ~~is required.~~

a. An animal feeding operation covered by the operation permit ~~application requirements~~ provisions of 65.3(1) to 65.3(~~4~~3) shall obtain a construction permit prior to constructing, installing, or modifying ~~a~~ the waste ~~storage and disposal~~ control system for that ~~animal feeding~~ operation. ~~Animal feeding operations required to obtain an operations permit under provisions of 65.3(5) shall obtain a construction permit for any required upgrading of its waste disposal system.~~

b. A confinement feeding operation shall obtain a construction permit prior to constructing, installing, or modifying a waste control system for that operation if any of the following conditions exist:

1. The confinement feeding operation uses an anaerobic lagoon as part of its waste control system.

2. The capacity of a confinement feeding operation using an earthen waste storage facility other than an anaerobic lagoon exceeds:

Species	Animal Capacity Exceeds
Slaughter and feeder cattle	200
Mature dairy cattle	140
Swine, butcher and breeding (over 55 lbs.)	500
Turkeys	11,000
Chickens, broiler or layer	18,000
Animal units	200

3. The capacity of a confinement feeding operation using formed waste storage tanks (e.g. concrete tanks, concrete block tanks, wood tanks, or steel tanks) exceeds:

Species	Animal Capacity Exceeds
Slaughter and feeder cattle	2,000
Mature dairy cattle	1,400
Swine, butcher and breeding (over 55 lbs.)	5,000
Turkeys	110,000
Chickens, broiler or layer	180,000
Animal units	2,000

65.6(2) Permit application. An ~~application~~ animal feeding operation required to obtain a construction permit in accordance with the provisions of 65.6(1) shall apply for a construction permit ~~must be submitted~~ at least ninety days before the date that ~~in advance of the planned date of start of~~ construction, installation, or modification of the waste control system is scheduled to start.

~~65.6(2) Deadline for acting on construction permit applications. The executive director shall act upon the application within sixty days of receipt of a complete application by either issuing a construction permit or denying the construction permit in writing, unless a longer review period is required and the applicant is so notified in writing prior to expiration of the sixty-day period. Notwithstanding the ninety-day requirement in 65.3(1) above, construction of the approved system may commence immediately after the issuance of a construction permit.~~

65.6(3) Application forms. Application for a construction permit shall be made on a form provided by the department. The application shall be complete and shall include ~~such~~ detailed engineering plans as determined necessary by the ~~executive director~~ department.

65.6(4) Plan requirements. Waste ~~storage and disposal facility~~ control system plans shall be designed and submitted in conformance with chapter 114 of the Code of Iowa.

65.6(5) Plan review criteria. Review of plans and specifications shall be conducted to determine the potential of the proposed waste ~~disposal~~ control system to achieve the level of waste control being required of the animal feeding operation. In conducting this review, applicable criteria contained in these rules, federal guidelines and ~~standards~~ specifications, soil conservation service design standards and specifications, and department of commerce precipitation data ~~, and the land disposal guidelines adopted by the Iowa water quality commission on June 23, 1976,~~ shall be used. For waste control systems which include use of anaerobic lagoons, the separation distance requirements contained in Iowa Code section 455B.133 and the design criteria contained in the department's chapter 22 and 23 rules shall also be used. If the proposed facility plans are not adequately covered by these criteria, applicable criteria contained in current technical literature shall be used.

Item 7. Change existing rule 567--65.6(455B) to 567--65.7(455B), and further amend it as follows:

567--65.7(455B) Transfer of legal responsibilities or title. If legal responsibility for a permitted animal feeding operation and its associated ~~disposal~~ waste control system is transferred, the person to whom legal responsibility is transferred shall be subject to all terms and conditions of ~~said~~ the permit. The person to whom the permit was issued shall notify the department ~~shall be notified~~ of the transfer of legal responsibility or title of ~~such an~~ the operation within thirty days of the transfer. Within 30 days of receiving a written request from the Department, the person to whom legal responsibility is transferred shall submit to the Department all information needed to modify the permit to reflect the transfer of legal responsibility.

Item 8. Change existing rule 567--65.7(455B) to 567--65.8(455B).

Item 9. Adopt a new rule 567--65.9, as follows:

567--65.9(455B) Interpretive rule. Iowa Code section 172D.3 defines the applicability of rules of the department adopted after November 1, 1976, by delaying their applicability to some existing animal feeding operations. However, the 1987 revisions of these rules in effect reduce the regulation by permit of existing or new animal feeding operations or merely clarify the rules adopted and implemented prior to November 1, 1976. Therefore, Iowa Code section 172D.3 shall not be construed to diminish or delay applicability of this Chapter 65, as revised in 1987, to any animal feeding operation. In the event a court rules otherwise, the rules in effect prior to the 1987 revisions shall apply.

Item 10. Adopt Appendix A to Chapter 65, as shown in the attached Appendix A.

Item 11. Amend the "Guidelines of Iowa Water Quality Commission on Land Disposal of Animal Wastes," currently an addendum to Chapter 65, as shown in the attached Appendix B.

_____
Date

_____
Larry J. Wilson, Director

APPENDIX A

WASTE CONTROL ALTERNATIVES FOR OPEN FEEDLOTS

Introduction: Water pollution control requirements for animal feeding operations are given in Chapter 65 of the rules of the Iowa Department of Natural Resources. Under these rules, open feedlots meeting the operation permit application requirements of rules 65.3(1) or 65.3(2) must also comply with the minimum waste control requirements of rule 65.2(2). Rule 65.2(2) requires that all feedlot runoff and other waste flows resulting from precipitation events less than or equal to the twenty-five year, twenty-four hour rainfall event be collected and land applied.

This appendix describes five feedlot runoff control systems that meet the requirements of rule 65.2(2). The systems differ in the volume of waste storage provided and in the frequency of waste disposal. In general, the time interval between required disposals increases with increased storage volume.

A feedlot operator who constructs and operates a waste control facility in accordance with the requirements of any of these five systems will not have additional waste control requirements imposed, unless waste discharges from the facility cause state water quality standards violations.

In describing the five systems, the major features of each are first reviewed, followed by detailed information on the construction and operation requirements of the system. The system descriptions are presented in this appendix as follows:

System		Pages
System 1:	One Waste Disposal Period Per Year	2-3
System 2:	July and November Waste Disposal	4-5
System 3:	April, July, and November Waste Disposal	6-7
System 4:	Disposal After Each Significant Precipitation Event	8-9
System 5:	April/May and October/November Waste Disposal .	10-11
Figures 1-4		12-13

SYSTEM 1: ONE WASTE DISPOSAL PERIOD PER YEAR

MAJOR SYSTEM FEATURES:

- Adequate capacity must be provided to collect and store the average annual runoff from all feedlot and nonfeedlot areas which drain into the waste control system (additional storage is required if process waters or wastes from other sources also drain into the control system).

- Collected wastes must be removed from the control system and land applied at least once annually (interval between successive disposals cannot exceed twelve months).

DETAILED SYSTEM REQUIREMENTS:

Waste Control System: The waste control system must be constructed to meet or exceed the following requirements:

1. Solids Settling Facilities: Waste solids settling facilities which meet or exceed the requirements of rule 65.2(1) must precede the feedlot runoff control system.

2. Feedlot Runoff Control System: The feedlot runoff control system shall, as a minimum, have adequate capacity to store the total wastewater volume determined by summing the following:

   A. The volume determined by multiplying the unpaved feedlot area which drains into the control system by the appropriate runoff value from Figure 1.

   B. The volume determined by multiplying the paved feedlot area which drains into the control system by 1.5 times the appropriate runoff value from Figure 1.

   C. The volume determined by multiplying the total area of cropland, pasture and woodland draining into the control system by the greater of the following:

      - The amount of runoff expected from these areas as a result of the twenty-five year, twenty-four hour precipitation event*

      - The average annual runoff expected from these areas*

   D. The volume determined by multiplying the total roof, farmstead, and driveway area draining into the control system by the average annual runoff expected from these areas*

   E. The volume of process wastewater which drains into the control system during a twelve-month period.

F. The volume of wastes from other sources which discharges into the control system during a twelve-month period.

*Expected twenty-five year, twenty-four hour and average annual runoff values shall be determined using runoff prediction methodologies of the U. S. Soil Conservation Service (or equivalent methodologies).

Waste Disposal Requirements: Wastes must be removed from the waste control system and land applied in accordance with the following requirements:

1. Solids Settling Facilities: Collected solids must be removed from the solids settling facilities as necessary to maintain adequate capacity to handle future runoff events. As a minimum, solids shall be removed at least once annually.

2. Feedlot Runoff Control System: Accumulated wastes shall be removed from the feedlot runoff control system and disposed of by land application at least once annually. The interval between successive disposal periods shall not exceed twelve months.

   During disposal periods, land application shall be conducted at rates sufficient to ensure complete removal of accumulated wastes from the runoff control system in ten (10) or fewer disposal days. Waste removal is considered complete when the wastes remaining in the runoff control system occupy less than ten (10) percent of the system's design waste storage volume.

   Land application of wastes shall be conducted on days when weather and soil conditions are suitable. Weather and soil conditions are normally considered suitable for waste disposal if:

   - Land disposal areas are not frozen or snow-covered
   - Temperatures during disposal are greater than 32 degrees Fahrenheit
   - Precipitation has not exceeded 0.05 inch per day for each of the three days immediately preceding disposal and no precipitation is occurring on the day of disposal.

SYSTEM 2: JULY AND NOVEMBER WASTE DISPOSAL

MAJOR SYSTEM FEATURES:

- Adequate capacity must be provided to collect and store the average runoff expected to occur over the eight-month period from December 1 through July 31 from all feedlot and nonfeedlot areas which drain into the waste control system (additional storage is required if process waters or wastes from other sources also drain into the control system).

- Collected wastes may be removed from the control system and land applied during any period of the year that conditions are suitable. While disposal during other periods will minimize the need for July and November disposal, sufficient wastes must still be disposed of during July and November to reduce the volume of wastes remaining in

the control system during these months to less than ten (10) percent of the system's design waste storage volume.

DETAILED SYSTEM REQUIREMENTS:

Waste Control System: The waste control system must be constructed to meet or exceed the following requirements:

1. Solids Settling Facilities: Waste solids settling facilities which meet or exceed the requirements of rule 65.2(1) must precede the feedlot runoff control system.

2. Feedlot Runoff Control System: The feedlot runoff control system shall, as a minimum, have adequate capacity to store the total wastewater volume determined by summing the following:

   A. The volume determined by multiplying the unpaved feedlot area which drains into the control system by the appropriate runoff value from Figure 2.

   B. The volume determined by multiplying the paved feedlot area which drains into the control system by 1.5 times the appropriate runoff value from Figure 2.

   C. The volume determined by multiplying the total area of cropland, pasture and woodland draining into the control system by the greater of the following:

      - The amount of runoff expected from these areas as a result of the twenty-five year, twenty-four hour precipitation event*

      - The average runoff expected to occur from these areas during the eight-month period from December 1 to July 31*

   D. The volume determined by multiplying the total roof, farmstead and driveway area draining into the control system by the average runoff expected to occur from these areas during the eight-month period from December 1 to July 31*

   E. The volume of process wastewater which drains into the control system during the eight-month period from December 1 through July 31.

   F. The volume of wastes from other sources which discharges into the control system during the eight-month period from December 1 through July 31.

   *Expected twenty-five year, twenty-four hour runoff and average runoff for the eight-month period December 1 through July 31 shall be determined using runoff prediction methodologies of the U. S. Soil Conservation Service (or equivalent methodologies).

Waste Disposal Requirements: Wastes must be removed from the waste control system and land applied in accordance with the following requirements:

1. Solids Settling Facilities: Collected solids must be removed from the solids settling facilities as necessary to maintain adequate capacity to handle future runoff events. As a minimum, solids shall be removed at least once annually.

2. **Feedlot Runoff Control System:**

A. A feedlot operator must comply with the following waste disposal requirements if disposal operations are limited to the months of July and November.

During these months, land application shall be conducted at rates sufficient to ensure complete removal of accumulated wastes from the runoff control system in ten (10) or fewer disposal days. Waste removal is considered complete when the wastes remaining in the runoff control system occupy less than ten (10) percent of the system's design waste storage capacity.

During July and November, waste disposal operations shall be initiated on the first day that conditions are suitable for land application of wastes, and disposal must continue on subsequent days that suitable conditions exist. If unfavorable weather conditions prevent complete disposal of wastes to be accomplished during July or November, disposal must be continued into the following month. Waste disposal operations may cease when complete disposal has been achieved.

Weather and soil conditions are normally considered suitable for land application of wastes if:

- Land disposal areas are not frozen or snow-covered
- Temperatures during disposal are greater than 32 degrees Fahrenheit
- Precipitation has not exceeded 0.05 inch per day for each of the three days immediately preceding disposal and no precipitation is occurring on the day of disposal.

B. A feedlot operator may dispose of accumulated wastes during any period of the year that conditions are suitable. While disposal during other periods will minimize the need for disposal during July and November, the feedlot operator will still need to dispose of sufficient wastes during July and November to reduce the waste volume remaining in the runoff control system during these months to less than ten (10) percent of the system's design waste storage capacity.

A feedlot operator who does not limit waste disposal operations to the months of July and November is not required to comply with the specific waste disposal requirements which apply when disposal is limited to those months. However, this does not relieve the feedlot operator of the responsibility to conduct disposal operations at rates and times which are sufficient to ensure that the waste volume remaining in the runoff control system during July and November will be reduced to less than ten (10) percent of the system's design waste storage capacity.

SYSTEM 3: APRIL, JULY AND NOVEMBER WASTE DISPOSAL

MAJOR SYSTEM FEATURES:

- Adequate capacity must be provided to collect and store the average runoff expected

to occur during the five-month period from December 1 through April 30 from all feedlot and nonfeedlot areas which drain into the waste control system (additional storage is required if process waters or wastes from other sources also drain into the control system).

- Collected wastes may be removed from the control system and land applied during any period of the year that conditions are suitable. While disposal during other periods will minimize the need for disposal during the specified disposal months, sufficient wastes must still be disposed of during April, July and November to reduce the volume of wastes remaining in the control system during these months to less than ten (10) percent of the system's design waste storage volume.

DETAILED SYSTEM REQUIREMENTS:

Waste Control System: The waste control system must be constructed to meet or exceed the following requirements:

1. Solids Settling Facilities: Waste solids settling facilities which meet or exceed the requirements of rule 65.2(1) must precede the feedlot runoff control system.

2. Feedlot Runoff Control System: The feedlot runoff control system shall, as a minimum, have adequate capacity to store the total wastewater volume determined by summing the following:

   A. The volume determined by multiplying the unpaved feedlot area which drains into the control system by the appropriate runoff value from Figure 3.

   B. The volume determined by multiplying the paved feedlot area which drains into the control system by 1.5 times the appropriate runoff value from Figure 3.

   C. The volume determined by multiplying the total area of cropland, pasture and woodland draining into the control system by the greater of the following:

      - The amount of runoff expected from these areas as a result of the twenty-five year, twenty-four hour precipitation event*

      - The average runoff expected to occur from these areas during the five-month period from December 1 to April 30*

   D. The volume determined by multiplying the total roof, farmstead, and driveway area draining into the control system by the average runoff expected to occur from these areas during the five-month period from December 1 to April 30*

   E. The volume of process wastewater which drains into the control system during the five-month period from December 1 through April 30.

   F. The volume of wastes from other sources which discharges into the control system during the five-month period from December 1 through April 30.

*Expected twenty-five year, twenty-four hour runoff and average runoff for the five-month period December 1 through April 30 shall be determined using runoff prediction methodologies of the U. S. Soil Conservation Service (or equivalent methodologies).

Waste Disposal Requirements: Wastes must be removed from the waste control system and land applied in accordance with the following requirements:

1. **Solids Settling Facilities:** Collected solids must be removed from the solids settling facilities as necessary to maintain adequate capacity to handle future runoff events. As a minimum, solids shall be removed at least once annually.

2. **Feedlot Runoff Control System:**

   A. A feedlot operator must comply with the following waste disposal requirements if disposal operations are limited to the months of April, July and November.

   During these months, land application shall be conducted at rates sufficient to ensure complete removal of accumulated wastes from the runoff control system in ten (10) or fewer disposal days. Waste removal is considered complete when the wastes remaining in the runoff control system occupy less than ten (10) percent of the system's design waste storage capacity.

   During April, July and November, waste disposal operations shall be initiated on the first day that conditions are suitable for land application of wastes, and disposal must continue on subsequent days that suitable conditions exist. If unfavorable weather conditions prevent complete disposal of wastes to be accomplished during any of these months, waste disposal must be continued into the following month. Waste disposal operations may cease when complete disposal has been achieved.

   Weather and soil conditions are normally considered suitable for land application of wastes if:

   - Land disposal areas are not frozen or snow-covered.
   - Temperatures during disposal are greater than 32 degrees Fahrenheit.
   - Precipitation has not exceeded 0.05 inch per day for each of the three days immediately preceding disposal and no precipitation is occurring on the day of disposal.

   B. A feedlot operator may dispose of accumulated wastes during any period of the year that conditions are suitable. While disposal during other periods will minimize the need for disposal during April, July and November, the feedlot operator will still need to dispose of sufficient wastes during July and November to reduce the waste volume remaining in the runoff control system during these months to less than ten (10) percent of the system's design waste storage capacity.

   A feedlot operator who does not limit waste disposal operations to the months of April, July and November is not required to comply with the specific waste disposal requirements which apply when disposal is limited to those months. However, this does not relieve the feedlot operator of the responsibility to conduct disposal operations at rates and times which are sufficient to ensure that the waste volume remaining in the runoff control system during April, July and November will be reduced to less than ten (10) percent of the system's design waste storage capacity.

SYSTEM 4: DISPOSAL AFTER EACH SIGNIFICANT PRECIPITATION EVENT

MAJOR SYSTEM FEATURES:

- Adequate capacity must be provided to collect and store the runoff expected to occur as a result of the twenty-five year, twenty-four hour precipitation event from all feedlot and nonfeedlot areas which drain into the waste control system (additional storage is required if process waters or wastes from other sources also drain into the control system).

- Collected wastes must be removed from the control system and land applied whenever the available (unoccupied) storage capacity remaining in the control system is less than ninety (90) percent of that needed to store runoff from the twenty-five year, twenty-four hour storm -- land application must begin on the first day that conditions are suitable and must continue until disposal is completed.

DETAILED SYSTEM REQUIREMENTS:

Waste Control System: The waste control system must be constructed to meet or exceed the following requirements:

1. Solids Settling Facilities: Waste solids settling facilities which meet or exceed the requirements of rule 65.2(1) must precede the feedlot runoff control system.

2. Feedlot Runoff Control System: The feedlot runoff control system shall, as a minimum, have adequate capacity to store the total wastewater volume determined by summing the following:

   A. The volume determined by multiplying the total feedlot area which drains into the control system by the amount of runoff expected to occur from this area as a result of the twenty-five year, twenty-four hour precipitation event*

   B. The volume determined by multiplying the total area of cropland, pasture and woodland draining into the control system by the amount of runoff expected to occur from these areas as a result of the twenty-five year, twenty-four hour precipitation event*

   C. The volume determined by multiplying the total roof, farmstead and driveway area draining into the control system by the amount of runoff expected to occur from these areas as a result of the twenty-five year, twenty-four hour precipitation event*

   D. The volume of process wastewater which drains into the control system during the five-month period from December 1 through April 30.

   E. The volume of wastes from other sources which discharges into the control system during the five-month period from December 1 through April 30.

*Expected twenty-five year, twenty-four hour runoff shall be determined by using runoff prediction methodologies of the U. S. Soil Conservation Service (or equivalent methodologies).

Waste Disposal Requirements: Wastes must be removed from the waste control system and land applied in accordance with the following requirements:

1. Solids Settling Facilities: Collected solids must be removed from the solids settling facilities as necessary to maintain adequate capacity to handle future runoff events. As a minimum, solids shall be removed at least once annually.

2. Feedlot Runoff Control System: Accumulated wastes shall be removed from the feedlot runoff control system and disposed of by land application following each precipitation or snowmelt runoff event which results in significant waste accumulations in the control system. Waste accumulations will be considered significant whenever the available (unoccupied) storage capacity remaining in the control system is less than ninety (90) percent of that required to store the runoff from the twenty-five year, twenty-four hour storm.

   Once the available storage capacity remaining in the waste control system is reduced to the point that waste disposal is necessary, waste disposal operations must be initiated on the first day that conditions are suitable for land application of wastes, and disposal must continue on subsequent days that suitable conditions exist. Disposal operations may cease when the storage capacity available in the control system has been restored to greater than ninety (90) percent of that required to store runoff from the twenty-five year, twenty-four hour storm.

   During disposal periods, land application shall be conducted at rates sufficient to ensure complete removal of accumulated wastes from the control system in ten (10) or fewer disposal days.

   Weather and soil conditions are normally considered suitable for land application of wastes if:

   - Land disposal areas are not frozen or snow-covered.
   - Temperatures during disposal are greater than 32 degrees Fahrenheit.
   - Precipitation has not exceeded 0.05 inch per day for each of the three days immediately preceding disposal and no precipitation is occurring on the day of disposal.

SYSTEM 5: APRIL/MAY AND OCTOBER/NOVEMBER DISPOSAL

MAJOR SYSTEM FEATURES:

- Adequate capacity must be provided to collect and store the average runoff expected to occur over the eight-month period from October 1 through May 31 from all feedlot and nonfeedlot areas which drain into the waste control system (additional storage is required if process waters or wastes from other sources also drain into the control system).
- Collected wastes may be removed from the control system and land applied during any period of the year that conditions are suitable. While disposal during other periods

will minimize the need for disposal during the April/May and the October/November periods, sufficient wastes must still be disposed of during each of these two-month periods to reduce the volume of wastes remaining in the control system during these periods to less than ten (10) percent of the system's design waste storage volume.

DETAILED SYSTEM REQUIREMENTS:

Waste Control System: The waste control system must be constructed to meet or exceed the following requirements:

1. Solids Settling Facilities: Waste solids settling facilities which meet or exceed the requirements of rule 65.2(1) must precede the feedlot runoff control system.

2. Feedlot Runoff Control System: The feedlot runoff control system shall, as a minimum, have adequate capacity to store the total wastewater volume determined by summing the following:

   A. The volume determined by multiplying the unpaved feedlot area which drains into the control system by the appropriate runoff value from Figure 4.

   B. The volume determined by multiplying the paved feedlot area which drains into the control system by 1.5 times the appropriate runoff value from Figure 4.

   C. The volume determined by multiplying the total area of cropland, pasture and woodland draining into the control system by the greater of the following:

      - The amount of runoff expected from these areas as a result of the twenty-five year, twenty-four hour precipitation event*

      - The average runoff expected to occur from these areas during the eight-month period from October 1 to May 31*

   D. The volume determined by multiplying the total roof, farmstead, and driveway draining into the control system by the average runoff expected to occur from these areas during the eight-month period from October 1 to May 31*

   E. The volume of process wastewater which drains into the control system during the eight-month period from October 1 through May 31.

   F. The volume of wastes from other sources which discharges into the control system during the eight-month period from October 1 through May 31.

   *Expected twenty-five year, twenty-four hour runoff and average runoff for the eight-month period October 1 through May 31 shall be determined using runoff prediction methodologies of the U.S. Soil Conservation Service (or equivalent methodologies).

Waste Disposal Requirements: Wastes must be removed from the waste control system and land applied in accordance with the following requirements:

1. Solids Settling Facilities: Collected solids must be removed from the solids settling facilities as necessary to maintain adequate capacity to handle future runoff events. As a minimum, solids shall be removed at least once annually.

2. Feedlot Runoff Control System: At a minimum, accumulated wastes shall be removed from the feedlot runoff control system and disposed of by land application during the periods April 1 through May 31 and October 1 through November 30.

During each of these periods, land application shall be conducted at rates sufficient to ensure complete removal of accumulated wastes from the runoff control system in ten (10) or fewer disposal days. Waste removal is considered complete when the wastes remaining in the runoff control system occupy less than ten (10) percent of the system's design waste storage capacity.

A feedlot operator may dispose of accumulated wastes during any period of the year that conditions are suitable. While disposal during other periods will minimize the need for disposal during the April/May and October/November periods, the feedlot operator will still need to dispose of sufficient wastes during these periods to reduce the waste volume remaining in the runoff control system during these periods to less than ten (10) percent of the system's design waste storage capacity.

Land application of wastes shall be conducted on days when weather and soil conditions are suitable. Weather and soil conditions are normally considered suitable for waste disposal if:

- Land disposal areas are not frozen or snow-covered
- Temperatures during disposal are greater than 32 degrees Fahrenheit
- Precipitation has not exceeded 0.05 inch per day for each of the three days immediately preceding disposal and no precipitation is occurring on the day of disposal.

APPENDIX B

GUIDELINES OF IOWA WATER QUALITY COMMISSION ON LAND DISPOSAL OF ANIMAL WASTES

GENERAL

Land application of aAnimal wastes has have long been utilized for the final disposal of such wastes. disposed of by land application. Although advancements in waste treatment technology may provide are making other disposal alternatives available, land disposal is expected to continue as the primary means of disposal. these alternatives are unlikely to replace land application as the primary disposal method in the near future.

Several Environmental and crop production concerns exist are associated with the land disposal of animal wastes. Improper or excessive applications of animal wastes on land can create water pollution problems due to excessive runoff of waste materials into streams or leaching of nitrogen nitrates into groundwater supplies. waters. Excessive waste applications of animal wastes can also lead to excessive cause the buildup of nutrients or trace elements in the soils. Excessive If nutrient or trace element buildups may affect levels become excessive, soil structure or plant growth, (and can ultimately affect crop yields) can be affected.

A number of factors affect the environmental hazard potential of animal waste disposal. These include chemical composition of waste materials, the rate and frequency of waste application disposal, crops grown, land topography, and soil characteristics.

Due to the number of factors involved, it is not presently possible to make specific recommendations which take into account all variables. However, conducting animal waste disposal operations in accordance with the recommendations can be made to assure than animal waste disposal will not increase existing environmental hazards or create new given below should minimize environmental or crop growth problems production hazards. The recommendations made below are made with this goal in mind.

WASTE APPLICATION RATE

A. Nitrogen: Excessive nNitrogen applications are of concern to the Iowa Water Quality Commission, since excessive applications may result in excessive cause increased nitrate leaching into groundwaters waters.

To minimize the potential for nitrate leaching to ground waters, it is recommended that total annual nitrogen application rates (considering both manure and commercial nitrogen sources) not exceed the annual nitrogen use requirements of the crops being grown.

In certain instances, insufficient land disposal areas or other factors make it necessary to apply wastes at rates which exceed annual crop nitrogen needs. To avoid minimize problems resulting from such applications, the following recommendations are made:

21. The maximum total nitrogen application to land in any one year should not exceed four hundred pounds per acre. In determining total nitrogen applications, both manure and commercial fertilizer sources should be considered.

12. Annual nitrogen application rates should not exceed two hundred fifty pounds available nitrogen per acre. This level of application should only be used with high nitrogen use crops. In determining available nitrogen applications, both manure and commercial fertilizer sources should be considered.

The following guidelines can be used to determine the available nitrogen content of animal waste is considered to be:

(a) During the first crop season following waste application, the available nitrogen content is:

1. Seventy-five percent of the total nitrogen content of the applied waste if the wastes is are injected or is incorporated into the soil immediately following application.

2. Fifty percent of the total nitrogen content of the applied wastes if the wastes is are surface applied and allowed to dry prior to incorporation into the soil.

(b) During the second crop season following waste application, the available nitrogen content is twelve and one-half percent of the total nitrogen content of the applied wastes.

(c) During the third crop season following waste application the available nitrogen content is 7~~%~~ seven percent of the total nitrogen content of the applied wastes.

(d) After more than three crop seasons following waste application, no further credit to available nitrogen is given to the applied wastes.

3. For ~~proposed~~ annual available nitrogen applications in excess of two hundred fifty pounds ~~available nitrogen~~ per acre, a specific crop management plan should be developed. This plan should indicate amounts and frequency of nitrogen applications, cropping systems and harvesting frequency, projected nitrogen removal by ~~the~~ crops, and other projected nitrogen losses. Nitrogen applications in excess of two hundred fifty pounds ~~of available nitrogen~~ should not be made if the crop management plan indicates that surface or ground water pollution may result.

B. Phosphorus: It should be recognized that ~~providing~~ satisfying crop nitrogen needs through application of animal wastes alone will, in most cases, result in phosphorus applications in excess of crop requirements. Excessive phosphorus applications are of concern since ~~excessive~~ high soil phosphorus ~~buildup~~ levels may lead to crop production problems. To avoid such problems, the following recommendations are made:

1. For soils testing low in phosphorus (soil test levels below forty~~-five~~ pounds per acre), phosphorus applications in excess of crop removal can be used to obtain maximum crop production.

2. For soils where tests indicate adequate phosphorus levels (between forty~~-five~~ and ~~one hundred~~ sixty pounds per acre), phosphorus applications ~~at rates equivalent to~~ should not exceed crop uptake ~~are recommended~~ rates.

In determining waste application rates which will comply with the above ~~recommendations~~, a producer should know the chemical composition of the wastes, the soil fertility level, and the nutrient requirements of ~~his~~ the crops ~~production system~~ produced. ~~Several sources of t~~This information ~~are~~ is available from several sources.

It is recommended that ~~T~~the chemical composition of ~~a~~ the wastes ~~material can~~ be determined by having a representative sample analyzed by a laboratory. As an alternative, a producer can use estimated nutrient composition values determined by previous research. A summary of representative nutrient composition data on animal wastes is contained in Midwest Plan Service booklet "Livestock Waste Facilities Handbook," MWPS-18, ~~1975~~ 1985, which is available from the Co-operative Extension Service of Iowa State University.

Soil fertility levels can best be determined by periodic soil tests. Information on soil testing is available from the Iowa State University Extension Service ~~of Iowa State University~~. Information on crop nutrient requirements can be obtained from a number of sources, including the Iowa State University Extension Service.

WASTE DISPOSAL ON FROZEN OR SNOW-COVERED LAND

~~It is recommended that~~ ~~w~~Waste disposal on frozen or snow-covered land should be avoided~~, if possible~~. If wastes are spread on frozen or snow-covered land, ~~it is recommended that~~ disposal should be limited to land areas on which:

(a) land slopes are four percent or less, or

(b) adequate erosion control practices ~~or diversions~~ exist. Adequate erosion control practices ~~might~~ may include such practices as terraces, ~~mulch~~ conservation tillage, cover crops, ~~or~~ contour farming, or similar practices.

WASTE DISPOSAL ON LAND SUBJECT TO FLOODING

~~It is recommended that~~ Wastes applied on land subject to flooding more than once every ten years should be incorporated into the soil ~~within thirty days~~ after spreading. ~~It is recommended that~~ Wastes should not be spread on such areas during frozen or snow-covered conditions. Wastes applied at usual peak flood periods (April, May, and June) should be injected or immediately incorporated into the soil.

WASTE DISPOSAL ON LAND ~~NEAR WATERCOURSE~~ ADJACENT TO WATER BODIES

~~Where waste runoff might enter any of the following, it is recommended that~~ Wastes should not be ~~spread~~ disposed of on land areas which are located ~~closer than~~ within two hundred feet ~~to~~ of and drain into any of the following unless adequate erosion control practices exist and the wastes are injected or incorporated into soil:

(a) stream

(b) surface intake of tile line or other buried conduit

(c) sinkhole~~s~~

(d) shoreline of a lake or pond

(e) any well with an open surface inlet

No wastes should be spread on waterways except for the purpose of establishing seedings.

~~INCORPORATION~~ DISPOSAL OF WASTES ~~INTO SOIL~~ ON STEEPLY SLOPING LAND

~~Immediate incorporation or soil injection is recommended for~~ Wastes ~~applied~~ disposal on tilled land with ~~slopes~~ greater than ten percent and ~~on floodplains subject to flooding more frequently than once every ten years,~~ slopes should be limited to areas where adequate erosion control practices exist. Injection or soil incorporation of wastes is recommended, and all waste disposal and incorporation operations should be done so as to maintain an adequate level of erosion control.

~~When required for odor control, wastes should be incorporated into the soil.~~

~~ODOR CONTROL FROM LAND DISPOSAL OPERATIONS~~

~~In the absence of odor control standards, it is recommended that the following be considered in an effort to minimize odor problems from land disposal operations:~~

~~(a) Use good judgment concerning location of disposal areas and time disposal operations with climatic conditions. Bright, cool, sunny days with gusty winds blowing away from neighbors are the best for land disposal.~~

(b) Soil incorporation immediately after spreading or soil injection helps control the release of odorous gases.

*Objection, see filed rules (DEQ) published IAC Supp. 7/12, 8/23, 11/3/76.

Motion was made by Charlotte Mohr to approve Final Rule--Revisions to Chapter 65, Animal Feeding Operations Rules. Seconded by Catherine Dunn. Motion carried unanimously.

REVISION TO SUBRULE 64.2(9) -- WASTEWATER FACILITY DESIGN STANDARDS

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

The Department requests Commission approval of the proposed revisions to Chapter 64 rules relating to Chapters 12, 14, 16 and 18C of the wastewater facility design standards.

Changes are proposed in Chapters 12 and 18C of the design standards to implement the decisions of the Commission made on May 20, 1986, and June 16, 1986. Changes are also proposed in Chapters 14, 16 and 18C to address the concerns of the Wastewater Treatment Committee of the Commission expressed in response to question numbers 1, 11, 19, 30, 31, 32 and 34 of the questionnaire used by this committee in their review of all design standards.

Three public hearings on the proposed changes in the standards were held throughout the state beginning on April 1, 1987, and written and oral comments were received through April 16, 1987, ten days after the date of the final hearing. The notice was published on March 11, 1987.

there were no attendees and no commentors at any of the tree public hearings held in Iowa City on April 1, 1987, in Council Bluffs on April 3, 1987 and Des Moines on April 6, 1987. Fifteen written and telephone comments were received from five commentors on twelve sections of the four chapters. The comments and responses are included in the Public Participation Responsiveness Summary. Three minor revisions were made for clarification in the proposed changes as a result of the comments received.

Following are descriptions of the proposed changes in the standards.

Chapter 12: Incorporate the cost-saving changes for unsewered communities developed by an ASCE sponsored committee. These include six-inch sewers, lower minimum sewer velocities and flatter slopes, increased manhole spacing, cleanouts and curved and variable grade sewers. In addition, it is proposed to correct several grade sewers. In addition, it is proposed to correct several minor errors in the standard and to delete asbestos-cement pipe due to its manufacture and use being eliminated on a national scale.

Chapter 14: Add a section requiring plant design to meet effluent limitations without reference to flows, delete wording which ties permit limitations to defined flows, and add a prohibited wastes section similar to that in Chapter 18A.

Chapter 16: Revise surface settling rates to be consistent with the ten states standards.

Chapter 18C: Permit baffles to form the quiescent cell, delete the requirement for a protective soil cover over snythetic liners, delete the requirement for a minimum of two surface aerators per cell except for the primary cells, and change the current requirement

for a spare surface aerator for standby to require only a motor and prop assembly (or drive train).

In addition to the above, four of the commentors expressed strong support for leaving the basis for design flow as it now is rather than changing to the average annual daily flow. There was no support for making such a change.

Proposed Changes In Standards

12.4 MATERIALS

Standards shall be as listed below for the respective materials

a. Rigid Pipes	Material Spec.	Joint Spec.
Asbestos Cement	ASTM C 428 77	ASTM D 4869 66

12.5 DETAILS OF DESIGN

12.5.1 Diameter

No public gravity sanitary sewer shall be less than eight inches in diameter, with the following exception.

For unsewered communities, six-inch diameter sewers may be used for the last 800 feet (approximately two blocks) of sewer, provided the six-inch sewer has sufficient hydraulic capacity and is a dead end not subject to future extension. A manhole or a cleanout must be provided at the end of the six-inch lateral sewer pipe.

12.5.3 Slope

Under no circumstances will the average design velocity when flowing full be allowed to drop below 1.5 feet per second based on Kutter's formula using an "n" value of 0.013.

The following exceptions to the above requirements in this section shall apply for unsewered communities only.

A minimum velocity of 2.0 feet per second when flowing full should be maintained in all sewer mains. However, in specific cases where savings in sewer cost are possible or a lift station could be eliminated, a minimum sewer velocity of 1.5 feet per second when flowing full will be permitted. An "n" value of 0.013 shall be used for design of PVC pipe, vitrified clay pipe, and ABS truss pipe. Minimum slopes for 8" sewers flowing full at 2.0 feet per second and 1.5 feet per second shall be 0.40 ft./100 ft. and 0.22 ft./100 ft. Minimum slopes for 6" sewers flowing full at 2.0 feet per second and 1.5 feet per second shall be 0.60 ft./100 ft. and 0.34 ft./100 ft. In cases where a minimum sewer design velocity of 1.5 feet per second is used, the city will be required to give written assurance to the department that any additional sewer maintenance required by reduced slopes and velocities will be provided.

12.5.4 Alignment

Sewers 24 inches inches or less shall be laid with straight alignment between manholes.

The following exceptions to the above requirement in this section shall apply for unsewered communities only.

Vertical and horizontal curved or variable grade sewer construction may be proposed by the design engineer. Whenever curved or variable grade sewer construction is proposed, the design engineer is to develop a proposed design basis and submit it to the department for review.

The city will be required to give written assurance that arrangements will be made for hydraulic sewer cleaning equipment to be available when necessary for cleaning curvilinear sewers.

12.5.7 Manholes

c. Cleanouts may be permitted in place of a manhole at the end of lines which are less than 150 feet in length.

d. The following exceptions to the requirements for manhole location and cleanouts in this section shall apply for unsewered communities only.

Manhole spacing for 6 and 8-inch sewers shall be a maximum of 400 feet or at intervals not exceeding 500 feet when adequate cleaning equipment is available. All other sewers shall have a maximum manhole spacing of 800 feet, with manholes also to be placed at the junctions of sewers. When the manhole spacing exceeds 400 feet, the city will be required to give written assurance that appropriate sewer cleaning equipment suitable to clean the distances between manholes will be made available when necessary.

Cleanouts can be installed at the ends of sewers of any size in lieu of manholes. If the sewer is ever extended, the cleanout must be removed and a sewer manhole constructed at that point if the maximum distance between manholes has been reached. Cleanout lids should be bolted down to prevent entry of foreign objects.

12.5.11 Sewer Crossing Under a Waterway

The top of all sewers entering or crossing streams shall be at a depth below the natural bottom of the stream bed sufficient to protect the line. One foot of cover over the top of the line is required where the sewer is located in rock or cased and three feet of cover is required in other material. In major streams, more than the three feet of cover may be required.

12.7.2 Allowable Leakage

The maximum allowable infiltration or exfiltration for any new gravity sanitary sewer section, including all manholes, is 200 gallons per inch

of diameter per mile of pipe per day. Manholes may be tested separately.

14.3 QUALITY OF EFFLUENT

This Department establishes the effluent limitations for each wastewater discharger. Effluent limitations for existing wastewater dischargers are available from the Department. The effluent limitations for new dischargers or significantly modified dischargers are established by the Department upon request. The minimum degree of treatment shall be standard secondary treatment for municipal facilities and the industrial effluent guidelines as defined by Department rules and Federal regulations for industrial facilities. A higher degree of treatment will be required if the minimum degree of treatment requirements would violate state water quality standards. Design engineers must obtain effluent limitations prior to preparation of the engineering report or facilities plan. The facilities must be designed to meet average effluent limitations in the operation permit during any 30-day period and to not exceed maximum seven-day average effluent limitations.

14.4 DESIGN

14.4.1 General

14.4.1.1 Type of Treatment

Careful consideration shall be given to the type of treatment selected in the engineering report or facilities plan as required by Section 11.2.9.5.

14.4.1.2 Industrial Wastes

Consideration shall be given to the type and effects of industrial wastes on the treatment process. It may be necessary to pretreat industrial wastes prior to discharge to the sanitary sewer system.

14.4.1.3 Prohibited Wastes

The following wastes shall not be discharged to treatment facilities without assessment of their effects upon the treatment process or discharge requirements in accordance with state and federal law:

a. Any toxic chemicals which may inhibit biological or bacteriological processes.

b. Any strong oxidizing agents or disinfectants in quantities sufficient to inhibit the growth of microorganisms.

c. Metal plating wastes or other toxic wastes containing heavy metals and/or toxic or noxious inorganic chemicals, such as cyanide, reduced sulfur compounds, arsenic and selenium.

d. Detergent wastes or other wastes containing excessive phosphorous or surfacants.

e. Plastics, pharmaceutical wastes and/or other synthetic organic chemicals not amendable to biological treatment.

f. Any wastes containing excessive amounts of nonbio-degradable oil and grease or tar.

g. Any acidic or alkaline wastes which because of quantity, strength or unequalized flow may upset the biological process.

h. Any wastes containing in excess of one milligram per liter phenols.

i. Any wastes containing radioactive chemicals.

j. Nutrient deficient wastes which cannot meet the normal ratio of 100 BOD_5: 5 Nitrogen: 1 Phosphorous necessary for the maintenance of the biological community. An example would be corn processing wastes.

k. Any wastes that might cause excessive physical deterioration of the equipment, piping or structures.

l. Any other waste which may be defined as an incompatible pollutant.

14.4.5 Hydraulic Design

14.4.5.1 Critical Flow Conditions, Municipal

d. Peak Hourly Wet Weather (PHWW) Flow - The total maximum flow received during one hour when the ground water is high, runoff is occurring, and the domestic commercial and industrial flows are at their peak. The domestic/commercial peak hour flow shall be based on actual monitoring information or the use of a peaking factor determined by use of Appendix I, Chapter 12 of these Standards. The runoff flow component shall be adjusted to the storm event of two inches of rainfall in one hour.

The treatment plant must be designed to meet the average limitations in the operation permit at average dry weather and average wet weather flow conditions. The maximum permit limitations must be met at maximum wet weather flow. The peak hourly wet weather flow is not associated with permit limitations, however, this flow shall be used to evaluate the effect of hydraulic peaks on the design of pumps, piping, clarifiers, and any other flow sensitive aspects.

14.4.5.4 Critical Flow Conditions, Industrial

The treatment plant must be designed to meet the average effluent limitations discussed in Section 14.3. in the operation permit at maximum 30 days flow conditions. The maximum permit limitations must be met at maximum day conditions. The peak hourly and other critical flow conditions are not associated with permit limitations, however, these flows must be considered in evaluating unit processes, pumping, piping, etc.

14.4.6.2 Industrial Loadings

The treatment facility must be designed to meet the average effluent limitations discussed in Section 14.3. at the maximum 30 day average organic load and the maximum effluent limitation at the maximum day organic load. In addition, diurnal peaks of organic loads must be addressed if such peaks adversely affect a unit process.

14.5.2.1 Unit Process Reliability Criteria A

The following reliability is required for any mechanical treatment facility that is designed to serve less than an average of 340 pounds of BOD per day, is Facility Reliability Class II or III, and is required to provide standard secondary treatment. (Facilities of this size with Reliability Class I are covered by Unit Process Reliability Criteria B under 14.5.2.2.), or Reliability Criteria C under 14.5.2.3).

1. Duplication of major treatment units is not required. If provided, duplication for any unit process or operation shall, as a minimum, be in accordance with the appropriate part of Process Reliability Criteria B.

2. When duplicate units are not provided, the facility shall be followed by include a pond having five (5) days storage capacity for the average wet weather flow and with capability to bypass the pond when effluent limitations are being met. This pond may also be used for flow equalization. if so, Provisions for returning the holding pond contents to the treatment process are required.

   The pond shall be constructed in accordance with the applicable provisions of Section 18.7, particularly Section 18.7.3 pertaining to sealing of the pond bottom and maximum percolation rate. Separate volumes must be provided in the pond for the five (5) days storage capacity for the average wet weather flow and for flow equalization if it is planned to use the pond for both purposes. A minimum water level of two (2) feet shall be maintained at all times. Adequate provisions must be

made for the necessary valving, piping, pumping, metering, aeration and sludge removal capabilities to permit the pond to be maintained and operated in a manner to effectively perform its intended functions.

16.3.2 Surface Overflow Rates

16.3.2.2 Primary Settling Tanks

Surface overflow rates for primary tanks should not exceed ~~800~~ 1,000 gallons per day per square foot at AWW flows or 1,500 gallons per day per square foot for PHWW flows. Clarifier sizing shall be calculated for both flow conditions and the larger surface area determined should be used. At these rates, primary settling of normal domestic sewage can be expected to remove 30 to 35% of the influent BOD. The overflow rates may be increased, but lower removal rates shall be assumed unless adequate chemical addition is provided.

16.3.2.3 Intermediate Settling Tanks

Surface settling rates for intermediate settling tanks following the carbonaceous stage of a separate stage nitrification activated sludge process shall not exceed 900 gallons per day per square foot at AWW flows or 1,200 gallons per day per square foot for PHWW flows. Higher surface settling rates may be permitted if such rates are shown to have no adverse effects on subsequent treatment units.

Surface settling rates for intermediate settling tanks following other treatment units shall not exceed 1,500 gallons per day per square foot based on PHWW flows.

16.3.2.4 Final Settling Tanks

16.3.2.4.1 Final Settling Tanks - Fixed Film Biological Reactors

Surface overflow rates for settling tanks following trickling filters or rotating biological contactors treating domestic wastewater shall not exceed ~~600 gallons per day per square feet based on AWW flow or~~ 1,200 gallons per day per square foot for PHWW flows.

16.3.2.4.2 Final Settling Tanks - Activated Sludge

To perform properly while producing a concentrated return flow, activated sludge settling tanks must be designed to meet thickening as well as solids separation requirements. Since the rate of recirculation of return sludge from the final settling tanks to the aeration or reaeration tanks is quite high in activated sludge processes,

surface overflow rates shall be low enough to minimize the problems with high solids loadings, density currents, inlet hydraulic turbulence, and occasional poor sludge settleability. The surface settling rates of final settling tanks following the activated sludge processes shall be based on AWW flow and PHWW flow. The hydraulic loadings for facilities treating domestic wastewater shall not exceed the following:

Process Type	Hydraulic Loading at PHWW Flow gpd/s.f.	
	Average (AWW)	Peak (PHWW)
All (except as listed below)	600	1,200
Contact Stabilization	500	1,200
Extended Aeration	400	1,000
Separate Nitrification	400	800
High-Purity Oxygen With Primary Settling	500	1,200

18C.6 AERATED FACULTATIVE POND DESIGN

18C.6.1 Sizing of Aerated Facultative Ponds

18C.6.1.1 Detention Time for Typical Waste

As a minimum, aerated facultative pond systems designed to treat a typical domestic waste (BOD_5 __ 200 mg/l) shall consist of two or more aerated cells and one quiescent cell or zone which provide the following minimum hydraulic detention times:

18C.6.1.2 Detention Time for Greater Strength Waste

Aerated facultative pond systems designed to treat greater strength waste with a BOD_5 of 400 mg/l or more shall consist of three or more aerated cells and one quiescent cell or zone. The first two cells shall be of equal size and no one cell shall provide more than 50% of the total required volume.

18C.6.2 System Reliability and Piping

The pond cells and piping shall be designed such that reliability and flexibility of operation are provided. All systems shall be designed with piping flexibilities to permit isolation of any cell without affecting the transfer and discharge capabilities of the total system. In addition,, the ability to discharge the influent waste load to a minimum of two cells and to all primary cells in the system shall be provided. Raw influent shall not be diverted to the final (quiescent) cell or zone. When disinfection is required, cell isolation shall not result in bypassing of the disinfection facilities.

18C.6.4 Aeration Equipment

18C.6.4.1 General

c. Reliability in mechanical aeration systems, to include surface aerators (floating and fixed) shall be provided in accordance with the following:

There shall be a sufficient number of aerators to enable the design oxygen transfer of a particular cell to be maintained with the largest capacity aerator in that cell out of service. It is permissible for the backup aerator to be a complete uninstalled unit or a motor and prop assembly (drive train) provided that the installed aerator or parts can be easily removed and replaced. However, at least two aerators per cell shall be installed in each primary for all cells.

18C.6.4.6 Floating Surface Aerators

a. Floating surface aerators shall be of the submerged motor type or the subsurface horizontally mixing aspirator type. As a minimum, one surface aerator shall be installed for each acre of aerated lagoon surface area and at least two aerators in each primary per cell.

18C.7 POND CONSTRUCTION DETAILS

18C.7.1 Pond Shape

18C.7.1.1 General

The shape of all cells should be such that there are no narrow or elongated portions. No islands, peninsulas or coves shall be permitted. Dikes should be rounded at corners to minimize

accumulations of floating materials. Common dike construction, wherever possible, is strongly encouraged. Individual cells must be separated by earthen dikes except that the quiescent cell or zone may be formed by baffling off an area in the final aerated cell. Additional baffling in any cell can be provided to prevent short circuiting.

18C.7.3 Pond Bottom

18C.7.3.2 Seal

Synthetic liners shall have a minimum thickness of 30 mills and shall be installed under the supervision of a qualified manufacturer's representative. ~~They shall be protected by an inorganic soil layer with a minimum thickness of one foot. The soil shall be uniformly graded and free from large rocks, angular stones, soil clumps, sticks or other material which may puncture the liner. When a granular, noncohesive soil is used for the cover, a soil fabric shall be placed between the liner and the soil cover. The soil fabric and~~ T~~t~~he synthetic liner shall be anchored at the dike berm and ~~Synthetic liners~~ shall be vented if gas generation from decaying organic material or air pumping from a fluctuating ground water table is a potential problem.

Richard Timmerman stated that he has somewhat of a problem because of what the task force said regarding average daily flow. He further stated that every engineer on the task force agreed that the average daily flow was the way to go, and now based upon four public comments it was completely reversed.

Mr. Stokes stated that during the formal comment period, when it was sent out to public comment, no comments were received supporting the average daily flow. The same people who sat on the task force did not send any statements supporting the opinions they offered.

Catherine Dunn stated that the task force may have considered that their comments were given previously and would be taken into consideration without having to submit them again.

Mr. Stokes stated that all consulting engineers on the list were sent a copy of the proposal and asked specifically for comments. He added that it was made known to at least some members of the task force that the department would be looking for written comments.

Discussion took place regarding population, flow, wet weather flow, over and under designed facilities, and average daily flow.

Motion was made by Catherine Dunn to approve Final Rule--Revisions to Subrule Chapter 64.2(9), Wastewater Facility Design Standards. Seconded by Gary Priebe. Motion carried unanimously.

REFERRALS TO THE ATTORNEY GENERAL

Mike Murphy, Bureau Chief, 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).

Robert M. Flynn -- Channel Change
City of Kellogg -- Wastewater
City of Dysart -- Wastewater
Hickory Grove MHP -- Water Supply
Outside Inn -- Water Supply

Robert M. Flynn -- Randall Clark, Legal Bureau, summarized the facts pertaining to this case and explained that the referral came about through a remark made by downstream landowner, Mr. Kay Statler. After the Department discovered the unauthorized channel change on West Fork Crooked Creek, Mr. Flynn was directed to apply for after-the-fact approval. He submitted an application but did not provide certified engineering plans. Mr. Clark presented a slide series and transparancies showing the unauthorized channel change and explained in detail the remaining history of the case. He added that the Department rules require prior approval for channel changes on floodplains where streams drain more than 10 square miles.

APPOINTMENT -- ROBERT FLYNN

Robert Flynn addressed the Commission stating that he did not think the drainage area was 10 square miles. He also stated that he did not know that he signed a paper stating that he was going to send in plans. He stated that he asked an engineer about plans and it is hard to find an engineer who knows what he is talking about.

Richard Timmerman asked Mr. Flynn why he has not proceeded with engineering plans. Mr. Flynn responded that he hasn't found an engineer to do it, and he doesn't really know what good it would do now that it is over. He stated that he assumed the Department would tell him what to do anyway, no matter what the engineer says.

Mr. Timmerman asked Mr. Flynn if he was aware that the straightening project is against state law. Mr. Flynn replied "Yes, if it is over 10 square miles, but it is pretty small and I didn't think it was, but he (Mr. Clark) undoubtedly knows what he is talking about." He added that the creek goes dry every summer.

Mr. Clark stated that the stream drains over 19 square miles at the upstream end and even more as you go downstream.

Discussion followed regarding engineering plans, department rules, protecting the environment, compliance, dry stream in summer, and fish and wildlife habitat.

Motion was made by Richard Timmerman for referral to the Attorney General's Office. Seconded by Nancylee Siebenmann.

Discussion followed regarding enforcement and the department acting on knowledge or information as well as complaints.

Nancylee Siebenmann commented that she feels that the penalty analysis is quite steep and does not think it is appropriate.

Chairman Schlutz requested a roll call vote.

"Aye" votes were cast by Commissioners Dunn, Mohr, Priebe, Siebermann, Timmerman and Schlutz. "Nay" vote was cast by Commissioner Yeager. Motion carried 6 to 1.

Clark Yeager stated that the Department should provide a list of engineers for people to use as a reference.

City of Kellogg -- Mike Murphy briefed the Commission on the history of this case. He explained that the City of Kellogg appealed and offered a counter proposal, as far as completion of the project, which was acceptable to the Department. They will pay a reduced penalty and have agreed to enter a consent decree.

Motion was made by Richard Timmerman for referral to the Attorney General's Office. Seconded by Catherine Dunn. Motion carried unanimously.

City of Dysart -- Mike Murphy explained in detail the history of this case. In speaking with their city attorney, he indicated that the city didn't feel they had to pay the penalty or have much discussion with the Department until July of 1988, which is the Clean Water Act deadline. The Administrative Order appeal period expired on February 11, 1987. Staff is asking for referral for payment of penalty and to obtain an injunction to complete construction and comply with final effluent limits by November 30, 1987.

APPOINTMENT -- CITY OF DYSART

Robert Gumbert, Mayor of Dysart distributed a number of newspaper clippings related to their problem. He stated that most available money goes to larger cities rather than small rural communities. The City Council's position was that if the DNR expects us to do this, and they are not willing to help one way or another, and won't leave the rules alone long enough to get the plant built, we better sit tight and see what happens. That is what the City Council decided to do.

Mayor Gumbert explained further problems encountered such as the SBR System plans failing, buying property, not knowing where to get advice, picking an alternate site, and costs.

Robert Schlutz asked the present status of their plans.

Mayor Gumbert stated that they have agreement with property owners on price and terms of sale, which will be complete by July 1, 1987. They should be pretty well through final design by now and the City still expects to go to contract this year and to have it on line by July 1, 1988.

Discussion followed regarding scheduling, timelines, the state's authority to set deadlines, appeal and communication problems.

Motion was made by Richard Timmerman for referral to the Attorney General's Office. Seconded by Charlotte Mohr. Motion carried unanimously.

Hickory Grove Mobile Home Park -- Mike Murphy briefed the Commission on the history of this case.

Motion was made by Charlotte Mohr for referral to the Attorney General's Office. Seconded by Catherine Dunn. Motion carried unanimously.

Outside Inn -- Mike Murphy briefed the Commission on the history of this case.

Motion was made by Nancylee Siebenmann for referral to the Attorney General's Office. Seconded by Catherine Dunn. Motion carried unanimously.

PROPOSED CONTESTED CASE DECISION -- SEAWARD DEVELOPMENT -- RED ROCK ASSOCIATES

Mike Murphy, Bureau Chief, Coordination and Information Division, presented the following item.

Seaward Development, Red Rock Associates (Seaward) applied to the Department's Floodplain Permits Section for approval to construct and operate a hydroelectric generation facility at the Lake Red Rock dam in Marion County, Iowa. Pursuant to Iowa Code Sections 17A.12, 469.3, 469.4, and 469A.2, a notice of hearing was published and a joint hearing, under the authority of the Department and the Executive Council of Iowa, was conducted by Administrative Hearing Officer Margaret LaMarche on April 9, 1987.

The Hearing Officer rendered the attached proposed decision as well as a separate proposed decision for the Executive Council. Even though Seaward or the Department may appeal this proposed decision to the Commission, such actions are not anticipated given the favorable nature of the decision. In the absence of an appeal, the Commission may decide on its own motion to review the proposed decision. If there is no appeal or review of the proposed decision, it automatically becomes the final decision of the Commission.

The Commission took no action on this. This has the effect of upholding the hearing officer's decision unless there is an appeal.

FINAL RULE -- CHAPTER 6, DECLARATORY RULINGS

Mike Murphy, Bureau Chief, Coordination and Information Division, presented the following item.

The Commission is requested to adopt the enclosed Chapter 6, Declaratory Rulings. The Commission approved a notice of intended action on these rules in January. The Commission adopted rules on this subject last month, but upon filing of the rules, the Administrative Rules Coordinator and the lawyer for the Rules Review Committee raised concern about our deviation from uniform rules which require the consent of the petitioner for us to take longer than 30 days to respond to a petition. We recommend that the Commission adopt the enclosed rules. The highlighted language shows changes from what was considered last month.

NATURAL RESOURCES, DEPARTMENT OF (561)
Adopted Rule

Pursuant to the authority of 1986 Iowa Acts, Chapter 1245, section 1804 and Iowa Code section 17A.9, the Director of the Department of Natural Resources adopts a new Chapter 6, "Declaratory Rulings," Iowa Administrative Code. This chapter consolidates existing rules of the former agencies merged into the department by 1986 Iowa Acts, Chapter 1245, and will be made applicable to all units of this umbrella agency by concurrent or subsequent rulemaking actions by the Director, Energy and Geological Resources (565); by the Environmental Protection Commission (567); and by the Natural Resource Commission (571).

The Notice of Intended Action was published in the January 28, 1987, IAB as ARC 7326. There were no comments to the proposed rules from the public or from oversight authorities in Iowa government.

These rules implement Iowa Code section 17A.9.

These rules will become effective July 22, 1987.

Adopt a new chapter 561--6(17A), as follows:

This chapter applies to matters within the jurisdiction of the director (Iowa Administrative Code Parts 561 and 565), the environmental protection commission (Iowa Administrative Code Part 567), and the natural resource commission (Iowa Administrative Code Part 571).

Insert the petition for declaratory rulings segments of the Uniform Administrative Rules which are printed in the front of Volume I of the Iowa Administrative Code, with the following amendments:

CHAPTER 6
DECLARATORY RULINGS

561--6.1(17A) Petition for declaratory rulings. In lieu of the words "designate office" insert "the Director of the Department of Natural Resources, Henry A. Wallace Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034." In lieu of the words "AGENCY NAME," the heading on the petition should read:

BEFORE THE
DEPARTMENT OF NATURAL RESOURCES

561--6.3(17A) Inquiries. Inquiries concerning the status of a petition for a declaratory ruling may be made to the Chief of Government Liaison Bureau, Coordination and Information Division, Department of Natural Resources, Henry A. Wallace Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034.

Amend rule 561--6.4(17A), ~~second paragraph~~, by ~~rescinding the paragraph and inserting in lieu thereof~~ adding the following:

~~The director shall either issue a ruling or decline to issue a ruling within thirty (30) days after receipt of the petition or receipt of additional information requested, unless a longer period of time is necessary due to the complexity of the issues or the number of pending petitions. If a longer period of time is needed, the director shall notify the petitioner within thirty (30) days. The petitioner shall be notified by certified mail of the director's action.~~ If the issue is within the rulemaking authority of one of the department's commissions, the ruling or declination, along with the petition and briefs, also shall be mailed to the commission members.

A ruling, including a refusal to rule, issued by the director is final unless the issue is within the rulemaking authority of one of the department's commissions in which case the ruling or refusal is final unless appealed to the commission within ten days of receipt by the petitioner or reviewed by the commission on its own motion. On appeal or review, the commission may:

a. Approve the director's ruling, in which case the ruling becomes the final declaratory ruling of the department, or

b. Reverse or modify the declaratory ruling, in which case the modified ruling becomes the final declaratory ruling of the department, or

c. Request additional information from the petitioner, or

d. Decline to issue a ruling, as specified in 6.5.

The commission's ruling or refusal to rule shall be made within a reasonable time and shall be sent by certified mail to the petitioner upon issuance.

These rules are intended to implement Iowa Code section 17A.9.

May 20, 1987

Larry J. Wilson, Director

Motion was made by Catherine Dunn to approve Final Rule--Chapter 6, Declaratory Rulings. Seconded by Nancylee Siebenmann. Motion carried unanimously.

LEGISLATIVE REPORT

Mike Murphy, Bureau Chief, Coordination and Information Division, presented the following item.

Mr. Murphy distributed a status report showing actions taken by the General Assembly on the Department's environmental legislative proposals (HF-631, SF-396, SF-401, SF-155 and HF-134). He explained current changes and stated that a more extensive report will be given next month after final versions have been released.

Gary Priebe commented that he attended three meetings regarding agricultural drainage wells and that he, as well as many other people, is against using state funds to help close wells.

ADDRESS ITEMS FOR NEXT MEETING

Liability on operator of landfill or service station.
Use of fee money and department funds.
Public list of consulting engineers.

NEXT MEETING DATES

June 15-16, 1987
July 20-21, 1987
August 17-18, 1987

ADJOURNMENT

With no further business to come before the Environmental Protection Commission, Chairman Schlutz adjourned the meeting at 3:15 p.m. on Wednesday, May 20, 1987.

Larry J. Wilson, Director

Charlotte Mohr, Secretary

(EPC/5-87)

ADM-1-1-1
May 1987

MEETING AGENDA
ENVIRONMENTAL PROTECTION COMMISSION
BEST WESTERN NEWTON INN
NEWTON, IOWA

May 20, 1987

Meeting Convenes at 8:30 a.m, Room 1

Break	10:00 a.m.
Public Participation	10:30 a.m.
Appointments:	
Robert Flynn City of Dysart	1:00 p.m. 2:00 p.m.

1. Approval of Agenda.

1a. Election of Officers.

2. Approval of Minutes of April 20-21, 1987.

3. Monthly Reports. (Stokes) Informational.

4. Status of Floodplain Permit Cases - Union County Bridge and Chichaqua. (Stokes) Informational.

5. Notice of Intended Action--Chapter 23, Air Quality Rules - Sulphur Dioxide Standards. (Stokes) Decision.

6. Notice of Intended Action--Chapters 40 and 41, Water Supplies Rules. (Stokes) Decision.

7. Notice of Intended Action--Chapter 43, Water Supply Grants Authorized Under 455B.309. (Stokes) Decision.

8. Notice of Intended Action--Revisions to Chapters 50, 51, and 52, Water Conservation and Priority Allocation Rules. (Stokes) Decision.

9. Authorization for Hearing, FY-88 Construction Grant Project List. (Stokes) Decision.

10. Final Rule--Revisions to Chapter 65, Animal Feeding Operations Rules. (Stokes) Decision.

11. Final Rule--Revisions to Subrule Chapter 64.2(9), Wastewater Facility Design Standards. (Stokes) Decision.

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

13. Proposed Contested Case Decision--Seward Development-Red Rock Associates. (Combs) Informational.

14. Final Rule--Chapter 6, Declaratory Rulings. (Combs) Decision.

15. Legislative Report. (Brown) Informational.

16. Address Items for Next Meeting.

NEXT MEETING DATES
June 15-16, 1987
July 20-21, 1987
August 17-18, 1987

MEETING AGENDA
ENVIRONMENTAL PROTECTION COMMISSION
BEST WESTERN NEWTON INN
NEWTON, IOWA

May 20, 1987

Meeting Convenes at 8:30 a.m, Room 1

Break	10:00 a.m.
Public Participation	10:30 a.m.
Appointments:	
Robert Flynn	1:00 p.m.

PRELIMINARY DRAFT

1. Approval of Agenda.
1A. Election of Officers
2. Approval of Minutes of April 20-21, 1987.
3. Monthly Reports. (Stokes) Informational.
4. Status of Floodplain Permit Cases - Union County Bridge and Chichaqua. (Stokes) Informational.
5. Notice of Intended Action--Chapter 23, Air Quality Rules - Sulphur Dioxide Standards. (Stokes) Decision.
6. Notice of Intended Action--Chapters 40 and 41, Water Supplies Rules. (Stokes) Decision.
7. Notice of Intended Action--Chapter 43, Water Supply Grants Authorized Under 455B.309. (Stokes) Decision.
8. Notice of Intended Action--Revisions to Chapters 50, 51, and 52, Water Conservation and Priority Allocation Rules. (Stokes) Decision.
9. Authorization for Hearing, FY-88 Construction Grant Project List. (Stokes) Decision.
10. Final Rule--Revisions to Chapter 65, Animal Feeding Operations Rules. (Stokes) Decision.
11. Final Rule--Revisions to Subrule Chapter 64.2(9), Wastewater Facility Design Standards. (Stokes) Decision.
12. Referrals to Attorney General's Office. (Combs) Decision.

13. Proposed Contested Case Decision--Seward Development-Red Rock Associates. (Combs) Informational.

14. Final Rule--Chapter 6, Declaratory Rulings. (Combs) Decision.

15. Legislative Report. (Brown) Informational.

16. Address Items for Next Meeting.

NEXT MEETING DATES
June 15-16, 1987
July 20-21, 1987
August 17-18, 1987

PRELIMINARY ONLY

ENVIRONMENTAL PROTECTION COMMISSION

NAME	COMPANY OR AGENCY	CITY
(Please print)		
DONALD E. JENSEN	CORN BELT	HUMBOLDT
TIM ROLLINGER	IOWA PUBLIC SERVICE	SIOUX CITY
ROBERT WATTHEW	AMANA REFRIGERATION INC	AMANA

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 3 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
May 8, 1987

Iowa Department of Natural Resources
Environmental Protection Commission
RULEMAKING STATUS REPORT
May 1, 1987

PROPOSAL	DRAFT TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 6 - Declaratory Rulings	1/20/87	2/11/87		--	4/21/87	4/21/87	5/20/87	6/24/87
2. Ch. 40, 41 - Fluoride MCL	4/20/87	*6/17/87		7/06/87 7/08/87 7/10/87				
3. Ch. 43 - Water Supply Grants	4/20/87	*6/17/87		7-06-87 7-08-87 7-10-87				
4. Ch. 50 - 52 Water Allocation (Conservation)	4/20/87	*5/17/87		7-06-87 7-08-87 7-10-87				
5. Ch. 64 - Design Standards (12, 14, 16, 18C)	2/17/87	3/11/87	4/13/87	4/01/87 4/03/87 4/06/87	5/20/87	*5/20/87	*6/17/87	*7/22/87
6. Ch. 65 - Feedlots	11/12/86	12/03/86	1/06/86	12/23/86 12/30/86 1/05/87	5/20/87	*5/20/87	*6/17/87	*7/22/87
7. Ch. 100, 103 - Landfill Groundwater Monitoring	3/16/87	5/20/87		6/09/87 6/10/87 6/11/87				
8. Ch. 135 - Underground Tank Monitoring	12/15/86	1/14/87	2/10/87	2/03/87 2/05/87 2/10/87	4/21/87	4/21/87	5/20/87	6/24/87

*Projected
MPM:rag/C11337J02.01

MONTHLY VARIANCE REPORT 04/30/87

No.	Facility	Program	Engineer	Subject	Decision	Date
1	Albia, City of	Wastewater Const.	Garden & Associates	Interconnecting Piping	approved	04/15/87
2	Birmingham, City of	Wastewater Const.	French-Reneker	Sewer Grade	approved	04/17/87
3	Woodbury County	Flood Plain	Woodbury Co. & IDOT	Freeboard	approved	04/13/87
4	Dakota City, City of	Flood Plain	MER Engineering,Inc	Freeboard	approved	04/15/87
5	DeWitt, City of	Wastewater Oper.	Beling Consultants	Effluent Limit	denied	04/07/87
6	Creston, City of	Wastewater Oper.		Monitoring Freq.	approved	04/20/87
7	Iowa City, City of	Wastewater Oper.	Harry E. Boren,Supt	Monitoring Freq.	approved	04/21/87

REPORTS OF HAZARDOUS CONDITIONS

During the period of April 1, 1987 through April 30, 1987, reports of 78 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
4-07-87 Cerro Gordo	Apparently vandals opened the valves on three fuel storage tanks sometime before working hours on April 7, 1987, when the loss of 15,000 gallons of diesel fuel was discovered one mile south of Plymouth, Iowa. The product ran through a farm yard and into a field. It entered a tile line and reached a tributary to the Shell Rock River, causing a fish kill.	Mr. Jerry Fritz Rural Route #2 Mason City, Iowa 50401	Sumps were dug in order to pump up product. Contaminated soil was removed. Booms and pads were placed on the river. A bypass dam was installed at the tile outfall. Fuel was pumped off the water at the confluence of the creek and the river.
4-13-87 Floyd	A bushing failed on a storage tank located two miles west of Charles City, Iowa on April 13, 1987, and 9,000 gallons of 28% nitrogen fertilizer spilled onto a gravel parking lot and ran to a small creek that discharges to a sink hole 200 feet north of the site.	Denny's Ag Supply P.O. Box 192 HWY 14 West Charles City, Iowa 50616	The top six to eight inches of soil were excavated for application on land. A berm was constructed around the storage tank. Neighboring wells will be monitored quarterly for one year.

RMK:rag/ERM124N08.01

Numbers in Parentheses Represent Reports For The Same Period In Fiscal Year 1986

		Substance Type			Mode					
Month	Total # of Incidents Reported	Petroleum Product	Agri. Chemical	Other Chemicals and Substances	Handling and Storage	Pipeline	Highway Incident	RR Incident	Fire	Other
Oct	79	45	0	34	53	0	18	2	0	6
Nov	24	12	3	9	17	0	5	1	0	1
Dec	43	36	1	6	24	1	14	1	0	3
Jan	48	32	3	13	37	0	9	0	1	1
Feb	41	25	1	15	30	1	5	1	2	2
Mar	55	35	5	15	37	0	12	4	1	1
Apr	78 (66)	32 (36) UST-13	25 (11)	21 (19)	51 (48) UST-13	3 (2)	16 (11)	3 (1)	2 (0)	3 (4)

Total # of Incidents Per Field Office

Field Office	01	02	03	04	05	06
This Period	16	12	10	07	13	20

RMK:rag/ERM086J01.02

May 1, 1987

TO: EPC

FROM: Mike Murphy

RE: Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
City of Baxter Baxter (5)	Wastewater	Noncompliance to Municipal Improvement Program	Order	4/8/87
Chicago C&P RR Waterloo (2)	Wastewater	Violation of Discharges	Order/Penalty	4/8/87
Moore Oil Company Cedar Rapids (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Fontana Park Picnic Buchanan Co. Cons. Bd. Hazelton (1)	Drinking Water	Failure to sample for nitrate	Order	4/8/87
Four Roads Inn Fairbank (1)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Delano's Lounge Washington (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Fox Roller Rink Cammanche (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
Kingsbury Inn Columbus Junction (6)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
The Midway Holy Cross (1)	Drinking Water	Failure to sample for bacteria	Order/Penalty	4/8/87
City of Oxford Oxford (6)	Construction	Construction w/o permit	Order	4/8/87

MPM:rls/CIW124K04.01

May 1, 1987

TO: EPC

FROM: Mike Murphy

RE: Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
City of Waterloo Waterloo (1)	Wastewater	Treatment violations	Order/Penalty	4/14/87
City of Leighton Leighton (5)	Drinking Water	Radioactiivty, Chlorination and public notice violations	Order	4/14/87
Dr McDonald's Limited Ft. Dodge (2)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Clarmond Country Club Clarion (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Lake Keokuk Yaht Club Keokuk	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
I-35 Truckstop Restaurant Willimas (2)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
E.J. Rath, Inc. Missouri Valley (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Frederika's Tap Frederika (1)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/16/87
Wheatland, City of Wheatland (6)	Wastewater	Compliance Schedule	Order	4/17/87
Sports Wade, Inc. Weldon (5)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87

MPM:rls/CIW124K04.01

May 1, 1987

TO: EPC

FROM: Mike Murphy

RE: Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Surburban Club Davenport (6)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
Telegrove Water Assn. Davenport (6)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
The Bank Turin (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/17/87
City of Crescent Crescent (4)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/27/87
Broadview Courts Dubuque (1)	Drinking Water	Failure to monitor bacteria	Order/Penalty	4/27/87
Marv's Lakeside Tap Davenport (6)	Drinking Water	Failure to monitor nitrate; failure to monitor bacteria	Order/Penalty Order/Penalty	4/27/87 4/27/87
J.I. Case Co., Inc. Bettendorf (6)	Wastewater	Prohibited discharge	Order/Penalty	4/27/87
Des Moines Metro SLF Des Moines (5)	Solid Waste	Cover; sludge disposal	Order/Penalty	4/30/87

M E M O R A D N U M

DATE: May 1, 1987

TO: Environmental Protection Commission

FROM: Mike 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
*Lawrence Payne (Ottumwa)	700	12-05-86
*Country Corner Cafe (Pacific Junction)	400	12-21-86
*Cedar Hills Apartments (Dubuque)	1,000	12-29-86
**K & K Truckshop (Lenox)	212	12-29-86
*Chico's Supper Club (Burr Oak)	863	2-10-87
City of Clemons	512	3-04-87
Redwood Resort (Ruthven)	289	3-07-87
OK Lounge (Marion)	448	3-29-87
City of Dysart	400	3-13-87
Shady Oaks Golf Course (Ackworth)	212	4-04-87
IBP, inc. (Columbus Junction)	1,000	4-15-87
Page County Pig, Inc. (Page County)	500	4-25-87
Indian Creek Country Club (Nevada)	62	5-01-87
Blake Grove Retreat (Ackley)	50	5-01-87
Silvercrest Golf & Country Club (Decorah)	50	5-01-87
Derner's of Milford (Milford)	800	5-08-87
Rhinehart Construction Co. (N. Dallas SLF)	800	5-15-87
Tim's Town Pump (Mitchell)	760	5-22-87
Berge/Rognes Bros. Excavating (Northwood)	600	5-23-87
City of Swan	530	----
Gladyth McConnell (Eddyville)	1,000	5-24-87
Giese Construction Co. (Eagle Grove)	1,000	5-25-87
Chicago Central & Pacific RR (Fort Dodge)	1,000	6-08-87
Delano's Lounge (Ainsworth)	336	6-08-87
The Midway (Holy Cross)	336	6-08-87
The Moore Oil Co. (West Branch)	336	6-09-87
Fox Roller Rink (Camanche)	172	6-10-87
City of Waterloo	1,000	6-14-87
Four Roads Inn (Fairbank)	50	6-15-87
Sport Wade, Inc. (Weldon)	224	6-20-87
Suburban Club (West Burlington)	448	6-20-87
E.J. Rath, Inc. (Missouri Valley)	50	
Dr. Macdonald's, Ltd. (Fort Dodge)	224	
Clarmont Country Club (Clarion)	174	
Lake Keokuk Yacht Club (Keokuk)	224	
Telegrove Water Assn. (Davenport)	224	
The Bank (Turin)	212	
City of Crescent	312	

* Referred to the Attorney General
** On Payment Schedule

MPM:rag/I122N01.01

NAME/LOCATION	AMOUNT	DUE DATE
Broadview Courts (Dubuque)	324	
Marv's Lakeside Tap (Davenport)	336	
Marv's Lakeside Tap (Davenport)	200	
J.I. Case, Inc. (Bettendorf)	500	
Des Moines Metro SLF	1,000	
Monti-View MHP (Monticello)	200	7-06-87
Frederika's Tap (Frederika)	50	8-01-87

The following administrative penalties have been appealed:

NAME/LOCATION	AMOUNT
*Finlan Landfill (Chickasaw County)	$1,000
Besch/Ralston (Fort Dodge)	500
Kula and Boge (Martelle)	1,000
McConnell; Yoder Feed (Ottumwa)	1,000
Handi-Klasp, Inc, (Webster City)	1,000
NW States Cement (Mason City)	1,000
City of Kellogg	1,000
Munn and Traum (Davenport)	100
Ken Turner (Fort Madison)	1,000
Lakewood Sanitary District	1,000
Kingsbury Inn (Columbus Junction)	336
Scotty's Auction Service (Davenport)	100

The following administrative penalties were paid in April:

NAME/LOCATION	AMOUNT
Cargill, Inc. (Eddyville)	$1,000
Grandview Corners (Grandview)	50
Walter Groenweg (Rock Valley)	150
First Place Lanes (Audubon)	50
Van Buren County SLF	500
Kossuth County SLF	300
Lehigh Portland Cement (Mason City)	1,000
Ag Processing, Inc. (Eagle Grove)	1,000
I-35 Truckstop (Williams)	224
Iowa Power and Light (Council Bluffs)	600
1st Pleasant View Subdivision (Clarion)	74

* Referred to the Attorney General
** On Payment Schedule

MPM:rag/I122N01.01

Department of Natural Resources
Environmental Protection Commission
Contested Cases
May 1, 1987

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
10-26-83 1-20-85	Frit Industries	Administrative Order Hazardous Waste Registry	HW	Landa	Settlement close.
9-14-84	Belmond, et. al.	Administrative Order	HC	Landa	Proposed decision 11-4-85; appealed.
10-17-85	City of Bevington	Administrative Order	WW	Hansen	Hearing continued.
1-23-86	Oelwein Soil Service	Administrative Order	WW	Landa	Hearing continued.
5-21-86	Besch and Ralston	Administrative Order	SW	Landa	Settlement close; Removal begun.
6-12-86	ADM - Clinton	Administrative Order	Air	Landa	Hearing continued.
7-30-86	IBP - Columbus Junction	NPDES Permit	WW	Hansen	Hearing held 1-14-87; Second hearing 5-21-87.
9-10-86	Farmer's Mutual Coop	Administrative Order	WW/SW	Landa	Proposed Consent Order 3-23-87
9-10-86	Kula and Boge	Administrative Order	SW	Landa	Negotiating before filing. Removal started.
10/27/86	Union County/Wittstock	Permit Issuance	FP	Clark	Remanded by District Court.
10/28/86	Lamoni Municipal Utilities	Administrative Order	WW	Hansen	Negotiating before setting hearing.
10/29/86	Handi-Kiesp Company, Inc.	Administrative Order	AQ/WW SW	Landa	Hearing set for 4-16-87.
11/14/86	Gale Conrad	Permit Condition	FP	Clark	Hearing held for 4-14-87.
11/18/86	Northwestern States	Administrative Order	WW	Landa	Settled.
12-03-86	City of Waukee	Administrative Order	WS	Hansen	Hearing continued.

MPM:rag/C11286N02.01

Department of Natural Resources
Environmental Protection Commission
Contested Cases
May 1, 1987

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
12/11/86	Eloise Reese	Permit Condition	FP	Clark	Hearing continued.
12/24/86	Francis Haberlin	Administrative Order	FP	Clark	Hearing continued.
12/30/86	Agripro Seeds	Permit Denial	AQ	Landa	Hearing settled.
1/29/87	Seaward Development	None - Public Hearing	FP	Clark	Hearing held 4-09-87.
2/ /87	Aspro, Inc.	Administrative Order	AQ	Landa	Hearing continued.
2/18/87	City of Kellogg	Administrative Order	WW	Murphy	Negotiating before filing.
3/03/87	Turner, Mildred and Kenneth	Administrative Order	SW	Landa	Hearing continued.
3/10/87	Lakewood Sanitary District	Administrative Order	WW	Hansen	Hearing set for 5-07-87.
3/16/87	Deere and Company	Administrative Order	WW	Murphy	Negotiating before filing.
3/18/87	Mayer/Greiner/Vogel	Administrative Order	FP	Clark	New Case.
3/19/87	City of Mt. Pleasant	Administrative Order	WW	Hansen	Negotiating before filing.
3/25/87	City of Long Grove	Design Denial	WW	Hansen	New Case.
3/25/87	Traum and Munn	Administrative Order	SW	Kennedy	Negotiating before filing.
4/06/87	Scotty's Auction Service	Administrative Order	SW	Kennedy	Negotiating before filing.
4/14/87	Chicago Central RR	Administrative Order	WW	Landa	Negotiating before filing.
4/15/87	Kingsbury Inn	Administrative Order	WS	Murphy	New Case.

MPM:rag/C11286N02.02

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 4 INFORMATION

STATUS OF FLOODPLAIN PERMIT CASES

As requested, the staff will update the Commission as to the status of two floodplain permit cases, Chichaqua (Polk County v. INRC) and Union County Bridge (Wittstock v. IDWAWM).

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 5 DECISION

NOTICE OF INTENDED ACTION -- 567 CHAPTER 23

The Department requests approval to file the attached Notice of Intended Action to initiate action to amend the rules to adopt the federally enforceable standard of 5.0 lbs. SO_2 per million Btu input for existing solid fuel burning sources located in 89 counties (other than Black Hawk, Clinton, Des Moines, Dubuque, Jackson, Lee, Linn, Louisa, Muscatine and Scott Counties). This will eliminate the dual standards which presently exist in the 89 counties.

Allan Stokes
May 6, 1987

(I17)

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code Section 455B.133, the Environmental Protection Commission proposes to amend Chapter 23, "Emission Standards for Contaminants," Iowa Administrative Code, by revising the sulfur dioxide emission standards for solid fuel (coal) burning stationary sources (principally coal-fired industrial and utility boilers and cement kilns) that are not subject to the federal new source performance standards.

Background

In 1972, the state of Iowa first submitted to the United States Environmental Protection Agency (EPA) a state implementation plan for meeting federal ambient air quality standards for sulfur dioxide (SO_2). That plan contained an SO_2 emission limit of 6 lbs. of SO_2 per million British thermal units (Btu) of heat input for all solid fuel burning sources in Iowa. The plan also provided for the reduction from 6 lbs. to 5 lbs. per million Btu's from all sources by January, 1975. These limits were approved by the EPA on May 31, 1972 (37 FR 10865).

In 1974, the state adopted new rules providing for a delay of the reduction to 5 lbs. per million Btu from January, 1975 to July, 1978. This proposal was submitted to the EPA on July 17, 1975. On October 1, 1976, EPA published notice that no approval or disapproval action would be taken on the July, 1975 submittal because the state had adopted subsequent revisions to the affected sections of the rules.

The existing subrule 567—23.3(3), Iowa Administrative Code, was adopted on April 15, 1976, and became effective July 19, 1976. This subrule provides that for ten eastern Iowa counties, the eight bordering Illinois plus Black Hawk and Linn Counties, all solid fuel burning sources are limited to 6 lbs. per million Btu's. (This is unchanged from the original 1972 plan). In the remaining 89 counties, no emission limits are specified for existing sources with less than 500 million Btu heat input per hour. In these 89 counties, emissions from existing sources with more than 500 million Btu of heat input per hour are limited to 8 lbs. per million Btu. Throughout the state, new sources of less than 250 million Btu's are limited to 6 lbs. per million Btu; for new fossil fuel burning sources greater than 250 million Btu input the source performance standards apply.

On June 1, 1977 (42 Fed. Reg. 27892), the Environmental Protection Agency formally determined that the proposed revisions to the SO_2 emission limits, other than the 6 lb. limit for the 10 eastern counties and the new sources which have a capacity of 250 million Btu or less per hour heat input, were inadequate to maintain the National Ambient Air Quality Standards for sulfur dioxide. The approval of only a portion of the emission limitations adopted by Iowa resulted in a dual set of standards. The state and federal standards for the 10 eastern counties and for new sources with capacities of 250 million Btu or less are consistent. However, the state and federal standards for the remaining 89 counties are significantly different. As they currently exist, the state standard for sources over 500 million Btu is 8 lbs. per million Btu and for those sources of 500 million Btu or less, there is no limit prescribed. The federal standard limits SO_2 emissions to 5 lbs. per million Btu for all solid fuel burning sources located in these 89 counties. (A more complete history of this rule is found in the IAB Volume 5, Number 26 published on June 22, 1983 as ARC 3813.)

The present rules were promulgated by the Iowa Department of Environmental Quality on April 15, 1976, and have only been approved in part by the Federal

Environmental Protection Agency. In order to eliminate the dual standards which presently exist because of this EPA action, to provide a clear direction for Iowa industries and utilities, and to provide for the minimum short-term impact to Iowa's economy while preserving the existing air quality the Commission revises the rules as follows:

1. To simplify and clarify this subrule, former subrule 23.3(3)a(2) is revised and is renumbered as 23.3(3)a(1). The emission limitation set by this subrule for the ten eastern Iowa counties specifically listed was approved by the Environmental Protection Agency on June 1, 1977, and remains in its entirety.

2. Subparagraph 23.3(3)a(1) is renumbered as 23.3(3)(a)(2) and is revised to set new emission limitations for the existing solid fuel burning units in the remaining 89 counties in Iowa. The rule which was promulgated by the DEQ limiting these sources to 8 lbs. of SO_2 per million Btu was not approved by the EPA. To conform to the existing federally approved standard, a previously proposed DEQ emission limitation of 5 lbs. per million Btu for existing sources is now, once more, proposed. The standards for new sources which have a capacity of 250 million Btu or less per hour heat input are not affected by this revision.

3. Subrule 23.3(3)a(5) is repealed in this entirety. The Environmental Protection Agency refused to approve this standard because it failed to provide for compliance with the National Ambient Air Quality Standards.

The rule which is proposed at this time is nearly identical to rulemaking that was proposed in 1983. The notice of intended action was published in the June 22, 1983 Iowa Administrative Bulletin as ARC 3813. There will be three public hearings to receive comments on this proposed amendment. The first will be July 6, 1987 at 11:00 a.m. in the Trowbridge Hall Conference Room, Geological Survey Bureau, Department of Natural Resources, 123 North Capitol Street, Iowa City, Iowa. The second hearing will be held on July 7, 1987 at 10:00 a.m. in the fifth floor conference room of the Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. The third hearing will be held July 10, 1987 at 11:00 a.m. in Room 006, Continuing Education Building, Iowa Western Community College, 2700 College Road, Council Bluffs, Iowa. Written comments will be received by the Department of Natural Resources at the Des Moines address given above for an additional ten days after the final hearing.

This proposed amendment is intended to implement Iowa Code section 455B.133.

The following amendment is proposed:

ITEM 1. Subrule 567--23.3(3), paragraph "a" is amended by striking subparagraphs (1) and (2) and inserting in lieu thereof the following:

(1) No person shall allow, cause, or permit the emission of sulfur dioxide into the atmosphere from an existing solid fuel-burning unit, (i.e., a unit which was in operation or for which components had been purchased, or which was under construction prior to September 23, 1970), in an amount greater than 6 pounds, replicated maximum two-hour average, per million Btu of heat input if such unit is located within the following counties: Black Hawk, Clinton, Des Moines, Dubuque, Jackson, Lee, Linn, Louisa, Muscatine and Scott.

(2) No person shall allow, cause, or permit the emission of sulphur dioxide into the atmosphere from an existing solid fuel-burning unit, (i.e., a unit which was in operation or for which components had been purchased, or which was under construction prior to September 23, 1970), in an amount greater than 5 pounds, replicated maximum two-hour average, per million Btu of heat input if such unit is located within the remaining 89 counties of the state not listed in subparagraph 23.3(3)a(1).

Further amend subrule 567--23.3(3), paragraph "a," by striking subparagraph (5).

Date

Larry J. Wilson, Director

(RUL/EP23N)

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 6 DECISION

REVISIONS TO CHAPTERS 40 AND 41 -- WATER SUPPLIES RULES

The Commission is requested to approve the Notice of Intended Action for changes in Chapters 40 and 41 of the IAC.

Changes are proposed in Chapters 40 and 41 of the Iowa Administrative Code to adjust the maximum contaminant level (MCL) for fluoride from 2.2 mg/l to 4.0 mg/l, to clarify sampling requirements for fluoride for systems having more than one source and to give the department the authority to alter the frequency for fluoride monitoring under pre-set conditions. These changes are being proposed as a result of the 1986 amendments to the Safe Drinking Water Act.

Upon authorization by the Commission, three public hearings on the proposed changes in the rules will be held throughout the state beginning on July 6, 1987, and written and oral comments will be received through July 20, 1987. The results of the comments and recommendations are scheduled to be brought back to the Commission at the September, 1987 meeting.

With these revisions, 38 of the 44 water systems currently in violation of the fluoride maximum contaminant level will be removed from the violation status.

Roy G. Ney
May 1, 1987

(I12)

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.105 as amended by 1986 Iowa Acts, Senate File 2175, section 1887, and 1985 Iowa Code supplement section 455B.173 as amended by 1986 Iowa Acts, Senate File 2175, section 1899A, the Environmental Protection Commission for the Department of Natural Resources gives notice of intended action to amend the subrules which contains the maximum contaminant level and monitoring requirements for fluoride in drinking water standards.

Revisions to 567-40(455B) and 567-41(455B) include adjusting the maximum contaminant level for fluoride from 2.2 mg/l to 4.0 mg/l, clarifying sampling requirements for fluoride for systems having more than one source and giving the department the authority to alter the frequency for fluoride monitoring under preset conditions. These changes are the result of revisions to the federal primary drinking water standards contained in the 1986 amendments to the Safe Drinking Water Act.

Any interested person may file written suggestions or comments on the proposed rule changes through July 20, 1987. Such written materials should be directed to Roy Ney, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. Persons who want to convey their views orally may contact Roy Ney at 515/281-8945 by that date. Persons are also invited to present oral or written comments at public hearings which will be held on July 6, 1987 at 10:00 a.m. at the Iowa Department of Natural Resources, Geological Survey Bureau, Trowbridge Hall, 123 North Capitol, Iowa City, Iowa 52242; on July 8, 1987 at 10:00 a.m. in the fifth floor east conference room, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034; and on July 10 1987 at 11:00 a.m. at Iowa Western Community College, Continuing Education Building, Room 006, Council Bluffs, Iowa 51501.

Copies of the proposed rules may be obtained from Roy Ney, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319.

These rules are intended to implement Iowa Code Chapter 455B, Division III, Part I, as amended by 1986 Iowa Acts, Senate File 2175, sections 1899, 1899A and 1899B.

FLUORIDE RULE REVISIONS

[NEW DEFINITION]

900-40.2(455B) Definitions.

"Performance evaluation sample" means a reference sample provided to a laboratory for the purpose of demonstrating that a laboratory can successfully analyze the sample within limits of performance specified by the department. The true value of the concentration of the reference material is unknown to the laboratory at the time of analysis.

[MODIFIED MCL]

567-41.3(455B) Maximum Contaminant Levels.

41.3(1) Inorganic chemicals

b. *Fluoride 2.2 4.0

567-41.4(455B) Sampling and analytical requirements.

41.4(3) Inorganic chemical sampling and analytical requirements.

f. Fluoride. In addition to complying with paragraphs "a" through "e" of this section, systems monitoring for fluoride must comply with the requirements of this paragraph.

(1) Where the system draws water from more than one source, the system must sample each source at the entry points to the distribution system.

(2) If the system draws water from more than one source and the sources are combined before distribution, the system must sample at an entry point

RGN:bkp/WSS076P07.01

to the distribution system during periods representative of the maximum fluoride levels occurring under normal operation conditions.

(3) The department may alter the frequencies for fluoride monitoring as set out in paragraph "a" of this section. Any increase or decrease in monitoring under this subsection will be designated in an operation permit or administrative order. To increase or decrease such frequency consider the following factors:

(a) Reported concentrations from previously required monitoring,

(b) The degree of variation in reported concentrations,

(c) Blending or treatment processes conducted for the purpose of complying with the MCL, and

(d) Other factors which may affect fluoride concentrations such as changes in pumping rates in groundwater supplies or significant changes in the system's configuration, operating procedures, source of water and changes in stream flows.

(4) Monitoring may be decreased from the frequencies specified in paragraph "a" of this section upon application in writing by water systems, if the state determines the system is unlikely to exceed the MCL, considering the factors listed in paragraph "3" of this section. Such determination shall be in writing and set forth the basis for the determination. In no case shall monitoring be reduced to less than one sample every 10 years. For systems monitoring once every 10 years, the state shall review the monitoring results every 10 years to determine whether more frequent monitoring is necessary.

(5) Effective October 2, 1987, analysis for fluoride under this section

shall only be used for determining compliance if conducted by certified laboratories that have analyzed Performance Evaluation samples to within ± 10% of the reference value at fluoride concentrations from 1.0 mg/l to 10.0 mg/l within the last 12 months.

(6) Compliance with the MCL shall be determined based on each sampling point. If any sampling point is determined to be out of compliance, the system is deemed to be out of compliance.

RGN:bkp/WSS076P07.01

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 7 DECISION

CHAPTER 43 -- WATER SUPPLY GRANTS AUTHORIZED UNDER 455B.309

The Commission is requested to approve the Notice of Intended Action for Chapter 43 of the IAC.

Chapter 43 of IAC is proposed to implement the award of grants to water supplies for the abatement or elimination of threats to public health and safety resulting from contamination of a water supply source as authorized under Iowa Administrative Code Chapter 455B, Subsection 309.4. The source of the grant funds is the landfill tonnage fee.

Upon authorization by the Commission, three public hearings on the proposed rules will be held throughout the state beginning on July 6, 1987, and written and oral comments will be received through July 20, 1987. The results of the comments and recommendations are scheduled to be brought back to the Commission at the September, 1987 meeting.

Implementation of these rules will allow the department to award approximately 10 grants per year to water supplies within the state to assist in the correction of water quality violations.

Roy G. Ney
May 1, 1987

(I13)

ENVIRONMENTAL PROTECTION COMMISSION (567)
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.105 as amended by 1986 Iowa Acts, Senate File 2175, section 1887, and 1985 Iowa Code supplement section 455B.173 as amended by 1986 Iowa Acts, Senate File 2175, section 1899A, the Environmental Protection Commission for the Department of Natural Resources gives Notice of Intended Action to adopt rules setting out the procedures for applying for water supply grant funds as authorized under Iowa Code section 455B.309(3) and to provide the method by which applications will be evaluated and grants awarded.

Chapter 43(455B) includes the procedures to apply for water supply grant funds and to provide the method by which applications will be evaluated and grants awarded. It is the intent of the rules to award grants to projects that will result in abatement or elimination of water quality problems within a very short time frame. The grant fund is created from monies received from the landfill tonnage fee pursuant to 455B.309

Grant eligible projects and project costs are detailed in the chapter. Procedures for ranking grant applications, awarding grants, payment of grant funds to the grantee and conditions under which forfeiture of grant funds may occur are outlined in this chapter.

Any interested person may file written suggestions or comments on the proposed rule changes through July 20, 1987. Such written materials should be directed to Roy Ney, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034. Persons who want to convey their views orally may contact Roy Ney at 515/281-8945 by that date. Persons are also invited to present oral or written comments at public hearings which will be held on July 6, 1987 at 10:30 a.m. at the Iowa Department of Natural Resources, Geological Survey Bureau, Trowbridge Hall, 123 North Capitol, Iowa City, Iowa 52242; on July 8, 1987 at 10:30 a.m. in the fifth floor conference room, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034; and on July 10, 1987 at 11:30 a.m. at Iowa Western Community College, Continuing Education Building, Room 006, Council Bluffs, Iowa 51501.

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

These rules are intended to implement Iowa Code Chapter 455B, Division III, Part I, as amended by 1986 Iowa Acts, Senate File 2175, sections 1899, 1899A and 1899B.

CHAPTER 43

WATER SUPPLY GRANTS AUTHORIZED UNDER 455B.309.4

43.1 Authority, purpose and applicability

43.1(1) Authority. Pursuant to 455B.309 of the IAC a groundwater fund is created from monies received from the tonnage fee and from other sources designated for purposes related to groundwater monitoring and groundwater quality standards. Twenty-five percent of the monies received from the tonnage fee in each fiscal year is reserved for the purpose of providing grants to public water supply systems to abate or eliminate threats to public health and safety resulting from contamination of the water supply source.

43.1(2) Purpose. The purpose of these rules is to provide the procedures to apply for grant funds and to provide the method by which applications will be evaluated and grants awarded. It is the intent of these rules to award grants to projects that will result in abatement or elimination of a problem within a very short time after the grant has been awarded (typically one year or less).

43.1(3) Applicability. the requirements of this Chapter apply to all water supply grant requests authorized under 455B.309 regardless of the type or size of water system for which the grant is being requested.

43.2 Definitions

When used in this chapter, unless the context otherwise requires:

"Abate or eliminate threats from contamination" means to reduce the contaminant level in the finished water to a level below the Maximum Contaminant Level pursuant to Rule 567-41 IAC or to a level considered acceptable by the Department.

"Application" means a request for grant funds including the required form and any attachments.

"Department" means the Iowa Department of Natural Resources.

"Eligible Applicant" means any public water supply system located within the State of Iowa and having a valid Department Water Supply Operation Permit.

"Grant" means funds received pursuant to 455B.309.4.

"Maximum Contaminant Level Goal" means a non-enforceable contaminant limit that has been set at a level at which no known or anticipated adverse effects on the health of public will occur and which contains an adequate margin of safety.

"Multi-Year Project" means a project that typically requires more than one construction year to complete.

"Project" means an activity or activities funded with 455B.309.4 grant funds.

"Recipient" means an eligible applicant receiving funds under this program.

"Single Year Project" means a project that typically can be completed in one construction year.

"Unexpended funds" means any surplus grant funds available after all grants have been awarded.

43.3 Eligible Projects and Costs

Projects assisted by this program must be for the abatement or elimination of a threat to the public health and safety resulting from contamination of the water supply source.

Eligible projects shall be limited to construction related projects. The grant eligible portion of a project shall be limited to the actual construction costs. All other types of projects or project activities are not grant eligible.

Examples of grant eligible projects include, but are not limited to:

a. Construction cost to provide a replacement well or for reconstruction of an existing well.

b. Construction cost to provide a new water treatment facility or for reconstruction or modification of an existing facility to eliminate contamination.

c. Construction cost to connect to an alternate public water supply.

Examples of grant ineligible projects or project costs include, but are not limited to:

a. Project related to improving the aesthetic quality of the water.

b. Projects consisting of increasing the available water storage or improving or extending the distribution system.

c. Projects related to the correction of a problem caused by poor or inadequate operation and maintenance of the existing system.

d. Site clean up or remedial work resulting from a spill, illegal dumping or a leaking underground storage tank.

e. Routine operation or maintenance costs.

f. Projects related to the correction of a contamination problem caused by or resulting from actions of the applicant such as leaking tanks, chemical spills, failure to maintain or properly operate the water system, violations of state requirements, etc.

g. Planning activities, including preparation of an engineering report.

h. Engineering costs to prepare plans and specifications.

i. Costs related to obtaining a construction permit or submission of request for grant.

j. Administrative costs of the project.

k. Costs associated with obtaining land or easements for construction.

l. Fines and administrative penalties assessed against the water system.

43.5 Application for Grant Funds

43.5(1) Restrictions on Applicants.

a. No more than one application will be considered per year from any applicant. Where multiple water systems are served by another public supply only one grant will be awarded unless the consecutive water system maintains their own water sources and they are contaminated.

b. The application shall be for work anticipated and costs incurred after the award of the grant. Grants will not be awarded to reimbuse the cost that were incurred prior to the grant award.

43.5(2) Application Procedure

Grant applications will be accepted, reviewed and grants awarded in accordance with the following schedule:

Applications accepted September 1 - October 1,
Applications evaluated October 1 - December 30, and
Award of Grants starting January 1

An original and one (1) copy of the application must be submitted. The application shall be made on a form provided by the Department. Application forms and instructions are available upon request from:

Water Supply Section
Department of Natural Resources
900 East Grand
Des Moines, IA 50319

Each application received will be reviewed, rated and ranked based on rating factors. Applications with the highest rankings will be funded, to the extent that Grant funds are available. If unallocated grant funds exist following the award of grants, the Department may consider Grant applications received after October 1.

43.5(3) Multi-Year Funding Application Procedure

a. Each application shall be for funds currently available. A single application requesting funds in two or more years will not be considered.

b. A grant application may be submitted in each of two or more years for discreet portions of multi-year projects. Each application shall be for funds requested for that year.

c. Receipt of a grant in one year does not guarantee receipt of a grant in subsequent years of a multi-year project. The applicant must agree to complete needed work on the project regardless of availability of additional grant funding.

d. Exclusion - More than one annual grant will not be awarded to a project that should take less than one year to complete. Examples of such projects include:

Well Construction
Well Rehabilitation, and
Connection to an Alternate Water Supply

43.6 Rating Factors

The following rating system will be used to rank applications under this program:

a. Type of Contamination. Priority will be given to synthetic organic compounds (including petroleum hyproducts), herbicides and other pesticides. Based upon the type of contamination at the point of entry to the distribution system the following points will be awarded:

Synthetic organic compounds, herbicides and other pesticides	100 points
Inorganic compounds and chemicals which have maximum contaminant levels pursuant to Rule 567-41 other than Fluoride and Turbidity	55 points
Bacteriological	30 points
Radiological	15 points
All other contaminants	0 points

Applicants with multiple contaminants will be awarded cumulative points if contaminants are present from more than one of the above categories and the project will correct these contamination problems.

b. Severity of Problem. The severity of the contaminant level in the system will be evaluated. Priority will be given to systems that have a more severe problem. 20 points will be awarded if the contaminant level found in the drinking water exceeds a maximum contaminant level pursuant to Rule 567-41 IAC and 10 points will be awarded if the contaminant level exceeds a maximum contaminant level goal.

c. Type of System

Category 1: A public water supply system regulated under Iowa Code Chapter 455B which serves a city under Iowa Code Chapter 362 or serves a state-owned facility regularly housing two hundred or more persons,

benefited water districts created under Iowa Code Chapter 357, rural water districts created under Iowa Code Chapter 357A and water systems serving publicly owned schools or institutions . . . . 100 points

Category 2: All community water systems not included in Category 1 . . . . . 40 points

Category 3: A non-community water system serving a non-transient population . . . . . 20 points

Category 4: All non-community water systems not included in Category 1 or 3 . . . . . 0 points

d. Regional Solution: Priority will be given to a system for which regionalization with another public water system is the selected option . . . . . 30 points

The total points to an applicant will be the total of the four areas listed above.

43.7 Verification of Data

Applications will be reviewed to verify figures or statements in the application. In cases where inaccuracies, omissions or errors are found, the Department will reject the application.

43.8 Award of Grants

a. Grants will be awarded to eligible projects in the order of the project rating. Projects with the highest rating will be awarded funds ahead of projects with lower ratings. Applications receiving equal points will be rated at the discretion of the Department, in order to fund to the applicant with the most immediate problem.

b. The amount of any grant shall not exceed 10% of the total available grant funds available in the year, or 100% of the grant eligible costs whichever is less.

c. All applicants will be notified whether or not they will receive a grant. Applications will be returned to all unsuccessful applicants. The Department will not retain applications or maintain a list of projects for consideration in subsequent years. An unsuccessful applicant must reapply for a grant in future years if they are to be considered for a future grant.

d. Successful applicants may be required to attend a conference with Department representatives to outline procedures to be followed as grant recipients.

e. Upon selection of a project for grant funding, the Department will issue a grant award agreement. These rules and applicable federal and state laws and regulations shall become a part of the grant award.

Certain activities may require that permits or clearances be obtained from other state or federal agencies prior to proceeding with the project. Award of the Grant does not relieve the Grantee of this requirement.

f. Copies of all contracts entered into by the Grantee relative to this project shall be forwarded to the Department.

43.9 Payment of Grant

a. Payment of Grant funds to the Grantee will be made only after the actual expenses have been incurred. Grant recipients shall submit requests for funds in the manner and on forms prescribed by the Department. Financial records, invoices, supporting documents and all other records pertinent to the grant program shall be retained by the recipient for a minimum of three years.

b. Representatives of the State Auditor's Office and the Department of Natural Resources or the Department's designee shall have access to all books, accounts, documents, records and the construction site pertaining to the project under these rules.

c. The Department may perform any reviews or field inspections it deems necessary or require the applicant to perform and submit test results (including water quality analyses) it deems necessary to assure that water supply contamination problems have been eliminated or abated. If problems are noted, the Department may require remedial actions to be taken.

43.10 Forfeiture of Grant Funds

Forfeiture of a portion of or the entire Grant may result if monies awarded are not spent by the Grant expiration date.

Forfeiture of a portion of or the entire Grant will result for the following reasons:

a. The Grant will be forfeited if it is determined that the Grant was obtained by fraud or misrepresentation regardless of whether grant monies have already been given to the Grantee. Any grant received or spent shall be repaid to the state.

b. The Grant will be forfeited if it is determined that the Grantee did not incur costs for which Grant payments were made and monies received or spent and shall be repaid to the state.

The grant recipient cannot receive more grant monies for the grant eligible portion of the project than the cost of those items. The grant will be reduced or forfeited such that the grant award applies to only the unfunded portion of the project. Any excess grant monies received or spent shall be repaid to the state.

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 8 DECISION

WATER CONSERVATION AND PRIORITY ALLOCATION RULES: REVISIONS TO CHAPTERS 50, 51 AND 52

The Department requests Commission approval of the attached Notice of Intended Action.

The staff will discuss the proposed amendments and additions to Chapters 50, 51 and 52 of the Iowa Administrative Code, Environmental Protection (567). These amendments include provisions for requiring water conservation and for restricting water withdrawals during severe shortages by category of water use in accordance with the State Water Plan. Authority for these rules comes from changes to the Iowa Code sections 455B.265, 455B.266, and 455B.271.

The proposed rule revisions change the classifications for types of water use in conformance with the priority allocation categories of water use. General provisions for water conservation are made as a requirement for all water withdrawal permits. Specific criteria for emergency conservation have been established for permits for water withdrawal from sources which are susceptible to short-term water shortages. Specific permit conditions for emergency conservation will be based on a water conservation plan prepared by the permittee. Events for triggering emergency conservation and/or priority allocation restrictions are described and the priority allocation plan (455B.266) is reiterated.

Copies of these rules were distributed to the Commission at the April meeting.

Bob Drustrup
May 1, 1987

(I40)

ENVIRONMENTAL PROTECTION COMMISSION (567)
NOTICE OF INTENDED ACTION

Pursuant to the authority of Iowa Code sections 455A.6, 455D.105, and 455B.263, the Environmental Protection Commission intends to amend Chapter 50, "Scope of Division - Definitions - Forms - Rules of Practice," Chapter 51, "Water Permit or Registration - When Required" and Chapter 52, "Criteria and Conditions for Authorizing Withdrawal, Diversion and Storage of Water."

Iowa Code sections 455B.265, 455B.266 and 455B.271 provide the authorization and conditions under which the Department may require water use permits to contain water conservation conditions and may suspend or restrict water use by category of use.

The Department intends to require water conservation in water use permits by adding new rule 52.9(455B). General water conservation conditions will be placed in all permits and specific conditions will be placed in permits for withdrawal from sources of water which are susceptible to short-term shortages. Specific water conservation permit conditions will be based on a water conservation plan prepared by the permittee or applicant. Proposed rule 52.10(455B) describes circumstances and procedures for implementing emergency conservation and priority allocation restrictions. It also reiterates the priority allocation list of water uses from Iowa Code section 455B.266.

These proposed rules categorize water use into six basic classes: domestic, industrial, irrigation, livestock, power generation, and recreational and aesthetic. Water use will no longer be classified by only the dominant use of the permitted withdrawal (i.e., municipal, municipal-type, industrial, or irrigation). As a result, water use by a municipal system will likely include domestic, industrial, irrigation, and recreational and aesthetic uses. Other water systems are also likely to include more than one class of water use.

The water use classification becomes important in the implementation of the priority allocation plan as proposed in rule 52.10(455B). The classification of most water uses is clear-cut. However, it may not always be evident as to what category a particular use may fall. This is particularly true of the industrial and recreational and aesthetic use classes. The Department's determination of specific water uses which will be included in the industrial and recreational and aesthetic use classes is provided in amended rule 50.2(455B). Comments on these use classifications are requested.

Proposed subrule 52.9(3)"c"(1) calls for water conservation plans to contain emergency water conservation provisions which reduce consumptive use of water by at least fifty percent over similar periods of normal use, except for irrigation use. Proposed subrule 52.9(3)"c"(3) limits irrigation to the equivalent of one inch of water per irrigated acre per week during periods when emergency conservation is required. These criteria are somewhat arbitrary and are proposed as a general guideline with exceptions permitted when justified. An alternative approach would be to assign specific maximum water use rates applicable to specific types of water use. For example, different irrigation rates could be set for different crops and different industrial water use rates could be established for different types of industry. Input is requested regarding the acceptability of the proposed approach and suggestions for preferable approaches.

Any interested person may file written comments on the above referenced rule changes through July 20, 1987, with the Administrator of the Environmental Protection Division, Department of Natural Resources, 900 East Grand Avenue, Des Moines, Iowa 50319-0120. Persons are also invited to present oral or written comments at public hearings which will be held on July 6, 1987 at

1:00 p.m. in the Trowbridge Hall Conference Room, Geological Survey Bureau, Department of Natural Resources, 123 North Capitol Street, Iowa City, Iowa; on July 8, 1987 at 1:00 p.m. in the Fifth Floor Conference Room, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa; and on July 10, 1987 at 1:00 p.m. in Room 006, Continuing Education Building, Iowa Western Community College, 2700 College Road, Council Bluffs, Iowa.

These rules are intended to implement Iowa Code sections 455B.265, 455B.266 and 455B.271.

ITEM 1. Amend one definition in rule 50.2 (455B) as follows:

"Consumptive use" means any use of water~~,~~ ~~except for~~ a ~~municipal or municipal type use,~~ which involves substantial evaporation, transpiration, ~~or~~ incorporation of water into a product or removal of water from a ~~watercourse~~ source without prompt return thereto. Consumptive uses include, but are not limited to, irrigation, evaporative cooling, and flooding of wildlife areas by withdrawals or diversions from watercourses or aquifers. Water use by community public water supplies is not considered to be consumptive in the administration of rules 52.3 (455B), 52.4 (455B) and 52.8 (455B).

ITEM 2. Amend rule 50.2 (455B) by deleting the following definitions: "industrial use," "irrigation use," "municipal use," and "municipal-type use."

ITEM 3. Amend rule 50.2 (455B) by adding the following seven definitions:

"Community public water supply" means a system for the provision to the public of piped water for domestic use which has at least fifteen service connections used by year-round residents or regularly serves at least twenty-five year-round residents.

"Domestic use" means a use of water for human consumption and sanitation and public safety (fire protection).

"Industrial use" means a use of water by manufacturing, processing, commercial, and other industrial facilities incidental to providing a product or a service; excluding domestic use, irrigation use, livestock use, power generation use, and recreational and aesthetic use. Examples include but are not limited to manufacturing, food processing, industrial cooling, excavation and processing of rock and gravel products, commercial laundries, cooling of perishables and electrical power generation other than for public consumption.

"Irrigation use" means a use of water which is artificially applied to land to aid the growing of general farm crops (hay, corn, soybeans, oats, grain sorghum and wheat) and specialty crops.

"Livestock use" means a use of water in the production of domestic animals such as drinking, sanitation and cooling.

"Power generation use" means a use of water incidental to the generation of electric power for public consumption, including process water (e.g., boiler makeup) and water for cooling purposes.

"Recreational and aesthetic use" means a use of water which can be easily curtailed and is not essential for the preservation of life, the general welfare, or the state's economic base. Examples include but are not limited to flooding of wildlife areas; filling of pools and fountains; nonessential cooling; car washing; street cleaning; washing of other exterior surfaces such as windows and walls; amusement park-type water rides; turf watering such as lawns, golf courses, athletic fields; and watering of landscape plantings.

ITEM 4 Amend subrule 51.6(4) as follows:

51.6(4) Rural water districts. A permit shall be required for withdrawals of water by any rural water district having its own source of water and such withdrawals shall be classified as ~~municipal-type~~ use by a community public water supply.

ITEM 5. Amend subrule 52.2(2) as follows:

52.2(2) The amount of water authorized for industrial use or power generation use shall be consistent with industry-wide usage for the same or similar purposes and shall provide for growth where need therefor is demonstrated by the applicant.

ITEM 6. Amend subrule 52.2(3) as follows:

52.2(3) The amount of water authorized for ~~municipal~~ use by a community public water supply shall not exceed two hundred (200) gallons per day per

capita except additional water may be provided for growth and industrial use where need therefor is demonstrated by the applicant.

ITEM 7. Delete subrule 52.2(4) and replace with the following:

52.2(4) Recreational and aesthetic permits.

a. Authorized amount. The amount of water authorized for recreational and aesthetic uses shall be determined on a case-by-case basis.

b. Watering system backflow prevention valve. Any permit which includes a use of water for turf or landscape plantings and introduction of fertilizer, pesticide, or other additive into the watering system shall contain a provision that the permittee submit documentation that an American Water Works Association-approved reduced-pressure backflow-prevention valve has been installed to prevent back-siphoning of contaminants into the water source.

This rule is intended to implement Iowa Code section 455B.265.

ITEM 8. Amend paragraphs 52.4(3)"a" and "b" as follows:

a. Two hundred gallon per minute (200 gpm) restriction on irrigation use and recreational and aesthetic use. New withdrawals of water for irrigation and recreational and aesthetic uses shall not be in excess of two hundred gallons per minute (200 gpm). Existing permits for irrigation and recreational and aesthetic uses that authorize withdrawal rates in excess of two hundred gallons per minute (200 gpm) shall not be renewed if serious impact on other water withdrawals or on groundwater piezometric levels occur or are forecasted to occur.

b. Two thousand gallon per minute (2000 gpm) restriction on industrial use and power generation use. New withdrawals of water for industrial and power generation uses at one plant location shall not exceed two thousand gallons per minute (2000 gpm).

ITEM 9. Amend paragraph 52.4(4)"d" as follows:

d. Priorities in renewal, modification and cancellation of permits. If permit renewals must be denied or if permits must be modified or canceled to prevent or abate water level declines which constitute a significant threat to the public interest in the availability of water for sustained beneficial use of the aquifer, withdrawals of water for ~~municipal and municipal-type water systems~~ community public water supplies and for agricultural research shall have priority over withdrawals of water for other regulated uses.

ITEM 10. Amend subrule 52.7(1) by adding paragraph "d" as follows:

d. Addition of conservation provisions. Modification to include conservation provisions is deemed necessary by the department.

ITEM 11. Amend subrule 52.7(2) as follows:

52.7(2) Emergency suspension or restriction.

Notwithstanding any other rule or permit conditions, if the department finds that it is imperatively necessary in an emergency to protect from imminent danger or substantial injury ~~either~~ the public health, welfare~~,~~ ~~and~~ or safety, ~~or~~ the public or private interest in lands or water, or to implement the priority allocation system pursuant to rule 52.10 (455B), and these findings are incorporated into a written emergency order to the permittee, then the department may immediately suspend or restrict operations under a permit and require the permittee to take measures necessary to prevent or remedy the injury. ~~either to the public health, welfare, or safety or to the public or private interests in lands and waters.~~ The emergency order shall state an effective date appropriate to the situation which invoked the suspension or restriction and shall be immediately effective on such date unless stayed, modified, or vacated at a hearing before the commission or by the court. The emergency order shall remain in effect until a date specified in the order,

such time as the order is revoked due to the situation giving rise to the order no longer existing, or as granted from appeal procedures.

ITEM 12. Rescind rule 52.9 (455B) and insert in lieu thereof the following: 567--52.9 (455B) Water conservation.

52.9(1) General. The purpose of water conservation requirements is to preserve the availability of water which is withdrawn for use, as opposed to protected flow provisions in rules 52.3 (455B), 52.4 (455B), and 52.8 (455B) which preserve instream flows.

Each permit granted after July 1, 1986 will include conditions requiring routine (day-to-day) conservation practices, and requiring emergency conservation practices after notification by the department. Existing permits may be modified to include conservation conditions pursuant to paragraph 52.7(1)"d", if deemed necessary by the department.

Only general provisions for routine conservation will be included in a permit, unless water is to be withdrawn from a protected water source designated in Chapter 53 (455B) of the rules which has specific requirements for routine conservation. Permit conditions requiring routine conservation are primarily intended to raise awareness of water usage, develop a preparedness for periods of water shortages, and minimize waste of water.

General conditions involving emergency conservation will be included in all permits. Specific emergency conservation conditions may be included in a water use permit pursuant to subrule 52.9(2). If specific emergency conservation permit conditions are required they will be based on a water conservation plan developed by the permittee or applicant, in accordance with subrule 52.9(3), and approved by the department.

The purpose of emergency conservation is to minimize consumptive use of water from a source experiencing a temporary shortage. Emergency conservation restrictions will be imposed in accordance with rule 52.10 (455B). Long-term water shortages may be dealt with in the protected source rules, Chapter 53 (455B).

52.9(2) Applicability of emergency conservation. Specific emergency conservation requirements may be made a condition of a water withdrawal permit if the proposed or permitted withdrawal could result in a significant consumptive use of water from a source which is likely to experience a short-term shortage.

A determination of the consumptive nature of a water use will be based on the hydrologic relationship of the sources of water withdrawal and wastewater discharge. If the source of withdrawal and discharge are the same, the consumptive use from the source will be considered to be the amount of water withdrawal minus the wastewater discharge. If the sources of withdrawal and discharge are hydrologically independent, then consumptive use from the source of withdrawal will be considered to be the total amount of withdrawal. Water sources which are in close hydrologic connection (e.g., an alluvial aquifer and adjacent stream) will be considered as the same source.

Specific emergency conservation requirements will not normally be included in a water use permit under any of the following conditions:

a. The proposed or existing permitted water use involves a consumptive use of less than 25,000 gallons per day from any water source during periods of substantial water shortage.

b. The proposed or permitted use is subject to protected stream flow conditions pursuant to rules 52.3 (455B), 52.4 (455B), and 52.8 (455B).

c. The water source for the proposed or permitted use is from a surface water impoundment or purchased storage owned by the applicant or permittee.

d. The proposed or permitted use is unable to conserve water without substantially disrupting or ceasing an essential activity which requires water, such as watering livestock or operating a commercial laundry.

e. The proposed or permitted withdrawal is from a source of water which is not likely to experience a substantial short-term water shortage including, but not limited to, the Missouri and Mississippi Rivers and adjacent alluvial aquifers, the Jordan Sandstone Aquifer, and the Iowa Great Lakes.

f. The source of water is or will be utilized by only the permitted or proposed water user and withdrawal from the source for the permitted or proposed use has no potential for affecting other water uses.

52.9(3) Water conservation plans. Unless specific emergency conservation permit conditions are not required in accordance with subrule 52.9(2), the applicant or permittee shall submit a water conservation plan with an application for a new water use permit or renewal of an existing permit. The department may also require a water conservation plan to be submitted by any existing permittee after a minimum of ninety (90) days notice. If an applicant is in doubt as to whether or not the application requires a water conservation plan, the department should be contacted and provided with a description of the proposed source of water, intended use, and desired amount and rate of withdrawal. The department will then make a determination of whether or not a conservation plan is necessary. If a water conservation plan is required with an application for permit renewal, the department will notify the permittee at least one hundred and twenty (120) days prior to expiration of the permit.

Water conservation plans shall describe the measures to be used to achieve water conservation and estimate water savings from each measure. Water conservation plans must contain the following information, as applicable, to be approved by the department.

a. General provisions. The following information shall be included in all water conservation plans:

(1) A description of each source of water withdrawal (i.e., well or surface water intake) including the location, well depth, pumping rate, and date of installation.

(2) A description of wastewater discharge including the location and discharge frequency.

(3) Monthly withdrawal amounts from each source for the past five years.

(4) Monthly total water withdrawal amount for the past five years.

(5) Monthly total wastewater discharge amount for the past five years.

(6) A quarterly breakdown, by the water use categories in subrule 52.10(3), of total water use and estimated consumptive water use over the past five years.

(7) A description of any previous water shortage problems, including the cause, frequency, other affected parties, and how they were resolved.

(8) Identification of nearby water supplies which are potentially affected by or could potentially affect the proposed or permitted withdrawal.

(9) A means of identifying impending water shortage problems (e.g., water level in wells or a reservoir decline to a certain level or stream flows fall to a certain rate).

b. Routine conservation provisions. Consideration of routine conservation is encouraged although it is not normally required in a water conservation plan. Documented water savings from routine conservation measures will be credited towards emergency conservation requirements. Suggested routine conservation measures include:

(1) Use of water-saving plumbing devices or required use of such devices in building codes.
(2) Scheduling irrigation to minimize peak water use.
(3) Use of efficient irrigation techniques.
(4) Implementing programs to minimize lost water, such as piping leaks.
(5) Use of metered water billing by public water supplies.
(6) Utilizing best commercially-available technology to optimize efficiency of water use.
(7) Implementing recycling and reuse practices.
(8) Developing alternative water sources which are not susceptible to shortages.
(9) Increasing rates charged for water or eliminating reduced rates for large users.

c. Emergency conservation provisions. Water conservation plans shall contain emergency conservation provisions in accordance with the following criteria.

(1) General. The consumptive nature of a water use, as described in subrule 52.9(2) and determined from information required in 52.9(3)"a", shall be reduced by at least fifty percent over similar periods of normal use. This criterion does not apply to irrigation use. If this requirement cannot be met, justification for nonattainment shall be provided which must include documentation that an activity involving water use is essential and demonstration of use of best commercially-available technology. The department may then grant variances on a case-by-case basis.

Measures which will be credited for emergency conservation include, but are not limited to, the following: Documented water savings resulting from routine water conservation measures; shutdown, postponement, or curtailment of nonessential activities involving water use; switching to nonaffected sources for water supply; mitigation of consumptive uses by direct discharge of stored water or water from a nonaffected source to the affected water source; acquisition and retirement of existing consumptive uses from the affected water source (credit for retirement of existing consumptive uses will be given only for the amount authorized during periods when emergency conservation is required); and imposing surcharges on water use during periods of shortage.

(2) Public water supplies. At a minimum, emergency water conservation plans for public water supplies must include provisions for restricting outside, consumptive water use.

(3) Irrigation water use. Emergency water conservation plans for irrigation water uses shall limit irrigation water use to the equivalent of one inch per irrigated acre per week for general farm crops and specialty crops, unless the water conservation plan contains other mitigating provisions such as listed in part (1) above.

Water conservation plans shall also address irrigation scheduling. Irrigation scheduling should attempt to provide approximately equal water use on each day of an irrigation cycle. Irrigation scheduling may be done in cooperation with other nearby irrigators who utilize the same water source.

This rule is intended to implement Iowa Code sections 455B.262 and 455B.265.

ITEM 13. Renumber existing rule 52.10 (455B) as rule 52.11 (455B) and insert the following as rule 52.10 (455B):

567--52.10 (455B) Priority allocation restrictions.

52.10(1) General. After any event described in subrule 52.10(2) has occurred, the department will investigate and, if appropriate, may restrict water use according to the priority allocation plan as described in subrule 52.10(3). Prior to imposing the priority allocation plan, the department will

normally require emergency conservation measures to be taken by existing permittees in accordance with permit conditions. The department will not normally require emergency conservation until a shortage of water is imminent and will not normally impose the priority allocation plan until an actual impairment of water usage exists.

The department will notify existing permittees of any emergency restriction or suspension of water use by written order pursuant to subrule 52.7(2). A permittee will be required to maintain daily records of water withdrawal and wastewater discharge, if any, while the emergency order is in effect. These records shall be available for inspection by the department to verify compliance with the order.

Suspension or restriction of water usage applicable to otherwise nonregulated water users shall be by emergency order of the director which the department shall cause to be published in local newspapers of general circulation and broadcast by local media. The emergency order shall state an effective date of the suspension or restriction and shall be immediately effective on such date unless stayed, modified or vacated at a hearing before the commission or by a court.

The department will lift the suspension or restriction of water usage, as deemed appropriate, when evidence of sustained, improved conditions is available.

The department will not impose a suspension of water or a further restriction, other than emergency conservation, on the uses of water provided in paragraphs 52.10(3)"g" through 52.10(3)"i" or on uses of water pursuant to a contract with the state as provided in Iowa Code section 455B.263, subsections 5 and 6 unless the governor has issued a proclamation, as described in subrule 52.10(2), paragraph "b". Notwithstanding such proclamation, in the case of water use under a contract with the state pursuant to Iowa Code subsections 455B.263(5) and (6) and in effect prior to March 5, 1985, restriction or suspension measures will be limited to emergency conservation.

52.10(2) Triggering events. The department may implement the priority allocation plan following the occurrence of any of the following:

a. Receipt of a petition by a governmental subdivision or twenty-five persons that the priority allocation plan be implemented due to a substantial local water shortage adversely affecting their water supply.

b. Issuance by the governor of a proclamation of a disaster emergency due to a drought or other event affecting water resources of the state.

c. Determination by the department in conjunction with the Office of Disaster Services of a local crisis which affects availability of water.

d. Receipt of information from a state or federal natural resource, research or climatological agency indicating that a drought of local or state magnitude is imminent. As a general guideline, emergency conservation or priority allocation restrictions will not be imposed on withdrawals from a surface stream or adjacent alluvial aquifer when stream flow is above the seven-day, one-in-ten-year low-flow level.

52.10(3) Priority allocation plan. Notwithstanding a person's possession of a permit or the person's use of water being a nonregulated use, the department may suspend or restrict usage of water by category of use on a local or statewide basis in the following order:

a. Water conveyed across state boundaries.

b. Water used primarily for recreational or aesthetic purposes.

c. Uses of water for the irrigation of hay, corn, soybeans, oats, grain sorghum or wheat.

d. Uses of water for the irrigation of crops other than hay, corn, soybeans, oats, grain sorghum or wheat.

e. Uses of water for manufacturing or other industrial processes.

f. Uses of water for generation of electrical power for public consumption.

g. Uses of water for livestock production.

h. Uses of water for human consumption and sanitation supplied by rural water districts, municipal water systems, or other public water supplies.

i. Uses of water for human consumption and sanitation supplied by a private water supply.

This rule is intended to implement Iowa Code section 455B.266.

Date

Larry J. Wilson, Director

(EP50)

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 9 DECISION

It is requested that the Commission authorize the department to hold a public hearing on June 30, 1987 to receive comments on the proposed FY88 Construction Grant Project List. The public hearing is the next step on the schedule of events, which was presented to you at the April meeting, leading to the adoption of a FY88 State Priority List.

The proposed FY88 funding list and summary identifies those projects which qualify to receive the anticipated grant funds allotted to Iowa during FY88.

Following the public hearing and comment period on the proposed FY88 funding list, staff will address all comments and prepare final recommendations for consideration at the August Commission meeting. Pending final approval, the FY88 Construction Grants Project List would become effective on October 1, 1987.

The FY88 Construction Grants Project List was distributed to the Commission at the April meeting.

(I09)

Keith Bridson
May 1, 1987

5/01/87

P R O P O S E D

STATE OF IOWA

IOWA DEPARTMENT OF NATURAL RESOURCES

FISCAL YEAR 1988

CONSTRUCTION GRANTS STATE PROJECT PRIORITY LIST

FOR COMMENT AT PUBLIC HEARING

CONSTRUCTION GRANTS FUNDING SUMMARY

The attached funding summary is condensed from the Fiscal Year 1988 State Project Priority List. It includes, in priority order, projects anticipated to be funded with available federal allotments and projected allotments through Fiscal Year 1988. Projects from the Fiscal Year 1987 Fundable List which have not been awarded a grant are shown in the first column. Projects in the second column comprise the proposed Fiscal Year 1988 Fundable List, providing a federal appropriation is made. The Fiscal Year 1988 Fundable List is based on an assumed allotment of $32,851,200.

It is emphasized that the list as shown is dependent upon supplemental Fiscal Year 1987 appropriations of an additional $16,296,200 for Iowa and appropriation of the full Fiscal Year 1988 authorization of $32,851,200 for Iowa.

5/01/87

DRAFT

FY 1988 CONSTRUCTION GRANTS STATE PROJECT PRIORITY LIST

		ESTIMATED EPA GRANT ASSISTANCE	
STEP	PROJECT	FY 1987	FY 1988
3	Des Moines ICA (segmented)	12,865,940	19,710,670
3	Ames (segmented)	5,692,490	2,644,180
4	Rock Valley **	670,010	
4	Dakota City **		222,420
4	Randall *		441,650
4	Clearfield */**	550,820	
4	Atalissa */**	262,350	
4	Waucoma *		385,000
4	Menlo */**	784,020	
4	Parnell *		305,800
4	Lineville *		770,000
4	Ricketts **		86,290
4	Panama */**		242,880
4	Welton */**	258,610	
	FISCAL YEAR FUNDING ESTIMATES	$21,084,240	$24,808,890

FUNDING FOR PROJECTS SHOWN IS BASED ON A SUPPLEMENTAL FY 1987 ALLOTMENT TO IOWA OF $16,296,200 AND AN ASSUMED FY 1988 ALLOTMENT TO IOWA OF $32,851,200. VARIATION OF ACTUAL ALLOTMENTS FROM THESE ASSUMPTIONS MAY REQUIRE A REVISION OF THE LIST.

PROJECT STEP KEY

3 Construction

4 Combination grant for design and construction. Available only when the grant is less than $3 million, the project is not segmented, and the population is under 25,000.

* Unsewered community

** Small community alternative technology. These projects are eligible for a 20% bonus grant for qualifying portions in addition to the 55% grant shown.

FY 1988 SUMMARY OF FUNDS

I. Estimated EPA Assistance Required

A. Estimated assistance for projects			$45,893,130
B. Designated reserve for grant increases			6,028,656
C. Reserve for grant increases for alternative technology			
	FY 1986	$ 88,566	
	FY 1987	$1,144,294	
	FY 1988	$1,149,792	2,382,652
D. Reserve for grant increases for innovative technology			
	FY 1987	$ 164,256	
	FY 1988	$ 164,256	328,512
E. Reserve for state management assistance 205(g)			
	FY 1987	$1,314,048	
	FY 1988	$1,314,048	2,628,096
F. Reserve for water quality management planning 205(j)(1)			
	FY 1986	$ 144,770	
	FY 1987	$ 328,512	
	FY 1988	$ 328,512	801,794
G. Reserve for non-point management planning 205(j)(5)			
	FY 1987	$ 162,962	
	FY 1988	$ 328,512	491,474
H. Reserve for advances of allowances (no need projected for FY 1988)			
Total grant needs			$58,554,314

II. Non-additive Set-aside Reserve Funds

A. Reserve for alternative systems for small communities		
	FY 1987	$1,314,048
	FY 1988	$1,314,048
		$2,628,096
B. Quota for unsewered communities	FY 1987	$1,642,560
	FY 1988	$1,642,560
		$3,285,120

III. Available Funds

A. FY 1972-1986 Carryover Balances (5/01/87)	$ 1,297,373
B. FY 1987 Allotment Balance (5/01/87)	8,109,541
C. Additional Anticipated FY 1987 Allotment	16,296,200
D. Anticipated FY 1988 Allotment	32,851,200
	$58,554,314

5/01/87

P R O P O S E D

STATE OF IOWA

IOWA DEPARTMENT OF NATURAL RESOURCES

FISCAL YEAR 1988

CONSTRUCTION GRANTS STATE PROJECT PRIORITY LIST

FOR COMMENT AT PUBLIC HEARING

CONSTRUCTION GRANTS FUNDING SUMMARY

The attached funding summary is condensed from the Fiscal Year 1988 State Project Priority List. It includes, in priority order, projects anticipated to be funded with available federal allotments and projected allotments through Fiscal Year 1988. Projects from the Fiscal Year 1987 Fundable List which have not been awarded a grant are shown in the first column. Projects in the second column comprise the proposed Fiscal Year 1988 Fundable List, providing a federal appropriation is made. The Fiscal Year 1988 Fundable List is based on an assumed allotment of $32,851,200.

It is emphasized that the list as shown is dependent upon supplemental Fiscal Year 1987 appropriations of an additional $16,296,200 for Iowa and appropriation of the full Fiscal Year 1988 authorization of $32,851,200 for Iowa.

DRAFT

FY 1988 CONSTRUCTION GRANTS STATE PROJECT PRIORITY LIST

STEP	PROJECT	ESTIMATED EPA GRANT ASSISTANCE FY 1987	ESTIMATED EPA GRANT ASSISTANCE FY 1988
3	Des Moines ICA (segmented)	12,865,940	19,710,670
3	Ames (segmented)	5,692,490	2,644,180
4	Rock Valley **	670,010	
4	Dakota City **		222,420
4	Randall *		441,650
4	Clearfield */**	550,820	
4	Atalissa */**	262,350	
4	Waucoma *		385,000
4	Menlo */**	784,020	
4	Parnell *		305,800
4	Lineville *		770,000
4	Ricketts **		86,290
4	Panama */**		242,880
4	Welton */**	258,610	
	FISCAL YEAR FUNDING ESTIMATES	$21,084,240	$24,808,890

FUNDING FOR PROJECTS SHOWN IS BASED ON A SUPPLEMENTAL FY 1987 ALLOTMENT TO IOWA OF $16,296,200 AND AN ASSUMED FY 1988 ALLOTMENT TO IOWA OF $32,851,200. VARIATION OF ACTUAL ALLOTMENTS FROM THESE ASSUMPTIONS MAY REQUIRE A REVISION OF THE LIST.

PROJECT STEP KEY

3 Construction

4 Combination grant for design and construction. Available only when the grant is less than $3 million, the project is not segmented, and the population is under 25,000.

* Unsewered community

** Small community alternative technology. These projects are eligible for a 20% bonus grant for qualifying portions in addition to the 55% grant shown.

FY 1988 SUMMARY OF FUNDS

I. Estimated EPA Assistance Required			
A. Estimated assistance for projects			$45,893,130
B. Designated reserve for grant increases			6,028,656
C. Reserve for grant increases for alternative technology			
	FY 1986	$ 88,566	
	FY 1987	$1,144,294	
	FY 1988	$1,149,792	2,382,652
D. Reserve for grant increases for innovative technology			
	FY 1987	$ 164,256	
	FY 1988	$ 164,256	328,512
E. Reserve for state management assistance 205(g)			
	FY 1987	$1,314,048	
	FY 1988	$1,314,048	2,628,096
F. Reserve for water quality management planning 205(j)(1)			
	FY 1986	$ 144,770	
	FY 1987	$ 328,512	
	FY 1988	$ 328,512	801,794
G. Reserve for non-point management planning 205(j)(5)			
	FY 1987	$ 162,962	
	FY 1988	$ 328,512	491,474
H. Reserve for advances of allowances (no need projected for FY 1988)			
Total grant needs			$58,554,314
II. Non-additive Set-aside Reserve Funds			
A. Reserve for alternative systems for small communities			
	FY 1987	$1,314,048	
	FY 1988	$1,314,048	
		$2,628,096	
B. Quota for unsewered communities	FY 1987	$1,642,560	
	FY 1988	$1,642,560	
		$3,285,120	
III. Available Funds			
A. FY 1972-1986 Carryover Balances (5/01/87)			$ 1,297,373
B. FY 1987 Allotment Balance (5/01/87)			8,109,541
C. Additional Anticipated FY 1987 Allotment			16,296,200
D. Anticipated FY 1988 Allotment			32,851,200
			$58,554,314

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 11 DECISION

REVISIONS TO SUBRULE 64.2(9) - WASTEWATER FACILITY DESIGN STANDARDS

The Department requests Commission approval of the proposed revisions to Chapter 64 rules relating to Chapters 12, 14, 16, and 18C of the wastewater facility design standards.

Changes are proposed in Chapters 12 and 18C of the design standards to implement the decisions of the Commission made on May 20, 1986, and June 16, 1986. Changes are also proposed in Chapter 14, 16 and 18C to address the concerns of the Wastewater Treatment Committee of the Commission expressed in response to question numbers 1, 11, 19, 30 31, 32 and 34 of the questionnaire used by this committee in their review of all design standards.

Three public hearings on the proposed changes in the standards were held throughout the state beginning on April 1, 1987, and written and oral comments were received through April 16, 1987, ten days after the date of the final hearing. The notice was published on March 11, 1987.

There were no attendees and no commentors at any of the three public hearings held in Iowa City on April 1, 1987, in Council Bluffs on April 3, 1987 and Des Moines on April 6, 1987. Fifteen written and telephone comments were received from five commentors on twelve sections of the four chapters. The comments and responses are included in the Public Participation Responsiveness Summary. Three minor revisions were made for clarification in the proposed changes as a result of the comments received.

Following are descriptions of the proposed changes in the standards.

Chapter 12: Incorporate the cost-saving changes for unsewered communities developed by an ASCE sponsored committee. These include six-inch sewers, lower minimum sewer velocities and flatter slopes, increased manhole spacing, cleanouts and curved and variable grade sewers. In addition, it is proposed to correct several minor errors in the standard and to delete asbestos-cement pipe due to its manufacture and use being eliminated on a national scale.

Chapter 14: Add a section requiring plant design to meet effluent limitations without reference to flows, delete wording which ties permit limitations to defined flows, and add a prohibited wastes section similar to that in Chapter 18A.

Chapter 16: Revise surface settling rates to be consistent with the ten states standards.

Chapter 18C: Permit baffles to form the quiescent cell, delete the requirement for a protective soil cover over snythetic liners, delete the requirement for a minimum of two surface aerators per cell except for the primary cells, and change the current requirement for a spare surface aerator for standby to require only a motor and prop assembly (or drive train).

In addition, to the above, four of the commentors expressed strong support for leaving the basis for design flow as it now is rather than changing to the average annual daily flow. There was no support for making such a change.

Wayne Reed
April 29, 1987

WAR:bkp/WQPQ118P01.02 -.22

Proposed Changes In Standards

12.4 MATERIALS

Standards shall be as listed below for the respective materials

a. Rigid Pipes	Material Spec.	Joint Spec.
Asbestos Cement	ASTM C 428 77	ASTM D 4869 66

12.5 DETAILS OF DESIGN

12.5.1 Diameter

No public gravity sanitary sewer shall be less than eight inches in diameter, with the following exception.

For unsewered communities, six-inch diameter sewers may be used for the last 800 feet (approximately two blocks) of sewer, provided the six-inch sewer has sufficient hydraulic capacity and is a dead end not subject to future extension. A manhole or a cleanout must be provided at the end of the six-inch lateral sewer pipe.

12.5.3 Slope

Under no circumstances will the average design velocity when flowing full be allowed to drop below 1.5 feet per second based on Kutter's formula using an "n" value of 0.013.

The following exceptions to the above requirements in this section shall apply for unsewered communities only.

A minimum velocity of 2.0 feet per second when flowing full should be maintained in all sewer mains. However, in specific cases where savings in sewer cost are possible or a lift station could be eliminated, a minimum sewer velocity of 1.5 feet per second when flowing full will be permitted. An "n" value of 0.013 shall be used for design of PVC pipe, vitrified clay pipe, and ABS truss pipe. Minimum slopes for 8" sewers flowing full at 2.0 feet per second and 1.5 feet per second shall be 0.40 ft./100 ft. and 0.22 ft./100 ft. Minimum slopes for 6" sewers flowing full at 2.0 feet per second and 1.5 feet per second shall be 0.60 ft./100 ft. and 0.34 ft./100 ft. In cases where a minimum sewer design velocity of 1.5 feet per second is used, the city will be required to give written assurance to the department that any additional sewer maintenance required by reduced slopes and velocities will be provided.

12.5.4 Alignment

Sewers 24 inches inches or less shall be laid with straight alignment between manholes.

The following exceptions to the above requirement in this section shall apply for unsewered communities only.

Vertical and horizontal curved or variable grade sewer construction may be proposed by the design engineer. Whenever curved or variable grade sewer construction is proposed, the design engineer is to develop a proposed design basis and submit it to the department for review.

The city will be required to give written assurance that arrangements will be made for hydraulic sewer cleaning equipment to be available when necessary for cleaning curvilinear sewers.

12.5.7 Manholes

c. Cleanouts may be permitted in place of a manhole at the end of lines which are less than 150 feet in length.

d. The following exceptions to the requirements for manhole location and cleanouts in this section shall apply for unsewered communities only.

Manhole spacing for 6 and 8-inch sewers shall be a maximum of 400 feet or at intervals not exceeding 500 feet when adequate cleaning equipment is available. All other sewers shall have a maximum manhole spacing of 800 feet, with manholes also to be placed at the junctions of sewers. When the manhole spacing exceeds 400 feet, the city will be required to give written assurance that appropriate sewer cleaning equipment suitable to clean the distances between manholes will be made available when necessary.

Cleanouts can be installed at the ends of sewers of any size in lieu of manholes. If the sewer is ever extended, the cleanout must be removed and a sewer manhole constructed at that point if the maximum distance between manholes has been reached. Cleanout lids should be bolted down to prevent entry of foreign objects.

12.5.11 Sewer Crossing Under a Waterway

The top of all sewers entering or crossing streams shall be at a depth below the natural bottom of the stream bed sufficient to protect the line. One foot of cover over the top of the line is required where the sewer is located in rock or cased and three feet of cover is required in other material. In major streams, more than the three feet of cover may be required.

12 7.2 Allowable Leakage

The maximum allowable infiltration or exfiltration for any new gravity sanitary sewer section, including all manholes, is 200 gallons per inch of diameter per mile of pipe per day. Manholes may be tested separately.

14.3 QUALITY OF EFFLUENT

This Department establishes the effluent limitations for each wastewater discharger. Effluent limitations for existing wastewater dischargers are available from the Department. The effluent limitations for new dischargers or significantly modified dischargers are established by the Department upon request. The minimum degree of treatment shall be standard secondary treatment for municipal facilities and the industrial effluent guidelines as defined by Department rules and Federal regulations for industrial facilities. A higher degree of treatment will be required if the minimum degree of treatment requirements would violate state water quality standards. Design engineers must obtain effluent limitations prior to preparation of the engineering report or facilities plan. The facilities must be designed to meet average effluent limitations in the operation permit during any 30-day period and to not exceed maximum seven-day average effluent limitations.

14.4 DESIGN

14.4.1 General

14.4.1.1 Type of Treatment

Careful consideration shall be given to the type of treatment selected in the engineering report or facilities plan as required by Section 11.2.9.5.

14.4.1.2 Industrial Wastes

Consideration shall be given to the type and effects of industrial wastes on the treatment process. It may be necessary to pretreat industrial wastes prior to discharge to the sanitary sewer system.

14.4.1.3 Prohibited Wastes

The following wastes shall not be discharged to treatment facilities without assessment of their effects upon the treatment process or discharge requirements in accordance with state and federal law:

a. Any toxic chemicals which may inhibit biological or bacteriological processes.

b. Any strong oxidizing agents or disinfectants in quantities sufficient to inhibit the growth of microorganisms.

c. Metal plating wastes or other toxic wastes containing heavy metals and/or toxic or noxious inorganic chemicals, such as cyanide, reduced sulfur compounds, arsenic and selenium.

d. Detergent wastes or other wastes containing excessive phosphorous or surfactants.

e. Plastics, pharmaceutical wastes and/or other synthetic organic chemicals not amendable to biological treatment.

f. Any wastes containing excessive amounts of nonbiodegradable oil and grease or tar.

g. Any acidic or alkaline wastes which because of quantity, strength or unequalized flow may upset the biological process.

h. Any wastes containing in excess of one milligram per liter phenols.

i. Any wastes containing radioactive chemicals.

j. Nutrient deficient wastes which cannot meet the normal ratio of 100 BOD_5: 5 Nitrogen: 1 Phosphorous necessary for the maintenance of the biological community. An example would be corn processing wastes.

k. Any wastes that might cause excessive physical deterioration of the equipment, piping or structures.

l. Any other waste which may be defined as an incompatible pollutant.

14.4.5 Hydraulic Design

14.4.5.1 Critical Flow Conditions, Municipal

d. Peak Hourly Wet Weather (PHWW) Flow - The total maximum flow received during one hour when the ground water is high, runoff is occurring, and the domestic commercial and industrial flows are at their peak. The domestic/ commercial peak hour flow shall be based on actual monitoring information or the use of a peaking factor determined by

use of Appendix I, Chapter 12 of these Standards. The runoff flow component shall be adjusted to the storm event of two inches of rainfall in one hour.

~~The treatment plant must be designed to meet the average limitations in the operation permit at average dry weather and average wet weather flow conditions. The maximum permit limitations must be met at maximum wet weather flow.~~ The peak hourly wet weather flow ~~is not associated with permit limitations, however, this flow~~ shall be used to evaluate the effect of hydraulic peaks on the design of pumps, piping, clarifiers, and any other flow sensitive aspects.

14.4.5.4 Critical Flow Conditions, Industrial

The treatment plant must be designed to meet the ~~average~~ effluent limitations discussed in Section 14.3. ~~in the operation permit at maximum 30 days flow conditions. The maximum permit limitations must be met at maximum day conditions.~~ The peak hourly ~~and other critical flow conditions are not associated with permit limitations, however, these~~ flows must be considered in evaluating unit processes, pumping, piping, etc.

14.4.6.2 Industrial Loadings

The treatment facility must be designed to meet the ~~average~~ effluent limitations discussed in Section 14.3. ~~at the maximum 30 day average organic load and the maximum effluent limitation at the maximum day organic load.~~ In addition, diurnal peaks of organic loads must be addressed if such peaks adversely affect a unit process.

14.5.2.1 Unit Process Reliability Criteria A

The following reliability is required for any mechanical treatment facility that ~~is designed to serve less than an average of 340 pounds of BOD per day,~~ is Facility Reliability Class II or III, and is required to provide ~~standard~~ secondary treatment. (Facilities ~~of this size~~ with Reliability Class I are covered by Unit Process Reliability Criteria B ~~under 14.5.2.2.)~~ or Reliability Criteria C under 14.5.2.3).

1. Duplication of major treatment units is not required. If provided, duplication for any

unit process or operation shall, as a minimum, be in accordance with the appropriate part of Process Reliability Criteria B.

2. When duplicate units are not provided, the facility shall ~~be followed by~~ include a pond having five (5) days storage capacity for the average wet weather flow and with capability to bypass the pond when effluent limitations are being met. This pond may also be used for flow equalization~~;~~. ~~if so,~~ ~~p~~Provisions for returning the holding pond contents to the treatment process are required.

The pond shall be constructed in accordance with the applicable provisions of Section 18.7, particularly Section 18.7.3 pertaining to sealing of the pond bottom and maximum percolation rate. Separate volumes must be provided in the pond for the five (5) days storage capacity for the average wet weather flow and for flow equalization if it is planned to use the pond for both purposes. A minimum water level of two (2) feet shall be maintained at all times. Adequate provisions must be made for the necessary valving, piping, pumping, metering, aeration and sludge removal capabilities to permit the pond to be maintained and operated in a manner to effectively perform its intended functions.

16.3.2 Surface Overflow Rates

16.3.2.2 Primary Settling Tanks

Surface overflow rates for primary tanks should not exceed ~~800~~ 1,000 gallons per day per square foot at AWW flows or 1,500 gallons per day per square foot for PHWW flows. Clarifier sizing shall be calculated for both flow conditions and the larger surface area determined should be used. At these rates, primary settling of normal domestic sewage can be expected to remove 30 to 35% of the influent BOD. The overflow rates may be increased, but lower removal rates shall be assumed unless adequate chemical addition is provided.

16.3.2.3 Intermediate Settling Tanks

Surface settling rates for intermediate settling tanks following the carbonaceous stage of a separate stage nitrification activated sludge process shall not exceed 900 gallons per day per square foot at AWW flows or 1,200 gallons per day per square foot for PHWW flows. Higher surface settling rates may be permitted if such rates are shown to have no adverse effects on subsequent treatment units.

Surface settling rates for intermediate settling tanks following other treatment units shall not exceed 1,500 gallons per day per square foot based on PHWW flows.

16.3.2.4 Final Settling Tanks

16.3.2.4.1 Final Settling Tanks - Fixed Film Biological Reactors

Surface overflow rates for settling tanks following trickling filters or rotating biological contactors treating domestic wastewater shall not exceed 600 gallons per day per square foot based on AWW flow or 1,200 gallons per day per square foot for PHWW flows.

16.3.2.4.2 Final Settling Tanks - Activated Sludge

To perform properly while producing a concentrated return flow, activated sludge settling tanks must be designed to meet thickening as well as solids separation requirements. Since the rate of recirculation of return sludge from the final settling tanks to the aeration or reaeration tanks is quite high in activated sludge processes, surface overflow rates shall be low enough to minimize the problems with high solids loadings, density currents, inlet hydraulic turbulence, and occasional poor sludge settleability. The surface settling rates of final settling tanks following the activated sludge processes shall be based on AWW flow and PHWW flow. The hydraulic loadings for facilities treating domestic

wastewater shall not exceed the following:

Process Type	Hydraulic Loading at PHWW Flow gpd/s.f.	
	Average (AWW)	Peak (PHWW)
All (except as listed below)	600	1,200
Contact Stabilization	500	1,200
Extended Aeration	400	1,000
Separate Nitrification	400	800
High-Purity Oxygen With Primary Settling	600	1,200

18C.6 AERATED FACULTATIVE POND DESIGN

18C.6.1 Sizing of Aerated Facultative Ponds

18C.6.1.1 Detention Time for Typical Waste

As a minimum, aerated facultative pond systems designed to treat a typical domestic waste (BOD_5 _ 200 mg/l) shall consist of two or more aerated cells and one quiescent cell or zone which provide the following minimum hydraulic detention times:

18C.6.1.2 Detention Time for Greater Strength Waste

Aerated facultative pond systems designed to treat greater strength waste with a BOD_5 of 400 mg/l or more shall consist of three or more aerated cells and one quiescent cell or zone. The first two cells shall be of equal size and no one cell shall provide more than 50% of the total required volume.

18C.6.2 System Reliability and Piping

The pond cells and piping shall be designed such that reliability and flexibility of operation are provided. All systems shall be designed with

piping flexibilities to permit isolation of any cell without affecting the transfer and discharge capabilities of the total system. In addition,, the ability to discharge the influent waste load to a minimum of two cells and to all primary cells in the system shall be provided. Raw influent shall not be diverted to the ~~final~~ (quiescent) cell or zone. When disinfection is required, cell isolation shall not result in bypassing of the disinfection facilities.

18C.6.4 Aeration Equipment

18C.6.4.1 General

c. Reliability in mechanical aeration systems, to include surface aerators (floating and fixed) shall be provided in accordance with the following:

There shall be a sufficient number of aerators to enable the design oxygen transfer of a particular cell to be maintained with the largest capacity aerator in that cell out of service. It is permissible for the backup aerator to be a complete uninstalled unit or a motor and prop assembly (drive train) provided that the installed aerator or parts can be easily removed and replaced. However, at least two aerators ~~per cell~~ shall be installed in each primary ~~for all~~ cells.

18C.6.4.6 Floating Surface Aerators

a. Floating surface aerators shall be of the submerged motor type or the subsurface horizontally mixing aspirator type. As a minimum, one surface aerator shall be installed for each acre of aerated lagoon surface area and at least two aerators in each primary ~~per~~ cell.

18C.7 POND CONSTRUCTION DETAILS

18C.7.1 Pond Shape

18C.7.1.1 General

The shape of all cells should be such that there are no narrow or elongated portions. No islands, peninsulas or coves shall be permitted. Dikes should be rounded at corners to minimize accumulations of floating materials. Common dike construction, wherever possible, is strongly encouraged. Individual cells must be separated by earthen dikes except that the quiescent cell or zone may be formed by baffling off an area in the final aerated cell. Additional baffling in any cell can be provided to prevent short circuiting.

18C.7.3 Pond Bottom

18C.7.3.2 Seal

Synthetic liners shall have a minimum thickness of 30 mills and shall be installed under the supervision of a qualified manufacturer's representative. ~~They shall be protected by an inorganic soil layer with a minimum thickness of one foot. The soil shall be uniformly graded and free from large rocks, angular stones, soil clumps, sticks or other material which may puncture the liner. When a granular, noncohesive soil is used for the cover, a soil fabric shall be placed between the liner and the soil cover. The soil fabric and~~ The synthetic liner shall be anchored at the dike berm and ~~Synthetic liners~~ shall be vented if gas generation from decaying organic material or air pumping from a fluctuating ground water table is a potential problem.

(CJE:PCS)

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY

FOR

AMENDMENTS TO SUBRULE 567--64.2(9) PARAGRAPH b., RELATING TO "IOWA WASTEWATER FACILITIES DESIGN STANDARDS"

CHAPTER 12: IOWA STANDARDS FOR SEWER SYSTEMS
CHAPTER 14: WASTEWATER TREATMENT WORKS
CHAPTER 16: SETTLING
CHAPTER 18C: WASTEWATER TREATMENT PONDS (LAGOONS)

The attached information constitutes a summary of written and telephone comments received on proposed changes to the above chapters of the Iowa Wastewater Facilities Design Standards.

Fifteen comments were received from five commentors on twelve sections of the four chapters.

The interest and input of the commentors is very much appreciated.

WAR:rag/WQPM120N02.01

The following information constitutes a summary of written and telephone comments received through April 16, 1987 concerning the proposed changes to Departmental rules Chapters 12, 14, 16 and 18C. Public hearings on the proposed changes were held on April 1, 1987, in Iowa City, Iowa; on April 3, 1987 in Council Bluffs, Iowa; and on April 6, 1987, in Des Moines, Iowa. There were no attendees and no commentors at the public hearings.

It has been suggested that the size and cost of facilities could be reduced if designs were based on average daily annual flows rather than the sustained high flows which actually occur. Prior to implementing a policy change which could have an adverse impact on the ability of wastewater facilities to meet effluent limits, it was decided to solicit opinions from interested parties on the possible effects of changing the basis for design flows in the design standards.

Therefore, in addition to proposed changes in the four chapters, respondents were asked to comment on the effects on the size of units, the cost savings and the ability for plants to meet effluent limit requirements if the average daily flow (average of 365 days) were used for design rather than average wet weather flow as now required. The comments received on this subject and the responses to the comments are included in this summary, identified as pertaining to Section 14.4.5.

This responsiveness summary addresses all written and telephone comments received, and each comment is followed by a notation of the commentor, a discussion and a staff recommendation. The input of the commentors is considered an essential part of the standards development and revision process and is very helpful.

1) Comment: (Chapter 12) Last year our ASCE Committee produced the Technical Information Memorandum that is now being proposed for adoption into Chapter 12 of the design standards. In it's present form, these design standards are only being applied to unsewered communities.

At our first meeting for the current year, we concluded that one of our priority activities will be to consider the application of the TIM provisions to all communities. We wish to make you aware of our position during the comment period on the Chapter 12 revisions and are anticipating a meeting with your staff personnel, probably within the next month.

Commentor: Thomas E. Wall, P.E., DeWild, Grant, Reckert & Associates Co. (representing the ASCE Small Community Sewer Standards Committee).

Discussion: Recommendations of the ASCE committee were presented and discussed at a meeting attended by representatives of the Consulting Engineers Council of Iowa (CEC), the Iowa section of the American Society of Civil Engineers (ASCE), the Farmers Home Administration (FmHA), Iowa State University (ISU) and the Iowa Department of Natural Resources (DNR).

The first order of business discussed at the meeting was the type or size of systems to which the proposed changes in Chapter 12 were to be applied. It was decided that the changes agreed on would apply only to unsewered communities, and this provision has been adhered to.

Recommendation: No change.

2) Comment: (12.3.1.4) Terms such as dry weather flow, design flow, minimum design flow and average daily sewage flow, appear to be used interchangeably and without adequate definitions in Chapter 12. We recommend clarification of these terms be made now since Chapter 12 is presently undergoing revision.

Commentor: Paul M. Walker, Director, Water Management Division, U.S. Environmental Protection Agency, Region VII.

Discussion: We agree that there is a need for some revision of the terms relating to flow in Chapter 12. Since revision of standards is a time consuming process, and these items were not considered in the present review efforts, they have not been addressed with this set of revisions. This recommendation will be acted upon the next time this chapter is reviewed for revision.

Recommendation: No change.

3) Comment: (12.5) You say "for unsewered communities" in several places. Would these details also be usable in new developments of existing communities? If not, why not?

Commentor: Dr. John Gleasby, Professor of Civil Engineering, Iowa State University.

Discussion: The proposed changes were instigated by an ASCE-sponsored committee, and were specifically developed to apply only for unsewered communities. The impetus came from the need for application of maximum reasonable cost saving approaches for small (unsewered) communities where per capita costs are high, financial resources are limited, and yet the sewer needs must be met for environmental protection.

An important consideration is lack of growth potential for future system expansion, which would not be the case in new areas of many larger communities. For example, 6" sewers on limited lengths of terminal ends of systems might serve adequately with little probability of future extension in a small community. In a larger community subdivision, it might be desirable to have sewers sized to permit the future system expansion which is more likely to occur.

This same question is addressed in Comment No. 1.

Recommendation: No change.

4) Comment: (12.5.7d) It was suggested that burying cleanout lids in lieu of bolting them down be permitted.

Commentor: Dave Fredericks, P.E., French-Reneker Associates.

Discussion: The greatest problem with burying anything in a sewer system is finding it later when needed for maintenance, repair, inspection or sewer cleaning. This might be alleviated with adequate location records, but experience shows that such records are all too often lacking. In addition, there is always the possibility of cleanouts (or manholes) being paved over and made inaccessible. This is much more likely if such appurtenances are buried, out of sight and out of mind. For these reasons, cleanouts should not be buried, and should be bolted down to prevent entry of foreign objects.

Recommendation: No change.

5) Comment: (12.5.11) What kind of casing would be considered acceptable. Should that be spelled out?

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: There may be merit in considering the addition of further details on the requirements for casings. This is an item that should be included in the complete review process when the entire chapter is scheduled for updating and revision. Meanwhile, it has not received the consideration of staff, consulting engineers and other interested parties, so it would be inappropriate to make any change at this time.

Recommendation: No change.

6) Comment: (14.3) The proposed wording of Section 14.3 essentially shifts the responsibility of designing to meet the 30-day and 7-day permit back to the consultant with approval by the state. As you know, our ability to predict effluent BOD and suspended solids is not very good. So we use these design standards to try to achieve secondary effluent meeting the normal permit requirements for secondary effluent. If we need something better than that, we start adding additional unit operations such as nitrification and/or tertiary filtration. It's understood that the plant must meet the permit requirements (as in the proposed 14.3). The object of the design standards is to provide some minimum design requirements which, hopefully, will achieve that goal.

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: Previously the requirements to meet effluent limits had been included in Sections 14.4.5.1, 14.4.5.4 and 14.4.6.2. The wording in these sections was no longer correct and was in need of revision. Rather than provide similar new text in each of these three sections, it seemed more logical to include the correct wording in 14.3 only, which was a more appropriate

location, and make reference to that as needed in the other sections.

There was no intent to change the scope, meaning or responsibility by this revision; the changes were made to concur with current criteria (seven-day rather than maximum day) and for clarification.

Recommendation: No change.

7) Comment: (14.4.1.3)

e. Many pharmaceutical wastes are biodegradable. I designed an activated sludge plant for Abbott Laboratories 35 years ago.

j. Why list a paper mill waste in Iowa where we have none? Why not a corn processing waste such as corn starch or corn sweetener as a more appropriate example in Iowa.

k. Filter media. What are we referring to here, trickling filters or granular media filters, or both?

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: e. Properly designed biological treatment facilities can accept pharmaceutical wastes that are amenable to biological treatment. Assessment of the effects on the treatment process or discharge requirements would be needed for pharmaceutical wastes not amenable or detrimental to biological treatment.

j. The example cited would be more appropriate for Iowa.

k. The list of prohibited wastes was excerpted from Chapter 18A on trickling filters and rotating biological contactors, where there was no doubt about the meaning. This section should be reworded for clarification.

Recommendation: e. No change

j. Change the last sentence to read, "An example would be corn processing wastes".

k. Change this section to read, "Any wastes that might cause excessive physical deterioration of the equipment, piping or structures".

8) Comment: (14.4.5)

a. We have reviewed as requested in the state's February 25, 1987, memo, the plant design flow based on ADF (average daily flow; average flow for 365 days). We believe the process unit sizes should provide treatment capacity for sustained peak flows including non-excessive infiltration from high ground water. A 365-day average would not be sensitive to this condition. An annual average daily flow could mask the effect of individual flow components. Unusually wet or dry years would influence the resulting average flows. Your proposal does not identify how non-excessive I/I will be addressed.

b. Our recommended approach to design would be to use the definitions for dry and wet weather flow (DWF) (WWF) included in our May 1986 comments. The definitions are as follows:

(1) Dry Weather Flow (DWF) - Highest average daily flow (excluding excessive infiltration) recorded over a 7-14 day period during a period of seasonal high ground water,, but when runoff is not occurring. The period of measurement for this flow should extend up to 60 days, if favorable conditions exist.

(2) Wet Weather Flow (WWF) - Highest daily flow (excluding excessive infiltration and inflow) recorded when domestic and industrial flows are maximum and during a period of seasonal high ground water when runoff is occurring. The period of measurement for this flow should extend for as long as necessary to include at least one major storm event which is deemed by the state to be locally representative and significant,

for example, in terms of storm frequency and intensity (two inches of rainfall in one hour).

The rationale for this change is that process units are usually sized to provide treatment capacity for sustained peak flows and hydraulic capacity (which is usually two to three times the treatment capacity) for short term inflow peaks during storm events. For higher peak flows, equalization measures are often used. A seven day or longer average dry weather flow represents the "sustained peak flow," which includes infiltration during high ground water, but does not include inflow. However, the present Iowa design standards require use of the 30 day average wet weather flow, which would include inflow as well as infiltration, for sizing of the treatment units.

Our recommendation is that initially the treatment units should be sized based on DWF. Then WWF conditions should be considered to determine if operability can be maintained. If any problems may result, then an analysis should be conducted of the most cost-effective combination of flow equalization and capacity of treatment units.

We encourage you to incorporate this design approach into your design standards. If you choose not to revise the design standards accordingly, we would consider a revision to Supplement NO. 8 (Facility Planning) incorporating the above as an assurance of state review for cost-effective unit sizing.

Commentor: Paul M. Walker, Director, Water Management Division, U.S. Environmental Protection Agency, Region VII.

Discussion:

a. We agree that process unit sizes should provide treatment capacity for sustained high flows and that a 365-day average would not be sensitive to this condition. Designing for the average daily flow for 365 days would therefore

result in an increased number of violations of effluent permit limits.

b. The flow definitions developed for the Iowa standard closely parallel those used in 10-States, with the exception of annual average daily flow, which is not used in the Iowa standard. Instead, the Iowa standard defines average wet weather flow for mechanical plants, aerated lagoons and controlled discharge lagoons, which is considered more useful and appropriate based on operating experience in this state.

To gain further input on this subject, the Department solicited comments from consultants and others on the effects on costs and the ability of the plants to meet effluent limits of using average daily flow (average of 365 days) for design rather than average wet weather flow as now used. This inquiry was included in the notice prepared to cover numerous other proposed changes to the design standards.

Average dry weather flow as defined in the Iowa standard is the same as the minimum daily flow in 10-States. Maximum wet weather flow for Iowa is the same as wet weather peak flows in the 10-States, and the Iowa peak hourly wet weather flow agrees with the 10-States peak hourly flow.

These are the flows which have been found most useful for Iowa and the member states of 10-States.

(1) The flow described by EPA AS DWF would not provide the guidance needed to design for problems of freezing, septicity, flow measurement and solids dropout. These can be present at the ADW flow when the groundwater is at or near normal and runoff is not occurring. ADW flow as defined in the Iowa Standards is the most common condition and is needed to design for normal operation and to estimate costs of operation and maintenance.

Since the DWF described by EPA is a 7-14 day peak, it could be higher than the 30 day AWW flow in the Iowa standards if there is no inflow problem or inflow is removed. This would result in over-design and over-sizing of treatment facilities.

(2) The flow conditions described by EPA as WWF are covered in the Iowa standard by the maximum wet weather (MMW) flow, which as noted above are the same as wet weather peak flows in the 10-States.

Peak flows are again referred to by EPA without an adequate definition. A "sustained peak flow" as described can certainly not be a dry weather flow as claimed, because peak flows do not occur during periods of dry weather flow using the generally accepted definitions of dry weather flow rather than the EPA definition. As mentioned previously, average dry weather flow as defined in the Iowa standard is the same as the minimum daily flow in 10-States.

Recommendation: No change.

9) Comment: (14.4.5) The Environmental Section at CGA has reviewed the proposed changes in the rules and find that all of the proposed changes offer proper clarification and updating that are periodically necessary in the evolution of design standards.

In the Notice of Intended Action, a request for comments on a proposed change to the use of "average daily flow" instead of "average wet weather flow" for facility design was made. It is our opinion that available data indicate there is a great difference between the average daily flow and the average day in the wettest month flow in most communities in the state. Reducing design to the average daily flow would, therefore, reduce the size of units and reduce construction costs of new facilities. It would in a like fashion, however, reduce the ability of the treatment facility to meet the effluent

limits during months when the flow was at wet weather levels.

If it is intended and necessary that treatment plants meet effluent guidelines during the wettest 30 days of the year, then that design flow must be used in designing the plant. If flow variable effluent limits can be utilized, then a design flow for a treatment facility representing the flow at that plant during critical stream flow conditions would be quite appropriate to protect the stream from damage from municipal pollution. It is certainly possible to design each treatment plant for a series of stream flow and effluent requirements that will take into account the stream dilution factor.

The question then reduces to one of minimum standards and the assumption that standard secondary treatment is the level of treatment necessary during all months of the year and receiving stream conditions. If this is in fact the standard, then utilization of average day of the year numbers will not be acceptable, and many treatment plants will violate the standard secondary level during the months of the year when flow is above average.

Technology can perform whatever the regulators and the populace desire and feel mandatory to protect the environment.

Commentor: David M. Fox. P.E., Clapsaddle-Garber Associates.

Discussion: We agree that the ability of the treatment plant to meet the effluent limits during months when the flow was at wet weather levels would be reduced by using annual average daily flow for design.

Flow variable effluent limits can be considered, but are only practical to apply in large plants with extensive laboratory and operational capability. Few such plants exist in Iowa, with Cedar Rapids perhaps being the outstanding example of a plant that is actually being operated with flow variable effluent limits.

Recommendation: No change.

10) Comment: (14.4.5) A telephone comment was submitted indicating support for continuing with the present basis for design, not changing to design based on average annual daily flow.

Commentor: Dave Fredericks, P.E., French-Reneker Associates.

Discussion: We concur with the opinion expressed by the commentor.

Recommendation: No change.

11) Comment: (14.4.5) I would view the proposal to return to Average Annual Flows and Loads as a step backwards, and I am opposed to that change. As you know, ISU pioneered the idea of introducing rational peaking factors into design, first with some early unpublished handouts, and later with our Journal paper in April 1978.

In our paper a peaking factor or factors were selected as rationally as possible for each treatment unit. For example, since the plant had to meet is permit requirement during any 30-day period, we suggest the peak 30-day load for design of the aeration tank volume. Also, we felt that in an extended period of that duration, the F/M or SRT should fall within normal ranges to ensure a settleable sludge.

It seems to me that before you change from the above sort of philosophy, you should survey plants to see which ones are meeting their permit at their full design loads during the peak load month.

There seem to be many plants that cannot meet their permits already for various reasons. One should study those plants to see what causes the problem. Bob Hegg of Process Applications, Inc. has developed a business analyzing existing plants to try to find out the problems and suggest ways to get the most out of existing plants. Perhaps the IDNR could hire him to render an opinion on the issue.

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: We concur with the opinion that it would be a step backwards to return to average annual daily flows for design.

Recent studies were conducted of essentially all the municipal aerated lagoon facilities operating in Iowa for which valid records are available. The facilities studied seem to be meeting effluent average BOD limits 92% to 96% of the reporting months, but all facilities were not meeting all permit limits at all times.

Similar studies have not been performed recently in Iowa on other types of plants, but would be desirable if funds and time permitted.

Recommendation: No change.

12) Comment: (14.5.2.1) First paragraph: Here "average wet weather flow" is mentioned. Is this 30-day maximum flow? Will that definition appear somewhere earlier?

New second paragraph under 2: It says adequate provision for necessary valving, etc., aeration and sludge removal. This seems to be so vague as to be pretty worthless. Are you going to require aeration; if so, how much? Just to maintain a positive D.O., or enough to retain solids in suspension? Also, the same for sludge removal. Seems to me we need lined ponds so solids can be flushed down into the two-foot minimum water depth to avoid odors. Everyone complains about the odor near the Ankeny plant. Is that due to the unlined equalization pond?

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: The average wet weather flow is defined in Section 14.4.5.1b.

The wording described is not very helpful as stated; it simply alerts the designer to the need for consideration of these various items. So far, there are an insufficient number of such facilities in Iowa to provide an adequate data base for development of more detailed standards. In

other words, we are in a learning period on design and utilization of these units, and each must be considered on a case-by-case basis, as we are now doing. When more experience and information become available it will be possible to provide better defined detailed design requirements in the standards.

The odors at Ankeny are believed to have been from sludge from the original storm water holding basin which was removed when the basin was enlarged and temporarily stored in a holding lagoon on the site.

Recommendation: No change.

13) Comment: (14.5.2.1) The EPA Technical Bulletin - Design Criteria for Mechanical, Electric, and Fluid System and Component Reliability (EPA 430-99-74-001) discourages the use of equalization basins, tanks or ponds as a substitute for component backup requirements. However, for a mechanical plant in Facility Reliability Class II or III, we have no objection to a pond being an acceptable reliability substitute for duplicate major treatment units if shown cost-effective. Required documentation of cost-effectiveness should be added to the revision of the standard.

Commentor: Paul M. Walker, Director, Water Management Division, U.S. Environmental Protection Agency, Region VII.

Discussion: A requirement for cost-effectiveness of a pond can be included elsewhere, but does not belong in a design standard.

Recommendation: No change.

14) Comment: (16.3.2.3) Second paragraph: What does "series units of fixed film reactor process" mean? How does the use of series units impact the desired clarifier loading?

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: The sentence referred to was excerpted from the 10-States Standards. We know of no reason for the qualifying phrase related to

series units and feel that it should be deleted.

Recommendation: Change the new sentence to read,

"Surface settling rates for intermediate settling tanks following other treatment units shall not exceed 1,500 gallons per day per square foot based on PHWW flows."

15) Comment: (18C.6.4.1 & 18C.6.4.6) What if there is more than one primary cell? I presume each primary must have two aerators. Please clarify.

Commentor: Dr. John L. Cleasby, Professor of Civil Engineering, Iowa State University.

Discussion: The intent is to require two aerators in each primary cell, and this should be clarified.

Recommendation: In Section 18C.6.4.1c, change the last sentence to read: "However, at least two aerators shall be installed in each primary cell."

In Section 18C.6.4.6a, change the last sentence to read: "As a minimum, one surface aerator shall be installed for each acre of aerated lagoon surface area and at least two aerators in each primary cell."

INDEX TO COMMENTS RECEIVED

CHANGES TO CHAPTERS

12: IOWA STANDARDS FOR SEWER SYSTEMS
14: WASTEWATER TREATMENT WORKS
16: SETTLING
18C: WASTEWATER TREATMENT PONDS (LAGOONS)

Comment No.	Section of Chapter	COMMENTORS					Total Number of Comments
		Thomas E. Wall	Paul M. Walker	Dr. John L. Cleasby	Dave Fredericks	David M. Fox	
1	12	X					1
2	12.3.1.4		X				1
3	12.5			X			1
4	12.5.7d				X		1
5	12.5.11			X			1
6	14.3			X			1
7	14.4.1.3			X			1
8	14.4.5		X				1
9	14.4.5					X	1
10	14.4.5				X		1
11	14.4.5			X			1
12	14.5.2.1			X			1
13	14.5.2.1		X				1
14	16.3.2.3			X			1
15	18C.6.4.1c and 18C.6.4.6a			X			1
	TOTAL	1	3	8	2	1	15

IOWA STATE UNIVERSITY

Department of Civil Engineering
Ames, Iowa 50011

Telephone: 515-294-3532

April 8, 1987

Mr. Wayne Reed
Iowa Department of Natural Resources
Wallace State Office Bldg.
Des Moines, IA. 50319

RE: Chapters 12, 14, 16, 18C
Your letter of 2/25/87

Dear Wayne:

I would view the proposal to return to Average Annual Flows and Loads as a step backwards, and I am opposed to that change. As you know, ISU pioneered the idea of introducing rational peaking factors into design, first with some early unpublished handouts, and later with our Journal paper in April 1978. (Young, Cleasby, Baumann, Flow & Load Variations in Treatment Plant Design, Jour. Env. Engr. Div. ASCE. 104:EE2, p. 289-303, April 1978).

The proposed wording of section 14.3 essentially shifts the responsibility of designing to meet the 30-day and 7-day permit back to the consultant with approval by the state. But since no guidance is given to the consultant, it will always be a point of debate between the consultant and the DNR.

In our paper a peaking factor or factors were selected as rationally as possible for each treatment unit. For example, since the plant had to meet its permit requirement during any 30-day period, we suggested the peak 30-day load for design of the aeration tank volume. Also, we felt that in an extended period of that duration, the F/M or SRT should fall within normal ranges to ensure a settleable sludge.

It seems to me that before you change from the above sort of philosophy, you should survey plants to see which ones are meeting their permit at their full design loads during the peak load month.

There seem to be many plants that cannot meet their permits already for various reasons. One should study those plants to see what causes the problem. Bob Hegg of Process Applications, Inc. has developed a business analyzing existing plants to try to find out the problems and suggest ways to get the most out of existing plants. (See enclosed brochure where he is a speaker.) Perhaps the IDNR could hire him to render an opinion on the issue.

Whether you intend it or not, the engineer uses the design numbers in the standards and assumes the plant will meet the requirements of 14.3. If you do not intend him to assume that, you need some "weasel" words up front to say that the use of these standards does not guarantee the meeting

of 14.3 and that the designer must accept that responsibility in spite of the design standards. If that is the case, then whatever you put in the standards means nothing, and you could put average annual load throughout. But the standards then become worthless.

Well, in addition to the above general comments, I have a few specifics, assuming that the standards still will have some worth.

12.5 You say "for unsewered communities" in several places. Would these details also be usable in new developments of existing communities? If not, why not?

12.5.11 What kind of casing would be considered acceptable. Should that be spelled out?

14.4.1.3 - e Many pharmaceutical wastes are biodegradable. I designed an activated sludge plant for Abbott Laboratories 35 years ago.

- j Why list a paper mill waste in Iowa where we have none? Why not a corn processing waste such as corn starch or corn sweetener as a more appropriate example in Iowa.

- k Filter media. What are we referring to here, trickling filters or granular media filters, or both?

14.5.2.1 - 2. Here "average wet weather flow" is mentioned. Is this 30-day max flow? Will that definition appear somewhere earlier?

New second paragraph under 2. It says adequate provision for necessary valving, etc., aeration and sludge removal. This seems to be so vague as to be pretty worthless. Are you going to require aeration; if so, how much? Just to maintain a positive D.O., or enough to retain solids in suspension? Also, the same for sludge removal. Seems to me we need lined ponds so solids can be flushed down into the two-foot minimum water depth to avoid odors. Everyone complains about the odor near the Ankeny plant. Is that due to the unlined equalization pond?

16.3.2.3 Second paragraph. What does "series units of fixed film reactor process" mean? How does the use of series units impact the desired clarifier loading?

18C.6.4.1 and 18C.6.4.6 What if there is more than one primary cell? I presume each primary cell must have two aerators. Please clarify.

Finally, as an aside, if you go back to average load design (against my pleaded opinion), do you intend to delete all these references to PHWW flow and revert back to lower allowable loads which are appropriate for

annual average load?? You certainly cannot delete all references for PHWW or other peak load factors, and retain the load guidelines presently in the standards.

Sincerely,

John L. Cleasby
Anson Marston Distinguished Professor
in Engineering
Professor of Civil Engineering

/jml

Enclosure

P.S. Wayne, in rereading this, I came across as being rather negative. I must have been in that state of mind the day it was written. One point wasn't well stated in the last paragraph of the first page. As you know, our ability to predict effluent BOD and suspended solids is not very good. So we use these design standards to try to achieve secondary effluent meeting the normal permit requirements for secondary effluent. If we need something better than that, we start adding additional unit operations such as nitrification and/or tertiary filtration. It's understood that the plant must meet the permit requirementments (as in the proposed 14.3). The object of the design standards is to provide some minimum design requirements which, hopefully, will achieve that goal. I hope this postscript amplifies that paragraph adequately.

April 6, 1987

CGA
CONSULTING ENGINEERS

Dwayne C. Garber, P.E., L.S.
David M. Fox, P.E.
Larry M. Neal, L.S.
Leslie S. Wolfe, P.E.
William R. Grobe, P.E.

Wayne A. Reed, P.E.
Iowa Department of Natural Resources
Wallace State Office Building
900 East Grand
Des Moines, IA 50319-0034

RE: PROPOSED DESIGN STANDARDS MODIFICATIONS

Dear Wayne:

The Environmental Section at CGA has reviewed the proposed changes in the rules and find that all of the proposed changes offer proper clarification and updating that are periodically necessary in the evolution of design standards.

In the Notice of Intended Action, a request for comments on a proposed change to the use of "average daily flow" instead of "average wet weather flow" for facility design was made. It is our opinion that available data indicate there is a great difference between the average daily flow and the average day in the wettest month flow in most communities in the state. Reducing design to the average daily flow would, therefore, reduce the size of units and reduce construction costs of new facilities. It would in a like fashion, however, reduce the ability of the treatment facility to meet the effluent limits during months when the flow was at wet weather levels. If it is intended and necesary that treatment plants meet effluent guidelines during the wettest 30 days of the year, then that design flow must be used in designing the plant. If flow variable effluent limits can be utilized, then a design flow for a treatment facility representing the flow at that plant during critical stream flow conditions would be quite appropriate to protect the stream from damage from municipal pollution. It is certainly possible to design each treatment plant for a series of stream flow and effluent requirements that will take into account the stream dilution factor.

The question then reduces to one of minimum standards and the assumption that standard secondary treatment is the level of treatment necessary during all months of the year and receiving stream conditions. If this is in fact the standard, then utilization of average day of the year numbers will not be acceptable, and many treatment plants will violate the standard secondary level during the months of the year when flow is above average.

Technology can perform whatever the regulators and the populace desire and feel mandatory to protect the environment.

Very truly yours,

CLAPSADDLE-GARBER ASSOCIATES

David M. Fox, P.E.

DMF:aln

CLAPSADDLE·GARBER ASSOCIATES
16 E. Main • P.O. Box 754 • Marshalltown, Iowa 50158 • Telephone 515/752-6701 • Iowa WATS 800-542-7961

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
726 MINNESOTA AVENUE
KANSAS CITY, KANSAS 66101

APR 16 1987

Mr. Darrell McAllister, Bureau Chief
Surface and Groundwater Protection
Iowa Department of Natural Resources
Henry A. Wallace Building
900 East Grand
Des Moines, Iowa 50319

Dear Darrell:

This is in response to your letter of February 18, 1987, which transmitted your "Responses to Final Review Report of State of Iowa Wastewater Facilities Design Standards." Additionally, your letter of February 25, 1987, solicited comments on proposed revisions to Chapters 12, 14, 16 and 18c.

We offer the following comments relative to construction grants eligibility:

1. Chapter 21, Land Application of Wastewater

The IDNR response indicated the EPA comments on this chapter will be considered when this chapter is rewritten. This approach is acceptable. However, in the interim, we must have your written assurance that the criteria included in our comments, particularly comments on disinfection, storage time, hydraulic loading and construction that influence cost-effective determinations, are considered during facility planning so that land application is considered on an equal basis with other alternatives.

2. Chapter 20, Disinfection

Your response indicated that all comments will be considered when the chapter is revised, which is satisfactory. In the interim, we encourage you to utilize the recently completed (October 1986) EPA Process Design Manual for Municipal Wastewater Disinfection to supplement your Chapter 20 reviews. We would ask for your written assurance that all appropriate disinfection processes and design criteria in the manual will be considered in the cost-effective analysis.

3. Page 14-4, Section 14.4.5 - Design Flow for Plants

a. We have reviewed, as requested in the state's February 25, 1987, memo, the plant design flow based on ADF (average daily flow; average flow for 365 days). We believe the process unit sizes should provide treatment capacity for sustained peak flows including non-excessive infiltration from high ground water. A 365-day average would not be sensitive to this condition. An annual average daily flow could mask the effect of individual flow components. Unusually wet or dry years would influence the resulting average flows. Your proposal does not identify how non-excessive I/I will be addressed.

b. Our recommended approach to design would be to use the definitions for dry and wet weather flow (DWF) (WWF) included in our May 1986 comments. The definitions are as follows:

(1) Dry Weather Flow (DWF) - Highest average daily flow (excluding excessive infiltration) recorded over a 7-14 day period during a period of seasonal high ground water, but when runoff is not occurring. The period of measurement for this flow should extend up to 60 days, if favorable conditions exist.

(2) Wet Weather Flow (WWF) - Highest daily flow (excluding excessive infiltration and inflow) recorded when domestic and industrial flows are maximum and during a period of seasonal high ground water when runoff is occurring. The period of measurement for this flow should extend for as long as necessary to include at least one major storm event which is deemed by the state to be locally representative and significant, for example, in terms of storm frequency and intensity (two inches of rainfall in one hour).

The rationale for this change is that process units are usually sized to provide treatment capacity for sustained peak flows and hydraulic capacity (which is usually two to three times the treatment capacity) for short term inflow peaks during storm events. For higher peak flows, equalization measures are often used. A seven day or longer average dry weather flow represents the "sustained peak flow," which includes infiltration during high ground water, but does not include inflow. However, the present Iowa design standards require use of the 30 day average wet weather flow, which would include inflow as well as infiltration, for sizing of the treatment units.

Our recommendation is that initially the treatment units should be sized based on DWF. Then WWF conditions should be considered to determine if operability can be maintained. If any problems may result, then an analysis should be conducted of the most cost-effective combination of flow equalization and capacity of treatment units.

We encourage you to incorporate this design approach into your design standards. If you choose not to revise the design standards accordingly, we would consider a revision to Supplement No. 8 (Facility Planning) incorporating the above as an assurance of state review for cost-effective unit sizing.

The following comments regarding your response to our May 1986 comments and your February 25, 1987, request on Chapters 12, 14, 16 and 18c are also offered for your consideration:

4. Page 12, Section 14.5.2.1 - Unit Process Reliability Criteria A

The EPA Technical Bulletin - Design Criteria for Mechanical, Electric, and Fluid System and Component Reliability (EPA 430-99-74-001) discourages the use of equalization basins, tanks or ponds as a substitute for component backup requirements. However, for a mechanical plant in Facility Reliability Class II or III, we have no objection to a pond being an acceptable reliability substitute for duplicate major treatment units if shown cost-effective. Required documentation of cost-effectiveness should be added to the revision of the standard.

5. Page 12-2, Section 12.3.1.4 - Design Flow for Sewers

Terms such as dry weather flow, design flow, minimum design flow and average daily sewage flow, appear to be used interchangeably and without adequate definitions in Chapter 12. We recommend clarification of these terms be made now since Chapter 12 is presently undergoing revision.

If you have any questions, please call me. The member of my staff who is most familiar with this subject, Jerry Anderson at (913)236-2813, can also provide additional information.

Sincerely yours,

Paul M. Walker
Director, Water Management Division

DeWild Grant Reckert & Associates Co.
Architecture Engineering and Planning

315 First Avenue
Rock Rapids, Iowa 51246
(712) 472-2531

April 15, 1987

Department of Water & Natural Resources
Wallace State Office Building
Des Moines, Iowa 50319

Attn: Darrell McAllister

Re: Iowa Design Standards for Wastewater Facilities
Chapter 12

Dear Darrell:

Last year our ASCE Committee produced the Technical Information Memorandum that is now being proposed for adoption into Chapter 12 of the design standards. In it's present form, these design standards are only being applied to unsewered communities.

At our first meeting for the current year, we concluded that one of our priority activities will be to consider the application of the TIM provisions to all communities. We wish to make you aware of our position during the comment period on the Chapter 12 revisions and are anticipating a meeting with your staff personnel, probably within the next month.

Very truly yours,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Thomas E. Wall, P.E.,
Chairman

TEW:jkv

3460 West 38th Avenue
Denver, Colorado 80211
(303) 458-0311

1051 Office Park Road
West Des Moines, Iowa 50265
(515) 225-8346

600 Sioux City Federal Plaza Bldg.
Sioux City, Iowa 51101
(712) 277-3049

1113 East 14th Street
Sioux Falls, South Dakota 57104
(605) 339-4157

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 12 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).

Robert M. Flynn -- Channel Change
City of Kellogg -- Wastewater
City of Dysart -- Wastewater
Hickory Grove MHP -- Water Supply
Outside Inn -- Water Supply

Mike Murphy
May 1, 1987

(I38)

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 13 INFORMATION

PROPOSED CONTESTED CASE DECISION -- SEAWARD DEVELOPMENT -- RED ROCK ASSOCIATES

Seaward Development, Red Rock Associates (Seaward) applied to the Department's Floodplain Permits Section for approval to construct and operate a hydroelectric generation facility at the Lake Red Rock dam in Marion County, Iowa. Pursuant to Iowa Code Sections 17A.12, 469.3, 469.4, and 469A.2, a notice of hearing was published and a joint hearing, under the authority of the Department and the Executive Council of Iowa, was conducted by Administrative Hearing Officer Margaret LaMarche on April 9, 1987.

The Hearing Officer rendered the attached proposed decision as well as a separate proposed decision for the Executive Council. Even though Seaward or the Department may appeal this proposed decision to the Commission, such actions are not anticipated given the favorable nature of the decision. In the absence of an appeal, the Commission may decide on its own motion to review the proposed decision. If there is no appeal or review of the proposed decision, it automatically becomes the final decision of the Commission.

Randy Clark
May 6, 1987

(I16)

BEFORE THE DEPARTMENT OF NATURAL RESOURCES

IN RE: APPLICATION OF SEAWARD DEVELOPMENT - RED ROCK ASSOCIATES FOR A PERMIT TO CONSTRUCT AND OPERATE A HYDROELECTRIC GENERATION FACILITY ON THE RED ROCK DAM ACROSS THE DES MOINES RIVER, IN MARION COUNTY, IOWA	PROPOSED FINDINGS, CONCLUSION, AND RECOMMENDATION

Seaward Development - Red Rock Associates applied to the Iowa Department of Natural Resources (hereinafter, the Department) for a permit to construct and operate a hydroelectric generation facility in the dam which impounds Red Rock Reservoir on the Des Moines River. Construction of the proposed project will be primarily located in the SW 1/4 of Section 19, T76N, R18W, Marion County, Iowa.

Pursuant to Iowa Code Section 469A.3, Notice of a Public Hearing to hear testimony regarding the project was published in the Pella Chronicle on March 13 and 20, 1987.

Pursuant to Iowa Code Sections 17A.12, 469A.2, 469A.3, 469.3, and 469.4 (1987), a joint public hearing on the proposed project was held with the Executive Council on April 9, 1987, commencing at 10:00 a.m. at the Pella Community Center - Room 201, 712 Union, Pella, Iowa. Present and participating in the hearing were representatives of Seaward Development - Red Rock Associates and the Department of Natural Resources (hereinafter, Department). By agreement between the Council and the Department of Natural Resources, the undersigned acted as hearing officer for the reception of evidence. These Proposed Findings, Conclusion and Recommendation constitute my report back to the Council.

Testifying for Seaward Development - Red Rock Associates was their agent, Eugene J. Garceau. Representing the Department was Randall Clark, Compliance Officer.

THE RECORD

The following exhibits were made a part of the record:

Applicant Exhibit 1 - Summary of Applications to construct and operate a hydroelectric facility at Red Rock Dam, prepared by Seaward Corporation.

Department Exhibit 1 -Flood Plain Project Summary Report, prepared by the Department.

FINDINGS OF FACT

1. The proposed hydroelectric generation facility would be located in the dam which impounds Red Rock Reservoir on the Des Moines River, approximately thirty-five miles downstream from Des Moines. Construction of the proposed project would be primarily located in the SW 1/4 of Section 19, T76N, R18W, Marion County, Iowa.
(Testimony of Eugene J. Garceau; Applicant Exhibit 1; Department Exhibit 1)

2. The existing structure at Red Rock Dam is an earth filled dam with a center spillway which flows into Lake Red Rock. During flood times the flow into the river is stored partially in Lake Red Rock. The existing dam and associated works at Red Rock Dam are owned by the United States of America and operated and maintained by the U. S. Army Corps of Engineers (COE), Rock Island District. Releases through the dam are presently controlled with 14 gated concrete conduits and five agee weir crested overflow spillways. The hydroelectric generating facilities would be constructed adjacent to the existing spillway and channel on the right descending side.
(Testimony of Eugene D. Garceau; Jeff Simmons, Staff Engineer for the Department; Applicant Exhibit 1; Department Exhibit 1)

3. The water diverted for use in the project will be returned to the river exactly lateral to the existing stilling basin. (See Figure 3, Applicant's Exhibit 1) Therefore, there will be a minimal diversion of water by the project.
(Testimony of Eugene D. Garceau)

4. After construction, the COE will continue to operate the dam according to their Water Control Manual with the exception that required discharges from the existing spillways will be prorated with the power plant discharges to maintain the required total downstream discharge. Therefore, the proposed project would not affect the pool elevation or reservoir storage during operation of the generating facility because flow in the existing spillways will be reduced to compensate for power plant discharges. In addition, discharges and water surface elevations located downstream of the project will not change from that regulated by the current operating procedure.
(Testimony of Eugene J. Garceau; Jeff Simmons; Department Exhibit 1)

5. The design report, Red Rock Dam Hydroelectric Project, states that the proposed project will consist of:

> " . . . an intake structure consisting of steel sheet pile coffer cell (filled with concrete) training walls, trash racks, a stop log slot entrance structure,

reinforced concrete box intake conduits 150 feet long and hydraulic operated roller gates located at the face of the existing concrete monolith dam section; two 21 foot diameter penetrations through the concrete monolith (alternatively two 15 foot by 32 foot penetrations); two 21 foot diameter welded steel penstocks bifurcating to four 15 foot diameter penstocks (alternatively four 15 foot diameter penstocks from the gates to the powerhouse) all concrete encased; an 85 foot by 120 foot powerhouse approximately 200 feet downstream of the dam housing four horizontal tube propeller-type (double regulated) turbine-generators; a tailrace channel to the existing outlet channel; a high voltage substation located on the power house roof and an electrical transmission line spanning the existing stilling basin and continuing to the dam's north abutment.

The top of the existing spillway entrance wall will be removed to provide better hydraulic conditions for entrance to the intake structure. In addition, portions of the stilling basin wall will be removed to accommodate the powerhouse tailrace and the draft tubes."

(Testimony of Eugene Garceau; Department Exhibit 1)

6. The proposed project will have an installed capacity at 30,000 kilowatts and will generate, on average, approximately 126,000,000 kilowatt hours per year. (Applicant Exhibit 1)

7. On January 30, 1987 the Federal Energy Regulatory Commission (FERC) granted Seaward Development - Red Rock Associates a license to construct, operate, and maintain the Red Rock Hydroelectric Water Power Project. FERC is the federal licensing agency responsible for overseeing the development of hydropower in the United States. As part of this licensing process, the Department was invited to submit comments to FERC on the proposed project. All such comments made by the Department were acted upon by the applicant. (Testimony of Eugene J. Garceau; Applicant Exhibit 1)

8. The FERC license is conditioned upon the applicant submitting detailed plans for mitigation of any impact water quality, fish mortality, erosion, or recreation. A study must be completed before the proposed project is operating to provide a baseline to later evaluate the project's overall effect on dissolved oxygen, nitrogen, and fish mortality. After construction, another study will be conducted to determine the overall effect of the project on dissolved oxygen, nitrogen and fish mortality. Fish stocking or aerators may be required after the study is completed. The applicant has agreed to a stocking program in the form of a $628.00 payment to supplement fish stocking. The applicant is willing to contribute more if the studies show more mitigation is

required.
(Testimony of Eugene J. Garceau; Jeff Simmons)

9. In connection with the FERC license, the Department is required to issue a Water Quality Certification (Sec. 401).

10. Seaward Development - Red Rock Associates is a partnership which has not yet been formally created. Ninety percent of the partnership will be owned by Seward Construction Company of Portsmouth, New Hampshire. Ten percent will be owned by Thomas Forbes. The funding for the development of the project will be dependent on the successful negotiation of a power sales contract for the purchase of the output of the project by an Iowa utility. The power sales contract will provide the security to raise the necessary funds and will have to be in place before any construction activities can be initiated.
(Testimony of Eugene J. Garceau; Applicant Exhibit 1)

11. The assets of the Seaward Corporation have an approximate net worth of eight to nine million dollars.
(Testimony of Eugene J. Garceau)

12. The proposed project will develop the potential of the renewable resource available at the existing Red Rock Dam and will provide a source of clean energy to reduce the dependency on non-renewable fossil fueled generation.
(Testimony of Eugene J. Garceau; Applicant Exhibit 1)

13. The Red Rock Dam and Reservoir are regulated during periods of low flow to provide a minimum flow to improve the water quality of the Des Moines River downstream of the dam. The minimum flow is 300 cubic feet per second (cfs). The maximum flow is 8000 cfs. If the outflow is less than 300 cfs the power facility will be temporarily closed. Flows above 8000 cfs will be apportioned between the powerhouse and gate structure.
(Testimony of Eugene J. Garceau)

14. The proposed hydroelectric generating facility is expected to provide at least the same erosion protection as the existing structure and may improve the erosion protection.
(Testimony of Eugene J. Garceau)

15. The following safety protective measures will be implemented at the facility:

    a) Warning devices will be placed at the intake structure and at the tailrace.

    b) Protective measures will be installed on all electrical devices both interior and exterior.

    c) Flow through the power plant will be under the direction

of the Corps of Engineers; therefore, all monitoring and safety equipment will be interconnected with the local Corps of Engineers operations office.
(Applicant Exhibit 1)

16. It was the opinion of the staff engineer for the Department that the project meets all relevant approval criteria in Chapters 72 through 74 found at 567 Iowa Administrative Code and in Iowa Code Sections 455B.262, 455B.264, 455B.275, and 455B.277 and 469.5. The staff engineer recommended approval of the project with the applicable general condition and the following special conditions:

Minimum Release Rate. The permittee shall be responsible for operating the hydroelectric facility in combination with the existing spillways such that the flow in the Des Moines River immediately downstream of the dam is not artificially reduced below 300 cfs (the protected minimum flow).

Inspection During Construction. The permittee shall be responsible for providing supervision of construction by a person experienced in the type of construction involved. The permittee shall submit written notification of the name and business address of the person responsible for supervising the construction.

Access. Authorized department personnel shall be allowed access to the dam site for the purpose of conducting dam safety inspections as cited in 900-73.25, IAC.

Annual Inspection and License Fee. The permittee shall pay to the Department an annual inspection and license fee of one hundred dollars on or before the first day of January each year as cited in 567--74.5 (469), IAC.

It is also recommended that the Department collect the one hundred dollar permit fee cited in Subrule 74.5 before issuing this permit.
(Testimony of Jeff Simmons; Department Exhibit 1)

17. There was no testimony in opposition to the proposed hydroelectric generation facility at the public hearing.

CONCLUSIONS OF LAW

1. Pursuant to section 469.1, the Code of Iowa 1987:

A dam shall not be constructed, maintained, or operated in this state in any navigable or meandered stream for any purpose, or in any other stream for manufacturing or power purposes, nor shall any water be taken from the streams for industrial purposes, unless a permit has been granted by the department to the person, firm, corporation or municipality constructing, maintaining, or operating the dam.

2. A permit shall be granted by the Department:

   If it appears to the department that the construction, operation, or maintenance of the dam will not materially obstruct existing navigation, materially affect other public rights, or endanger life or public health, and any water taken from the stream in connection with the project, except water taken by a municipality for distribution in its water mains, is returned to the stream at the nearest practicable place without being materially diminished in quantity, polluted or rendered deleterious to fish life, it shall grant the permit, upon the terms and conditions as it may prescribe.
   Section 469.5, the Code of Iowa 1987.

3. Substantial evidence was presented at the public hearing to establish that the construction, operation, or maintenance of the dam will not:

   a) materially obstruct existing navigation. (Findings of Fact 1-4)

   b) materially affect other public rights. (Findings of Fact 1-4, 8, 9, 13-17)

   c) endanger life or public health. (Findings of Fact 8, 9, 15-17)

   d) any water taken from the stream in connection with the project, excepting water taken by a municipality for distribution in its water mains, is returned to the stream at the nearest practicable place without being materially diminished in quantity, polluted, or rendered deleterious to fish life. (Findings of Fact 1-4, 8-9, 13, 16)

CONCLUSION AND RECOMMENDATION

It is the conclusion of the undersigned that the proposed hydroelectric generation facility to be constructed and operated on the Red Rock Dam across the Des Moines River, in Marion County, Iowa, is meritorious and meets the criteria of the Department of Natural Resources for the issuance of a permit.

It is the recommendation of the undersigned that a permit be issued to Seaward Development - Red Rock Associates for the construction and operation of a hydroelectric generation facility on the Red Rock Dam, across the Des Moines River, primarily located in the SW 1/3 of Section 19, T76N, R18W, Marion County, Iowa. The permit should be issued subject to the special conditions as outlined in the special project summary of the Department's staff engineer.
(Department Exhibit 1)

Dated this 1st day of May, 1987.

Margaret LaMarche
Margaret LaMarche
Hearing Officer

ML/jmm

cc: Eugene J. Garceau, for the Applicant
Golda Beals, for the Executive Council
Randall Clark, for the Department of Natural Resources

ENVIRONMENTAL PROTECTION COMMISSION

ITEM 14 DECISION

The Commission is requested to adopt the enclosed Chapter 6, Declaratory Rulings. The Commission approved a notice of intended action on these rules in January. The Commission adopted rules on this subject last month, but upon filing of the rules, the Administrative Rules Coordinator and the lawyer for the Rules Review Committee raised concern about our deviation from uniform rules which require the consent of the petitioner for us to take longer than 30 days to respond to a petition. We recommend that the Commission adopt the enclosed rules. The highlighted language shows changes from what was considered last month.

Mike Murphy
May 7, 1987

(I01)

NATURAL RESOURCES, DEPARTMENT OF (561)
Adopted Rule

Pursuant to the authority of 1986 Iowa Acts, Chapter 1245, section 1804 and Iowa Code section 17A.9, the Director of the Department of Natural Resources adopts a new Chapter 6, "Declaratory Rulings," Iowa Administrative Code. This chapter consolidates existing rules of the former agencies merged into the department by 1986 Iowa Acts, Chapter 1245, and will be made applicable to all units of this umbrella agency by concurrent or subsequent rulemaking actions by the Director, Energy and Geological Resources (565); by the Environmental Protection Commission (567); and by the Natural Resource Commission (571).

The Notice of Intended Action was published in the January 28, 1987, IAB as ARC 7326. There were no comments to the proposed rules from the public or from oversight authorities in Iowa government.

These rules implement Iowa Code section 17A.9.

These rules will become effective July 22, 1987.

Adopt a new chapter 561--6(17A), as follows:

This chapter applies to matters within the jurisdiction of the director (Iowa Administrative Code Parts 561 and 565), the environmental protection commission (Iowa Administrative Code Part 567), and the natural resource commission (Iowa Administrative Code Part 571).

Insert the petition for declaratory rulings segments of the Uniform Administrative Rules which are printed in the front of Volume I of the Iowa Administrative Code, with the following amendments:

CHAPTER 6
DECLARATORY RULINGS

561--6.1(17A) Petition for declaratory rulings. In lieu of the words "designate office" insert "the Director of the Department of Natural Resources, Henry A. Wallace Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034." In lieu of the words "AGENCY NAME," the heading on the petition should read:

BEFORE THE
DEPARTMENT OF NATURAL RESOURCES

561--6.3(17A) Inquiries. Inquiries concerning the status of a petition for a declaratory ruling may be made to the Chief of Government Liaison Bureau, Coordination and Information Division, Department of Natural Resources, Henry A. Wallace Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034.

Amend rule 561--6.4(17A), ~~second paragraph,~~ by ~~rescinding the paragraph and inserting in lieu thereof~~ adding the following:

~~The director shall either issue a ruling or decline to issue a ruling within thirty (30) days after receipt of the petition or receipt of additional information requested, unless a longer period of time is necessary due to the complexity of the issues or the number of pending petitions. If a longer period of time is needed, the director shall notify the petitioner within thirty (30) days. The petitioner shall be notified by certified mail of the director's action.~~ If the issue is within the rulemaking authority of one of the department's commissions, the ruling or declination, along with the petition and briefs, also shall be mailed to the commission members.

A ruling, including a refusal to rule, issued by the director is final unless the issue is within the rulemaking authority of one of the department's commissions in which case the ruling or refusal is final unless appealed to the commission within ten days of receipt by the petitioner or reviewed by the commission on its own motion. On appeal or review, the commission may:

a. Approve the director's ruling, in which case the ruling becomes the final declaratory ruling of the department, or

b. Reverse or modify the declaratory ruling, in which case the modified ruling becomes the final declaratory ruling of the department, or

c. Request additional information from the petitioner, or

d. Decline to issue a ruling, as specified in 6.5.

The commission's ruling or refusal to rule shall be made within a reasonable time and shall be sent by certified mail to the petitioner upon issuance.

These rules are intended to implement Iowa Code section 17A.9.

May 20, 1987

Larry J. Wilson, Director

(D6RC)

Item 15

May 15, 1987

LEGISLATIVE STATUS REPORT

The following is a preliminary report on the actions taken by the General Assembly on the Department's environmental legislative proposals. There will necessarily be a later report after the final versions of the bills are released and we have an opportunity to assess whether our understandings were correct.

Groundwater Bill (HF 631) The general content of the bill is similar to the approach proposed in the early part of the session and which was described in a separate handout in February. It is important to note that the bill as passed has incorporated essentially all of the proposed language of the Department's draft. The scope of the bill is of course much broader. The result is legislation that impacts numerous departments of state government, county and municipal government and all of Iowa's citizens to differing degrees. A general summary is as follows:

1. Part one of the bill incorporates as chapter 455E of the code, most of the elements of the Department's bill. There are some changes to the approach including the goal statement and the inclusion of provisions relating to the liability related to a farmer's use of agricultural chemicals. The bill does not require the adoption of standards, but does ask for a report on how they might be a part of a state groundwater program.

2. The bill makes substantial changes in the Department of Agriculture and Land Stewardship's authority related to pesticides and fertilizers. A major effort to spur agricultural research and development which supports current efforts while reducing the impact of practices on groundwater is part of this portion of the bill.

3. The Legislature was not able to agree to the direct approach to the closure of agricultural drainage wells, but did take several steps to work toward the alternative objective of eliminating the contamination of groundwater through these conduits. The demonstration and financial programs will move us much further forward, and will allow us to work cooperatively with the Dept. of Agriculture and Land Stewardship to administer a progressive program that we hope will lead us to the desired result.

4. The solid waste provisions were among the most hotly debated. There are increased fees for landfills, and new re-

quirements for planning for the management, closure and post-closure activities. There is a large element of this part to encourage the local governments to move to the use of alternative means to dispose of solid waste. The Department will play a major role in both implementing these requirements and in developing demonstration projects t to prove out the alternatives to landfills.

5. The bill continues to include the household hazardous materials program. The Department will be the state agency to administer this as well with a few exceptions. Besides determining what these materials are, we are to mount a public information and education effort as well as continue to offer toxic clean-up days throughout the state.

6. An expanded underground storage tank is provided for that will require additional rule making and also give the owners an opportunity to participate in a state sponsored insurance pool.

More detailed reports on the elements of the bill will be prepared as we are able to analyze the requirements included and assess how to meet the obligations placed on the Department.

Waste Management Authority (SF 396) This bill was passed by both houses, but was substantially amended in the House. There are certain elements of the changes that could cause us problems in administration. The general content of the bill will still allow us to establish the Authority and begin to operate. With more time to assess the impact of the amendments, we should be able to determine what changes must be proposed later. On the more positive view, the bill does clearly allow us to be in compliance with the Congressional mandate to be able to deal with low level radioactive waste disposal siting.

Dues for the Low-Level Radioactive Compact (SF 401) This bill was incorporate in part into a supplemental appropriations bill. The dues for FY 87 were funded while those for FY 88 were not. We must go back to secure the rest of the funds. Currently, the dues are all to be submitted by some time in October. Unless we can get an extension or find some way to make the funds available, there could be a problem that would affect our membership in the compact.

RCRA Authority Bill (SF 155) The substance of the bill was placed into the Department's appropriation bill when the House was unable to pass the the provisions as a separate bill. There was interest in seeking the delegation of authority for RCRA from EPA, but noone was willing to provide the funds needed to do it.

Air Quality Amendments (HF 134) This was the first Department bill to receive approval. There was no opposition and no amendment to the language as it was submitted.