Commonwealth Edison
72 West Adams Street, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690 - 0767

DAB

PRIORITY ROUTING

First		Second	
RA		RC	
C/A		EIC	
ORP		SGA	
ORS		NL	
DRSS	✓	OL	
DRMA		OC	
		PAO	

FILE

orig + 2 ✓

October 1, 1986

Schumacher

Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Quad Cities Station Units 1 and 2
NPDES Permit Modification
NRC Docket Nos. 50-254 and 50-265

Dear Mr. Keppler:

Enclosed please find a copy of the Quad Cities NPDES Permit as modified March 7, 1986. This document is provided per the requirement in Section 2.2 of Appendix B to the Quad Cities Units 1 and 2 Operating Licenses. We apologize for the delayed transmittal.

If you have any questions regarding this transmittal, please contact this office.

Very truly yours,

J. R. Wojnarowski
Nuclear Licensing Administrator

lm

Enclosure

cc: NRC Resident Inspector - Quad Cities

IE24

111

2168K

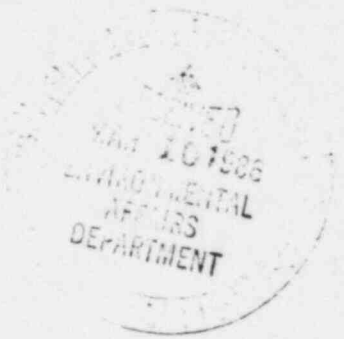
OCT 6 1986

Illinois Environmental Protection Agency 2200 Churchill Road, Springfield, IL 62706

217/782-0610

Commonwealth Edison Company
Quad Cities Nuclear Power Station
NPDES Permit No. IL0005037
Final Permit

MAR 07 1986



Commonwealth Edison Company
Attn: T. E. Hemminger
Posst Office Box 767
Chicago, Illinois 60690

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. The failure of you to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit as issued is effective as of the date indicated on the first page of the Permit. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board prior to the effective date.

Should you have questions concerning the Permit, please contact Gary Cima at the telephone number indicated above.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:TRK:GC:jd/0321F/75

Enclosure: Final Permit

cc: USEPA/With Enclosure
Region 1/With Enclosure
Permit Section
Records Unit
Consulting Engineer

NPDES Permit No. IL0005037

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Iowa Department of Water, Air
and Waste Management
Wastewater Permits Branch
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50319

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified (NPDES) Permit

Expiration Date: November 1, 1988

Issue Date: December 22, 1983
Effective Date: January 21, 1984
Modification Issue Date: March 7, 1986
Modification Effective Date: April 6, 1986

Name and Address of Permittee:

Commonwealth Edison Company
72 West Adams Street
Post Office Box 767
Chicago, Illinois 60690

Facility Name and Address:

Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois
(Rock Island County)

Discharge Number and Name

Receiving Waters: Mississippi River

No. 001 Radwaste Treatment System Blowdown
No. 002 Spray Canal Blowdown
No. 003 Demineralizer Regenerative Waste
No. 004 Miscellaneous Wastewater Treatment System
No. 005 Sanitary Waste Treatment Plant
No. 006 and 007 Open Cycle Diffusers

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C Rules and Regulations of the Illinois Pollution Control Board, Iowa Water Quality Standards Chapter 16, 400 Iowa Administrative Code, and the FWPCA, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is **not** authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) and the Iowa Department of Water, Air and Wastemanagement (IDWAWM) not later than 180 days prior to the expiration date.

Lavoy Haage

Steven Baldou
Executive Director
Iowa Department of Water, Air and Waste Management
by Lavoy Haage
Chief, Wastewater Permits Branch
Program Operations Division

Thomas G. McSwiggin

Thomas G. McSwiggin, P.E.
Illinois Environmental Protection Agency
Manager, Permit Section
Division of Water Pollution Control

Modification Date: March 7, 1986

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the effective date of this permit until November 1, 1988, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 Radwaste Treatment System Blowdown* Approximate Flow 0.003 (MGD

This discharge consists of:

					Laundry Waste Water	**
					Bleedsteam	**
					Reactor Water	**
					Floor drain runoff that has radioactive contamination	**
					Condensate	**
					Cooling Water From Equipment Seals	**
					Laboratory Wastewater	**
Flow (MGD)					Daily	24 hr tot
T 1 Suspended Solids		15		30	1/Week When Discharging	8 hr. Composite
Oil and Grease		15		20	1/Week When Discharging	Grab

*The permittee shall comply with the Nuclear Regulatory Commission Title 10 (10 CFR 0.735-1) regulations for discharge and monitoring of radioactive wastewater discharges.

**These waste streams are generally batch treated and recycled, therefore the daily average discharge rate from Outfall No. 001 does not reflect influent flow rates.

2. From the effective date of this permit until November 19, 1985, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 002 Spray Canal Blowdown

Flow (MGD)					Daily	24 hr tot
pH	See Special Condition No. 1				1/Week	Grab
Total Residual Chlorine		0.2		0.3	1/Week	Grab***
Temperature	See Special Condition No. 7				Daily	Continuou Recording

***See Special Condtion No. 3

NPDES Permit No. IL0005037

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE
3. From November 19, 1985 until November 1, 1988, the effluent of the following discharges shall be monitored and limited at all times as follows:						
Outfall(s): 002 Spray Canal Blowdown						
Flow (MGD)					Daily	24 hr tota
pH	See Special Condition No. 1				1/Week	Grab
Total Residual Chlorine				0.2	1/Week	Grab****
Temperature	See Special Condition No. 7				Daily	Continuous Recording
**** See Special Condition No. 4						
4 om the effective date of this permit until November 1, 1988, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 003 Demineralizer Regenerate Waste					Approximate Flow	0.008 (MGD
Flow (MGD)					1 Week	24 hr tota
Total Suspended Solids			15	30	2/Month	Grab
Outfall(s): 004 Miscellaneous Wastewater Treatment System						
This discharge consists of:					Approximate Flow (MGD)	
Auxiliary Boiler blowdown					0.039	
Oil Separator discharges					****	
Roof and floor drains					Intermittent	
Demineralizer filter back wash					.018 MGD	
Flow (MGD)					1/Week	24 hr tota
Total Suspended Solids			15	30	1/Week	8 hr Composite
Oil and Grease			15	20	1/Week	Grab

** Discharge No. 004 is routed through an oil separator prior to discharge to the condenser cooling water effluent. Two oil separators which receive effluent from the intake pump house sumps are intermittent discharges to the miscellaneous wastewater treatment system.

NPDES Permit No. IL0005037

Modification Date: 3/7/86

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

4. From the effective date of this permit until November 1, 1988, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 005 Sanitary Waste Treatment Plant (DMF 0.025 MGD) Approximate Flow 0.008 (MGD)

Flow (MGD)					2/Month	24 hr tota
pH	See Special Condition No. 1				2/Month	Grab
BOD_5	6.25	12.51	30	60	2/Month	24 hr Composite
Fecal Coliform	See Special Condition No. 11				2/Month	Grab
Total Suspended Solids	6.25	12.51	30	60	2/Month	24 hr Composite

5. From the effective date of this permit until November 19, 1985, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 006 and 007 Open Cycle Diffusers

This discharge consists of: Approximate Flow

Main Condenser Cooling Water	1441 MGD
Radwaste Treatment System Blowdown	0.003 MGD
Demineralizer Regenerative Waste	0.008 MGD
Miscellaneous Wastewater Treatment Plant Effluent	0.057 MGD
Sanitary Waste Treatment Plant Effluent	0.008 MGD
House Service Water Strainer Backwash	0.126 MGD
Intake Screen Backwash	0.508 MGD
Oil Separator No. 1 (see Outfall No. 004)	
Oil Separators No. 2 and No. 3 (Switchyard)	Intermittent

Flow (MGD)					Daily	24 hr tota
pH	See Special Condition No. 1				1/Month	Grab
Total Residual Chlorine	400.5	600.8	0.2	0.3	1/Week	Grab***
Temperature	See Special Condition No. 7				Daily	Continuous Recording

***See Special Condition No. 3

NPDES Permit No. IL0005037

Modification Date: Mar. 7, 1986

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day 30 DAY AVG.	LOAD LIMITS lbs/day DAILY MAX.	CONCENTRATION LIMITS mg/l 30 DAY AVG.	CONCENTRATION LIMITS mg/l DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

6. From November 19, 1985 until November 1, 1988 the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 006 and 007 Open Cycle Diffusers

This discharge consists of:	Approximate Flow
Main Condenser Cooling Water	1441 MGD
Radwaste Treatment System Blowdown	0.003 MGD
Demineralizer Regenerative Waste	0.008 MGD
Miscellaneous Wastewater Treatment Plant Effluent	0.057 MGD
Sanitary Waste Treatment Plant Effluent	0.008 MGD
House Service Water Strainer Backwash	0.126 MGD
Intake Screen Backwash	0.508 MGD
Oil Separator No. 1 (see Outfall No. 004)	
Oil Separators No. 2 and No. 3 (Switchyard)	Intermittent

Flow (MGD)				Daily	24 hr tot
pH	See Special Condition No. 1			1/Month	Grab
Total Residual Chlorine		400.5	0.2	1/Week	Grab****
Temperature	See Special Condition No. 7			Daily	Continuou Recording

****See Special Condition No. 4

Modification Date: March 7, 1986

NPDES Permit No. IL0005037

Special Conditions

1. The pH shall be in the range 6.0 to 9.0.

2. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

3. Three grab samples shall be taken at approximately five minute intervals in the discharge bay during the respective chlorination period of each unit allowing for lag time between the initiation of chlorination and the point of sampling before the first of the three grab samples is taken. The individual values and average (mean) values for each set of samples shall be reported including the times samples were collected, the time and duration of the chlorine dosing period plus the rate and amount (lbs.) of chlorine applied.

4. Three grab samples shall be taken at approximately five minute intervals in the discharge bay at the diffuser pipes during the respective chlorination period of each unit allowing for lag time between the initiation of chlorination and the point of sampling before the first of the three grab samples is taken. The individual values and average (mean) values for each set of samples shall be reported including the times samples were collected, the time and duration of the chlorine dosing period plus the rate and amount (lbs.) of chlorine applied.

5. Chlorine may not be discharged from any unit for more than two hours in any one day. If the permittee elects to use bromine or other oxidizing agents in station condensers as alternative biocides or in addition to chlorine the IEPA shall be notified in writing of the proposed change.

6. Nothing in this permit affects or abrogates the responsibilities or commitments of the Permittee herein as set forth in the agreement entered into by the Permittee in the consolidated cases of Izaak Walton League of America, et. al. v. Schlesinger, No. 2208-71 and People of the State of Illinois, et. al. v. United States Atomic Energy Commission, No. 2208-71 (U.S. District Court, District of Columbia).

7. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone:

   A. Maximum temperature rise above natural temperature must not exceed 5°F.

Special Conditions

B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F. (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
°F	45	45	57	68	78	85	86	86	85	75	65	52

C. The area of diffusion of an effluent in the receiving water is a mixing zone, and that mixing zone shall not extend:

i) over more than 25 percent of the cross sectional area of volume of flow in the Mississippi River;

ii) more than 26 acres of the Mississippi River

8. River discharge and plant load data indicating compliance with the above temperature limitations will be accepted as evidence of compliance in lieu of actual determination of the 5°F temperature rise isotherm by plotting river discharge and plant load on the temperature monitoring curve[1]. If ambient river temperatures are within 5°F of the limiting temperatures for each month, temperature surveys at the 500 ft. downstream cross section are required once per week only when the river discharge is less than the minimum value for which compliance has been verified by temperature surveys in the field. At present this minimum river discharge is 16000 cfs.

9. There shall be no discharge of polychlorinated biphenyl compounds from any discharge.

10. There shall be no discharge of boiler and other miscellaneous chemical metal cleaning wastes unless a construction permit has been obtained from IEPA for the treatment of such wastes and this Permit No. IL0005037 has been modified to include the new discharge.

11. The daily maximum fecal coliform count examined twice per month shall not exceed 400 per 100 ml.

[1]The temperature monitoring curve as shown on p. 83 of the March 16, 1981 "Supplement to 316(a) and 316(b) Demonstration For the Quad Cities Nuclear Generating Station".

NPDES Permit No. IL0005037

Special Conditions

12. Commonwealth Edison Company's demonstration for the Quad Cities Nuclear Power Station in accordance with Section 316(a) and 316(b) of the Clean Water Act was approved by IEPA by letter dated July 28, 1981 and by IDWAWM by letter dated May 18, 1981. Based on these conclusions the following actions by the permittee are required:

    A. The permittee shall deploy and maintain a barrier net across the river's edge of the intake forebay during the period September 1 to the ice-cover period which typically begins December 15th. The permittee shall make every effort to maintain the barrier net during December depending on prevailing ice conditions.

    B. The permittee shall monitor fish impingement twice per week when no barrier net is installed during the period December 15 through March 31. Each year's data shall be tabulated and compared to historical fish impingement data for the same period with the results submitted to IEPA Permit Section and Compliance Assurance Section by July 28, each year.

    C. The permittee shall monitor water temperatures in the river at the 500 ft. downstream cross section once per week for the possibility of water quality violations at river flows under 16000 cfs.

13. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

14. The completed Discharge Monitoring Report forms shall be mailed and received by the IEPA no later than the 28th day of the following month, unless otherwise specified by the permitting authority. Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

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

    Additionally, Discharge Monitoring Report forms shall be mailed to United States Environmental Protection Agency in Chicago and IDWAWM on a quarterly basis. The permittee shall submit the reports as follows, unless otherwise specified by the permitting authority.

Modification Date: March 7, 1986

NPDES Permit No. IL0005037

Special Conditions

Period	Report Due At U.S. Environmental Protection Agency
Jan, Feb, Mar	April 28th
April, May, June	July 28th
July, Aug, Sept	October 28th
Oct, Nov, Dec	January 28th

Reports shall be addressed to United States Environmental Protection Agency as follows:

NPDES Compliance Unit
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

10

ATTACHMENT H

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, Ch. 111 1/2 Ill. Rev. Stat., Sec. 1001-1051 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended, 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

(1) **Duty to comply**. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

(2) **Duty to reapply**. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) **Need to halt or reduce activity not a defense**. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) **Duty to mitigate**. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) **Proper operation and maintenance**. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) **Permit actions**. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) **Property rights**. This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) **Duty to provide information**. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry**. The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records**.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement**. All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application**. All permit applications shall be signed as follows:

(1) **For a corporation**: by a principal executive officer of at least the level of vice president;

(2) **For a partnership or sole proprietorship**: by a general partner or the proprietor, respectively; or

(3) **For a municipality, State, Federal, or other public agency**: by either a principal executive officer or ranking elected official.

(b) **Reports**. All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

State of Illinois
Environmental Protection Agency
Instructions for Completing Discharge Monitoring Reports

The purpose of these instructions is to inform Illinois NPDES permittees how Discharge Monitoring Reports (DMR's) should be completed. Please take the time to review these instructions carefully and compare them with procedures currently in use.

Definitions

NPDES means the system created under Section 307, 402, 318, and 405 of the Clean Water Act for administering a permit program. NPDES stands for National Pollutant Discharge Elimination System.

USEPA means the United States Environmental Protection Agency.

IEPA means the Illinois Environmental Protection Agency.

Agency means IEPA.

Board means the Illinois Pollution Control Board.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24 hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass (quantity), the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. To express the mass discharged use one of the following formulas:

Pounds per day = concentration (mg/l) x flow (mgd) x 8.34
Kilograms per day = concentration (mg/l) x flow (mgd) x 3.79

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharge over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation means the highest allowable average of daily discharges over a calendar week, usually Sunday through Saturday, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. Where a new month starts in the middle of a week, that weekly average shall be reported with the month in which the Wednesday of that week falls.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

Aliquot means a sample of specified volume used to make up a total composite sample.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8 hour period.

Flow Proportioned Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that a sample aliquot is collected when a specified amount of flow passes the sampling point or that when a sample aliquot is collected its volume will be proportioned to the flow at that time.

Included is a copy of a Discharge Monitoring Report with numbers at various points of data entry. The numbers correspond to the following paragraphs which explain how to enter the required data.

1. Enter the name of the facility, the address and phone.

2. Enter IL for the state abbreviation.

3. Enter the seven digit NPDES permit number.

4. Enter the three digit outfall number. This number will appear on the effluent limitations page of the NPDES permit for each outfall. The outfalls will be numbered 001, 002, 003, etc. One DMR must be submitted for each outfall. If there is only one outfall (discharge) enter 001.

5. Enter the SIC code, if this is an industrial facility, and the latitude and longitude for any type facility. This information can be obtained from the original NPDES permit application. If this information is not readily available, leave the space blank.

6. Enter the reporting period as the first day until the last day of the month. Each month, day and year is represented by two digits. Therefore, for the month of January, 1980, the following entry would be made: 80 for year, 01 for the month and 01 for the first day of the reporting period. For the last day of this reporting period 80 would be entered for the year, 01 for the month and 31 for the last day of this reporting period.

7. Enter the name of the parameter required to be monitored. Abbreviations such as BOD, TSS, and the like are acceptable. STORET numbers should also be reported but do not use only the STORET numbers. If the NPDES permit requires influent reporting for a parameter, please identify in this column which values being reported are influent and which are effluent. The last page of these instructions contains a list of commonly used STORET numbers.

8. If the column headings of "minimum," "average," and "maximum" do not correspond to the requirements listed in the NPDES permit, then substitute them with the headings from the NPDES permit. Most permits will contain requirements such as 7-day, 30-day and daily maximum.

9. Enter the results obtained from sample analysis for each parameter.

   a. Please remember that when a 7-day or weekly average is to be reported that this is meant to be a calendar week. If a week falls within two different months, then report that week's average with whichever month into which the Wednesday falls.

   b. To calculate weekly or seven (7) day average concentration, add the results of the samples collected during that week and divide this result by the number of samples analyzed during the week.

   c. To calculate monthly or thirty (30) day average concentration, add the results of the samples collected during that month and divide this result by the number of samples analyzed during the month.

   d. To calculate the weekly or seven (7) day average quantity, average each day's quantity value. Do not use an average flow and parameter value to calculate the weekly average quantity.

   e. To calculate the daily quantity for a parameter, please use the following formula:

      Flow (in MGD) x Concentration (in mg/l) x 8.34 = lbs/day

      By using this formula, pounds per day will be obtained for entry in the quantity column.

   f. To calculate monthly or 30-day quantity, use an average of each day's quantity calculation. Add the number of daily calculations and divide by the number of daily calculations made during the month. A daily calculation for quantity should be made every day a sample is analyzed.

   g. In reporting seven (7) day average, the highest value must be reported. Do not report an average of seven day averages.

10. Enter the appropriate permit limitations for each parameter required to be monitored. Where facilities have been given interim limitations to complete construction in the Construction Grants Program, the Agency will consider the start up period, which is generally 45, 60, or 90 days, to begin when the treatment process units are placed on-line.

11. Enter the unit of measurement which should be the same for the permit condition and the reported value.

12. Enter the number of excursions from the column which covers the shortest duration of time. For example, a daily limitation is a shorter period of time than a 7 day limitation. Therefore, if an operator had 3 daily maximum excursions and 1 seven day average excursions, 3 would be entered in the excursion column. The seven day average excursion would not be included in the number of excursions reported. Be sure to send a Notice of Non-Compliance (NON) within 5-days to the Agency as required by the NPDES permit. If the facility has returned to compliance, please note this in the NON.

13. Enter the sample frequency for each parameter. Do not preprint this information on the DMR form. Rather, enter the frequency that is actually performed during the reporting period. Sample frequency is usually represented by the following abbreviations:

    1/30 or 1/mo for once per month
    2/30 or 2/mo for twice per month
    1/7 or 1/wk for once per week
    2/7 or 2/wk for twice per week
    5/7 or 5/wk for five times per week
    7/7 or daily for every day
    cont for continuous

14. Enter the permit requirement for sample frequency using the same type of notation outlined in 13. This information may be preprinted but may need to be updated as permit conditions change.

15. Enter the sample type for each parameter. Do not preprint this information on the DMR form. Rather, enter the sample type used and note any changes during the reporting period. Sample type should be represented by the following abbreviations:

    grab for grab samples
    comp for composite samples
    24 hr comp for 24 hour composite samples
    24 hr F.P. comp for 24 hour flow proportioned composite samples

16. Enter the type of sample required by the NPDES permit using the same notations outlined in 15. This information may be preprinted on the DMR but should be updated as permit conditions change.

17. Enter the name of the person who falls into the following category:

    a. for a corporation - principal executive officer of at least the level of vice president
    b. for a partnership - a general partner
    c. for a sole proprietorship - the proprietor
    d. for a municipality, State, Federal or other public facility - a principal executive officer or ranking elected official

18. Enter the title of the person named in 17.

19. Enter the date the DMR is signed.

20. Have the person named in 17 sign the DMR. That person's authorized agent may also sign. An authorized agent may be a person who is responsible for the overall operation of the facility such as a plant manager, superintendent of public works or the like. Please remember that the person who signs the DMR is also responsible for the accuracy of the data reported. If the person knowingly submits incorrect data, they may be subject to criminal prosecution with penalties up to $10,000 in fines and up to six (6) months in jail or both for each violation.

A. Customized DMR's may not be used. Federal requirements require the use of standardized DMR forms.

B. DMR's and Notices of Non-compliance (NON's) are to be submitted to the Agency at the following address:

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

   Do NOT mail DMR's and NON's to the Agency's regional offices.

C. The Agency does not require that DMR's be sent by certified mail.

D. The NPDES permit requires that all data used to generate the DMR must be kept on file for three (3) years. This data includes all records, original strip chart recordings as well as calibration and maintenance records. The three year retention period is automatically extended if there is unresolved litigation or if there is a request by USEPA or the Agency.

E. Please enter all data in ink or type the data in the spaces.

F. In any differences between these guidelines and an individual NPDES permit, the NPDES permit shall govern.

G. The Agency strongly urges each permit holder to read the NPDES permit carefully.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM COMMENTS

DISCHARGE MONITORING REPORT

PERMITTEE NAME 1

ADDRESS

PHONE

COMMENTS

2	3	4	5	5	5
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM YEAR | MO | DAY ←6→ YEAR | MO | DAY

PARAMETER		QUANTITY 8 MINIMUM	8 AVERAGE	8 MAXIMUM	8 UNITS	NO EX	CONCENTRATION 8 MINIMUM	8 AVERAGE	8 MAXIMUM	UNITS	NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	REPORTED	9	9	9	11	12	9	9	9	11	12	13	15
	PERMIT CONDITION	10	10	10			10	10	10			14	16
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

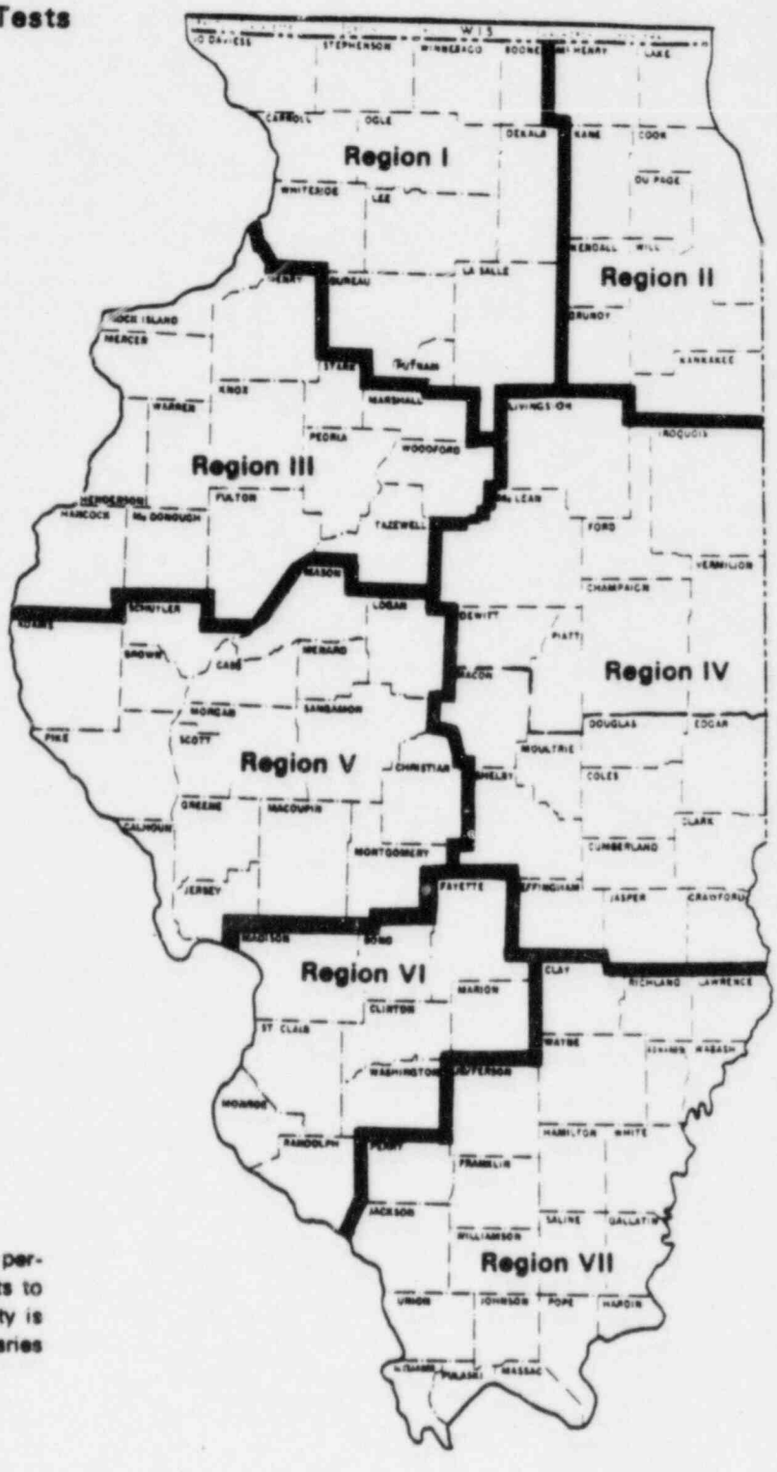
NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE		
17	18	19	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.*	20
LAST FIRST MI	TITLE	YEAR MO DAY		SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

PAGE OF

WPC-242 11/79

Storet Numbers for Commonly Required Tests

Ammonia Nitrogen	00610
Arsenic	01002
Barium (total)	01007
Biochemical Oxygen Demand (BOD)	00310
Cadmium (total)	01027
Chlorine Residual	50060
Chromium (hexavalent)	01032
Chromium (trivalent)	01033
Copper (total)	01042
Cyanide	00720
Dissolved Oxygen	00300
Fecal Coliform	31616
Fluoride (total)	00951
Iron (total)	01045
Iron (dissolved)	01046
Lead (total)	01051
Manganese (total)	01055
Mercury (total	71900
Nickel (total)	01067
Oil (Hexane soluble)	00550
pH (field determination)	00440
pH (laboratory determination)	00403
Phenols	32730
Phosphorus	00665
Selenium (total)	01145
Silver	01077
Temperature	00010
Total Dissolved Solids (TDS)	00515
Total Suspended Solids (TSS)	00530
Zinc (total)	01092



While it is not mandatory, it would be helpful to Agency personnel assigned to sorting Discharge Monitoring Reports to write on the top of the DMR in which region this facility is located. The map is provided to show the regional boundaries for the Division of Water Pollution Control.

Printed by authroity of the State of Illinois
14307 4/85 1000

NATIONAL POLLUTANT DI RGE ELIMINATION SYSTEM COMMENTS

DISCHARGE MONITORING REPORT

PERMITTEE NAME

ADDRESS

PHONE

COMMENTS

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM (20-21) YEAR (22-23) MO (24-25) DAY TO (26-27) YEAR (28-29) MO (30-31) DAY

(32-37) PARAMETER		QUANTITY 3 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION 4 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-68) FREQUENCY OF ANALYSIS	(69-70) SAMPLE TYPE
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE			
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

PAGE OF

IL 532-0092
WPC-242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.