Sewer Acct.#: **1020548900**

Company: **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**

Address: **1465 South Grand Blvd.**

City: **St. Louis**

State and Zip: **MO 63104**

Industry ID	File Code	File Description
64260	60 41	PERMIT OVERFLOW

. Name: SSM Cardinal Glennon

ct #: 4112195400

OLDER

CORRESPONDENCE

FROM

97

THRU

99

01-22-15 Moved to ARCHIVED PERMIT files. MI

PERMIT OVERFLOW

SSM Cardinal Glennon Children's Hospital

December 27, 1999

Fabian T. Grabski
Assistant Engineer
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913

RE: Industrial User Questionnaire
Discharge Permit No: 41121954-00
For premises at: 1465 So. Grand Blvd.

In reviewing the items needing further information for correction identified in letter dated October 29, 1999, the following has been provided:

1) Section C.4 information was obtained from City of St. Louis Water Division with 38,523 ccf of water consumed during the past year. Copies of those records have been included with this letter.

2) C.6, C.7, C.8, D.2, and E.1 figures reflect usage of 38, 523 ccf. ✓ FG 12/30/99

3) Actual discharge has been reflected in C.7.a, E.1, C.8 and D.2

Thank you for your help. Please call me at 268-4117 or page me at 294-9550 if you have any questions.

Sincerely,

Kevin R Julius

Kevin R. Julius
Cardinal Glennon Children's Hospital

Enclosures

RECEIVED
DEC 29 1999
Environmental Compliance

1465 South Grand Blvd. ▪ St. Louis, MO 63104-1095
(314) 577-5600 *phone* ▪ www.cardinalglennon.com

4122164-00

PRINT KEY OUTPUT PAGE 1
763SS1 V3R2M0 960517 STLOUIS 12/27/99 11:39:06

ISPLAY DEVICE . . . . . : DSP39
SER . . . . . : SCLARK

0I01 ST LOUIS WATER DIVISION 12/27/99
CUSTOMER/LOCATION CONSUMPTION HISTORY INQUIRY 11:39:03

OMER ID: 407334 NAME: CARDINAL GLENNON HOSP.
TION ID: 227088 ADDR: 1505 S GRAND BL
E/ROUTE: 14 18 AMOUNT DUE: $.00
IATION DATE : 4/13/81 PENDING : $.00
INATION DATE: 0/00/00 CUSTOMER STATUS: A CUSTOMER/LOCATION STATUS: A
OPTIONS, PRESS ENTER.
SELECT 5=VIEW DETAIL 6=DISPLAY COMMENT CODES

VICE CODE	READING TYPE	DATE	ACTUAL CONSUMPTION	ACTUAL DEMAND	DAYS	METER NUMBER	EST CD	CMNT CD
WA	REG	10/20/99	8.00	.00	95	39522214		
WA	REG	7/17/99	9.00	.00	91	39522214		
WA	REG	4/17/99	7.00	.00	82	39522214		
WA	REG	1/25/99	8.00	.00	99	39522214		
WA	REG	10/18/98	12.00	.00	88	39522214		
WA	REG	7/22/98	7.00	.00	94	39522214		
WA	REG	4/19/98	6.00	.00	87	39522214		
WA	REG	1/22/98	7.00	.00	91	39522214		

36 CCS

XIT F5=PRINT HISTORY F6=METER INVENTORY F7=METER SVC INFO
ENDING/HISTORY TRANS F10=CHANGE VIEW F24=MORE KEYS

RECEIVED
DEC 29 1999
Environmental Compliance

MSD 035646

4112954-00

PRINT KEY OUTPUT

5763SS1 V3R2M0 960517 STLOUIS 12/27/99 PAGE 1 11:38:16

DISPLAY DEVICE . . . . . : DSP39
USER . . . . . : SCLARK

UT300I01 ST LOUIS WATER DIVISION 12/27/99
CUSTOMER/LOCATION CONSUMPTION HISTORY INQUIRY 11:38:12

CUSTOMER ID: 405153 NAME: CARDINAL GLENNON HOSP
LOCATION ID: 226370 ADDR: 1465 S GRAND BL
CYCLE/ROUTE: 14 16 AMOUNT DUE: $.00
INITIATION DATE : 1/01/79 PENDING : $.00
TERMINATION DATE: 0/00/00 CUSTOMER STATUS: A CUSTOMER/LOCATION STATUS: A
TYPE OPTIONS, PRESS ENTER.
1=SELECT 5=VIEW DETAIL 6=DISPLAY COMMENT CODES

OPT	SERVICE CODE	READING TYPE	DATE	ACTUAL CONSUMPTION	ACTUAL DEMAND	DAYS	METER NUMBER	EST CD	CMNT CD
	WA	REG	10/18/99	4670.00	.00	81	70036303		
	WA	REG	7/29/99	4386.30	.00	97	70036303		R2
	WA	REG	4/23/99	6093.70	.00	86	70036303		L7
	WA	REG	1/27/99	.00	.00	99	70036303	E	
	WA	REG	10/20/98	4660.00	.00	[illegible]	70036303		L8
	WA	REG	7/23/98	11030.00	[illegible]		70036303		
	WA	REG	4/20/98	526.00			70036303		
	WA	REG	1/22/98	.00			70036303	E	R4

15,140

F3=EXIT F5=PRINT HISTORY SVC INFO
F8=PENDING/HISTORY TRANS KEYS

RECEIVED
DEC 29 1999
Environmental Compliance

4161954-00

PRINT KEY OUTPUT PAGE 1

:763SS1 V3R2M0 960517 STLOUIS 12/27/99 11:38:02

IISPLAY DEVICE . . . . . : DSP39
ISER . . . . . : SCLARK

IOIOI ST LOUIS WATER DIVISION 12/27/99
CUSTOMER/LOCATION CONSUMPTION HISTORY INQUIRY 11:37:56

'OMER ID: 405153 NAME: CARDINAL GLENNON HOSP
ITION ID: 226370 ADDR: 1465 S GRAND BL
.E/ROUTE: 14 16 AMOUNT DUE: $.00
'IATION DATE : 1/01/79 PENDING : $.00
IINATION DATE: 0/00/00 CUSTOMER STATUS: A CUSTOMER/LOCATION STATUS: A
: OPTIONS, PRESS ENTER.
'SELECT 5=VIEW DETAIL 6=DISPLAY COMMENT CODES

:VICE :ODE	READING TYPE	DATE	ACTUAL CONSUMPTION	ACTUAL DEMAND	DAYS	METER NUMBER	EST CD	CMNT CD
WA	REG	10/18/99	9240.00	.00	94	1198646		
WA	REG	7/16/99	6610.00	.00	88	1198646		
WA	REG	4/19/99	3990.00	.00	82	1198646		
WA	REG	1/27/99	4230.00	.00	99	1198646		
WA	REG	10/20/98	5960.00	.00	89	1198646		
WA	REG	7/23/98	6450.00	.00	94	1198646		
WA	REG	4/20/98	4460.00	.00	88	1198646		
WA	REG	1/22/98	3800.00	.00	90	1198646		

20,790 ccs

:XIT F5=PRINT HISTORY F6=METER INVENTORY F7=METER SVC INFO
'ENDING/HISTORY TRANS F10=CHANGE VIEW F24=MORE KEYS

RECEIVED
DEC 29 1999
Environmental Compliance

41121954-00

PRINT KEY OUTPUT

5763SS1 V3R2M0 960517 STLOUIS 12/27/99 PAGE 1 11:38:09

DISPLAY DEVICE . . . . . : DSP39
USER . . . . . : SCLARK

JT300I01 ST LOUIS WATER DIVISION 12/27/99
CUSTOMER/LOCATION CONSUMPTION HISTORY INQUIRY 11:38:07

CUSTOMER ID: 405153 NAME: CARDINAL GLENNON HOSP
LOCATION ID: 226370 ADDR: 1465 S GRAND BL
CYCLE/ROUTE: 14 16 AMOUNT DUE: $.00
INITIATION DATE : 1/01/79 PENDING : $.00
TERMINATION DATE: 0/00/00 CUSTOMER STATUS: A CUSTOMER/LOCATION STATUS: A
TYPE OPTIONS, PRESS ENTER.
1=SELECT 5=VIEW DETAIL 6=DISPLAY COMMENT CODES

SERVICE PT	CODE	READING TYPE	ACTUAL DATE	ACTUAL CONSUMPTION	ACTUAL DEMAND	DAYS	METER NUMBER	EST CD	CMNT CD
	WA	REG	10/25/99	1396.50	.00	101	3272122		M8
	WA	REG	7/16/99	807.00	.00	88	3272122		
	WA	REG	4/19/99	370.00	.00	82	3272122		
	WA	REG	1/27/99	395.00	.00	99	3272122		
	WA	REG	10/20/98	827.00	.00	89	3272122		
	WA	REG	7/23/98	820.00	.00	94	3272122		
	WA	REG	4/20/98	428.00	.00	88	3272122		
	WA	REG	1/22/98	175.00	.00	99	3272122		

2399 ccs

F3=EXIT F5=PRINT HISTORY F6=METER INVENTORY F7=METER SVC INFO
F8=PENDING/HISTORY TRANS F10=CHANGE VIEW F24=MORE KEYS

RECEIVED
DEC 29 1999
Environmental Compliance

4112213-01

PRINT KEY OUTPUT PAGE 1

5763SS1 V3R2M0 960517 STLOUIS 12/27/99 11:38:47

DISPLAY DEVICE . . . . . : DSP39
USER . . . . . : SCLARK

300I01 ST LOUIS WATER DIVISION 12/27/99
CUSTOMER/LOCATION CONSUMPTION HISTORY INQUIRY 11:38:44

STOMER ID: 407331 NAME: CARDINAL GLENNON HOSP.
CATION ID: 227086 ADDR: 1501 1503 S GRAND BL
CLE/ROUTE: 14 18 AMOUNT DUE: $.00
ITIATION DATE : 8/19/81 PENDING : $.00
RMINATION DATE: 0/00/00 CUSTOMER STATUS: A CUSTOMER/LOCATION STATUS: A
PE OPTIONS, PRESS ENTER.
1=SELECT 5=VIEW DETAIL 6=DISPLAY COMMENT CODES

ERVICE CODE	READING TYPE	DATE	ACTUAL CONSUMPTION	ACTUAL DEMAND	DAYS	METER NUMBER	EST CD	CMNT CD
WA	REG	10/20/99	.00	.00	95	40333698		
WA	REG	7/17/99	.00	.00	91	40333698		
WA	REG	4/17/99	16.00	.00	82	40333698		
WA	REG	1/25/99	67.00	.00	99	40333698		
WA	REG	10/18/98	76.00	.00	88	40333698		
WA	REG	7/22/98	80.00	.00	94	40333698		
WA	REG	4/19/98	59.00	.00	87	40333698		
WA	REG	1/22/98	57.00	.00	91	40333698		

159 ccs

=EXIT F5=PRINT HISTORY F6=METER INVENTORY F7=METER SVC INFO
=PENDING/HISTORY TRANS F10=CHANGE VIEW F24=MORE KEYS

RECEIVED
DEC 29 1999
Environmental Compliance

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

January 4, 2000

Kevin R. Julius
Facilities Compliance Manager
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, MO 63104

RE: INDUSTRIAL USER QUESTIONNAIRE
Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Boulevard

Dear Mr. Julius:

Thank you for your December 27, 1999 letter include with your revised pages 3 and 4 of the Industrial User Questionnaire (IUQ). These pages were revised in response to the District's November 9, 1999 letter to Cardinal Glennon Children's Hospital.

The aforementioned letter correctly states that the aforementioned facility consumed 38,523 hundred cubic-feet (ccf) of water during the previous year. However, it appears that the revised pages 3 and 4 do not reflect the aforementioned 38,523 ccf. Accordingly, please note the following items that need further information or correction on pages 3 and 4 of the IUQ before we can complete processing of your application:

1) In Section C.4, you have stated that 27,894 ccf of water was consumed during the previous year. Please revise this section to reflect the actual 38,523 ccf of water consumed.

2) In Section A.6 you have indicated that your facility operates seven days per week or 365 work days per year. Pursuant to item 1 above, your facility consumes 38,523 ccf of water per year. Converting this volume to gallons (748 gallons/hundred cubic-feet) and using 365 work days per year, the water consumption equates to approximately 78,946 gallons per day (gpd). This volume conflicts with the 33,114 gpd provided in Section C.6. With the increased volume, the gallons per day figures used in Sections C.6, C.7, C.8, D.2, and E.1 need to be adjusted.

Taking the above comments into consideration, I am enclosing additional blank copies of pages 3 and 4 of the IUQ. After completing these pages, please sign and date each page at the bottom. Please return the white and yellow copies to us within 30 days after receipt of this letter.

Please call me at 436-8756 if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

bv
Enclosures
pc: suspense file

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

December 23, 1999

Kevin R. Julius
Director of Safety & Security
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 South Grand Boulevard
St. Louis, MO 63104-1095

RE: Industrial User Questionnaire
Discharge Permit No: 41121954-00
For premise at: 1465 South Grand Boulevard

Dear Mr. Julius:

This letter is a follow-up to the District's November 9, 1999 letter to Cardinal Glennon. The intent of the letter was to inform you that the application for permit renewal received by the District on October 29, 1999 needed further information or correction. The letter provided blank copies of pages 3 and 4 of the application and requested that Cardinal Glennon return the revised pages 3 and 4 within 30 days after the receipt of the letter. As of the date of this letter, the District has not received these pages.

Your failure to submit these pages in a timely manner is a violation of MSD Ordinance No. 8472, Article VIII, Section One, and is delaying our efforts to comply with the Federal General Pretreatment Regulation 40 CFR 403.8(f) (iii). This regulation requires the District to maintain effective wastewater discharge permits for every Significant Industrial User within our jurisdiction.

Failure to provide the revised pages constitutes noncompliance and places Cardinal Glennon in Significant Noncompliance (SNC), as defined in District Ordinance 8472 and federal regulations 40 CFR 403. SNC companies are subject to enforcement actions by the District. To avoid further action, please complete and submit the revised pages no later than January 3, 2000.

Thank you for your cooperation. Please call me at 436-8756 if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

bv

Cardinal Glennon Children's Hospital

Department Of Physical Facilities

Fax Transmission

No. Of Pages Incl.. This One: 2

To: Fabian Czabski

Company: MSD

Cc:

From: Kevin R. Julius, Compliance Manager

Date: 12-6-99

If You Do Not Receive All Pages, Please Contact:

Cardinal Glennon Children's Hospital
1465 South Grand Blvd
St. Louis, Mo. 63104
Tel: (314) 268-4117
Fax: (314 577-5314

Subject:

Here is a copy of the Radioactive Materials discharge report sent with 3 Qrtr report. Thanks Kevin

The Documents Accompanying This Facsimile Transmission May Contain Sensitive Information. The Information Is Intended Only For The Use Of The Individual(S) Or Entity Name Above. If You Are Not The Intended Recipient, You Are Notified That Any Disclosure, Copying, Distribution Or The Taking Of Any Action In Reliance On The Contents Of This Facsimile Information Is Not Permissible. If You Have Received The Transmission In Error, Please Immediately Notify Us At 314(268-2798) To Arrange For Return Of The Original Document. Thank You.

A MEMBER OF THE SSM HEALTH CARE SYSTEM

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☐ JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) 1999 ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I 125	0.543
Radioactive Nuclides discharged by St Louis University	0.000
TOTAL ACTIVITY DISCHARGED:	0.543

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Kevin R. Julius

Title: Director, Safety and Security Telephone: (314) 268-4117

Signature: Kevin R. Julius Date: 10-7-99

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

November 9, 1999

Kevin R. Julius
Director of Safety & Security
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, MO 63104-1095

RE: Industrial User Questionnaire
Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Boulevard

Dear Mr. Julius:

We have reviewed your application for permit renewal received in our office on October 29, 1999. Please note the following items that need further information or correction before we can complete processing of your application:

1) In Section C.4 you have stated that 38,523 hundred cubic-feet (ccf) of water was consumed during the past year. A review of our records shows that the amount of water supplied to your facility by City of St. Louis Water Division during this period was 45,100 ccf. This volume was calculated using data from account numbers 41121954-00, 41122163-01, and 41122164-00. The total provided differs considerably from the District's summation of the aforementioned accounts. Please determine the correct figures for Section C.4.

2) In Section A.6 you have indicated that Cardinal Glennon operates seven days per week or 365 work days per year. Utilizing the aforementioned District summation of Cardinal Glennon's water use of 45,100 ccf per year and converting this volume to gallons (748 gallons/hundred cubic-feet), the water consumption equates to approximately 92,424 gallons per day (gpd). This volume conflicts with the 33,114 gpd provided in Section C.6. With the increased volume, the gallons per day figures used in Sections C.6, C.7, C.8, D.2, and E.1 need to be adjusted.

3) In Sections C.7.a and E.1, you have stated that 28,182 gpd and 33,352 gpd, respectively, of effluent are discharged to the municipal sewer. However, in Sections C.8 and D.2, you have stated that 33,114 gpd are discharged to the municipal sewer. Please note that these sections should reflect identical discharges to the municipal sewer. Please adjust these sections to reflect your actual discharge.

Taking the above comments into consideration, I am enclosing additional blank copies of pages 3 and 4 of the IUQ. After completing these pages, please sign and date each page at the bottom. Please return the white and yellow copies to us within 30 days after receipt of this letter.

Thank you for your cooperation. Please call me at 436-8756 if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

bv

Enclosures

pc: suspense file

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 South Grand Blvd., St. Louis, Missouri 63104-1095

Monitoring Period: ☐(JAN-MAR) ☒(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: Midwest Testing Laboratories, Incorporated

Analyses Performed By: Midwest Testing Laboratories, Incorporated

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>			001					
DATES ON WHICH SAMPLES WERE COLLECTED ——>			06-04-99					
TIMES AT WHICH SAMPLES WERE COLLECTED ——>			8a.m.-4p.m.					
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW								
BOD		C	382					mg/L
COD		C	723					mg/L
Oil and Grease		G	27					mg/L
Temperature (Degrees C)		G	28.1					C
pH (S.U.)		G	7.93					SU
TSS		C	138					mg/L
Silver		C	.02					mg/L

You must complete and sign the certification statements on the reverse side.

RECEIVED
SEP 23 1999
Environmental Compliance

MSD 035656

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY**. If your permit contains no Special Conditions, then none of the certifications in **PART III** apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[KRJ] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 002 .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

RECEIVED
SEP 23 1999
ENVIRONMENTAL CONTROL

Print or type name of signing official: Kevin R. Julius

Title: Facilities Compliance Mgr. Telephone: ( )

Signature: Kevin R. Julius Date: 9-23-99

SMF 10/93

MSD 035657

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

September 13, 1999

Al T. Wittrock
Risk Manager, General Services
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Wittrock:

The Metropolitan St. Louis Sewer District Wastewater Discharge permit for the above premise expires on April 30, 2000. Under the terms of the permit, you are required to apply for renewal at least 180 days prior to the expiration date.

Enclosed is an Industrial User Questionnaire along with detailed instructions to assist you in supplying the required information. This questionnaire serves as your permit application. We request that you return the original and yellow copy by November 1, 1999.

After a review of the questionnaire and our existing data, we will prepare a draft permit and send it to you for comment.

Thank you for your cooperation. If you have any question or any specific problem providing the requested information, please contact me, at 436-8755, or Fabian Grabski, at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Gunter H. Durdel
Assistant Engineer

ldl

Enclosure

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

August 26, 1999

Kevin R. Julius
Facilities Compliance Manager
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

RE: NOTICE OF PERMIT VIOLATIONS

Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Julius:

Under the terms and conditions of the above referenced permit, you are required to self-monitor the discharge at the identified sampling points. Monitoring is to be performed for the parameters listed and at the frequency specified in the permit. The results are to be reported quarterly. Your report for second quarter of 1999 was due by July 28, 1999.

VIOLATIONS OF PERMIT TERMS/CONDITIONS:

The second quarter self-monitoring report has not been received by the District. This is in violation of permit standard condition I.A.1 which requires sampling and analyses for all regulated substances at the frequencies specified at your sampling points. I initially attempted to contact you, via telephone, on August 19, 1999 since we had not received this report. At this time I left a message requesting that you contact me regarding this matter. As of the date of this letter, the District has not received a response to my telephone message or your self-monitoring report. Since no report was submitted, you did not satisfy the second quarter's reporting requirements.

The reporting requirements of your permit also include completing certain certifications for each quarter. Even if sampling and analytical requirements can not be met, the report should still be submitted with all applicable certifications completed. The violation will then be recorded as an incomplete report rather than "no report".

REQUIRED ACTION/RESPONSE:

Submit the second quarter 1999 report with the applicable certifications completed, any available second quarter self-monitoring data, and a report of corrective actions, which you have initiated, to ensure that the reporting requirements will be met in future reporting quarters.

Failure to perform the monitoring and reporting requirements of your permit places your company in Significant Noncompliance (SNC), as defined in District ordinance 8472 and federal pretreatment regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to list SNC companies in an annual newspaper publication.

Please submit your second quarter report and corrective action response by September 7, 1999.

If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

ph

pc: suspense file

RADIATION SAFETY OFFICE
INTEROFFICE MEMORANDUM

****

DATE: July 15, 1999

TO: Mr. Kevin Julius
Facilities and Compliance Manager
Facilities Department
Cardinal Glennon Hospital

FROM: Kevin Ferguson KF
Health Physicist
Radiation Safety Office

SUBJECT: Sewer Discharges Of Radioactive Material and Quarterly Metropolitan St. Louis Sewer District (MSD) Reports

As agreed to in the meeting between Mr. Mark Haenchen, Radiation Safety Officer and Mr. Al Wittrock, Safety Director on November 7, 1995, I am forwarding this notice that there were no discharges of radioactive materials from any of the Cardinal Glennon basement laboratories over which the Saint Louis University Radiation Safety Office maintains surveillance. This statement applies for the period beginning April 1, 1999 and ending June 31, 1999.

We will continue to report the discharges from the Pediatric Research Institute to MSD, as we have in the past. If you wish to have a copy of the report for the PRI, please give me a call at 577-8609.

RECEIVED
JUL 19 1999
Environmental Compliance

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

June 24, 1999

Mr. Fabian Grabski
METROPOLITAN ST. LOUIS
SEWER DISTRICT
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Re: SSM Cardinal Glennon Children's Hospital
Permit No: 41121954-00

Dear Mr. Durdel:

Enclosed please find the reports of the samples collected and tested for SSM Cardinal Glennon Children's Hospital. On June 8, 1999 we have been informed they are not in compliance. The reports have been mailed March 2, 1999 to Mr. Kevin Julius.

If, in your review, you should have any questions or require additional information, please call.

Sincerely,

Victor V. Gorostiza

Victor V. Gorostiza
Laboratory Director

RECEIVED
JUN 28 1999
Environmental Compliance

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 S. Grand Boulevard, St. Louis, Missouri 63104-1095

Monitoring Period: ☒(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: Midwest Testing Laboratories, Incorporated

Analyses Performed By: Midwest Testing Laboratories, Incorporated

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001		002				
DATES ON WHICH SAMPLES WERE COLLECTED ——>		02-09-99		02-09-99				
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		9a.m.-5p.m.		11a.m.-7p.m.				
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW								
BOD		C	286	C	57			mg/L
COD		C	565	C	132			mg/L
TSS		C	28	C	59			mg/L
Oil and Grease		G	56	G	18			mg/L
Temperature		G	22.1	G	15.5			C
pH		G	8.32	G	8.04			SU
Silver		C	.06					mg/L
TTO		G	~~0.179~~	G	~~<.001~~			mg/L
			L.119		L.05			

You must complete and sign the certification statements on the reverse side.

RECEIVED
JUN 28 1999
Environmental Compliance

MSD 035663

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY**. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Kevin R. Julius

Title: Facilities, Compliance Mngr Telephone: 268-4117

Signature: Kevin R Julius Date: 6-3-99

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

Date: March 5, 1999
Lab. No.: 99MT0051
Invoice No.: 0066

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095

ATTENTION: Mr. Kevin Julius

REPORT OF TESTS

SAMPLE I.D.: Sample Point Ref. Number: 001
Wastewater, Grab sample 9:00a.m. / 02-09-99
Sample Point Ref. Number: 002
Wastewater, Grab sample 1:30a.m. / 02-09-99
DATE ANALYZED: 02-10-99

RESULTS: ug/L

VOLATILE ORGANICS
EPA 600 METHOD 624

ANALYTE	001	002	MDL
Dichlorodifluoromethane	ND	ND	10.0
Chloromethane	ND	ND	10.0
Vinyl Chloride	ND	ND	2.0
Bromomethane	ND	ND	10.0
Chloroethane	ND	ND	10.0
Trichlorofluoromethane	ND	ND	5.0
1,1'-Oxybis-ethane	ND	ND	5.0
Acrolein	ND	ND	100
Acetone	ND	ND	10.0
1,1-Dichloroethene	ND	ND	5.0
Iodomethane	ND	ND	5.0
Allyl Chloride	ND	ND	5.0
Carbon Disulfide	ND	ND	5.0
KP Methylene Chloride	ND	ND	5.0
Acrylonitrile	ND	ND	5.0
2-Methoxy-2-Methylpropane	ND	ND	5.0
Hexane	ND	ND	5.0
Trans-1,2-Dichloroethene	ND	ND	5.0
Vinyl Acetate	ND	ND	10.0
1,1-Dichloroethane	ND	ND	5.0
2-Butanone	ND	ND	10.0
Propionitrile	ND	ND	10.0
2,2-Dichloropropane	ND	ND	5.0
cis-1,2-Dichloroethene	ND	ND	5.0
Methacrylonitrile	ND	ND	10.0
2-Propenic acid, methyl ester	ND	ND	10.0

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

KP

ANALYTE	001	002	MDL
Chloroform	ND	ND	5.0
Bromochloromethane	ND	ND	5.0
Tetrahydrofuran	ND	ND	5.0
1,1,1-Trichloroethane	ND	ND	5.0
1-Chlorobutane	ND	ND	5.0
Heptane	ND	ND	5.0
1,1-Dichloropropene	ND	ND	5.0
Carbon Tetrachloride	ND	ND	5.0
1,2-Dichloroethane	ND	ND	5.0
Benzene	ND	ND	2.0
Trichloroethene	ND	ND	5.0
1,2-Dichloropropane	ND	ND	5.0
Methyl methacrylate	ND	ND	5.0
Bromodichchloromethane	ND	ND	5.0
Dibromomethane	ND	ND	5.0
2-Nitropropane	ND	ND	10.0
2-Chloroethyl vinyl ether	ND	ND	10.0
1,1-Dichloro-2-Propanone	ND	ND	30.0
cis-1,3-Dichloropropene	ND	ND	5.0
Ethyl Methacrylate	ND	ND	5.0
Trans 1,3-Dichloropropene	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	5.0
2-Hexanone	ND	ND	10.0
1,3-Dichloropropane	ND	ND	5.0
Dibromochloromethane	ND	ND	5.0
Bromoform	ND	ND	5.0
4-Methyl-2-Pentanone	ND	ND	10.0
Toluene	ND	ND	2.0
Tetrachloroethene	ND	ND	5.0
1,2-Dibromoethane	ND	ND	5.0
Chlorobenzene	ND	ND	5.0
1,1,1,2-Tetrachloroethane	ND	ND	5.0
Ethylbenzene	69.0 ✓	ND	2.0
m,p-Xylenes	109.0	ND	2.0
o-Xylene	ND	ND	2.0
Styrene	ND	ND	5.0
Isopropylbenzene	ND	ND	10.0
1,1,2,2-Tetrachloroethane	ND	ND	10.0
1,2,3-Trichloropropane	ND	ND	5.0
1,4-Dichloro-2-butene	ND	ND	5.0
n-Propylbenzene	ND	ND	5.0
Bromobenzene	ND	ND	5.0
1,3,5-Trimethylbenzene	ND	ND	5.0
2-Chlorotoluene	ND	ND	5.0
4-Chlorotoluene	ND	ND	5.0

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

ANALYTE	001	002	MDL
tert-Butylbenzene	ND	ND	5.0
1,2,4-Trimethylbenzene	ND	ND	5.0
Pentachloroethane	ND	ND	5.0
sec-Butylbenzene	ND	ND	5.0
p-Isopropyltoluene	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	5.0
n-Butylbenzene	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	5.0
Hexachloroethane	ND	ND	5.0
1,2-Dibromo-3-chloropropane	ND	ND	5.0
Nitrobenzene	ND	ND	40.0
1,2,4-Trichlorobenzene	ND	ND	5.0
Hexachlorobutadiene	ND	ND	5.0
Naphthalene	ND	ND	5.0
1,2,3-Trichlorobenzene	ND	ND	5.0

ND: Not Detected / MDL: Method Detection Limit

Identification of tested specimens prvided by the client.

MIDWEST TESTING LABORATORIES, INC.

Victor V. Gorostiza

VICTOR V. GOROSTIZA
Laboratory Director

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

Date: March 5, 1999
Lab No.: 99MT0051
Invoice No.: 0066

DEACONESS CENTRAL HOSPITAL
6150 Oakland Avenue
St. Louis, Missouri 63139

ATTENTION: Mr. Kevin Julius

REPORT OF TESTS

SAMPLE I.D.: Sample Point Ref. Number: 001
Wastewater, Grab Sample 9:00a.m. / 02-09-99
Sample Point Ref. Number: 002
Wastewater, Grab Sample 1:30p.m. / 02-09-99

DATE ANALYZED: 02-10-99

RESULTS: mg/L

SEMI - VOLATILE ORGANICS
EPA 600 METHOD 625

ANALYTE	001	002	MDL
bis- (Chloromethyl) - ether	ND	ND	0.020
Pyridine	ND	ND	0.020
Aniline	ND	ND	0.020
Benzyl alcohol	ND	ND	0.020
Phenol	ND	ND	0.005
2-Chlorophenol	ND	ND	0.010
bis-(2-Chloroethyl) ether	ND	ND	0.010
N-nitrosodimethylamine	ND	ND	0.010
bis- (2-Chloroisopropyl) ether	ND	ND	0.010
N-Nitroso-di-n-propylamine	ND	ND	0.010
1,3-Dichlorobenzene	ND	ND	0.010
1,4-Dichlorobenzene	ND	ND	0.010
1,2-Dichlorobenzene	ND	ND	0.010
o-Cresol	ND	ND	0.020
m,p-Cresol	ND	ND	0.020
Hexachloroethane	ND	ND	0.010
Nitrobenzene	ND	ND	0.010
2,4-Dimethylphenol	ND	ND	0.020
4-Chloroaniline	ND	ND	0.020
2-Nitrophenol	ND	ND	0.020
2,4-Dichlorophenol	ND	ND	0.020
Benzoic acid	ND	ND	0.050
4-Chloro-3-methylphenol	ND	ND	0.020
bis (2-Chloroethoxy) methane	ND	ND	0.010
Isophorone	ND	ND	0.010

KP

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

ANALYTE	001	002	MDL
1,2,4-Trichlorobenzene	ND	ND	0.010
2-Methylnaphtalene	ND	ND	0.010
Hexachlorocyclopentadiene	ND	ND	0.010
Naphthalene	ND	ND	0.010
Hexachlorobutadiene	ND	ND	0.010
2,4,6-Trichlorophenol	ND	ND	0.010
2,4,5-Trichlorophenol	ND	ND	0.010
2-Nitroaniline	ND	ND	0.050
3-Nitroaniline	ND	ND	0.050
4-Nitroaniline	ND	ND	0.010
KP 2,4- Dinitrophenol	ND	ND	0.050 ✓
4-Nitrophenol	ND	ND	0.020
4,6-Dinitro-2-methylphenol	ND	ND	0.050
2-Chloronaphthalene	ND	ND	0.010
4-Chlorophenyl phenyl ether	ND	ND	0.010
Dimethyl phthalate	ND	ND	0.010
2,6-Dinitrotoluene	ND	ND	0.010
Acenaphthylene	ND	ND	0.010
Dibenzofuran	ND	ND	0.010
Diethyl phthalate	ND	ND	0.100
Acenaphthene	ND	ND	0.010
Benzo(g,h,i)perylene	ND	ND	0.010
Fluorene	ND	ND	0.010
Azobenzene	ND	ND	0.010
2,4-Dinitrontoluene	ND	ND	0.010
Hexachlorobenzene	ND	ND	0.010
Pentachlorophenol	ND	ND	0.050
N-Nitrosodiphenylamine	ND	ND	0.010
4-Bromophenyl phenyl ether	ND	ND	0.010
Carbazole	ND	ND	0.020
Di-n-butyl phthalate	ND	ND	0.010
Phenanthrene	ND	ND	0.010
Anthracene	ND	ND	0.010
Fluoranthene	ND	ND	0.010
Butyl benzyl phthalate	ND	ND	0.010
bis (2-ethylhexyl) phthalate	ND	ND	0.010
Pyrene	ND	ND	0.010
Benzo(a)anthracene	ND	ND	0.010
Chrysene	ND	ND	0.010
3,3'-Dichlorobenzidine	ND	ND	0.010
Di-n-octyl phthalate	ND	ND	0.010
Benzidine	ND	ND	0.020
Benzo(b)fluoranthene	ND	ND	0.010
Benzo(k)fluoranthene	ND	ND	0.010
Benzo(a)pyrene	ND	ND	0.010

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

ANALYTE	001	002	MDL
Dibenzo(a,h)anthracene	ND	ND	0.010
Indeno(1,2,3-cd)pyrene	ND	ND	0.010

ND: Not Detected / MDL: Method Dection Limit

Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES, INC.

VICTOR V. GOROSTIZA
Laboratory Director

MIDWEST TESTING LABORATORIES
INCORPORATED

2645 Gravois Avenue • St. Louis, MO 63118 • (314) 773-3035 • FAX (314) 773-3519

Date: March 5, 1999
Lab. No.: 99MT0051
Invoice No.: 0066

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095

ATTENTION: Mr. Kevin Julius

REPORT OF TESTS

SAMPLE I.D.: Sample Point Ref. Number: 001
Wastewater Grab, 9:00a.m. / 02-09-99
Sample Point Ref. Number: 002
Wastewater Grab, 1:30p.m. / 02-09-99

DATE ANALYZED: 02-11-99/ATAS

RESULTS: ug/L

ORGANOCHLORINE PESTICIDE ANALYSIS
SW-846 METHOD 8081

ANALYTE	001	002	MDL
Aldrin	ND	ND	0.015
alpha-BHC	ND	ND	0.006
beta-BHC	ND	ND	0.015
gamma-BHC (Lindane)	ND	ND	0.006
delta- BHC	ND	ND	0.020
Chlordane	ND	ND	0.014
4,4'-DDD	ND	ND	0.015
4,4'-DDE	ND	ND	0.008
4,4'-DDT	ND	ND	0.015
Dieldrin	ND	ND	0.006
Endosulfan I	ND	ND	0.015
Endosulfan II	ND	ND	0.008
Endosulfan Sulfate	ND	ND	0.075
Endrin	0.026	ND	0.015
Endrin Aldehyde	ND	ND	0.075
Heptachlor	0.781	0.059	0.020
Heptachlor Epoxide	ND	0.270	0.075
Methoxychlor	ND	ND	0.014
Toxaphene	ND	ND	0.240

ND: Not detected / MDL: Method Detection Limit

MIDWEST TESTING LABORATORIES, INC.

Victor V. Gorostiza

VICTOR V. GOROSTIZA
Laboratory Director

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

May 21, 1999

Kevin R. Julius
Facilities Compliance Manager
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

RE: NOTICE OF PERMIT VIOLATIONS

Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.

Dear Mr. Julius:

Under the terms and conditions of the above referenced permit, you are required to self-monitor the discharge at the identified sampling points. Monitoring is to be performed for the parameters listed and at the frequency specified in the permit. The results are to be reported quarterly. Your report for first quarter of 1999 was due by April 28, 1999.

VIOLATIONS OF PERMIT TERMS/CONDITIONS:

The first quarter self-monitoring report has not been received by the District. This is in violation of permit standard condition I.A.1 which requires sampling and analyses for all regulated substances at the frequencies specified at your sampling points. I initially attempted to contact you, via telephone, on May 14, 1999 since we had not received this report. At this time I left a message requesting that you contact me regarding this matter. As of the date of this letter, the District has not received a response to my telephone message or your self-monitoring report. Since no report was submitted, you did not satisfy the first quarter's reporting requirements.

The reporting requirements of your permit also include completing certain certifications for each quarter. Even if sampling and analytical requirements can not be met, the report should still be submitted with all applicable certifications completed. The violation will then be recorded as an incomplete report rather than "no report".

REQUIRED ACTION/RESPONSE:

Submit the first quarter 1999 report with the applicable certifications completed, any available first quarter self-monitoring data, and a report of corrective actions, which you have initiated, to ensure that the reporting requirements will be met in future reporting quarters.

Failure to perform the monitoring and reporting requirements of your permit places your company in Significant Noncompliance (SNC), as defined in District ordinance 8472 and federal pretreatment regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to list SNC companies in an annual newspaper publication.

Please submit your first quarter report and corrective action response by June 1, 1999.

If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

ph

pc: suspense file

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENON CHILDRENS HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD., ST.LOUIS, MO 63104-1095

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☒(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIAL TESTING LTD

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING LTD

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001						
DATES ON WHICH SAMPLES WERE COLLECTED ——>		11/16-17/98						
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		9:43 AM						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	27,324					
Ph pH		G	7.10					UNITS
TSS		C	60					Mg/L
Temperature		G	27.5					C
Silver		C	0.05					mg/L
BOD		C	130					mg/L
O & G		G	5					mg/L
COD		C	280					mg/L

You must complete and sign the certification statements on the reverse side.

RECEIVED
APR 06 1999
Environmental Compliance

MSD 035674

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in **PART III** apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

002 [x] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 001 .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Kevin R. Julius

Title: Facilities Compliance Mgr. Telephone: 268-4117

Signature: Kevin R. Julius Date: _____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USE RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDRENS HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD., ST.LOUIS, MO 63104-1095

Reporting Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ✓☐(OCT-DEC) 98 per 4/8/99 tel conv w/ Julius

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I 125	0-221mC
TOTAL ACTIVITY DISCHARGED:	

RECEIVED APR 06 1999 Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R JULIUS

Title: FACILITIES COMPLIANCE MGR Telephone:

Signature: Kevin R Julius Date:

radrpt 6/94

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

February 25, 1999

Kevin R. Julius
Facilities Compliance Manager
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, MO 63104

RE: NOTICE OF PERMIT VIOLATIONS
Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Boulevard

Dear Mr. Julius:

Under the terms and conditions of the above referenced permit, you are required to self-monitor the discharge at the identified sampling points. Monitoring is to be performed for the parameters listed and at the frequency specified in the permit. The results are to be reported quarterly. Your report for fourth quarter of 1998 was due by January 28, 1999.

VIOLATIONS OF PERMIT TERMS/CONDITIONS:

The fourth quarter self-monitoring report has not been received by the District. This is in violation of permit standard condition I.A.1 which requires sampling and analyses for all regulated substances at the frequencies specified at all sampling points. I initially attempted to contact you on February 17, 1999, since we had not received this report. At this time I left a message requesting that you contact me regarding this matter. As of the date of this letter, the District has not received a response to my telephone message or your self-monitoring report. Since no report was submitted, you did not satisfy the fourth quarter's reporting requirements

The reporting requirements of your permit also include completing certain certifications for each quarter. Even if sampling and analytical requirements can not be met, the report should still be submitted with all applicable certifications completed. The violation will then be recorded as an incomplete report rather than "no report".

REQUIRED ACTION/RESPONSE:

Submit the fourth quarter 1998 report with the applicable certifications completed, any available fourth quarter self-monitoring data, and a report of corrective actions, which you have initiated, to ensure that the reporting requirements will be met in future reporting quarters.

Failure to perform the monitoring and reporting requirements of your permit places your company in Significant Noncompliance (SNC), as defined in District ordinance 8472 and federal pretreatment regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to list SNC companies in an annual newspaper publication.

Please submit your fourth quarter report and corrective action response by March 22, 1999.

If you have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

ldl
pc: suspense file

Bodycote MATERIALS TESTING ♦ ST. LOUIS LABORATORY

METAL TECHNOLOGY

BODYCOTE INDUSTRIAL TESTING, LTD. • 2350 SOUTH SEVENTH STREET • ST. LOUIS, MISSOURI 63104-4296 • 800/467-5227 • 314/771-7111 • FAX: 314/771-9573

Mr. Fabian T. Grabski
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913

Dear Mr. Grabski:

RE: DISCHARGE PERMIT No.41121954-00
FOR PREMISE AT: 1465 & 1505 S. GRAND BLVD, ST. LOUIS, MO 63104
CARDINAL GLENNON CHILDREN'S HOSPITAL

Dear Mr. Grabski:

In response to your letter dated 11/2/98, concerning the above stated permit and discharge report filed accordingly, we as the Testing Facility chosen by Cardinal Glennon Childrens Hospital reply to the Technical Query as follows:

1. The result for Silver at Sample Point 001for the third Quarter, 1998 monitoring was accidently omitted from the discharge report. Attached (Attachment 1), please find a copy of the official report for sample Point 001 for the third Quarter and the silver results cited (0.07 mg/L). The corrective action followed has been to Organize Permit Files containing copies of MSD permits and Questionnaires to the permits for each of our Wastewater clients. These files will contain a dated form listing all Sample Points, their corresponding Monitoring requirements, analysis and Approved Methodology for these analysis (Attachment 2). This will ensure that correct methodologies are used and the all the appropriate results are cited.

2. The PCB, Semivolatile and Volatile results cited for the Third Quarter did use the stated Methodologies on the report submitted. Upon our conversation with you, we now know that the approved methodologies for Wastewater permits per 40CFR DO NOT include the SW846 methodologies used. The corrective action followed has been to issue a memo to all of Chemistry at BITL requesting that only those methodologies stated in this Table be used for analysis of Waters and Wastewater samples. This memo included a copy of the table of Approved Methodologies for Water and Wastewater Analysis from 40CFR (Attachment 3).

RECEIVED
DEC - 3 1998
Environmental Compliance

Bodycote MATERIALS TESTING
METAL TECHNOLOGY

We regret the inconvenience caused by the above and have ensured by our corrective actions stated above that this will not occur again.
If we can provide any further information, please do not hesitate to contact us at your earliest convenience.

Sincerely,

BODYCOTE INDUSTRIAL TESTING LTD.
ST. LOUIS LABS

Ila Sharma
Project Coordinator
Quality Assurance Coordinator

CC: Mr. K. Julius (Cardinal Glennon)
M. Crane (BITL, Gen. Mgr – Chemistry)
RCS Archibald (BITL – President)

RECEIVED
DEC - 3 1998
Environmental Compliance

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

November 2, 1998

Kevin R. Julius
Risk Manager, General Services
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

RE: Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Julius:

Under the terms and conditions of the above referenced permit, you are required to self-monitor the discharge at each of the identified sampling points. Monitoring is to be performed for the parameters listed and at the frequency specified in the permit.

The District received your third quarter, 1998 self-monitoring report on October 30, 1998. Our review of this report indicates that at sampling point 001, no result was reported for Silver (Total).

Additionally, our review of your report and attached laboratory analytical sheets show that the PCB's and volatile/semi-volatile organics analyses were performed using the SW846 solid waste methodology. Please note that pursuant to General Condition I.A.6 in the above referenced Industrial Wastewater Discharge Permit, you are required to analyze all wastewater pursuant to 40 CFR 136 which lists EPA Method 624 for volatile organics, EPA Method 625 for semi-volatile organics, and EPA Method 608 for PCB's.

Failure to perform required monitoring or to submit required reports, complete and on time, constitutes noncompliance with the terms and conditions of your permit and may place your company in Significant Noncompliance (SNC), as defined in District Ordinance 8472 and federal regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to include SNC companies in an annual newspaper publication. To avoid further action, you must ensure that all future monitoring and reporting is performed as specified in the permit.

If you have any questions please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

bv

pc: suspense file

RECEIVED
DEC - 3 1998
Environmental Compliance

** TOTAL PAGE.002 **

Bodycote MATERIALS TESTING
METAL TECHNOLOGY

ATTACHMENT #1

RECEIVED
DEC - 3 1998
Environmental Compliance

Bodycote

Bodycote Industrial Testing . 2350 South 7th Street . St. Louis . Missouri . U S A . 63104-4296
Tel: (314) 771-7111 . Fax: (314) 771-9573

Test Certificate

CARDINAL GLENNON
CHILDRENS HOSPITAL
1465 SOUTH GRAND BLVD
ST LOUIS
MO
63104-1095

CRT No S805277 : Issue 1
Ord No RE: KEVIN JULIUS

Date Tested 08/05/98
Date Reported 08/06/98

Attn: MR KEVIN JULIUS

Item - Examination of wastewater samples SAMPLED 7/23-24/98

Ref: Sample Point 001, THIRD Quarter Sampling

Specification- US EPA Requirements for Wastewater Analysis

014274 SAMPLE POINT 001, 7/98

Sample	Test Description	Specification	Result	Comments
01:	2,4-Dinitrophenol	Method 8270B	<10 ug/l	Nil
02:	Phenol	Method 8270B	<10 ug/l	Nil
03:	Chloroform	Method 8260A	<5 ug/l	Nil
04:	Methylene Chloride	Method 8260A	12 ug/l	Nil
05:	pH	EPA Method 150.1	8.70 units	Nil
06:	Solids - Suspended (TSS)	EPA Method 160.2	890 mg/l	Nil
07:	Temperature	EPA Method 170.1	32.4 degrees C	Nil
08:	Silver	EPA Method 200.7	0.07 mg/l	Nil
09:	BOD	EPA Method 405.1	388 mg/l	Nil
10:	Oil & Grease in Liquid	EPA Method 413.1	50.5 mg/l	Nil
11:	COD	SM 5220 / HACH MICRO	633 mg/l	Nil
12:	Endrin	SW 846 8080	<0.004 ug/l	Nil

Certificate Comments

Sampling Data:

Composite Date: (24HR COMPOSITE) 7/23-24/98
Time of First Sample: 10:43 AM
Date of Grab: 7/23/98
Time of Grab: 10:38 AM
Sampled by G. Frost, BITL

RECEIVED
DEC - 3 1998
Environmental Compliance

Bodycote

Bodycote Industrial Testing

Test Certificate

CARDINAL GLENNON CRT No S805277 : Issue 1

Examination of wastewater samples SAMPLED 7/23-24/98

Ref: Sample Point 001, THIRD Quarter Sampling

Approved by Carmen S DeBlass

.....

For and on authority of

Bodycote Industrial Testing

RECEIVED

DEC - 3 1998

Environmental Compliance

Bodycote MATERIALS TESTING
METAL TECHNOLOGY

BODYCOTE INDUSTRIAL TESTING LTD.
ST. LOUIS LABS

REV: ISSUE 1
11/98

ATTACHMENT #2

RECEIVED
DEC - 3 1998
Environmental Compliance

CLIENT DISCHARGE PERMIT SUMMARY

Bodycote MATERIALS TESTING
METAL TECHNOLOGY

REV: ISSUE 1
11/98

BODYCOTE INDUSTRIAL TESTING LTD.
ST. LOUIS LABS

THIS IS AN EXAMPLE - PLEASE FILL ONE OF THESE SHEETS PER CLIENT, PER YEAR.

CLIENT:

TYPE OF PERMIT: STORMWATER (NPDES), WASTEWATER (MSD), OTHER

*DISCHARGE PERMIT No:*_____

SAMPLE POINT:	FREQUENCY OF MONITORING:	TEST PARMETERS:	APPROVED TEST METHOD:
001	Q	BOD	EPA 405.1
	Q	TSS	EPA 160.2
	Q	pH	EPA 150.1
	Q	OIL AND GREASE	EPA 413.1
	Q		
002	Q	BOD	EPA 405.1
	A	TOLUENE	EPA 624
	A	BENZENE	EPA 624
	A	ETHYLBENZENE	EPA 624
	A	XYLENE (TOTAL)	EPA 624

Q = QUARTERLY
A= ANNUAL

COMMENTS:

WE HAVE TO COMPLETE MSD FORMS AND DELIVER TO MSD BY LAST DAY OF EACH QUARTER: 31MAR, 30JUN, 30SEPT 31ST DEC.

RECEIVED
DEC - 3 1998
Environmental Compliance

CLIENT DISCHARGE PERMIT SUMMARY

Bodycote MATERIALS TESTING
METAL TECHNOLOGY

BODYCOTE INDUSTRIAL TESTING LTD.
ST. LOUIS LABS

REV: ISSUE 1
11/98

CLIENT:

TYPE OF PERMIT: STORMWATER (NPDES), WASTEWATER (MSD), OTHER

DISCHARGE PERMIT No:_____

SAMPLE POINT:	FREQUENCY OF MONITORING:	TEST PARMETERS:	APPROVED TEST METHOD:

NOTE: Q = QUARTERLY
A= ANNUAL

COMMENTS:

RECEIVED
DEC - 3 1998
Environmental Compliance

CLIENT DISCHARGE PERMIT SUMMARY

Bodycote MATERIALS TESTIN
METAL TECHNOLOGY

ATTACHMENT #3

RECEIVED
DEC - 3 1998
Environmental Compliance

Distribution

To: MC, GF, CSD, MJP

Cc: RCSA

RECEIVED
DEC - 3 1998
Environmental Compliance

bitlmemo

Date: 11/16/98

To: See Distribution List

Cc: See Distribution List

From: IS

RE: WATER AND WASTEWATER ANALYSIS

Priority: [Urgent]

We have contacted and confirmed with MSD that the wastewater analysis for MSD permit holders MUST be performed according to the approved procedures stated in 40CFR, Part 136. Attached is a copy of Part 136 Approved Methods Table. Please ensure that any wastewater/water analysis for MSD permit purposes employ only the stated methodology in this table.

IS/IS
Attachments: 40CFR – Part 136, Approved Methodolgy Table

RECEIVED
DEC - 3 1998
Environmental Compliance

Internet
"Revised 1996"

PART 136—GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS

Sec.
136.1 Applicability.
136.2 Definitions.
136.3 Identification of test procedures.
136.4 Application for alternate test procedures.
136.5 Approval of alternate test procedures.

APPENDIX A TO PART 136—METHODS FOR ORGANIC CHEMICAL ANALYSIS OF MUNICIPAL AND INDUSTRIAL WASTEWATER

APPENDIX B TO PART 136—DEFINITION AND PROCEDURE FOR THE DETERMINATION OF THE METHOD DETECTION LIMIT—REVISION 1.11

APPENDIX C TO PART 136—INDUCTIVELY COUPLED PLASMA—ATOMIC EMISSION SPECTROMETRIC METHOD FOR TRACE ELEMENT ANALYSIS OF WATER AND WASTES METHOD 200.7

APPENDIX D TO PART 136—PRECISION AND RECOVERY STATEMENTS FOR METHODS FOR MEASURING METALS

AUTHORITY: Secs. 301, 304(h), 307 and 501(a), Pub. L. 95-217, 91 Stat. 1566, et seq. (33 U.S.C. 1251, et seq.) (the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act of 1977).

§ 136.1 Applicability.

The procedures prescribed herein shall, except as noted in § 136.5, be used to perform the measurements indicated whenever the waste constituent specified is required to be measured for:

(a) An application submitted to the Administrator, or to a State having an approved NPDES program for a permit under section 402 of the Clean Water Act of 1977, as amended (CWA), and/or to reports required to be submitted under NPDES permits or other requests for quantitative or qualitative effluent data under parts 122 to 125 of Title 40, and,

(b) Reports required to be submitted by discharges under the NPDES established by parts 124 and 125 of this chapter, and,

(c) Certifications issued by States pursuant to section 401 of the CWA, as amended.

[38 FR 28758, Oct. 16, 1973, as amended at 49 FR 43250, Oct. 26, 1984]

§ 136.2 Definitions.

As used in this part, the term:

(a) *Act* means the Clean Water Act of 1977, Pub. L. 95-217, 91 Stat. 1566, et seq. (33 U.S.C. 1251 et seq.) (The Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act of 1977).

(b) *Administrator* means the Administrator of the U.S. Environmental Protection Agency.

(c) *Regional Administrator* means one of the EPA Regional Administrators.

(d) *Director* means the Director of the State Agency authorized to carry out an approved National Pollutant Discharge Elimination System Program under section 402 of the Act.

(e) *National Pollutant Discharge Elimination System (NPDES)* means the national system for the issuance of permits under section 402 of the Act and includes any State or interstate program which has been approved by the Administrator, in whole or in part, pursuant to section 402 of the Act.

(f) *Detection limit* means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure set forth at appendix B of this part.

[38 FR 28758, Oct. 16, 1973, as amended at 49 FR 43250, Oct. 26, 1984]

§ 136.3 Identification of test procedures.

(a) Parameters or pollutants, for which methods are approved, are listed together with test procedure descriptions and references in Tables IA, IB, IC, ID, and IE. The full text of the referenced test procedures are incorporated by reference into Tables IA, IB, IC, ID, and IE. The references and the sources from which they are available are given in paragraph (b) of this section. These test procedures are incorporated as they exist on the day of approval and a notice of any change in these test procedures will be published in the FEDERAL REGISTER. The discharge parameter values for which reports are required must be determined by one of the standard analytical test procedures incorporated by reference and described in Tables IA, IB, IC, ID, and IE, or by any alternate test procedure which has been approved by the Administrator under the provisions of paragraph (d) of this section and §§ 136.4 and 136.5 of this part 136. Under certain circumstances (§ 136.3 (b) or (c) or 40 CFR 401.13) other test procedures may be used that may be more advantageous when such other test procedures have been previously approved by the Regional Administrator of the Region in which the discharge will occur, and providing the Director of the State in which such discharge will occur does not object to the use of such alternate test procedure.

RECEIVED
DEC - 3 1998
Environmental Compliance

§ 136.3

TABLE 1A.—LIST OF APPROVED BIOLOGICAL METHODS

Parameter and units	Method[1]	EPA	Standard methods, 18th Ed.	ASTM	USGS
Bacteria:					
1. Coliform (fecal), number per 100 mL.	Most Probable Number (MPN), 5 tube	p. 132[2]	9221C E[4]	----------	
	3 dilution, or Membrane filter (MF)[3], single step	p. 124[2]	9222D[4]		B-0050-85[5]
2. Coliform (fecal) in presence of chlorine, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 132[2]	9221C E[4]	----------	
	MF, single step[6]	p. 124[2]	9222D[4]		
3. Coliform (total), number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 114[2]	9221B[4]	----------	
	MF[3] single step or two step	p. 108[2]	9222B[4]		B-0025-85[5]
4. Coliform (total), in presence of chlorine, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 114[2]	9221B[4]	----------	
	MF[3] with enrichment	p. 111[2]	9222(B+B.5c)[4]		
5. Fecal streptococci, number per 100 mL.	MPN, 5 tube, 3 dilution	p. 139[2]	9230B[4]	----------	
	MF[3], or	p. 136[2]	9230C[4]		B-0055-85[5]
	Plate count	p. 143[2]			
Aquatic Toxicity:					
6. Toxicity, acute, fresh water organisms, LC50, percent effluent.	Daphnia, Ceriodaphnia, Fathead Minnow, Rainbow Trout, Brook Trout, or Barnerfish Shiner mortality.	Sec. 9[7]		----------	
7. Toxicity, acute, estuarine and marine organisms, LC50, percent effluent.	Mysid, Sheepshead Minnow, or Menidia spp. mortality	Sec. 9[7]		----------	
8. Toxicity, chronic, fresh water organisms, NOEC or IC25, percent effluent.	Fathead minnow larval survival and growth	1000.0[8]		----------	
	Fathead minnow embrye-larval survival and teratogenicity	1001.0[8]			
	Ceriodaphnia survival and reproduction				
	Selenastrum growth	1002.0[8]			
		1003.0[8]			
9. Toxicity, chronic, estuarine and marine organisms, NOEC or IC25, percent effluent.	Sheepshead minnow larval survival and growth	1004.0[8]		----------	
	Sheepshead minnow embrye-larval survival and teratogenicity	1005.0[8]			
	Menidia beryllina larval and growth				
	Mysidopsis bahia survival, growth, and fecundity	1006.0[8]			
	Arbacia punctulata fertilization	1007.0[8]			
	Champia parvula reproduction	1008.0[8]			
		1009.0[8]			

Notes to Table IA:

[1] The method must be specified when results are reported.

[2] A 0.45 um membrane filter (MF) or other pore size certified by the manufacturer to fully retain organisms to be cultivated and to be free of extractables which could interfere with their growth.

[3] USEPA. 1978. Microbiological Methods for Monitoring the Environment, Water, and Wastes. Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency, Cincinnati, Ohio. EPA/600/8-78/017.

[4] APHA. 1992. Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 18th Edition. Amer. Publ. Hlth. Assoc., Washington, DC.

[5] USGS. 1989. U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples, U.S. Geological Survey, U.S. Department of Interior, Reston, Virginia.

[6] Because the MF technique usually yields low and variable recovery from chlorinated wastewaters, the Most Probable Number method will be required to resolve any controversies.

[7] USEPA. 1993. Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms. Fourth Edition. Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency, Cincinnati, Ohio. August 1993, EPA/600/4-90/027F.

RECEIVED
DEC - 3 1998
Environmental Compliance

[1]USEPA. 1994. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. Third Edition. Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency USEPA. 1994, Cincinnati, Ohio (July 1994, EPA/600/4-91/002).

[2]Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. Second Edition. Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency, Cincinnati, Ohio (July 1994, EPA/600/4-91/003). These methods do not apply to marine waters of the Pacific Ocean.

TABLE 1B.—LIST OF APPROVED INORGANIC TEST PROCEDURES

Parameter, units and method	Reference (method number or page)				
	EPA[1,2]	STD methods 18th ed.	ASTM	USGS[3]	Other
1. Acidity, as $CaCO_3$, mg/L:					
Electrometric endpoint or phenolphthalein endpoint	305.1	2310 B(4a)	D1067-92		
2. Alkalinity, as $CaCO_3$, mg/L:					
Electrometric or Colorimetric titration to pH 4.5, manual or automated.	310.1	2320 B	D1067-92	I-1030-85	973.43.[8]
	310.2			I-2030-85	
3. Aluminum—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[36]	202.1	3111 D		I-3051-85	
AA furnace	202.2	3113 B			
Inductively Coupled Plasma/Atomic Emission Spectrometry (ICP/AES)[36].	[6]200.7	3120 B			
Direct Current Plasma (DCP)[36]			D4190-82(88)		Note 34.
Colorimetric (Eriochrome cyanine R)		3500-Al D			
4. Ammonia (as N), mg/L:					
Manual distillation (at pH 9.5),[4] followed by	350.2	4500-NH_3 B			973.49.[8]
Nesslerization	350.2	4500-NH_3 C	D1426-43(A)	I-3520-85	973.49.[8]
Titration	350.2	4500-NH_3 E			
Electrode	350.3	4500-NH_3 F or G	D1426-43(B)		
Automated phenate, or	350.1	4500-NH_3 H		I-4523-85	
Automated electrode					Note 7.
5. Antimony-Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[36]	204.1	3111 B			
AA furnace	204.2	3113 B			
ICP/AES[36]	[6]200.7	3120 B			
6. Arsenic-Total,[4] mg/L:					
Digestion[4] followed by	206.5				
AA gaseous hydride	206.3	3114 B 4.d	D2972-93(B)	I-3062-85	
AA furnace	206.2	3113 B	D2972-93(C)		
ICP/AES,[36] or	[6]200.7	3120 B			
Colorimetric (SDDC)	206.4	3500-As C	D2972-93(A)	I-3060-85	
7. Barium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[36]	208.1	3111 D		I-3084-85	
AA furnace	208.2	3113 B	D4382-91		
ICP/AES[36]	[6]200.7	3120 B			Note 34.
DCP[36]					
8. Beryllium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	210.1	3111 D	D3645-93(88)(A)	I-3095-85	
AA furnace	210.2	3113 B	D3645-93(88)(B)		
ICP/AES	[6]200.7	3120 B			
DCP, or			D4190-82(88)		Note 34.

RECEIVED
DEC - 3 1998
Environmental Compliance

TABLE 1B.—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter, units and method	Reference (method number or page)				
	EPA[1,35]	STD methods 18th ed.	ASTM	USGS[8]	Other
Colorimetric (aluminon)		3500-Be D			
9. Biochemical oxygen demand (BOD_5), mg/L:					
Dissolved Oxygen Depletion	405.1	5210 B		I-1578-78[6]	973.44,[3] p. 17.[8]
10. Boron[37]—Total, mg/L:					
Colorimetric (curcumin)	212.3	4500-B B		I-3112-85	
ICP/AES, or	[6]200.7	3120 B			
DCP			D4190-82(88)		Note 34
11. Bromide, mg/L:					
Titrimetric	320.1		D1246-82(88)(C)	I-1125-85	p. 344.[10]
12. Cadmium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	213.1	3111 B or C	D3557-90(A or B)	I-3135-85 or I-3136-85	974.27,[3] p. 37.[8]
AA furnace	213.2	3113 B	D3557-90(D)		
ICP/AES[34]	[6]200.7	3120 B		I-1472-85	
DCP[34]			D4190-82(88)		Note 34.
Voltametry,[16] or			D3557-90(C)		
Colorimetric (Dithizone)		3500-Cd D			
13. Calcium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	215.1	3111 B	D511-93(B)	I-3152-85	
ICP/AES	[6]200.7	3120 B			Note 34.
DCP, or					
Titrimetric (EDTA)	215.2	3500-Ca D	D511-93(A)		
14. Carbonaceous biochemical oxygen demand ($CBOD_5$), mg/L:[12]					
Dissolved Oxygen Depletion with nitrification inhibitor.		5210 B			
15. Chemical oxygen demand (COD), mg/L: Titrimetric, or.	410.1	5220 C	D1252-88(A)	I-3560-85	973.46,[3] p. 17.[8]
	410.2			I-3562-85	
	410.3				
Spectrophotometric, manual or automated	410.4	5220 D	D1252-88(B)	I-3561-85	Notes 13 or 14.
16. Chloride, mg/L:					
Titrimetric (silver nitrate) or		4500-Cl- B	D512-89(B)	I-1183-85	
(Mercuric nitrate)	325.3	4500-Cl- C	D512-89(A)	I-1184-85	973.51.[8]
Colorimetric, manual or				I-1187-85	
Automated (Ferricyanide)	325.1 or 325.2	4500-Cl- E		I-2187-85	
17. Chlorine—Total residual, mg/L; Titrimetric:					
Amperometric direct	330.1	4500-Cl D	D1253-86(92)		
Iodometric direct	330.3	4500-Cl B			
Back titration ether end-point[15] or	330.2	4500-Cl C			
DPD-FAS	330.4	4500-Cl F			
Spectrophotometric, DPD	330.5	4500-Cl G			Note 18.
Or Electrode					
18. Chromium VI dissolved, mg/L; 0.45 micron filtration followed by:					

RECEIVED
DEC - 3 1998
Environmental Compliance

§136.3

AA chelation-extraction or	218.4	3111 C		I-1232-85	
Colorimetric (Diphenylcarbazide)		3500-Cr D	D1687-92(A)	I-1230-85	
19. Chromium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	218.1	3111 B	D1687-92(B)	I-3236-85	974.27,[3]
AA chelation-extraction	218.3	3111 C			
AA furnace	218.2	3113 B	D1687-92(C)		
ICP/AES[34]	[5]200.7	3120 B			
DCP,[34] or			D4190-82(88)		Note 34.
Colorimetric (Diphenylcarbazide)		3500-Cr D			
20. Cobalt—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	219.1	3111 B or C	D3558-90(A or B)	I-3239-85	p. 37.[3]
AA furnace	219.2	3113 B	D3558-90(C)		
ICP/AES	[5]200.7	3120 B			
DCP			D4190-82(88)		Note 34.
21. Color platinum cobalt units or dominant wavelength, hue, luminance purity:					
Colorimetric (ADMI), or	110.1	2120 E			Note 18.
(Platinum cobalt), or	110.2	2120 B		I-1250-85	
Spectrophotometric	110.3	2120 C			
22. Copper—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	220.1	3111 B or C	D1688-90(A or B)	I-3270-85 or I3271-85	974.27,[3] p.37.[3]
AA furnace	220.2	3113 B	D1688-90(C)		
ICP/AES[34]	[5]200.7	3120 B			
DCP,[34] or			D4190-82(88)		Note 34.
Colorimetric (Neocuproine) or		3500-Cu D			Note 19.
(Bicinchoninate)		Or E			
23. Cyanide—Total, mg/L:					
Manual distillation with $MgCl_2$ followed by		4500-CN C	D2036-91(A)		
Titrimetric, or		4500-CN D			p. 22.[3]
Spectrophotometric, manual or	[31]335.2	4500-CN E	D2036-91(A)	I-3300-85	
Automated[35]	[31]335.3				
24. Cyanide amenable to chlorination, mg/L:					
Manual distillation with $MgCl_2$ followed by titrimetric or Spectrophotometric.	335.1	4500-CN G	D2036-91(B)		*.
25. Fluoride—Total, mg/L:					
Manual distillation[4] followed by		4500-F B			
Electrode, manual or	340.2	4500-F C	D1179-93(B)		
Automated				I-4327-85	
Colorimetric (SPADNS)	340.1	4500-F D	D1179-93(A)		
Or Automated complexone	340.3	4500-F E			
26. Gold—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	231.1	3111 B			
AA furnace, or	231.2				
DCP					Note 34.
27. Hardness—Total, as $CaCO_3$, mg/L					
Automated colorimetric,	130.1				
Titrimetric (EDTA), or Ca plus Mg as their carbonates, by inductively coupled plasma or AA direct aspiration. (See Parameters 13 and 33).	130.2	2340 B or C	D1126-86(92)	I-1338-85	973.52B.[3]
28. Hydrogen ion (pH), pH units					

RECEIVED
DEC - 3 1998
Environmental Compliance

TABLE IB.—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter, units and method	Reference (method number or page)				
	EPA[1,15]	STD methods 18th ed.	ASTM	USGS[2]	Other
Electrometric measurement, or	150.1	4500-H^+ B	D1293-84(90)(A or B)	I-1586-85	973.41,[3]
Automated electrode					Note 21.
29. Iridium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration or	235.1	3111 B			
AA furnace	235.2				
30. Iron—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	236.1	3111 B or C	D1068-90(A or B)	I-3381-85	974.27,[3]
AA furnace	236.2	3113 B	D1068-90(C)		
ICP/AES[34]	[5]200.7	3120 B			
DCP[34] or			D4190-82(88)		Note 34.
Colorimetric (Phenanthroline)		3500-Fe D	D1068-90(D)		Note 22.
31. Kjeldahl Nitrogen—Total, (as N), mg/L:					
Digestion and distillation followed by:	351.3	4500-NH_3 B or C	D3590-89(A)		
Titration	351.3	4500-NH_3 E	D3590-89(A)		973.48,[3]
Nesslerization	351.3	4500-NH_3 C	D3590-89(A)		
Electrode	351.3	4500-NH_3 F or G		I-4551-78[6]	
Automated phenate colorimetric	351.1		D3590-89(B)		
Semi-automated block digester colorimetric	351.2		D3590-89(A)		
Manual or block digester potentiometric	351.4				
Block Digester, followed by:					Note 39.
Auto distillation and Titration, or					Note 40.
Nesslerization					Note 41.
Flow injection gas diffusion					
32. Lead—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	239.1	3111 B or C	D3559-90(A or B)	I-3399-85	974.27,[3]
AA furnace	239.2	3113 B	D3559-90(D)		
ICP/AES[34]	[5]200.7	3120 B			
DCP[34]			D4190-82(88)		Note 34.
Voltametry[11] or			D3559-90(C)		
Colorimetric (Dithizone)		3500-Pb D			
33. Magnesium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	242.1	3111 B	D511-93(B)	I-3447-85	974.27,[3]
ICP/AES	[5]200.7	3120 B			Note 34.
DCP, or					
Gravimetric		3500-Mg D			
34. Manganese—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	243.1	3111 B	D858-90(A or B)	I-3454-85	974.27,[3]
AA furnace	243.2	3113 B	D858-90(C)		
ICP/AES[34]	[5]200.7	3120 B			
DCP[34] or			D4190-82(88)		Note 34.
Colorimetric (Persulfate), or		3500-Mn D			920.203,[3]
(Periodate)					Note 23.
35. Mercury—Total,[4] mg/L:					

RECEIVED
DEC - 3 1998
Environmental Compliance

Cold vapor, manual or	245.1	3112 B	D3223-91	I-3462-85	977.22.[3]
Automated	245.2				
36. Molybdenum—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	246.1	3111 D		I-3490-85	
AA furnace	246.2	3113 B			
ICP/AES	[5]200.7	3120 B			Note 34.
DCP					
37. Nickel—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[34]	249.1	3111 B or C	D1886-90(A or B)	I-3499-85	
AA furnace	249.2	3113 B	D1886-90(C)		
ICP/AES[34]	[5]200.7	3120 B			Note 34.
DCP[34], or			D4190-82(88)		
Colorimetric (heptoxime)		3500-Ni D			
38. Nitrate (as N), mg/L:					
Colorimetric (Brucine sulfate), or Nitrate-nitrite N minus Nitrite N (See parameters 39 and 40). *	352.1				973.50,[3] 419 D,[17] p. 28.[3]
39. Nitrate-nitrite (as N), mg/L:					
Cadmium reduction, Manual or	353.3	4500-NO_3^- E	D3867-90(B)		
Automated, or	353.2	4500-NO_3^- F	D3867-90(A)	I-4545-85	
Automated hydrazine	353.1	4500-NO_3^- H			
40. Nitrite (as N), mg/L; Spectrophotometric:					
Manual or	354.1	4500-NO_2^- B			Note 25.
Automated (Diazotization)				I-4540-85	
41. Oil and grease—Total recoverable, mg/L:					
Gravimetric (extraction)	413.1	5520 B[34]			
42. Organic carbon—Total (TOC), mg/L:					
Combustion or oxidation	415.1	5310 B, C, or D	D2579-93 (A or B)		973.47,[3] p. 14.[34]
43. Organic nitrogen (as N), mg/L:					
Total Kjeldahl N (Parameter 31) minus ammonia N (Parameter 4)					
44. Orthophosphate (as P), mg/L; Ascorbic acid method:					
Automated, or	365.1	4500-P F		I-4601-85	973.56,[3]
Manual single reagent	365.2	4500-P E	D515-88(A)		973.55[3], *
Manual two reagent	365.3				
45. Osmium—Total[4], mg/L; Digestion[4] followed by:					
AA direct aspiration, or	252.1	3111 D			
AA furnace	252.2				
46. Oxygen, dissolved, mg/L:					
Winkler (Azide modification), or	360.2	4500-O C	D888-92(A)	I-1575-78[8]	973.45B,[3]
Electrode	360.1	4500-O G	D888-92(B)	I-1576-78[8]	
47. Palladium—Total[4] mg/L; Digestion[4] followed by:					
AA direct aspiration, or	253.1	3111 B			p. S27.[18]
AA furnace	253.2				p. S28.[18]
DCP					Note 34.
48. Phenols, mg/L:					
Manual distillation[35]	420.1				Note 27.
Followed by:					
Colorimetric (4AAP) manual, or	420.1				Note 27.
Automated[19]	420.2				
49. Phosphorus (elemental), mg/L:					

RECEIVED
DEC - 3 1998
Environmental Compliance

TABLE 1B.—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter, units and method	Reference (method number or page)				
	EPA [1,34]	STD methods 18th ed.	ASTM	USGS [2]	Other
Gas-liquid chromatography					Note 28.
50. Phosphorus—Total, mg/L:					
Persulfate digestion followed by	365.2	4500-P B,5			973.55.[9]
Manual or	365.2 or 365.3	4500-P E	D515-88(A)		
Automated ascorbic acid reduction	365.1	4500-P F		I-4600-85	973.56.[3]
Semi-automated block digestor	365.4		D515-88(B)		
51. Platinum—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	255.1	3111 B			
AA furnace	255.2				Note 34.
DCP					
52. Potassium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	258.1	3111 B		I-3630-85	973.53.[3]
ICP/AES	[6]200.7	3120 B			
Flame photometric, or		3500-K D			317 B.[17]
Colorimetric					
53. Residue—Total, mg/L:					
Gravimetric, 103-105°	160.3	2540 B		I-3750-85	
54. Residue—filterable, mg/L:					
Gravimetric, 180°	160.1	2540 C		I-1750-85	
55. Residue—nonfiltrable (TSS), mg/L:					
Gravimetric, 103-105° post washing of residue	160.2	2540 D		I-3765-85	
56. Residue—settleable, mg/L:					
Volumetric, (Imhoff cone), or gravimetric	160.5	2540 F			
57. Residue—Volatile, mg/L:					
Gravimetric, 550°	160.4			I-3753-85	
58. Rhodium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration, or	265.1	3111 B			
AA furnace	265.2				
59. Ruthenium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration, or	267.1	3111 B			
AA furnace	267.2				
60. Selenium—Total,[4] mg/L; Digestion[4] followed by:					
AA furnace	270.2	3113 B	D3859-93(B)		
ICP/AES,[26] or	[6]200.7	3120 B			
AA gaseous hydride		3114 B	D3859-93(A)	I-3667-85	
61. Silica[27]—Dissolved, mg/L; 0.45 micron filtration followed by:					
Colorimetric, Manual or	370.1	4500-Si D	D859-88	I-1700-85	
Automated (Molybdosilicate), or				I-2700-85	
ICP	[6]200.7	3120 B			
62. Silver—Total,[4] mg/L; Digestion[4,24] followed by:					
AA direct aspiration	272.1	3111 B or C		I-3720-85	974.27,[3] p. 37.[9]
AA furnace	272.2	3113 B			

RECEIVED
DEC - 3 1998
Environmental Compliance

MSD 035697

ICP/AES	[8]200.7	3120 B			Note 34.
DCP					
63. Sodium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	273.1	3111 B		I-3735-85	973.54,[9]
ICP/AES	[8]200.7	3120 B			Note 34.
DCP, or					
Flame photometric		3500 Na D			
64. Specific conductance, micromhos/cm at 25 °C:					
Wheatstone bridge	120.1	2510 B	D1125-91(A)	I-1780-85	973.40,[9]
65. Sulfate (as SO_4), mg/L:					
Automated colorimetric (barium chloranilate)	375.1				925.54,[9]
Gravimetric	375.3	4500-SO_4-[2] C or D	D516-90		426C,[10]
Turbidimetric, or	375.4				
66. Sulfide (as S), mg/L:					
Titrimetric (iodine), or	378.1	4500-S-[2] E		I-3840-85	
Colorimetric (methylene blue)	378.2	4500-S-[2] D			
67. Sulfite (as SO_3), mg/L:					
Titrimetric (iodine-iodate)	377.1	4500-SO_3-[2] B			
68. Surfactants, mg/L:					
Colorimetric (methylene blue)	425.1	5540 C	D2330-88		
69. Temperature, °C:					
Thermometric	170.1	2550 B			Note 32.
70. Thallium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	279.1	3111 B			
AA furnace	279.2				
ICP/AES, or	[8]200.7	3120 B			
71. Tin—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	282.1	3111 B		I-3850-78[8]	
AA furnace, or	282.2	3113 B			
ICP/AES	[8]200.7				
72. Titanium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	283.1	3111 D			
AA furnace	283.2				
DCP					Note 34.
73. Turbidity, NTU:					
Nephelometric	180.1	2130 B	D1889-88(A)	I-3860-85	
74. Vanadium—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration	286.1	3111 D			
AA furnace	286.2		D3373-93		
ICP/AES	[8]200.7	3120 B			
DCP, or			D4190-82(88)		Note 34.
Colorimetric (Gallic acid)		3500-V D			
75. Zinc—Total,[4] mg/L; Digestion[4] followed by:					
AA direct aspiration[36]	289.1	3111 B or C	D1691-90 (A or B)	I-3900-85	974.27,[9] p. 37.[9]
AA furnace	289.2				
ICP/AES[36]	[8]200.7	3120 B			
DCP,[36] or			D4190-82(88)		Note 34.
Colorimetric (Dithizone) or		3500-Zn E			Note 33.
(Zincon)		3500-Zn F			

Table IB Notes:

RECEIVED
DEC - 3 1998
Environmental Compliance

5136.3

MSD 035698

§ 136.3

[1] "Methods for Chemical Analysis of Water and Wastes", Environmental Protection Agency, Environmental Monitoring Systems Laboratory-Cincinnati (EMSL-CI), EPA-600/4-79-020, Revised March 1983 and 1979 where applicable.

[2] Fishman, M.J., et al, "Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments," U.S. Department of the Interior, Techniques of Water-Resource Investigations of the U.S. Geological Survey, Denver, CO, Revised 1989, unless otherwise stated.

[3] "Official Methods of Analysis of the Association of Official Analytical Chemists," methods manual, 15th ed. (1990).

[4] For the determination of total metals the sample is not filtered before processing. A digestion procedure is required to solubilize suspended material and to destroy possible organic-metal complexes. Two digestion procedures are given in "Methods for Chemical Analysis of Water and Wastes, 1979 and 1983". One (section 4.1.3), is a vigorous digestion using nitric acid. A less vigorous digestion using nitric and hydrochloric acids (section 4.1.4) is preferred; however, the analyst should be cautioned that this mild digestion may not suffice for all samples types. Particularly, if a colorimetric procedure is to be employed, it is necessary to ensure that all organo-metallic bonds be broken so that the metal is in a reactive state. In those situations, the vigorous digestion is to be preferred making certain that at no time does the sample go to dryness. Samples containing large amounts of organic materials may also benefit by this vigorous digestion, however, vigorous digestion with concentrated nitric acid will convert antimony and tin to insoluble oxides and render them unavailable for analysis. Use of ICP/AES as well as determinations for certain elements such as antimony, arsenic, the noble metals, mercury, selenium, silver, tin, and titanium require a modified sample digestion procedure and in all cases the method write-up should be consulted for specific instructions and/or cautions.

NOTE TO TABLE IB NOTE 4: If the digestion procedure for direct aspiration AA included in one of the other approved references is different than the above, the EPA procedure must be used.

Dissolved metals are defined as those constituents which will pass through a 0.45 micron membrane filter. Following filtration of the sample, the referenced procedure for total metals must be followed. Sample digestion of the filtrate for dissolved metals (or digestion of the original sample solution for total metals) may be omitted for AA (direct aspiration or graphite furnace) and ICP analyses, provided the sample solution to be analyzed meets the following criteria:

a. has a low COD (<20)
b. is visibly transparent with a turbidity measurement of 1 NTU or less
c. is colorless with no perceptible odor, and
d. is of one liquid phase and free of particulate or suspended matter following acidification.

[5] The full text of Method 200.7, "Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes," is given at Appendix C of this Part 136.

[6] Manual distillation is not required if comparability data on representative effluent samples are on company file to show that this preliminary distillation step is not necessary; however, manual distillation will be required to resolve any controversies.

[7] Ammonia, Automated Electrode Method, Industrial Method Number 379-75 WE, dated February 19, 1976, (Bran & Luebbe (Technicon) Auto Analyzer II, Bran & Luebbe Analyzing Technologies, Inc., Elmsford, NY 10523.

[8] The approved method is that cited in "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments", USGS TWRI, Book 5, Chapter A1 (1979).

[9] American National Standard on Photographic Processing Effluents, Apr. 2, 1975. Available from ANSI, 1430 Broadway, New York, NY 10018.

[10] "Selected Analytical Methods Approved and Cited by the United States Environmental Protection Agency", Supplement to the Fifteenth Edition of Standard Methods for the Examination of Water and Wastewater (1981).

[11] The use of normal and differential pulse voltage ramps to increase sensitivity and resolution is acceptable.

[12] Carbonaceous biochemical oxygen demand ($CBOD_5$) must not be confused with the traditional BOD_5 test which measures "total BOD". The addition of the nitrification inhibitor is not a procedural option, but must be included to report the $CBOD_5$ parameter. A discharger whose permit requires reporting the traditional BOD_5 may not use a nitrification inhibitor in the procedure for reporting the results. Only when a discharger's permit specifically states $CBOD_5$ is required can the permittee report data using the nitrification inhibitor.

[13] OIC Chemical Oxygen Demand Method, Oceanography International Corporation, 1978, 512 West Loop, P.O. Box 2980, College Station, TX 77840.

[14] Chemical Oxygen Demand, Method 8000, Hach Handbook of Water Analysis, 1979, Hach Chemical Company, P.O. Box 389, Loveland, CO 80537.

[15] The back titration method will be used to resolve controversy.

[16] Orion Research Instruction Manual, Residual Chlorine Electrode Model 97-70, 1977, Orion Research Incorporated, 840 Memorial Drive, Cambridge, MA 02138. The calibration graph for the Orion residual chlorine method must be derived using a reagent blank and three standard solutions, containing 0.2, 1.0, and 3.0 ml 0.00281 N potassium iodate/100 ml solution, respectively.

[17] The approved method is that cited in Standard Methods for the Examination of Water and Wastewater, 14th Edition, 1976.

[18] National Council of the Paper Industry for Air and Stream Improvement, (Inc.) Technical Bulletin 253, December 1971.

[19] Copper, Bicinchoninate Method, Method 8506, Hach Handbook of Water Analysis, 1979, Hach Chemical Company, P.O. Box 389, Loveland, CO 80537.

[20] After the manual distillation is completed, the autoanalyzer manifolds in EPA Methods 335.3 (cyanide) or 420.2 (phenols) are simplified by connecting the re-sample line directly to the sampler. When using the manifold setup shown in Method 335.3, the buffer 6.2 should be replaced with the buffer 7.6 found in Method 335.2.

[21] Hydrogen Ion (pH) Automated Electrode Method, Industrial Method Number 378-75WA, October 1978, Bran & Luebbe (Technicon) Autoanalyzer II, Bran & Luebbe Analyzing Technologies, Inc., Elmsford, NY 10523.

[22] Iron, 1,10-Phenanthroline Method, Method 8008, 1980, Hach Chemical Company, P.O. Box 389, Loveland, CO 80537.

[23] Manganese, Periodate Oxidation Method, Method 8034, Hach Handbook of Wastewater Analysis, 1979, pages 2-113 and 2-117, Hach Chemical Company, Loveland, CO 80537.

[24] Wershaw, R.L., et al, "Methods for Analysis of Organic Substances in Water," Techniques of Water-Resources Investigation of the U.S. Geological Survey, Book 5, Chapter A3, (1972 Revised 1987) p. 14.

[25] Nitrogen, Nitrite, Method 8507, Hach Chemical Company, P.O. Box 389, Loveland, CO 80537.

[26] Just prior to distillation, adjust the sulfuric-acid-preserved sample to pH 4 with 1 + 9 NaOH.

[27] The approved method is cited in Standard Methods for the Examination of Water and Wastewater, 14th Edition. The colorimetric reaction is conducted at a pH of 10.0±0.2. The approved methods are given on pp 576-61 of the 14th Edition: Method 510A for distillation, Method 510B for the manual colorimetric procedure, or Method 510C for the manual spectrophotometric procedure.

RECEIVED
DEC - 3 1998
Environmental Compliance

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

November 2, 1998

Kevin R. Julius
Risk Manager, General Services
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

RE: Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Julius:

Under the terms and conditions of the above referenced permit, you are required to self-monitor the discharge at each of the identified sampling points. Monitoring is to be performed for the parameters listed and at the frequency specified in the permit.

The District received your third quarter, 1998 self-monitoring report on October 30, 1998. Our review of this report indicates that at sampling point 001, no result was reported for Silver (Total).

Additionally, our review of your report and attached laboratory analytical sheets show that the PCB's and volatile/semi-volatile organics analyses were performed using the SW846 solid waste methodology. Please note that pursuant to General Condition I.A.6 in the above referenced Industrial Wastewater Discharge Permit, you are required to analyze all wastewater pursuant to 40 CFR 136 which lists EPA Method 624 for volatile organics, EPA Method 625 for semi-volatile organics, and EPA Method 608 for PCB's.

Failure to perform required monitoring or to submit required reports, complete and on time, constitutes noncompliance with the terms and conditions of your permit and may place your company in Significant Noncompliance (SNC), as defined in District Ordinance 8472 and federal regulations 40 CFR 403. SNC companies are subject to enforcement action by the District. At a minimum, the District is required to include SNC companies in an annual newspaper publication. To avoid further action, you must ensure that all future monitoring and reporting is performed as specified in the permit.

If you have any questions please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

bv

pc: suspense file

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD., ST. LOUIS MO 63104-1095

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIALT ESTING, LTD.

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING, LTD.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

SEE LAST PG. OF THIS RPT. FG 10/30/98

MSD SAMPLE POINT REFERENCE NUMBERS ——>		SP001						
DATES ON WHICH SAMPLES WERE COLLECTED ——>								
TIMES AT WHICH SAMPLES WERE COLLECTED ——>								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	27,324					GPD
BOD_5	300	C	60					mg/l
COD	600	C	242					mg/l
TOTAL SUSPENDED SOLIDS		C	1700					mg/l
SILVER		C						mg/l
pH	<5, >7	G	7.13					UNITS
TEMPERATURE		G	24.3					°C.
OIL & GREASE	200	G	7					mg/l
TTO		G,C	0.02 ~~MAX~~					mg/l

RECEIVED
OCT 30 1998
Environmental Compliance

You must complete and sign the certification statements on the reverse side.

TTO_{001} = 0.031 mg/l
FG 10/30/98

MSD 035701

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in **PART III** apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[X] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 002 .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R. JULIUS

Title: FACILITIES, COMPLIANCE MANAGER Telephone: _____

Signature: Kevin R. Julius Date: 10-30-98

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST. LOUIS, MO 63104-1095

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.247
TOTAL ACTIVITY DISCHARGED:	

RECEIVED
OCT 30 1998
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R. JULIUS

Title: FACILITIES, COMPLIANCE MANAGER Telephone:

Signature: Kevin R. Julius Date: 10-30-98

radrpt 6/94

Bodycote

Bodycote Industrial Testing . 2350 South 7th Street . St. Louis . Missouri . U S A . 63104-4296
Tel: (314) 771-7111 . Fax: (314) 771-9573

Test Certificate

CARDINAL GLENNON
CHILDRENS HOSPITAL
1465 SOUTH GRAND BLVD
ST LOUIS
MO
63104-1095

Attn: MR KEVIN JULIUS

CRT No S805279 : Issue 1
Ord No RE: KEVIN JULIUS

Date Tested 08/05/98
Date Reported 08/06/98

Item - Examination of wastewater samples SAMPLED 7/23/98

Ref: Sample Point 002, THIRD Quarter Sampling

Specification - US EPA Requirements for Wastewater Analysis

INCORRECT METHODOLOGY
FG 10/30/98

014266 SAMPLE POINT 002, 7/98

Sample	Test Description	Specification	Result	Comments
01:	2,4-Dinitrophenol KP	Method 8270B	~~<10 ug/l~~ ≤.01	Nil
02:	Phenol KP	Method 8270B	15 ug/l	Nil
03:	Chloroform KP	Method 8260A	~~<5 ug/l~~ ≤.01	Nil
04:	Methylene Chloride KP	Method 8260A	16 ug/l	Nil
05:	pH	EPA Method 150.1	7.13 units	Nil
06:	Solids - Suspended (TSS)	EPA Method 160.2	1,700 mg/l	Nil
07:	Temperature	EPA Method 170.1	24.3 degrees C	Nil
08:	BOD	EPA Method 405.1	60 mg/l	Nil
09:	Oil & Grease in Liquid	EPA Method 413.1	7.3 mg/l	Nil
10:	COD	SM 5220 / HACH MICRO	242 mg/l	Nil
11:	Endrin KP	SW 846 8080	~~<0.004~~ ug/l ≤.01	Nil

Certificate Comments

Sampling Data:

Composite Date: (8HR COMPOSITE) 7/23/98
Time of First Sample: 09:45 AM
Date of Grab: 7/23/98
Time of Grab: 09:50 AM
Sampled by G. Frost, BITL

RECEIVED
OCT 30 1998
Environmental Compliance

Approved by Carmen S DeBlass

For and on authority of
Bodycote Industrial Testing

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST. LOUIS MO 63104-1095

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIAL TESTING LTD

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING LTD

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001						
DATES ON WHICH SAMPLES WERE COLLECTED ——>		5/6/98, 5/7/98						
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		10:19A(G);10:23A(C)						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	27,324					GPD
BOD_5	300	C	510					mg/l
COD	600	C	750					mg/l
TSS		C	170					mg/l
Silver		C	0.07					mg/l
pH	<5,>7	G	8.48					units
Temperature		G	24.1					°C
Oil & Grease	200	G	85					mg/L

RECEIVED
AUG 25 1998
Environmental Compliance

You must complete and sign the certification statements on the reverse side.

MSD 035705

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[x] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 001 .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R. JULIUS

Title: FACILITIES, COMPLIANCE MGR Telephone: 314-268-4117

Signature: X Kevin R. Julius Date: X Aug 25, 1998

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD., ST. LOUIS, MO 63104-1095

Reporting Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.224
TOTAL ACTIVITY DISCHARGED:	

RECEIVED
AUG 25 1998
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R. JULIUS

Title: FACILITIES, COMPLIANCE MANAGER Telephone: 314-268-4117

Signature: X Kevin R. Julius Date: Aug 25, 1998

radrpt 6/94

Bodycote MATERIALS TESTING
METAL TECHNOLOGY

Bodycote Industrial Testing . 2350 South 7th Street . St. Louis . Missouri . U S A . 63104-4296
Tel: (314) 771-7111 . Fax: (314) 771-9573

Test Certificate

CARDINAL GLENNON
CHILDRENS HOSPITAL
1465 SOUTH GRAND BLVD
ST LOUIS
MO
63104-1095

REF No S803084 : Issue 1
Ord No NA

Date Tested 05/07/98
Date Reported 05/15/98

Attn: MR KEVIN JULIUS

Item - Examination of wastewater samples collected 5/6-7/98

Ref: Sample Point 001, Second Quarter Sampling

Specification- US EPA Requirements for Wastewater Analysis

007442 Composite 5/6-7/98; BOD, COD, TSS

Sample	Test Description	Specification	Result	Comments
01:	Solids - Suspended	EPA 160.2	170 mg/l	Nil
02:	BOD	EPA 405.1	510 mg/l	Nil
03:	COD	SM 5220/HACH MICRO	750 mg/l	Nil

007443 Composite 5/6-7/98; Ag

Sample	Test Description	Specification	Result	Comments
04:	Silver	EPA 200.7	0.07 mg/l	Nil

007444 Grab 5/6/98; O&G, pH, Temp

Sample	Test Description	Specification	Result	Comments
05:	pH	EPA 150.1	8.48 Units	Nil
06:	Temperature	EPA 170.1	24.1 Deg. C	Nil
07:	Oil & Grease in Liquid	EPA 413.1	85 mg/l	Nil

Certificate Comments

Sampling Data:
Composite Date: 5/6-7/98
Time of First Sample: 10:23 AM

RECEIVED
AUG 25 1998
Environmental Compliance

Rcd

Bodycote
Bodycote Industrial Testing

Test Certificate

CARDINAL GLENNON REF No S803084 : Issue 1
Examination of wastewater samples collected 5/6-7/98
Ref: Sample Point 001, Second Quarter Sampling

Date of Grag: 5/6/98
Time of Grab: 10:19 AM
Sampled by G. Frost, BITL

Approved by Robert C.S. Archibald

.....
For and on authority of
Bodycote Industrial Testing

RECEIVED
AUG 25 1998
Environmental Compliance

MSD 035709

SSM Cardinal Glennon Children's Hospital

February 9, 1998

Mr. Fabian T. Grabski
Assistant Engineer, Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147-8710

RE: Permit No. 41121954-00 Noncompliance

Dear Mr. Grabski:

SSM Cardinal Glennon Children's Hospital was requested to submit a follow-up analyses report and actions taken to insure future compliance for Oil/Grease (Total) for sample point 001 due to a high concentration on sample date 11-20-97. Bodycote Industrial Testing Ltd. made SSM Cardinal Glennon aware of the violation on 12-31-97 and conducted a follow-up analyses on 1-21-98. The Oil/Grease result at this time was 39mg/l.

SSM Cardinal Glennon Children's Hospital has an ongoing service agreement with Biologix to treat wastewater to insure concentrations are in compliance with the set parameters of regulatory limitations.

Thank you for your time and consideration. If you have any questions concerning this matter, please contact me at (314) 268-4117.

Sincerely,

Kevin R. Julius

Kevin R. Julius
Facilities Compliance Manager
SSMCardinal Glennon Children's Hospital

Enclosure

cc: Richard G. Schilling, Director - Physical Facilities
Karen J. Stafford, R.N. Paralegal, Risk Management, Professional Services

RECEIVED
FEB 12 1998
Environmental Compliance

1465 South Grand Blvd.
St. Louis MO 63104-1095
(314) 577-5600 *phone*

Bodycote MATERIALS TESTING

Bodycote Industrial Testing . 2350 South 7th Street . St. Louis . Missouri . U S A . 63104-4296
Tel: (314) 771-7111 . Fax: (314) 771-9573

Test Certificate

Cardinal Glennon Children's H.
1465 South Grand Blvd.
St. Louis
Missouri

63104-1095

Attn: Mr. Kevin Julius

REF No S800472 : Issue 1
Ord No NA

Date Tested 02/05/98
Date Reported 02/05/98

Item - Wastewater analysis for first quarter, 1998.

Sample Date: 1/21-22/98. Sample Point 001.

Specification- US EPA Requirements for Wastewater Analysis

000633 Composite for BOD, COD, TSS

Sample	Test Description	Specification	Result	Comments
01:	Solids - Suspended	EPA 160.2	168 mg/l ✓	Nil
02:	BOD	EPA 405.1	540 mg/l ✓	Nil
03:	COD	SM 5220/HACH MICRO	790 mg/l ✓	Nil

000634 Composite for Ag

Sample	Test Description	Specification	Result	Comments
04:	Silver	EPA Method 200.7	0.09 mg/l ✓	Nil

000635 Grab for O&G, pH, and Temp.

Sample	Test Description	Specification	Result	Comments
05:	pH	EPA 150.1	7.03 units ✓	Nil
06:	Temperature	EPA 170.1	19.3 Degrees C. ✓	Nil
07:	Oil & Grease in Liquid	EPA 413.1	39 mg/l ✓	Nil

Certificate Comments

Sampling Data: 1/21/98
Date of composite: 1/21-22/98
Time of first sample: 10:00 AM
Time of grab: 9:47 AM

RECEIVED
FEB 12 1998
Environmental Compliance

Bodycote
Bodycote Industrial Testing

Test Certificate

Cardinal Glennon Children's H. REF No S800472 : Issue 1
Wastewater analysis for first quarter, 1998.
Sample Date: 1/21-22/98. Sample Point 001.

Sampling Personnel: C.S.DeBlass and G.Frost, BITL

Symbol "mg/l" denotes milligrams per liter.

chk'd 2/5/98

Approved by William A. Rorie

.....
For and on authority of
Bodycote Industrial Testing

confirmed: Data chk'd by CSD.

RECEIVED
FEB 12 1998
Environmental Compliance

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST LOUIS MO 63104-1095

Monitoring Period: ☒(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIAL TESTING, LTD.

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING, LTD.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

SP001. 01/21-22/98. SEE ATT. DATA. FG 5/26/98

MSD SAMPLE POINT REFERENCE NUMBERS ——>								
DATES ON WHICH SAMPLES WERE COLLECTED ——>								
TIMES AT WHICH SAMPLES WERE COLLECTED ——>								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	27,324					GPD
BOD_5	300	C	540					mg/l
COD	600	C	790					mg/l
TSS		C	168					mg/l
Silver		C	0.09					mg/l
pH	<5 >7	G	7.03					Units
Temperature		G	19.3					°C
Oil & Grease	200	G	39					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
MAY 21 1998
Environmental Compliance

MSD 035713

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in **PART III** apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[X] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 002 .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Kevin R. Julius

Title: Facilities, Compliance Manager Telephone: 314/268-4117

Signature: Kevin R Julius Date: May 21, 1998

Delivered by Courier @ 1:19 Middle of hail storm

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST LOUIS MO 63104-1095

Reporting Period: ☒ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.997
TOTAL ACTIVITY DISCHARGED:	

RECEIVED
MAY 21 1998
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Kevin R. Julius

Title: Facilities,,Compliance Manager Telephone: 314/268-4117

Signature: Kevin R. Julius Date: May 21, 1998

radrpt 6/94

HOLDING TIMES NOT EXCEEDED. PURSUANT TO MR. DEBLASS (BODYCOTE), THE 2/5/98 IS AN ARBITRARY NUMBER & NOT REFLECTIVE OF ACTUAL TEST DATE. MR. DEBLASS STATED ALL HOLDING TIMES FOLLOWED.

FG
5/26/98

Bodycote MATERIALS TESTING

Bodycote Industrial Testing . 2350 South 7th Street . St. Louis . Missouri . U S A . 63104-4296
Tel: (314) 771-7111 . Fax: (314) 771-9573

Test Certificate

Cardinal Glennon Children's H.
1465 South Grand Blvd.
St. Louis
Missouri

63104-1095

Attn: Mr. Kevin Julius

REF No S800472 : Issue 1
Ord No NA

Date Tested 02/05/98
Date Reported 02/05/98

Item - Wastewater analysis for first quarter, 1998.

Sample Date: 1/21-22/98, Sample Point 001.

Specification- US EPA Requirements for Wastewater Analysis

000633 Composite for BOD, COD, TSS

Sample	Test Description	Specification	Result	Comments
01:	Solids - Suspended	EPA 160.2	168 mg/l	Nil
02:	BOD	EPA 405.1	540 mg/l	Nil
03:	COD	SM 5220/HACH MICRO	790 mg/l	Nil

000634 Composite for Ag

Sample	Test Description	Specification	Result	Comments
04:	Silver	EPA Method 200.7	0.09 mg/l	Nil

000635 Grab for O&G, pH, and Temp.

Sample	Test Description	Specification	Result	Comments
05:	pH	EPA 150.1	7.03 units	Nil
06:	Temperature	EPA 170.1	19.3 Degrees C.	Nil
07:	Oil & Grease in Liquid	EPA 413.1	39 mg/l	Nil

Certificate Comments

Sampling Data: 1/21/98
Date of composite: 1/21-22/98
Time of first sample: 10:00 AM
Time of grab: 9:47 AM

Bodycote MATERIALS TESTING
Bodycote Industrial Testing

Test Certificate

Cardinal Glennon Children's H. **REF No S800472 : Issue 1**
Wastewater analysis for first quarter, 1998.
Sample Date: 1/21-22/98, Sample Point 001.

Sampling Personnel: C.S.DeBlass and G.Frost, BITL

Symbol "mg/l" denotes milligrams per liter.

Approved by William A. Rorie

William A. Rorie
For and on authority of
Bodycote Industrial Testing

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

February 23, 1998

Kevin Julius
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand
St. Louis, MO 63104

Dear Mr. Julius:

The Metropolitan St. Louis Sewer District is required to track the status of compliance of all industrial users with the terms of the federal pretreatment regulations (40 CFR 403), MSD Ordinance 8472 and the user's industrial wastewater discharge permit. On a semi-annual basis, the District is required to identify those users who are in significant noncompliance (SNC) as defined in the ordinance.

Using the criteria defined in the ordinance, the Cardinal Glennon Children's Hospital facility at 1465 S. Grand, St. Louis, MO 63104 has been found to be in SNC for the six month period July 1, 1997 through December 31, 1997.

> At sample point 001, the Technical Review Criteria (TRC) limitation for oil & grease has been exceeded for one of three samples analyzed, resulting in a TRC noncompliance rate of 33.3 %.

In accordance with the provisions of Section 403.8(f)(5) of the federal regulations, the District has developed an Enforcement Response Plan. That plan has been approved by the Missouri Department of Natural Resources and incorporated as an integral part of the District's pretreatment program. The Plan requires the District to make an annual newspaper publication of the names of all users found to be in SNC, and to initiate additional enforcement action if necessary.

We recognize that subsequent samples by Cardinal Glennon Children's Hospital have indicated oil & grease levels in your wastewater discharge to be in compliance. Consequently, we have determined that the annual newspaper publication is the only District action required.

If you have any questions regarding this matter, please contact me at 436-8717 or Bob Zeman at 436-8715.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Industrial Waste Engineer

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

February 3, 1998

Al T. Wittrock
Risk Manager, General Services
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

RE: Renewal of Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Wittrock:

We have reviewed the self monitoring data you recently submitted to the District for your wastewater discharge. The results of analyses of this sample show noncompliance with the limitation of Oil/Grease (Total) as indicated below:

SAMPLE DATE	SAMPLE POINT	LIMIT TYPE	PARAMETER	MSD ORD. 8472	CONCENTRATION FOUND
11-20-97	001	Instantaneous	Oil/Grease (T)	200 mg/l	703 mg/l**

mg/l = milligrams per liter

Please refer to the enclosure for information on potential enforcement actions should noncompliance continue. The enclosure also explains the meaning of any asterisks which appear next to the concentration found above.

Pursuant to Section 403.12 (g) (2) of the federal pretreatment regulations and Article VIII, Section 4.C of MSD Ordinance 8472, you are required to resample the discharge and to submit the results of analyses to the District within thirty (30) days of your first becoming aware of the violation. Analyses need only be performed for Oil/Grease (Total) as indicated above.

At this time we request that you: (1) submit the 30 day follow-up analyses report for Oil/Grease (Total); and (2) advise us, in writing, by March 2, 1998 of corrective actions initiated which will insure that future concentrations of the above parameter are in compliance with regulatory limitations.

If you should have any questions, please contact me at 436-8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

ldl

Enclosure

pc: Suspense file

VIOLATION NOTIFICATION ENCLOSURE

SIGNIFICANT NONCOMPLIANCE

The Metropolitan St. Louis Sewer District is required, under federal regulations, to review the status of industrial user compliance with pretreatment regulations and to identify those users in **Significant Noncompliance** (SNC) on a semi-annual basis. Based on these reviews the District is required to:

1. Make an annual publication in the St. Louis Post Dispatch of those companies identified as being in **Significant Noncompliance** with the regulations. This publication must also identify any actions taken by each company or the District to eliminate the noncompliance.

2. Initiate additional enforcement actions based upon the seriousness and frequency of the violations. Potential enforcement actions are described in Article IX of MSD Sewer Use Ordinance 8472 and in the District's Enforcement Response Plan.

##

If any asterisks appear next to the "CONCENTRATION FOUND" values in the accompanying notification, it means your company is either in SNC or may be quickly approaching SNC.

* means this is at least the second violation of the discharge limit identified by the District within the **July 1 through December 31** review period.

** means the concentration equals or exceeds the discharge limit multiplied by a factor known as the Technical Review Criteria (TRC). The TRC for most pollutants is 1.2. For oil & grease, the TRC is 1.4.

*** means both of the above conditions exist.

You will be in SNC for violations of the discharge limit for any pollutant if:

1. The results of 66% or more of all daily samples collected within this six-month period exceed the daily limit by any amount; or

2. The results of 33% or more of all daily samples collected within this six-month period equal or exceed the daily limit multiplied by the TRC; or

3. 66% or more of the monthly average values during this six-month period exceed the monthly average limit by any amount; or

4. 33% or more of the monthly average values during this six-month period equal or exceed the monthly average limit multiplied by the TRC.

If no asterisks appear next to the "CONCENTRATION FOUND" values in the accompanying notification, it means the violations identified up to the date of the notification may not be serious and/or frequent enough to immediately place your company in SNC. This assumes you have at least two samples within the six month review period. A final SNC determination will be made after the end of the six month review period and will be based upon a review of all samples collected during the period.

##

You must, as soon as possible, correct the problem which caused the noncompliance identified in the accompanying notification.

Under federal regulations the results of all analyses you perform must be submitted to the District and will be used, along with the results of all District samples, to determine whether your company must be listed in SNC.

SNC-95-2b

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

RECEIVED
JAN 26 1998
DEPT. of ENVIRONMENTAL COMPLIANCE

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST. LOUIS, MO 63104-1095

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☒(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIAL TESTING LTD.

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING LTD.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001							
DATES ON WHICH SAMPLES WERE COLLECTED ——>		11|19 TO 11|20|97							
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		1:35 PM - 1:35 ~~PM~~							
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow							UNITS
FLOW		E	27,324						GPD
BOD_5	300	C	670						mg|L
COD	600	C	1,100						mg|L
TSS	350	C	450						mg|L
Silver	0.5 MAX	C	< 0.05						mg|L
pH	5.5-11.5	G	7.63						Units
Temperature	~~<5, >7~~ 60°C MAX	G	21.1						°C.
Oil & Grease	200	G	730						mg/L

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[X] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 002.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R JULIUS

Title: FACILITIES COMPLIANCE MNGR. Telephone: (314) 268-4117

Signature: Kevin R Julius Date: 1-22-98

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST. LOUIS, MO 63104-1095

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIAL TESTING LTD.

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING LTD.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001		002				
DATES ON WHICH SAMPLES WERE COLLECTED ——>		9/17-9/18/97		9/25/97				
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		11:30A-10:30A		9:19A - 4:30P				
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	27,324	E	858			GPD
BOD_5	300	C	220	C	130			mg/L
COD	600	C	360	C	300			mg/L
TSS		C	130	C	160			mg/L
Silver		C	<0.05	C	-----			mg/L
pH	<5, >7	G	7.49	G	7.43			units
Temperature		G	27.5	G	23.3			°C
Oil & Grease	200	G	12	G	<5			mg/L
Total Toxic Organics	5.52	G,C	~~<0.05~~		~~<0.05~~ *			mg/L
(attached list)			6.03		6.03			

RECEIVED
OCT 31 1997
Environmental Compliance

You must complete and sign the certification statements on the reverse side.

*Sample Point 002 SVOA: Sampling Data: 9/17-18/97 10:45A - 9:45A

1

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R JULIUS

Title: FACILITIES COMPLIANCE MANAGER Telephone: 268-4117

Signature: Kevin R Julius Date: 10-31-97

Bodycote MATERIALS TESTING ♦ ST. LOUIS LABORATORY
METAL TECHNOLOGY
BODYCOTE INDUSTRIAL TESTING LTD. • 2350 SOUTH 7TH STREET, ST. LOUIS, MISSOURI 63104-4296 • TEL (314) 771-7111 • FAX (314) 771-9573

Report No. 97-09-04394 October 27, 1997

Examination of wastewater samples collected from Sample Points 001 and 002 in September.

Cardinal Glennon Children's Hospital
1465 South Grand Blvd.
St. Louis, MO 63104-1095

P.O.: PF100293
Attn: Mr. Kevin R. Julius

TEST REPORT

I. Composite Samples:

	Sample Point 001	Sample Point 002
Composite:	9/17-18/97	9/17-18/97, - 9/25-26/97 (SVOA)
Time of First Sample	11:39 AM	10:53 AM, - 9:19 AM (SVOA)

Miscellaneous :

BITL No.	Test	Sample Pt. 001 (mg/L)	Sample Pt. 002 (mg/L)	Test Method	PQL (mg/L)
289123, 457	BOD_5	220	130	EPA 405.1	4
289123, 457	COD	360	300	SM5220/HM	5
289123, 457	TSS	130	160	EPA 160.2	5
289122	Silver	<0.05	-----	EPA 200.7	0.05

SVOA

		(µg/L)	(µg/L)		(µg/L)
289125, 126	2,4 Dinitrophenol	<30.0 ✓	<30.0 ✓	EPA SW-846 3510/8270	30.0
289125, 126	Phenol	<10.0	<10.0	EPA SW-846 3510/8270	10.0

Pesticides

		(µg/L)	(µg/L)		(µg/L)
289125B, 126B	Endrin	<0.004	<0.004	EPA SW-846 3510/8080	0.004

RECEIVED
OCT 3 1 1997
Environmental Compliance

Bodycote
METAL TECHNOLOGY

II. Grab Samples:

	Sample Point 001	Sample Point 002
Grab:	9/17/97	9/17/97
Time of Grab:	11:30 AM	10:45 AM

Miscellaneous:

BITL No.	Test	Sample Pt. 001	Sample Pt. 002	Test Method	PQL
289122, 127	pH, units	7.49	7.43	EPA 150.1	---
289121, 127	Temperature, °C	27.5	23.3	EPA 170.1	---
289121, 127	Oil and Grease, mg/L	12	<5	EPA 413.1	5
VOA:					
289128, 130	Chloroform, µg/L	<5.0	<5.0	EPA SW-846 8260	5.0
289128, 130	Methylene Chloride, µg/L	<5.0	<5.0	EPA SW-846 8260	5.0

Symbol "mg/L" denotes milligrams per liter or parts per million.
Symbol "µg/L" denotes micrograms per liter or parts per billion.
Symbol "<" denotes less than Practical Quantitation Limit (PQL). PQL's are matrix dependent.

Method Reference: Test Methods for Evaluating Solid Waste, 3rd. Edition, USEPA, January 1995.
Methods for Chemical Analysis of Waters and Wastes, EPA 600/4-79-020, March 1983.

Results pertain to only those items submitted for testing.

Respectfully Submitted,

BODYCOTE INDUSTRIAL TESTING, LTD.

By: William A. Rorie

William A. Rorie
Vice President

Faxed: 10/6/97

LB - 72740, 45; 72677, 81; 73036, 39; 74446; 73384-86; 67964
MLD/MRH/DH/MP/CSD/JW/is/kg

RECEIVED
OCT 31 1997
Environmental Compliance

Inv. #11932

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDRENS'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD, ST. LOUIS, MO 63104-1095

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: BODYCOTE INDUSTRIAL TESTING LTD.

Analyses Performed By: BODYCOTE INDUSTRIAL TESTING LTD.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001		002		002		
DATES ON WHICH SAMPLES WERE COLLECTED ——>		9/17 - 9/18/97		9/25/97		9/17 - 9/18/97		
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		11:30A-10:30A		9:19A - 4:30P		10:45A - 9:45A		
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	27,324	E	858			GPD
BOD_5	300	C	220	C	130			mg/L
COD	600	C	360	C	300			mg/L
TSS		C	130	C	160			mg/L
Silver		C	<0.05	C	----			mg/L
pH	<5, >7	G	7.49	G	7.43			units
Temperature		G	27.5	G	23.3			°C
Oil & Grease	200	G	12	G	<5			mg/L
Total Toxic Organics	5.52	G,C	<0.05		<0.05			mg/L
(attached list)								

RECEIVED
OCT 28 1997
Environmental Compliance

You must complete and sign the certification statements on the reverse side.

MSD 035727

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY**. If your permit contains no Special Conditions, then none of the certifications in **PART III** apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: _____

Title: _____ Telephone: _____

Signature: _____ Date: _____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD., ST. LOUIS, MO 63401-1095

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I 125	0.399
TOTAL ACTIVITY DISCHARGED:	0.399

RECEIVED
OCT 28 1997
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: KEVIN R. JULIUS

Title: FACILITIES COMPLIANCE MANAGER Telephone: (314) 268-4117

Signature: Kevin R. Julius Date: 10-28-97

radrpt 6/94

18

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

RECEIVED
JUL 2 8 1997
Environmental Compliance

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐ (JAN-MAR) ☒ **(APR-JUNE) 1997** ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **TEKLAB ENVIRONMENTAL TESTING LABORATORIES (Laboratory Report No. 20784-1,2)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001					
DATES ON WHICH SAMPLES WERE COLLECTED -->		June 25, 1997					
TIMES AT WHICH SAMPLES WERE COLLECTED -->		12:50 - 17:20					
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow					Units
FLOW		E	**100,994**				GPD
Bio-chemical Oxygen Demand (BOD)	300	C	**196**				mg/l
Chemical Oxygen Demand (COD)	600	C	**377**				mg/l
Oil and Grease	200	G	**26**				mg/l
pH Acidic (s.u.) Less than 7	5.5	G	---				units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	**9.06**				units
Temperature (Degrees C)	60°	G	**29.6**				degrees
Silver (Total)	.5	C	**0.016**				mg/l
Total Suspended Solids (TSS)	350	C	**151**				mg/l

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[RSS] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 002.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: RICK SCHILLING

Title: DIRECTOR OF FACILITIES Telephone: 577-5362

Signature: [signature] Date: 7/28/97

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT

RECEIVED

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT JUL 2 8 1997

Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Reporting Period: ☐ JAN-MAR) ■ **(APR-JUNE) 1997** ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.571
Radioactive Nuclides discharged by St. Louis University	0.000
TOTAL ACTIVITY DISCHARGED:	**0.571**

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : RICK SCHILLING.

Title: DIRECTOR OF FACILITIES Telephone: 577-5362

Signature: Date: 7/28/97

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

May 16, 1997

Kevin Julius
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Julius:

We have reviewed your letter dated May 15, 1997 regarding the District's Administrative Order issued to Cardinal Glennon Children's Hospital on March 20, 1997. Your letter contained information required under the order.

Based on the information provided, we will consider the requirements of the order to be complete. We encourage you to continue in your efforts to remain in consistent compliance.

If you have any questions, call me at (314) 436-8717.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Industrial Waste Engineer

ph

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

May 15, 1997

Mr. Douglas M. Mendoza, P.E.
Industrial Waste Engineer
Environmental Compliance
St. Louis Metropolitan Sewer District
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Dear Mr. Mendoza:

Cardinal Glennon Children's Hospital was ordered to submit a report to the District on the causes of the excessive silver levels in the wastewater discharge and include a schedule of actions to reduce those levels.

The conclusion as to the cause of the excessive levels of silver was due to the failure of silver recovery equipment installed in the facility by Central States Refining Co., Inc. to adequately remove the silver from the discharge waste.

The corrective actions taken by Cardinal Glennon was to have Central States Refining Co., Inc., change out and update equipment located in the radiology department to remove the silver from the wastewater discharge to meet compliance with limitations of silver parameters. Since the installation of the new equipment, the silver levels have been far below the established parameters.

Thank you for your time and consideration. If you have any questions concerning this matter, please contact me at (314) 268-4117.

Sincerely,

Kevin R. Julius

Kevin R. Julius
CGCH Facilities Compliance Manager

cc: Richard G. Schilling, CGCH Physical Facilities Director
Marvin F. Kessler, Jr., Sitex Environmental, Inc.

Enclosures

RECEIVED
MAY 19 1997
Environmental Compliance

A MEMBER OF THE SSM HEALTH CARE SYSTEM

SILVER REFINERS

Central States Refining Co., Inc.
P.O. Box 82
Versailles, MO 65084
(314) 378-5778
(800) 456-2490

May 14, 1997

Mr. Kevin Julius
CARDINAL GLENNON HOSPITAL
1465 South Grand Avenue
St. Louis, Missouri 63104

Dear Mr. Julius,

Central States Refining Co., Inc. has changed and updated the following equipment in the radiology department as follows

Main Darkroom	- Changed-out the ARU-11 recovery unit and silver cell canister back-up
Main laser	- Installed an ARU-11 recovery unit/ silver cell canister back-up
Cine & Laser (Heart Cath area)	- Installed an ARU-11 recovery unit/ silver cell back-up (both processors in tandem)
Outpatient area.	- Installed an ARU-11 silver recovery unit/ silver cell canister back-up
Surgery	- Changed-out the RU-4 silver recovery unit and silver cell back-up

Thank you.

Sincerely,

CENTRAL STATES REFINING CO. INC

Merlene Stowman

MDS/cad
Faxed 314/577-5314

RECEIVED
MAY 19 1997
Environmental Compliance

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☒ (JAN-MAR) 1997 Additional ☐ (APR-JUNE) ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108425)

Analysis Performed By: TEKLAB ENVIRONMENTAL LABORATORY

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001		001		001		
DATES ON WHICH SAMPLES WERE COLLECTED -->		March 28, 1997		March 29, 1997		March 30, 1997		
TIMES AT WHICH SAMPLES WERE COLLECTED -->		12:00am - 8:00 pm		8:00 am - 4:00 pm		8:00 am - 4:00 pm		
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW (G = grab, C = composite, M = measured flow, E = estimated flow)						Unit
Silver	0.50	C	0.04	C	0.02	C	0.02	mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
MAY 19 1997
Environmental Compliance

Fax Transmission

No. of pages incl. this one: 4

To: Mr. Douglas M. Mendoza, P.E.

Fax number: 436-8753 Voice:

cc:

From: Kevin R. Julius

Date: Thursday, May 15, 1997

If you do not receive all pages, please contact:

Cardinal Glennon Children's Hospital
1465 South Grand
St. Louis, MO 63104-1095
268-2744/577-5314

Subject: *Administrative Compliance Order*

Special Instructions:

Doug, thank you for your help. Hard copy to follow.

Kevin

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

May 15, 1997

Mr. Douglas M. Mendoza, P.E.
Industrial Waste Engineer
Environmental Compliance
St. Louis Metropolitan Sewer District
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Dear Mr. Mendoza:

Cardinal Glennon Children's Hospital was ordered to submit a report to the District on the causes of the excessive silver levels in the wastewater discharge and include a schedule of actions to reduce those levels.

The conclusion as to the cause of the excessive levels of silver was due to the failure of silver recovery equipment installed in the facility by Central States Refining Co., Inc. to adequately remove the silver from the discharge waste.

The corrective actions taken by Cardinal Glennon was to have Central States Refining Co., Inc., change out and update equipment located in the radiology department to remove the silver from the wastewater discharge to meet compliance with limitations of silver parameters. Since the installation of the new equipment, the silver levels have been far below the established parameters.

Thank you for your time and consideration. If you have any questions concerning this matter, please contact me at (314) 268-4117.

Sincerely,

Kevin R. Julius
CGCH Facilities Compliance Manager

cc: Richard G. Schilling, CGCH Physical Facilities Director
Marvin F. Kessler, Jr., Sitex Environmental, Inc.

Enclosures

Central States Refining Co., Inc.
PO Box 82
Versailles, MO 65084
(314) 378-5778
(800) 456-2490

May 14, 1997

Mr. Kevin Julius
CARDINAL GLENNON HOSPITAL
1465 South Grand Avenue
St. Louis, Missouri 63104

Dear Mr. Julius,

Central States Refining Co., Inc. has changed and updated the following equipment in the radiology department as follows

Main Darkroom	- Changed-out the ARU-11 recovery unit and silver cell canister back-up
Main laser	- Installed an ARU-11 recovery unit/ silver cell canister back-up
Cine & Laser (Heart Cath area)	- Installed an ARU-11 recovery unit/ silver cell back-up (both processors in tandem)
Outpatient area.	- Installed an ARU-11 silver recovery unit/ silver cell canister back-up
Surgery	- Changed-out the RU-4 silver recovery unit and silver cell back-up

Thank you.

Sincerely,

CENTRAL STATES REFINING CO. INC.

Michael Stowman

MDS/cad
Faxed 314/577-5314

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☒ (JAN-MAR) 1997 Additional ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108425)

Analysis Performed By: TEKLAB ENVIRONMENTAL LABORATORY

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS --		001		001		001		
DATES ON WHICH SAMPLES WERE COLLECTED --		March 28, 1997		March 29, 1997		March 30, 1997		
TIMES AT WHICH SAMPLES WERE COLLECTED --		12:00am - 8:00 pm		8:00 am - 4:00 pm		8:00 am - 4:00 pm		
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW (G = grab, C = composite, M = measured flow, E = estimated flow)						Unit
Silver	0.50	C	0.04	C	0.02	C	0.02	mg/l

You must complete and sign the certification statements on the reverse side.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☒ **(JAN-MAR) 1997** ☐(APR-JUNE) ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **TEKLAB ENVIRONMENTAL TESTING LABORATORIES (Laboratory Report No. 19561-1)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		March 31, 1997						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		13:00 - 18:35						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	**100,994**					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	**130**					mg/l
Chemical Oxygen Demand (COD)	600	C	**306**					mg/l
Oil and Grease	200	G	**3**					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	---					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	**6.85**					units
Temperature (Degrees C)	60°	G	**20.8°**					degree
Silver (Total)	.5	C	**0.02**					mg/l
Total Suspended Solids (TSS)	350	C	**115**					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
APR 28 1997
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[RDS] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) 002.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[RDS] In lieu of monitoring for TTO at sample point(s) 001 & 002, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: RICK SCHILLING

Title: Director of Facilities Telephone: 577-5362

Signature: [signature] Date: 4/28/97

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Reporting Period: ■ **(JAN-MAR) 1997** ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.254
Radioactive Nuclides discharged by St. Louis University :	0.000
TOTAL ACTIVITY DISCHARGED:	**0.254**

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : RICK SCHILLING

Title: Director of Facilities Telephone: 577-5362

Signature: Date: 4/28/97

RECEIVED

APR 28 1997

Environmental Compliance

SITEX ENVIRONMENTAL, INC.

June 3, 1996

Douglas M. Mendoza, P.E.
Industrial Waste Engineer
Environmental Compliance
St. Louis Metropolitan Sewer District
10 East Grand Avenue
St. Louis,. Missouri 63147-2913

File
4/29

Dear Mr. Mendoza:

Cardinal Glennon Children's Hospital (CGCH) received a letter on March 20, 1997 from MSD concerning a noncompliance condition that was reported during the routine fourth quarter sampling on December 30, 1996. Laboratory analysis of the samples indicated an excursion of the limit for silver of 0.90 mg/l.

SITEX Environmental, Inc. (SITEX), CGCH's environmental consultant, has collected additional samples. These samples were collected on a hourly basis over eight hour time periods on March 28, 29 and 30, 1997. Laboratory analysis of these composite samples indicate silver levels of 0.04 mg/l, 0.02 mg/l and 0.02 mg/l respectively, well below the MSD silver limit of 0.50 mg/l. The required first quarter sampling was conducted on March 31, 1997 and laboratory analysis of the composite sample indicates a silver level of 0.02 mg/l. All of the samples were collected per MSD sample guidelines. Samples were preserved and transported to a qualified laboratory for analysis. The first quarter 1997 silver result, along with the remaining required parameters will be reported to MSD as soon as laboratory analysis is complete. The additional resampling results along with the first quarter sample results indicate that CGCH is currently above the 67% compliance level. A completed MSD Industrial User Self Monitoring Report form is also attached.

SITEX and CGCH maintenance staff are continuing to investigate into the reason why the silver level was apparently elevated at the time of the fourth quarter 1996 sampling. Our conclusion along with the corrective actions taken to eliminate future silver limit exceedances will be forwarded to you shortly.

If you have any questions, feel free to contact my office or Kevin Julius, CGCH Compliance Manager.

Sincerely,

Marvin F. Kessler, Jr.
Wastewater Monitoring Supervisor

RECEIVED
APR 4 1997
Environmental Compliance

cc: Kevin Julius, CGCH
Richard G. Schilling, CGCH

-This is not a response under the 3/20/97 A.O.
-DMM

11905 BORMAN DRIVE • ST. LOUIS, MO 63146 • (314) 569-1119 • FAX (314) 569-0051

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: **IDENTIFYING INFORMATION**

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☒ **(JAN-MAR) 1997 Additional** ☐ (APR-JUNE) ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **TEKLAB ENVIRONMENTAL LABORATORY**

PART II: **ANALYTICAL RESULTS OF SELF MONITORING**

MSD SAMPLE POINT REFERENCE NUMBERS -->		001		001		001		
DATES ON WHICH SAMPLES WERE COLLECTED -->		March 28, 1997		March 29, 1997		March 30, 1997		
TIMES AT WHICH SAMPLES WERE COLLECTED -->		12:00am - 8:00 pm		8:00 am - 4:00 pm		8:00 am - 4:00 pm		
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW (G = grab, C = composite, M = measured flow, E = estimated flow)						Unit
Silver	**0.50**	**C**	**0.04**	**C**	**0.02**	**C**	**0.02**	**mg/l**

.You must complete and sign the certification statements on the reverse side.

RECEIVED
APR 4 1997
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review y permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If y permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the follow certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at samp point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, y are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those ac connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. The points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are require to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatme standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanic at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturin process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electroni Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electroni Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxi organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into th wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxi organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, n toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: RICK SCHILLING

Title: DIRECTOR OF FACILITIES Telephone: 577 5362

Signature: Rick Schilling Date: 3 APRIL 97.

Metropolitan
St. Louis Sewer
District

2000 Hampton Avenue
St. Louis, MO 63139-2979
(314) 768-6200

March 20, 1997

Kevin Julius
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Julius:

The Metropolitan St. Louis Sewer District is required to track the status of compliance of all industrial users with the terms of the federal pretreatment regulations (40 CFR 403), MSD Ordinance 8472 and the user's industrial wastewater discharge permit. On a semi-annual basis, the District is required to identify those users who are in significant noncompliance (SNC) as defined in the ordinance.

Using the criteria defined in the ordinance, the Cardinal Glennon Children's Hospital facility at 1465 S. Grand Blvd., St. Louis, MO 63104 has been found to be in SNC for the six month period July 1, 1996 through December 31, 1996.

In accordance with the provisions of Section 403.8(f)(5) of the federal regulations, the District has developed an Enforcement Response Plan. That plan has been approved by the Missouri Department of Natural Resources and incorporated as an integral part of the District's pretreatment program. The Plan requires that any industrial user identified as being in SNC must be issued an enforceable order if necessary to secure timely and effective compliance with the regulatory requirements.

The attached administrative order identifies the conditions which have placed your facility in SNC and specifies actions to be taken to return to compliance. Please note the scheduled action dates and any status reporting dates contained in the order. Failure to comply with the terms of the order, or to submit required status reports when required, would constitute further noncompliance and could lead to escalated enforcement actions as provided within the ordinance.

In addition to issuance of the attached order, the District is required to make an annual newspaper publication of the names of all users found to be in SNC. Your facility will be included in the publication to be made in the fall of this year.

If you have any questions regarding this matter, please contact Mr. Doug Mendoza (436-8717) or Mr. Bob Zeman (436-8715) at the Department of Environmental Compliance, 10 E. Grand, St. Louis Mo. 63147.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

James M. Byrne
General Counsel

THE METROPOLITAN ST. LOUIS SEWER DISTRICT

ADMINISTRATIVE COMPLIANCE ORDER

IN THE MATTER OF

CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

LEGAL AUTHORITY

The following findings are made and order issued pursuant to the authority vested in the Executive Director of the Metropolitan St. Louis Sewer District, under Article IX of the District's Sewer Use Ordinance No. 8472. This order is based on findings of violations of the conditions of the District's Sewer Use Ordinance No. 8472 and the Industrial Wastewater Discharge Permit No. 41121954-00 issued under Article VI of the Ordinance.

FINDINGS

1. Cardinal Glennon Children's Hospital discharges wastewater into the sanitary sewer system of the Metropolitan St. Louis Sewer District.

2. Cardinal Glennon Children's Hospital is a "significant industrial user" as defined in 40 CFR 403.3(t).

3. Cardinal Glennon Children's Hospital is subject to the terms and limitations contained in the District's Sewer Use Ordinance No. 8472 which has been in full force and effect at all times during the periods referenced herein.

4. Cardinal Glennon Children's Hospital is subject to the terms and limitations contained in Industrial Wastewater Discharge Permit No. 41121954-00 which has been in full force and effect at all times during the periods referenced herein.

5. Pursuant to the above-referenced ordinance and permit, data is routinely collected by or submitted to the District on the compliance status of Cardinal Glennon Children's Hospital.

6. These data show that, during the period July 1, 1996 through December 31, 1996, Cardinal Glennon Children's Hospital has violated the terms of its wastewater discharge permit and the sewer use ordinance in the following manner:

    a. At sample point 001, the Technical Review Criteria (TRC) limitation for silver has been exceeded for one of three samples analyzed, resulting in a TRC noncompliance rate of 33.3 %.

MSD 035748

7. Based on the violations listed above for the semi-annual review period from July 1, 1996 through December 31, 1996, Cardinal Glennon Children's Hospital is in significant noncompliance as defined in the District's Sewer Use Ordinance No. 8472.

8. Cardinal Glennon Children's Hospital has not submitted a response to the District's February 6, 1997 notice of self-monitoring violation for excessive silver levels in the wastewater discharge.

ORDER

THEREFORE, BASED ON THE ABOVE FINDINGS, **CARDINAL GLENNON CHILDREN'S HOSPITAL** IS HEREBY ORDERED TO:

ITEM	ACTION	COMPLIANCE DATE
1.	Submit to the District a report on the causes of the excessive silver levels in the wastewater discharge and include a schedule of actions to reduce those levels.	April 21, 1997
2.	The District will review the schedule of actions in step 1 within 7 days of receipt and advise Cardinal Glennon Children's Hospital of any deficiencies. Cardinal Glennon Children's Hospital shall correct any deficiencies and obtain District approval of the schedule of actions. The approved schedule of actions shall be incorporated into this order the same as if fully set out herein.	May 19, 1997
3.	Initiate actions to reduce the levels of silver in the wastewater discharge to comply with the limits contained in the wastewater discharge permit.	June 2, 1997
4.	Submit a report demonstrating compliance with the limits contained in the wastewater discharge permit for silver. Compliance shall be demonstrated through wastewater sampling at SP001 on at least two separate days.	Not later than 21 days following the final compliance date contained in the schedule of actions approved in step 2.

MSD 035749

ITEM	ACTION	COMPLIANCE DATE
5.	Submit a report of progress to the District for each Action Item. Each report shall state the status of compliance with the Action Item due and shall explain the reasons for any delays, actions being taken to return to schedule and the expected date the missed Action Item will be completed.	Not later than 14 days following the compliance date for each Action Item.

All reports and notices required by this order shall be sent, in writing, to the following address:

Douglas M. Mendoza, P.E.
Industrial Waste Engineer
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147

This order does not constitute a waiver of Cardinal Glennon Children's Hospital's wastewater discharge permit or the District's Sewer Use Ordinance, which remain in full force and effect. The Metropolitan St. Louis Sewer District reserves the right to seek any and all remedies available to it under Article IX of Sewer Use Ordinance No. 8472 for any violation, including those cited in this order.

Failure to comply with the requirements of this order shall constitute a further violation of the District's Sewer Use Ordinance and may subject Cardinal Glennon Children's Hospital to civil or criminal penalties or such other enforcement response as may be appropriate.

This order, entered this 20th day of March, 1997, shall be effective upon receipt by Cardinal Glennon Children's Hospital.

THE METROPOLITAN ST. LOUIS SEWER DISTRICT

By James M. Byrne

James M. Byrne
General Counsel
2000 Hampton Avenue
St. Louis, MO 63139-2979
(314) 768-6200

MSD 035750

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

February 6, 1997

Mr. Rick Schilling
Director of Facilities
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00

Dear Mr. Schilling:

We have reviewed the self monitoring data you recently submitted to the District for your wastewater discharge. The results of analyses of these samples show noncompliance with the limitations of certain parameters as indicated below:

SAMPLE DATE	SAMPLE POINT	SAMPLE TYPE	PARAMETER	MSD ORD. 8472 LIMIT	CONCENTRATION FOUND
12-30-96	001	Comp	Silver (T)	0.5 mg/l	.90 mg/l **

mg/l = milligrams per liter

Pursuant to Section 403.12 (g) (2) of the federal pretreatment regulations and Article VIII, Section 4.C of MSD Ordinance 8472, you are required to resample the discharge and to submit the results of the analysis to the District within thirty (30) days of your first becoming aware of the violation. Analyses need only be performed for the parameters shown to be out of compliance as indicated above.

Please refer to the enclosure for information on potential enforcement actions should noncompliance continue. The enclosure also explains the meaning of any asterisks which appear next to the concentration found above.

At this time we must request that you: (1) submit the 30 day follow-up analyses report; and (2) advise us, in writing, by March 15, 1997 of corrective actions initiated which will insure that the concentration of silver is in compliance with regulatory limitations.

If you should have any questions, please call me at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

rmk
Enclosure

VIOLATION NOTIFICATION ENCLOSURE

SIGNIFICANT NONCOMPLIANCE

The Metropolitan St. Louis Sewer District is required, under federal regulations, to review the status of industrial user compliance with pretreatment regulations and to identify those users in **Significant Noncompliance** (SNC) on a semi-annual basis. Based on these reviews the District is required to:

1. Make an annual publication in the St. Louis Post Dispatch of those companies identified as being in **Significant Noncompliance** with the regulations. This publication must also identify any actions taken by each company or the District to eliminate the noncompliance.

2. Initiate additional enforcement actions based upon the seriousness and frequency of the violations. Potential enforcement actions are described in Article IX of MSD Sewer Use Ordinance 8472 and in the District's Enforcement Response Plan.

##

If any asterisks appear next to the "CONCENTRATION FOUND" values in the accompanying notification, it means your company is either in SNC or may be quickly approaching SNC.

* means this is at least the second violation of the discharge limit identified by the District within the **July 1 through December 31** review period.

** means the concentration equals or exceeds the discharge limit multiplied by a factor known as the Technical Review Criteria (TRC). The TRC for most pollutants is 1.2. For oil & grease, the TRC is 1.4.

*** means both of the above conditions exist.

You will be in SNC for violations of the discharge limit for any pollutant if:

1. The results of 66% or more of all daily samples collected within this six-month period exceed the daily limit by any amount; or

2. The results of 33% or more of all daily samples collected within this six-month period equal or exceed the daily limit multiplied by the TRC; or

3. 66% or more of the monthly average values during this six-month period exceed the monthly average limit by any amount; or

4. 33% or more of the monthly average values during this six-month period equal or exceed the monthly average limit multiplied by the TRC.

If no asterisks appear next to the "CONCENTRATION FOUND" values in the accompanying notification, it means the violations identified up to the date of the notification may not be serious and/or frequent enough to immediately place your company in SNC. This assumes you have at least two samples within the six month review period. A final SNC determination will be made after the end of the six month review period and will be based upon a review of all samples collected during the period.

##

You must, as soon as possible, correct the problem which caused the noncompliance identified in the accompanying notification.

Under federal regulations the results of all analyses you perform must be submitted to the District and will be used, along with the results of all District samples, to determine whether your company must be listed in SNC.

SNC-97-2b

RECD 1/28/97

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

RECEIVED
JAN 28 1997
DEPT. of ENVIRONMENTAL COMPLIANCE

PART I: **IDENTIFYING INFORMATION**

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☐(JULY-SEPT) ☒ **(OCT-DEC) 1996**

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 96-12-6857)**

PART II: **ANALYTICAL RESULTS OF SELF MONITORING-**

MSD SAMPLE POINT REFERENCE NUMBERS -->			001					
DATES ON WHICH SAMPLES WERE COLLECTED -->			December 30, 1996					
TIMES AT WHICH SAMPLES WERE COLLECTED -->			14:25 pm - 18:45 pm					
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	412					mg/l
Chemical Oxygen Demand (COD)	600	C	692					mg/l
Oil and Grease	200	G	10					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	- - -					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	7.43					units
Temperature (Degrees C)	60°	G	17.5°					degree
Silver (Total)	.5	C	0.90					mg/l
Total Suspended Solids (TSS)	350	C	242					mg/l
Total Toxic Organics consisting of:								
Chloroform		G	<0.005					mg/l
Dichloromethane		G	<0.005					mg/l
Endosulfan Sulfate		G	<0.001					mg/l
Phenol		G	<0.010					mg/l
2, 4-dinitrophenol		G	<0.020					mg/l

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: RICK SCHILLING

Title: Director of Facilities Telephone: 577 5362

Signature: [signature] Date: 1/28/97.

SMF 10/93

RECD 1/28/97

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
JAN 28 1997
DEPT. of ENVIRONMENTAL COMPLIANCE

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☐(JULY-SEPT) ■ (OCT-DEC) 1996

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.322
Radioactive Nuclides discharged by St. Louis University :	0.000
TOTAL ACTIVITY DISCHARGED:	**0.322**

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : RICK SCHILLING

Title: Director of Facilities Telephone: 577-5362

Signature: Rick Schilling Date: 1/28/97

4112 1954-00
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 & 1505 SOUTH GRAND BLVD.
ST. LOUIS, MO 63104

OLDER PERMIT CORRESPONDENCE HAS BEEN PLACED INTO BROWN FOLDER BEHIND THIS FILE

02-17-16 Moved to ARCHIVED PERMIT files.

PERMIT OVERFLOW

4112 1954-00
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 & 1505 SOUTH GRAND BLVD.
ST. LOUIS, MO 63104

PERMIT CORRESPONDENCE 1992-1996

02-17-16 Moved to ARCHIVED PERMIT files.

PERMIT OVERFLOW

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ **(JULY-SEPT) 1996** ☐(OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 96-10-6633)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		September 30, 1996						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		11:45am - 5:25 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	1190 ~~714~~					mg/l
Chemical Oxygen Demand (COD)	600	C	714 ~~1190~~					mg/l
Oil and Grease	200	G	7					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	- - -					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	7.95					units
Temperature (Degrees C)	60°	G	26.5°					degree
Silver (Total)	.5	C	0.22					mg/l
Total Suspended Solids (TSS)	350	C	322					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
OCT 29 1996
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review y permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If y permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. X If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the follow certification:

[RS] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampl point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, y are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those act connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. The points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are require to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatme standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanid at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturin process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electroni Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electroni Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxi organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxi organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. **Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:**

X [RS] **In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, nc toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.**

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

X Print or type name of signing official: RICHARD SCHILLING

X Title: Richard Schilling Director of Facilities Telephone: 577 5362

X Signature: Richard Schilling Date: 10/24/96

RECEIVED
OCT 29 1996
Environmental Compliance

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ■ **(JULY-SEPT) 1996** ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.192
Radioactive Nuclides discharged by St. Louis University :	0.000
TOTAL ACTIVITY DISCHARGED:	**0.192**

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

X ☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

X ☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : RICHARD SCHILLING

Title: DIRECTOR OF FACILITIES Telephone: 577-5362

Signature: Richard Schilling Date: 10/24/96

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

June 3, 1996

4112195A-00
2nd 1/4 IN 7/25/96
NOT ON 2nd 1/4 SMR
FG
8/8/96

Enter
w/2nd 1/4
SMR

RECEIVED
JUN 3 1996
Environmental Compliance

Gunter H. Durdel
Assistant Engineer
Environmental Compliance
St. Louis Metropolitan Sewer District
10 East Grand Avenue
St. Louis,. Missouri 63147-2913

Dear Mr. Durdel:

Cardinal Glennon Children's Hospital (CGCH) received a letter on May 6, 1996 from MSD concerning a noncompliance condition that reportedly existed during the first quarter sampling on March 30, 1996. Laboratory analysis of the sample indicated an oil and grease level of 296 mg/l.

As a result of this sample result CGCH's environmental consultant, Mr. Marvin Kessler of SITEX Environmental, Inc. (SITEX), collected additional samples for oil and grease. On May 23, 1996 at 8:20 a.m. SITEX collected a grab sample for laboratory analysis. Laboratory analysis of this grab sample indicated a level of 44 mg/l oil and grease. On May 30, 1996 at 9:20 a.m. SITEX collected an additional sample and laboratory analysis indicated an oil and grease level of 21 mg/l. The samples were collected per MSD sample guidelines. The samples were preserved and transported to a qualified laboratory for analysis. A copy of the laboratory report and chain-of-custody form for the additional grab sample are attached. A completed MSD Industrial User Self Monitoring Report form is also attached.

The additional resampling indicates that CGCH is currently at the 67% compliance level. The Second quarter sampling will be reported as soon as possible and is expected to indicate that CGCH is above 67% compliance with MSD oil and grease parameter levels.

SITEX and CGCH maintenance staff are continuing to investigating the reason why the oil and grease was apparently elevated at the time of the first quarter sampling. The facility's grease traps are in proper working order. The facility's pipe schematics are currently being gathered and will be checked to conclude whether additional grease traps are needed. We will provide the results of our investigation when they are available.

If you have any questions, feel free to contact my office or SITEX.

Sincerely,

Al Wittrock

A.T. Wittrock
Risk Manager, General Services

cc: Rick Schilling

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐ (JAN-MAR) 1996 ☒ **(APR-JUNE) Additional** ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 96-5-6358,6366)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001		001				
DATES ON WHICH SAMPLES WERE COLLECTED -->		May 23, 1996		May 30, 1996				
TIMES AT WHICH SAMPLES WERE COLLECTED -->		8:20 a.m.		9:20 a.m.				
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
Oil and Grease	**200**	**G**	**44**	**G**	**21**			mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
JUN 3 1996
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Withrock

Title: Risk Manager Telephone: 577-5616

Signature: Al Withrock Date: 6/3/96

KIESEL ENVIRONMENTAL LABORATORIE
4801 Fyler Avenue • St. Louis, Missouri 63116 • 314/351-5500 • FAX 314/351-

Laboratory Report No.: **96-5-6358** **May 31, 1996**

Mr. Marvin Kessler
Sitex Environmental, Inc.
11905 Borman Drive
St. Louis, Mo. 63146

Project: Cardinal Glennon Children's Hospital CGCH
Total number of samples submitted: 1
Date sample collected: May 23, 1996
Date sample submitted: May 23, 1996
Date of sample analysis: May 23, 1996-May 31, 1996

ANALYTICAL RESULTS

RECEIVED
JUN 3 1996
Environmental Compliance

Sample Identification: CGCH-52396-001
Lab No.: 12594
Sample Matrix: Wastewater

Oil and Grease, mg/l: **44**

METHODS REFERENCE:
-"USEPA Methods for the Analysis of Water and Wastes," EPA-600/4-79-020, Revised March 1983, Technical Addition, EPA-600/4-84-017, March 1984

KIESEL ENVIRONMENTAL LABORATORIES

Robert J. Winkler
Laboratory Supervisor

Lab No(s).: 12594
BK/RB/th

KIESEL ENVIRONMENTAL LABORATORIES
4601 Fyler Avenue • St. Louis, Missouri 63116 • 314/351-6600 • FAX 314/351-0

Laboratory Report No.: 96-5-6366 May 31, 1996

Mr. Marvin Kessler
Sitex Environmental, Inc.
11905 Borman Drive
St. Louis, Mo. 63146

Project: Cardinal Glennon Children's Hospital CGCH
Total number of samples submitted: 1
Date sample collected: May 30, 1996
Date sample submitted: May 30, 1996
Date of sample analysis: May 30, 1996-May 31, 1996

ANALYTICAL RESULTS

RECEIVED
JUN 3 1996
Environmental Compliance

Sample Identification: CGCH-53096-001 O/G
Lab No.: 12630
Sample Matrix: Wastewater

Oil and Grease, mg/l: 21

METHODS REFERENCE:
-"USEPA Methods for the Analysis of Water and Wastes," EPA-600/4-79-020, Revised March 1983, Technical Addition, EPA-600/4-84-017, March 1984

KIESEL ENVIRONMENTAL LABORATORIES

Robert J. Winkler
Laboratory Supervisor

Lab No(s).: 12630
BK/RB/th

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

RECEIVED
JUL 25 1996
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐ (JAN-MAR) ☒ **(APR-JUNE) 1996** ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108425)**

Analysis Performed By: **KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 96-6-6440)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		June 28, 1996						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		12:40pm - 5:20 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	**100,994**					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	**183**					mg/l
Chemical Oxygen Demand (COD)	600	C	**312**					mg/l
Oil and Grease	200	G	**8**					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	---					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G						units
Temperature (Degrees C)	60°	G	**31.1°**					degree
Silver (Total)	.5	C	**0.09**					mg/l
Total Suspended Solids (TSS)	350	C	**100**					mg/l

You must complete and sign the certification statements on the reverse side.

PH = 7.1 PURSUANT TO
CALL ON 7-29-96 BY
MARTIN KIESLER (SITEX)
7/29/96 FG

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Risk Mangger Telephone: 314-577-5616

Signature: Al Wittrock Date: 7/25/96

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT

RECEIVED

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

JUL 25 1996

Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Reporting Period: ☐ (JAN-MAR) ☒ **(APR-JUNE) 1996** ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.234
Radioactive Nuclides discharged by St. Louis University :	0.000
TOTAL ACTIVITY DISCHARGED:	**0.234**

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : Al Withrock

Title: Risk Manager Telephone: 314-577-5616

Signature: Al Withrock Date: 7/25/96

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

May 6, 1996

Mr. Al T. Wittrock
Risk Manager
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00

Dear Mr. Wittrock:

We have reviewed the self monitoring data you recently submitted to the District for your wastewater discharge. The results of analyses of these samples show noncompliance with the limitations of certain parameters as indicated below:

SAMPLE DATE	SAMPLE POINT	SAMPLE TYPE	PARAMETER	MSD ORD. 8472 LIMIT	CONCENTRATION FOUND
03-30-96	001	Grab	Oil & Grease (T)	200 mg/l	296 mg/l **

mg/l = milligrams per liter

Pursuant to Section 403.12 (g) (2) of the federal pretreatment regulations and Article VIII, Section 4.C of MSD Ordinance 8472, you are required to resample the discharge and to submit the results of the analysis to the District within thirty (30) days of your first becoming aware of the violation. Analyses need only be performed for the parameters shown to be out of compliance as indicated above.

Please refer to the enclosure for information on potential enforcement actions should noncompliance continue. The enclosure also explains the meaning of any asterisks which appear next to the concentration found above.

At this time we must request that you: (1) submit the 30 day follow-up analyses report; and (2) advise us, in writing, by June 3, 1996 of corrective actions initiated which will insure that the concentration of oil and grease is in compliance with regulatory limitations.

If you should have any questions, please call me at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

VIOLATION NOTIFICATION ENCLOSURE

SIGNIFICANT NONCOMPLIANCE

The Metropolitan St. Louis Sewer District is required, under federal regulations, to review the status of industrial user compliance with pretreatment regulations and to identify those users in **Significant Noncompliance (SNC)** on a semi-annual basis. Based on these reviews the District is required to:

1. Make an annual publication in the St. Louis Post Dispatch of those companies identified as being in **Significant Noncompliance** with the regulations. This publication must also identify any actions taken by each company or the District to eliminate the noncompliance.

2. Initiate additional enforcement actions based upon the seriousness and frequency of the violations. Potential enforcement actions are described in Article IX of MSD Sewer Use Ordinance 8472 and in the District's Enforcement Response Plan.

##

If any asterisks appear next to the "CONCENTRATION FOUND" values in the accompanying notification, it means your company is either in SNC or may be quickly approaching SNC.

- * means this is at least the second violation of the discharge limit identified by the District within the **January 1 through June 30** review period.

- ** means the concentration equals or exceeds the discharge limit multiplied by a factor known as the Technical Review Criteria (TRC). The TRC for most pollutants is 1.2. For oil & grease, the TRC is 1.4.

- *** means both of the above conditions exist.

You will be in SNC for violations of the discharge limit for any pollutant if:

1. The results of 66% or more of all daily samples collected within this six-month period exceed the daily limit by any amount; or

2. The results of 33% or more of all daily samples collected within this six-month period equal or exceed the daily limit multiplied by the TRC; or

3. 66% or more of the monthly average values during this six-month period exceed the monthly average limit by any amount; or

4. 33% or more of the monthly average values during this six-month period equal or exceed the monthly average limit multiplied by the TRC.

If no asterisks appear next to the "CONCENTRATION FOUND" values in the accompanying notification, it means the violations identified up to the date of the notification may not be serious and/or frequent enough to immediately place your company in SNC. This assumes you have at least two samples within the six month review period. A final SNC determination will be made after the end of the six month review period and will be based upon a review of all samples collected during the period.

##

You must, as soon as possible, correct the problem which caused the noncompliance identified in the accompanying notification.

You are then strongly advised to collect and analyze additional samples for the problem pollutants within the current six month review period. This period ends on June 30, 1996.

Under federal regulations the results of all analyses you perform must be submitted to the District and will be used, along with the results of all District samples, to determine whether your company must be listed in SNC.

SNC-96-1a

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☒ (JAN-MAR) 1996 ☐(APR-JUNE) ☐(JULY-SEPT) ☐ (OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108425)

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 96-3-6259)

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		March 30, 1996						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		10:15am - 1:40 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	211					mg/l
Chemical Oxygen Demand (COD)	600	C	429					mg/l
Oil and Grease	200	G	296					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	---					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.89					units
Temperature (Degrees C)	60°	G	19.1°					degree
Silver (Total)	.5	C	0.01					mg/l
Total Suspended Solids (TSS)	350	C	101					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
APR 29 1996
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock Al Wittrock

Title: Risk Manager Telephone: 577-5616

Signature: Al Wittrock Date: 4/08/96

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Reporting Period: ■ **(JAN-MAR) 1996** ☐ (APR-JUNE) ☐ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.102
Radioactive Nuclides discharged by St. Louis University :	0.000
TOTAL ACTIVITY DISCHARGED:	**0.102**

RECEIVED
APR 29 1996
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

[AW] I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

[AW] I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : Al Withrock

Title: Risk Manager Telephone: 577-5616

Signature: Al Withrock Date: 4/28/96

MEMO TO: Douglas Mendoza

FROM: Gunter Durdel gd

DATE: April 5, 1996

SUBJECT: Establishing new sampling point for:

CARDINAL GLENNON CHILDREN'S HOSPITAL
Permit No: 41121954-00

I am in the process of preparing a draft permit renewal for the hospital. Their permit expires August 31, 1996.

On page 4, of their renewal application, Mr. Wittrock identifies a new sampling point location for their building at 1505 Grand. This new point was located at the request of Jim Goodall during the 2/15/96 facility inspection. I am enclosing a copy of page 4.

Please ask Jim to verify the proposed sampling point and to obtain a more specific location description.

Since we are renewing their permit, please ask Jim to resolve any other questions about this hospital's complex of buildings.

Thank you.

RECD 1/29/96
FG

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☒(OCT-DEC)1995

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108356)

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 95-12-6067)

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		December 30, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		10:00 am - 2:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	153					mg/l
Chemical Oxygen Demand (COD)	600	C	276					mg/l
Oil and Grease	200	G	34					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	--					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.89					units
Temperature (Degrees C)	60°	G	20.7°					degree
Silver (Total)	.5	C	0.01					mg/l
Total Suspended Solids (TSS)	350	C	94					mg/l
Total Toxic Organnics	5.52	G	<0.115					mg/l
Consisting of the Following:								
Chloroform			<0.005					mg/l
2, 4-Dinitrophenol			<0.05					mg/l
Endodulfan Sulfate			<0.005					mg/l
Methylene Chloride			<0.005					mg/l
Phenol			<0.05					mg/l

You must complete and sign the certification statements on the reverse side.

LEFT AS IS PURSUANT TO BZ DISCUSSION ON 1/30/96, TTL SUM DIFFERENCE IS MINIMAL
FG 1/30/96

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____ _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____ _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ _____ _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Safety Director Telephone: 1577-5616

Signature: Al Wittrock Date: 1/29/96

SMF 10/93

RECD 1/29/96 FCR

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: **IDENTIFYING INFORMATION**

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☒(OCT-DEC)1995

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108326)**

Analysis Performed By: **Kiesel Environmental Laboratories , Inc. (Lab report No. 95-11-5953)**

PART II: **ANALYTICAL RESULTS OF SELF MONITORING**

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		November 13, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		12:28 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
Oil and Grease	200	G	16					mg/l

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____ [illegible]

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Withrock

Title: Safety Director Telephone: 5777 5616

Signature: Al Withrock Date: 1/29/96

SMF 10/93

MSD 035779

RECD 1/29/96 FG

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☒ (OCT-DEC)1995

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO33 THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.177
Radioactive Nuclides discharged by St. Louis University :	0.00
TOTAL ACTIVITY DISCHARGED:	**0.177**

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. Everyone must complete the information under item B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : Al Wittrock Safety Director

Title: _____ Telephone: 577-5616

Signature: Al Wittrock Date: 1/29/96

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

January 9, 1996

Al Wittrock
Risk Manager
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

RE: Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

The Metropolitan St. Louis Sewer District Wastewater Discharge permit for the above premise expires on August 31, 1996. Under the terms of the permit, you are requested to apply for renewal at least 180 days prior to the expiration date.

Enclosed is an Industrial User Questionnaire along with detailed instructions to assist you in supplying the required information. This questionnaire serves as your permit application. We request that you return the original and yellow copy by March 1, 1996.

After a review of the questionnaire and our existing data, we will prepare a draft permit and send it to you for comment.

Thank you for your cooperation. If you have any question or any specific problem providing the requested information, please contact me at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H Durdel
Gunter H. Durdel
Assistant Engineer

577-5616

3/11/96
1 UQ in the mail
per Secretary
gd

ldl

Enclosure

File: Permit

SITEX
ENVIRONMENTAL, INC.

December 1, 1995

PROJECT NO. 108326

RECEIVED
DEC 5 1995
Environmental Compliance

Douglas M. Mendoza, P.E.
Industrial Waste Engineer
Environmental Compliance
St. Louis Metropolitan Sewer District
10 East Grand Avenue
St. Louis, Missouri 63147-2913

RE: Radioactive discharge monitoring reports for Cardinal Glennon Children's Hospital

Dear Mr. Mendoza:

It has come to the attention of Cardinal Glennon Children's Hospital (CGCH) and Saint Louis University Health and Sciences Center (SLUHS) that both parties were filing radioactive discharge monitoring reports with the St. Louis Metropolitan Sewer District (MSD) under CGCH's Industrial Wastewater Discharge Permit No. 41121954-00. It has been requested by CGCH and SLUHS that SITEX Environmental, Inc. (SITEX) be their representative and explain MSD why supposedly conflicting reports were filed.

In a letter dated July 8, 1994, MSD granted permission to SLUHS to discharge small amounts of low level radioactive wastes into the sewer system. All radioactive wastes discharged to the sewer system were to be biological material readily soluble or dispersible in water. The discharge wastes were to comply with federal regulations under 10 CFR 20.2108 and Missouri Department of Natural Resources regulation 19 CSR 20-10.060.

Several locations, CGCH being one of the locations, were identified in the July 8, 1994 letter as sites having the need to dispose of radioactive wastes into the sanitary sewer system. SLUHS was and currently still occupies space in CGCH. Mark Haenchen, Radiation Safety Officer for SLUHS, started reporting the radioactive materials discharged for all the locations identified on a quarterly basis.

On August 11, 1994, MSD issued a modification to CGCH's Industrial Wastewater Discharge Permit No. 41121954-00 allowing the discharge of radioactive wastes into the sewer system. Al Whitrock , Risk Manager of General Services for CGCH, contacted SITEX regarding the permit modification. Using the radioactive inventory discharge report generated by the pathology department of CGCH, SITEX started reporting the total amount of radioactive wastes discharged each quarter for CGCH. CGCH and SITEX were not aware of the letter issued to SLUHS by MSD on July 8, 1994 and that SLUHS was reporting to MSD the discharged amounts of radioactive materials for the CGCH facility.

11905 BORMAN DRIVE • ST. LOUIS, MO 63146 • (314) 569-1119 • FAX (314) 569-0051

It has been resolved as a result of a meeting among CGCH, SLUHS and SITEX, that information regarding radioactive wastes discharged by SLUHS for the CGCH facility under permit No. 41121954-00 will be forwarded at the end of each monitoring quarter to CGCH and then to SITEX for reporting. This will eliminate the confusion of two reports for the same facility.

The reported radioactive discharged quantities for previous quarters can be added together for each quarter as the total discharge for the CGCH facility under the MSD Permit No. 41121954-00. If requested by MSD, SITEX will issue revised Radioactive Discharge Monitoring Reports for the CGCH facility for the previous quarters.

If you have any questions, feel free to contact my office.

Sincerely,

SITEX ENVIRONMENTAL, INC.

Marvin F. Kessler, Jr.
Wastewater Monitoring Project Manager

RECEIVED
DEC 0 5 1995
Environmental Compliance

cc: Al Wittrock, CGCH
Rick Schilling, CGCH
Dr. J. Wendell Davis, SLUHS
Mark Haenchen, SLUHS

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

RECEIVED
OCT 27 1995
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108208)

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 95-6-5656)

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		Sept. 28, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		1:00 pm - 6:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	223					mg/l
Chemical Oxygen Demand (COD)	600	C	407					mg/l
Oil and Grease	200	G	23					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	--					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.39					units
Temperature (Degrees C)	60°	G	28.3°					degree
Silver (Total)	.5	C	0.01					mg/l
Total Suspended Solids (TSS)	350	C	112					mg/l

TTO due in 4th Q

Radioactive Disch Attached

You must complete and sign the certification statements on the reverse side.

MSD 035784

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

Will initial 4th Q 96

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: x Al Wittrock

Title: x Plant Manager Telephone: x 577-5616

Signature: x Al Wittrock Date: x 10/25/95

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
OCT 27 1995
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.169
TOTAL ACTIVITY DISCHARGED:	0.169

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : Al Whitrock

Title: Risk Manager, General Services Telephone: (314) 577-5616

Signature: Al Whitrock Date: 10/25/95

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: **IDENTIFYING INFORMATION**

Company Name: Saint Louis University; Cardinal Glennon Hospital

Permit No: 41121954-00

Premise Address: 1465 S. Grand Blvd. 63104

Reporting Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

PART II: **RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM**

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
–	–
TOTAL ACTIVITY DISCHARGED:	Ø

RECEIVED
OCT 25 1995
Environmental Compliance

PART III: **CERTIFICATION STATEMENTS**

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mark Haenchen

Title: Radiation Safety Officer Telephone: 577-8609

Signature: Mark Haenchen Date: October 23, 1995

radrpt 6/94

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER SELF MONITORING REPORT

RECEIVED
JUL 28 1995
Environmental Compliance

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐(JAN-MAR) ☒(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108208)**

Analysis Performed By: **SITEX ENVIRONMENTAL, INC. (Project No. 108208)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		April 27, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		5:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
pH Acidic (s.u.) Less than 7	5.5	G	6.89					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	--					units

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Risk Manager Telephone: 527-5616

Signature: Al Wittrock Date: 1/28/95

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER SELF MONITORING REPORT

RECEIVED
JUL 28 1995
Environmental Compliance

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **CARDINAL GLENNON CHILDREN'S HOSPITAL**

Permit No: **41121954-00**

Premise Address: **1465 SOUTH GRAND BOULEVARD**

Monitoring Period: ☐(JAN-MAR) ☒(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: **SITEX ENVIRONMENTAL, INC. (Project No. 108208)**

Analysis Performed By: **SITEX ENVIRONMENTAL, INC. (Project No. 108208)**

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		May 23, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		10:00 am						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
pH Acidic (s.u.) Less than 7	5.5	G	--					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.29					units

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Witthrock

Title: Plant Manager Telephone: 577-5666

Signature: Al Witthrock Date: 7/28/95

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

RECEIVED
JUL 28 1995
Environmental Compliance

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☐(JAN-MAR) ☒(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108208)

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 95-6-5656)

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		June 30, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		8:00 am - 5:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	150					mg/l
Chemical Oxygen Demand (COD)	600	C	225					mg/l
Oil and Grease	200	G	17					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	--					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.61					units
Temperature (Degrees C)	60°	G	28°					degree
Silver (Total)	.5	C	0.07					mg/l
Total Suspended Solids (TSS)	350	C	73					mg/l

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Rub Manager Telephone: 577-5616

Signature: Al Wittrock Date: 7/28/95

METROPOLITAN ST. LOUIS SEWER DISTRICT

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
JUL 28 1995
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☐ (JAN-MAR) ☒ (APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.065
TOTAL ACTIVITY DISCHARGED:	0.065

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☑ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: AL Wittrock

Title: Risk Manager Telephone: 577-5616

Signature: Al Wittrock Date: 7/28/95

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: _____

Title: _____ Telephone: _____

Signature: _____ Date: _____

gak

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Saint Louis University; Cardinal Glennon Hospital

Permit No: 41121954-00

Premise Address: 1465 S. Grand Blvd. 63104

Reporting Period: ☐(JAN-MAR) ☒(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
NONE	Ø
TOTAL ACTIVITY DISCHARGED:	Ø

RECEIVED
JUL 28 1995
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

MJ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

MJ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mark Haenchen

Title: Radiation Safety Officer Telephone: 577-8609

Signature: Mark Haenchen Date: 7-27-95

radrpt 6/94

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

May 19, 1995

Al T. Wittrock
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

RE: Discharge Permit No: 41121954-00

Dear Mr. Wittrock:

We have reviewed the self monitoring data you recently submitted to the District for your wastewater discharge. The results of analyses of these samples show noncompliance with the limitations of certain parameters as indicated below:

SAMPLE DATE	SAMPLE POINT	SAMPLE TYPE	PARAMETER	MSD ORD. 8472 LIMIT	CONCENTRATION FOUND
03-29-95	001	grab	pH	not less than 5.5 s.u.	5.10 s.u.

s.u. = standard units

Pursuant to Section 403.12 (g) (2) of the federal pretreatment regulations and Article VIII, Section 4.C of MSD Ordinance 8472, you are required to resample the discharge and to submit the results of analyses to the District within thirty (30) days of your first becoming aware of the violation. Analyses need only be performed for the parameters shown to be out of compliance as indicated above.

Please refer to the enclosure for information on potential enforcement actions should noncompliance continue. The enclosure also explains the meaning of any asterisks which appear next to the concentrations found above.

At this time we must request that you: (1) submit the 30 day follow-up analyses report; and (2) advise us, in writing, by June 12, 1995 of corrective actions initiated which will insure that concentrations of the above parameter is in compliance with regulatory limitations.

If you should have any questions, please contact me at 436-8716.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Judith A. Kalna

Judith A. Kalna
Engineering Associate

bv
Enclosure
pc Suspense file

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
MAY 10 1995
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: Saint Louis University; Cardinal Glennon Hospital

Permit No: 41121954-00

Premise Address: 1465 S. Grand Blvd. 63104

Reporting Period: ☒(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
NO DISPOSALS THIS QUARTER	—
TOTAL ACTIVITY DISCHARGED:	—

SMR Says .129 Judy

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mark Haenchen

Title: Radiation Safety Officer Telephone: 577-8609

Signature: Mark Haenchen Date: APRIL 27, 1995

radrpt 6/94

MSD 035798

RECEIVED
MAY 1[illegible]1995
Environmental Compliance

SAINT LOUIS UNIVERSITY
HEALTH SCIENCES CENTER

3556 Caroline Street
St. Louis, MO 63104-1085
314/577-8608 or 577-8609
FAX 314/772-1307

Office of Environmental Safety and Services

May 8, 1995

Douglas M. Mendoza
Industrial Waste Engineer
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(FAX #: 436-8753)

SUBJECT: Quarterly Reports Of Radionuclide Discharge For The Period Jan. - Mar. 1995

Dear Mr. Mendoza:

Attached you will find copies of the MSD Industrial User Radioactive Materials Discharge Reports for all Saint Louis University and affiliated facilities. Copies of some of these reports for which wastewater permits are held have been forwarded to Mr. Al Wittrock (Cardinal Glennon Hospital) and Mr. Gary Rauchenbach (Anheuser Busch Eye Institute, Saint Louis University Hospital, and Saint Louis University Health Sciences Center - Wohl Facility).

Do to an oversight, the completed reports were not forwarded to you at the end of April. I apologize for any inconvenience this may have caused you. If you have any questions regarding these reports, please contact me at 577-8609.

Sincerely,

Mark Haenchen
Radiation Safety Officer

{MSDSTL\MEDNOZA8}

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

RECEIVED
APR 28 1995
Environmental Compliance

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☒(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (Project No. 108105)

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES (Laboratory Report No. 95-3-5455)

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		March 29, 1995						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		8:00 am - 5:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	364					mg/l
Chemical Oxygen Demand (COD)	600	C1	499					mg/l
Oil and Grease	200	G	30					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	5.10					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	--					units
Temperature (Degrees C)	60°	G	21°					degree
Silver (Total)	.5	C	<0.01					mg/l
Total Suspended Solids (TSS)	350	C	216					mg/l

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in **PART III** apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: A.T. Withrock

Title: Risk Manager

Telephone: 314-577-5616

Signature: A.T. Withrock

Date: 4/25/95

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
APR 28 1995
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☒(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	.129
TOTAL ACTIVITY DISCHARGED:	0.129

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

AW I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

AW I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : A.T. Wittrock

Title: Risk Manager Telephone: (314) 577-5616

Signature: AWittrock /CL Date: 4-28-95

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Saint Louis University; Cardinal Glennon Hospital

Permit No: 41121954-00

Premise Address: 1465 S. Grand Blvd. 63104

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☐ (JULY-SEPT) ☒ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
No disposals this quarter	
TOTAL ACTIVITY DISCHARGED:	Ø

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

☒ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mark Haenchen

Title: Radiation Safety Officer Telephone: 577-8609

Signature: Mark Haenchen Date: 1-27-95

radrpt 6/94

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

RECEIVED
JAN 30 1995
DEPT. of ENVIRONMENTAL COMPLIANCE

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☒(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC. (SITEX Project No. 108049)

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES (Laboratory No. 94-12-5229a)

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		December 9, 1994						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		9:30 am - 3:20 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	195					mg/l
Chemical Oxygen Demand (COD)	600	C	383					mg/l
Oil and Grease	200	G	40					mg/l
pH Acidic (s.u.) Less than 7	5.5	G						units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.64					units
Temperature (Degrees C)	60°	G	21°					degree
Silver (Total)	.5	C	0.19					mg/l
Total Suspended Solids (TSS)	350	C	118					mg/l
Total Toxic Organics - Consisting of:	5.52	G	<0.016					
Endosulfan Sulfate		G	<0.001					
Mercury		G	<0.001					
Dichloromethane		G	<0.005					
Chloroform		G	0.009					

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☒ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Alvin T. Wittrock

Title: Risk Manager Telephone: 577-5616

Signature: Alvin T. Wittrock Date: 1/27/95

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
JAN 30 1995
DEPT. of ENVIRONMENTAL COMPLIANCE

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ■(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.102
TOTAL ACTIVITY DISCHARGED:	0.102

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Alvin T. Withrock

Title: Risk Manager Telephone: 577-5616

Signature: Alvin T. Withrock Date: 1/27/95

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Saint Louis University; Cardinal Glennon Hospital

Permit No: 41121954-00

Premise Address: 1465 S. Grand Blvd. 63104

Reporting Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
No disposals this quarter	
TOTAL ACTIVITY DISCHARGED:	Ø

RECEIVED
OCT 27 1994
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

MK I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

MK I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mark G. Haenchen

Title: Radiation Safety Officer Telephone: 577-8609

Signature: Mark G. Haenchen Date: Oct. 24, 1994

radrpt 6/94

— COPY IN CARDINAL GLENNON FILE —

MSD 035807

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC.

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->			001					
DATES ON WHICH SAMPLES WERE COLLECTED -->			September 15, 1994					
TIMES AT WHICH SAMPLES WERE COLLECTED -->			8:00 am - 5:00 pm					
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	155					mg/l
Chemical Oxygen Demand (COD)	600	C	304					mg/l
Oil and Grease	200	G	48					mg/l
pH Acidic (s.u.) Less than 7	5.5	G						units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.55					units
Temperature (Degrees C)	60°	G	29.9					degrees
Silver (Total)	.5	C	0.02					mg/l
Total Suspended Solids (TSS)	350	C	150					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
OCT 28 1994
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report:**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: A. T. Wittrock

Title: Risk Manager Telephone: (314) 577-5616

Signature: Date: 10/25/94

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

RECEIVED
OCT 28 1994
Environmental Compliance

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Reporting Period: ☐(JAN-MAR) ☐(APR-JUNE) ☒(JULY-SEPT) ☐(OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
I_{125}	0.147
TOTAL ACTIVITY DISCHARGED:	0.147

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☐ I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for materials regulated by the Missouri Department of Health have been met for the period covered by this report.

☐ I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervison in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry fo the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official : A. T. Wittrock

Title: Risk Manager Telephone: (314) 577-5616

Signature: Date: 10/25/94

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: Saint Louis University; Cardinal Glennon Hospital

Permit No: 4112 1954-00

Premise Address: 1465 S. Grand Blvd. 63104

Reporting Period: ☐ (JAN-MAR) ☐ (APR-JUNE) ☒ (JULY-SEPT) ☐ (OCT-DEC)

PART II: RECORD OF DISPOSAL OF RADIOACTIVE MATERIALS TO THE SEWER SYSTEM

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
No disposals this quarter	
TOTAL ACTIVITY DISCHARGED:	Ø

RECEIVED
OCT 27 1994
Environmental Compliance

PART III: CERTIFICATION STATEMENTS

Place your initials in the boxes under item A which apply to you. **Everyone must complete the information under item B and sign this report.**

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

MGH I certify that to the best of my knowledge and belief, all requirements of 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Missouri Department of Health have been met for the period covered by this report.

MGH I certify that to the best of my knowledge and belief, all requirements of 10 CFR Part 20.2003 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission have been met for the period covered by this report.

B. RADIOACTIVE MATERIALS DISCHARGE REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Mark G. Haenchen

Title: Radiation Safety Officer Telephone: 577-8609

Signature: Mark G. Haenchen Date: Oct. 24, 1994

radrpt 6/94

MSD 035811

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

June 30, 1994

Mr. Gunter H. Durdel
Assistant Engineer
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Re: Industrial User Quarterly Self Monitoring Report
Cardinal Glennon Children's Hospital
1465 South Grand Boulevard
Permit No: 41121954-00

Dear Mr. Durdel:

Enclosed are the first quarter of 1994 results from the necessary quarterly wastewater discharge monitoring as defined by the current MSD permit. All parameters were within the required limits.

Call me at 577-5616 if you have any questions or require additional information.

Sincerely,

A. T. Wittrock

A. T. Wittrock
Risk Manager

ATW/cl

Enclosure

cc: Russell Hairer

RECEIVED
JUL - 1 1994
Environmental Compliance

A MEMBER OF THE SSM HEALTH CARE SYSTEM

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☐(JAN-MAR) ☒(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC.

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		May 31, 1994						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		11:00 am - 7:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	272					mg/l
Chemical Oxygen Demand (COD)	600	C1	455					mg/l
Oil and Grease	200	G	83					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	--					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.03					units
Temperature (Degrees C)	60°	G	30°					degrees
Silver (Total)	.5	C	0.14					mg/l
Total Suspended Solids (TSS)	350	C	196					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
JUL - 1 1994
Environmental Compl

MSD 035813

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Risk Manager Telephone: (314) 577-5616

Signature: Al Wittrock Date: 6/29/94

SMF 10/93

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

April 21, 1994

Mr. Gunter H. Durdel
Assistant Engineer
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Re: Industrial User Quarterly Self Monitoring Report
Cardinal Glennon Children's Hospital
1465 South Grand Boulevard
Permit No: 41121954-00

Dear Mr. Durdel:

Enclosed are the first quarter of 1994 results from the necessary quarterly wastewater discharge monitoring as defined by the current MSD permit. All parameters were within the required limits.

Call me at 577-5616 if you have any questions or require additional information.

Sincerely,

A. T. Wittrock
Risk Manager

ATW/cl

Enclosure

RECEIVED
APR 25 1994
Environmental Compliance

SSM
A MEMBER OF THE SSM HEALTH CARE SYSTEM

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: ☒(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples collected By: SITEX ENVIRONMENTAL, INC.

Analysis Performed By: KIESEL ENVIRONMENTAL LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS -->		001						
DATES ON WHICH SAMPLES WERE COLLECTED -->		March 9, 1994						
TIMES AT WHICH SAMPLES WERE COLLECTED -->		8:00 am - 5:00 pm						
PARAMETER	LIMIT	RECORD SAMPLES TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C= composite, M=measured flow, E=estimated flow						Units
FLOW		E	100,994					GPD
Bio-chemical Oxygen Demand (BOD)	300	C	138					mg/l
Chemical Oxygen Demand (COD)	600	C	264					mg/l
Oil and Grease	200	G	<1					mg/l
pH Acidic (s.u.) Less than 7	5.5	G	--					units
pH Basic (s.u.) Greater than or equal to 7	11.5	G	8.36					units
Temperature (Degrees C)	60°	G	18°					degrees
Silver (Total)	.5	C	0.03					mg/l
Total Suspended Solids (TSS)	350	C	130					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
APR 25 1994
Environmental Compliance

MSD 035816

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Risk Manager Telephone: (314) 577-5616

Signature: Al Wittrock Date: 4/21/94

SMF 10/93

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 GRAND BOULEVARD

Monitoring Period: [ ](JAN-MAR) [ ](APR-JUNE) [ ](JULY-SEPT) [X](OCT-DEC)

Samples Collected By: WELLINGTON ENVIRONMENTAL CONSULTING & CONSTRUCTION, INC.

Analyses Performed By: ENVIRONMETRICS, INC.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBER ---------->		001						
DATES ON WHICH SAMPLES WERE COLLECTED--------->		11/4/93						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G,C,M, OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	100,994					GPD
BIOCHEMICAL OXYGEN DEMAND	300	C	160					mg/l
CHEMICAL OXYGEN DEMAND	600	C	780					mg/l
OIL AND GREASE	200	G	6					mg/l
pH	BETWEEN 5.5 - 11.5	G	7.2					----
TEMPERATURE	60	G	23					C°
TOTAL SUSPENDED SOLIDS	350	C	226					mg/l
SILVER	0.5	C	0.500					mg/l
TOTAL TOXIC ORGANICS	5.52	G	----					mg/l

You must complete and sign the certification statements on the reverse side.

RECEIVED
DEC 20 1993
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☑ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify that the permitted facility does not discharge any wastes which are subject to pretreatment standards in 40 CFR _____ _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify that cyanide is not used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Al Wittrock

Title: Risk Manager Telephone: (314) 577-5616

Signature: Al Wittrock Date: 12/15/93

SMF 11/92

03

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 GRAND BOULEVARD

Monitoring Period: [ ](JAN-MAR) [ ](APR-JUNE) [X](JULY-SEPT) [ ](OCT-DEC)

Samples Collected By: WELLINGTON ENVIRONMENTAL CONSULTING & CONSTRUCTION, INC.

Analyses Performed By: ENVIRONMETRICS, INC.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBER ---------->		001						
DATES ON WHICH SAMPLES WERE COLLECTED--------->		8/16/93						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G,C,M, OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	100,994					GPD
BIOCHEMICAL OXYGEN DEMAND	300	C	175					mg/l
CHEMICAL OXYGEN DEMAND	600	C	380					mg/l
OIL AND GREASE	200	G	18					mg/l
pH	BETWEEN 5.5 - 11.5	G	6.8					----
TEMPERATURE	60	G	33					C°
TOTAL SUSPENDED SOLIDS	350	C	122					mg/l
SILVER	0.5	C	0.026					mg/l
TOTAL TOXIC ORGANICS	5.52	G	0.154					mg/l
			L.2					

You must complete and sign the certification statements on the reverse side.

See report Dated 10-19-93

RECEIVED
SEP 21 1993
Environmental Compliance

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

[ ] I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

[SB] I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

[ ] I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

[ ] I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

[ ] I certify that the permitted facility does not discharge any wastes which are subject to pretreatment standards in 40 CFR _____ _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

[ ] I certify that cyanide is not used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

[ ] Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

[ ] In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Scott Branham

Title: Utilities Supervisor Telephone: (314) 577-5600

Signature: Scott Branham Date: Sept 17 1993

WELLINGTON
ENVIRONMENTAL
CONSULTING & CONSTRUCTION, INC.

RECEIVED
OCT 21 1993
Environmental Compliance

October 19, 1993

Mark Montaque
Associate Engineer
Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Re: Cardinal Glennon Hospital
1465 South Grand Boulevard
Permit No. 41121954-00

Dear Mr. Montaque:

Per our conversation today, attached are copies of the Total Toxic Organic laboratory results you requested. The wastewater sample was collected on Monday, August 16, 1993 as part of the July through September 1993 monitoring period.

If you have any questions or if you need additional information, please contact me.

Sincerely,
WELLINGTON ENVIRONMENTAL
CONSULTING AND CONSTRUCTION, INC.

Jacqueline Griggs
Environmental Engineer

JRG/

cc: Mr. Al Wittrock
Cardinal Glennon Hospital

607 Hanley Industrial Court • St. Louis, MO 63144 • (314) 644-4930

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687
CARDINAL GLENNON

VOLATILE ORGANIC ANALYSIS
METHOD EPA 624

SAMPLE ID: METHOD BLANK
LAB ID: VDBLK232A

CAS NUMBER		DETECTION LIMIT	RESULTS
74-87-3	Chloromethane	10 µg/l	U µg/l
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	22B
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	100	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-02-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	c-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	t-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
541-73-1	1,3-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U

U = UNDETECTED
B = PRESENT IN BLANK
J = DETECTED, BUT BELOW PRACTICAL QUANTITATION LIMIT

DATE COLLECTED : ---
DATE RECEIVED : ---
DATE ANALYZED : 08/20/93

SEPTEMBER 1, 1993

WAYNE L. COOPER
LABORATORY DIRECTOR

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687
CARDINAL GLENNON

VOLATILE ORGANIC ANALYSIS
METHOD EPA 624

SAMPLE ID: 001
LAB ID: 9308796

CAS NUMBER		DETECTION LIMIT	RESULTS
74-87-3	Chloromethane	10 µg/l	U µg/l
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	14B
107-02-8	Acrolein	100	U
107-13-1	Acrylonitrile	100	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (Total)	5	U
67-66-3	Chloroform	5	U
107-02-2	1,2-Dichloroethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	c-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	t-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U
541-73-1	1,3-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U

U = UNDETECTED
B = PRESENT IN BLANK
J = DETECTED, BUT BELOW PRACTICAL QUANTITATION LIMIT

DATE COLLECTED : 08/16/93
DATE RECEIVED : 08/17/93
DATE ANALYZED : 08/20/93

SEPTEMBER 1, 1993

WAYNE L. COOPER
LABORATORY DIRECTOR

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687
CARDINAL GLENNON

SEMIVOLATILE ORGANIC COMPOUNDS
METHOD SW-846 8270
PAGE ONE

SAMPLE ID: METHOD BLANK
LAB ID: WASBLK3811

CAS NUMBER		PRACTICAL QUANTITATION LIMIT	RESULTS
62-75-9	N-Nitrosodimethylamine	10 µg/l	U µg/l
108-95-2	Phenol	1	U
111-44-4	bis(2-chloroethyl)Ether	1	U
95-57-8	2-Chlorophenol	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	1	U
95-48-7	o-Cresol	7	U
39638-32-9	bis-(2-Chloro2propyl)Ether	3	U
106-44-5	m & p-Cresol	7	U
621-64-7	N-Nitroso-Di-n-propylamine	4	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	1	U
78-59-1	Isophorone	1	U
88-75-5	2-Nitrophenol	1	U
105-67-9	2,4-Dimethylphenol	6	U
65-85-0	Benzoic Acid	3	U
111-91-1	bis(2-Chloroethoxy)methane	1	U
120-83-2	2,4-Dichlorophenol	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
91-20-3	Naphthalene	1	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	1	U
59-50-7	4-Chloro-3-methylphenol	2	U
91-57-6	2-Methylnaphthalene	1	U
77-47-4	Hexachlorocyclopentadiene	1	U
88-06-2	2,4,6-Trichlorophenol	1	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	1	U
88-74-4	2-Nitroaniline	2	U
131-11-3	Dimethylphthalate	1	U
103-33-3	Azobenzene	1	U
208-96-8	Acenaphthylene	1	U
606-20-2	2,6-Dinitrotoluene	1	U
99-09-2	3-Nitroaniline	2	U
83-32-9	Acenaphthene	1	U
51-28-5	2,4-Dinitrophenol	2	U

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687
CARDINAL GLENNON

SEMIVOLATILE ORGANIC COMPOUNDS
METHOD SW-846 8270
PAGE TWO

SAMPLE ID: METHOD BLANK
LAB ID: WASBLK3811

CAS NUMBER		PRACTICAL QUANTITATION LIMIT	RESULTS
100-02-7	4-Nitrophenol	2 µg/l	U µg/l
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	2	U
7005-72-3	4-Chlorophenol phenyl ether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-methylphenol	2	U
86-30-6	N-Nitrosodiphenylamine	8	U
101-55-3	4-Bromophenyl phenyl ether	1	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	1	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	2	U
84-74-2	Carbazole	9	U
84-74-2	Di-n-butylphthalate	3	2BJ
206-44-0	Fluoranthene	1	U
92-87-4	Benzidine	10	U
129-00-0	Pyrene	1	U
85-68-7	Butylbenzylphthalate	2	U
91-94-1	3,3'-Dichlorobenzidine	2	U
56-55-3	Benzo(a)anthracene	1	U
218-01-9	Chrysene	1	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	1BJ
117-84-0	Di-n-octylphthalate	4	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	4	U
50-32-8	Benzo(a)pyrene	3	U
193-39-5	Indeno(1,2,3-cd)pyrene	3	U
53-70-3	Dibenzo(a,h)anthracene	4	U
191-24-2	Benzo(g,h,i)perylene	3	U

U = UNDETECTED
B = PRESENT IN BLANK
J = DETECTED, BUT BELOW PRACTICAL QUANTITATION LIMIT

SEPTEMBER 1, 1993

DATE COLLECTED : ---
DATE RECEIVED : ---
DATE EXTRACTED : 08/19/93
DATE ANALYZED : 08/26/93

WAYNE L. COOPER
LABORATORY DIRECTOR

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687
CARDINAL GLENNON

SEMIVOLATILE ORGANIC COMPOUNDS
METHOD SW-846 8270
PAGE ONE

SAMPLE ID: 001
LAB ID: 9308796

CAS NUMBER		PRACTICAL QUANTITATION LIMIT	RESULTS
62-75-9	N-Nitrosodimethylamine	10 µg/l	U µg/l
108-95-2	Phenol	1	U
111-44-4	bis(2-chloroethyl)Ether	1	U
95-57-8	2-Chlorophenol	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
100-51-6	Benzyl Alcohol	2	2
95-50-1	1,2-Dichlorobenzene	1	U
95-48-7	o-Cresol	7	U
39638-32-9	bis-(2-Chloro2propyl)Ether	3	U
106-44-5	m & p-Cresol	7	U
621-64-7	N-Nitroso-Di-n-propylamine	4	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	1	U
78-59-1	Isophorone	1	U
88-75-5	2-Nitrophenol	1	U
105-67-9	2,4-Dimethylphenol	6	U
65-85-0	Benzoic Acid	3	130
111-91-1	bis(2-Chloroethoxy)methane	1	U
120-83-2	2,4-Dichlorophenol	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
91-20-3	Naphthalene	1	U
106-47-8	4-Chloroaniline	1	U
87-68-3	Hexachlorobutadiene	1	U
59-50-7	4-Chloro-3-methylphenol	2	U
91-57-6	2-Methylnaphthalene	1	U
77-47-4	Hexachlorocyclopentadiene	1	U
88-06-2	2,4,6-Trichlorophenol	1	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	1	U
88-74-4	2-Nitroaniline	2	U
131-11-3	Dimethylphthalate	1	U
103-33-3	Azobenzene	1	U
208-96-8	Acenaphthylene	1	U
606-20-2	2,6-Dinitrotoluene	1	U
99-09-2	3-Nitroaniline	2	U
83-32-9	Acenaphthene	1	U
51-28-5	2,4-Dinitrophenol	2	U

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687
CARDINAL GLENNON

SEMIVOLATILE ORGANIC COMPOUNDS
METHOD SW-846 8270
PAGE TWO

SAMPLE ID: 001
LAB ID: 9308796

CAS NUMBER		PRACTICAL QUANTITATION LIMIT	RESULTS
100-02-7	4-Nitrophenol	2 µg/l	U µg/l
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	2	5
7005-72-3	4-Chlorophenol phenyl ether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-methylphenol	2	U
86-30-6	N-Nitrosodiphenylamine	8	U
101-55-3	4-Bromophenyl phenyl ether	1	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	1	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	2	U
84-74-2	Carbazole	9	U
84-74-2	Di-n-butylphthalate	3	1BJ
206-44-0	Fluoranthene	1	U
92-87-4	Benzidine	10	U
129-00-0	Pyrene	1	U
85-68-7	Butylbenzylphthalate	2	U
91-94-1	3,3'-Dichlorobenzidine	2	U
56-55-3	Benzo(a)anthracene	1	U
218-01-9	Chrysene	1	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	2B
117-84-0	Di-n-octylphthalate	4	U
205-99-2	Benzo(b)fluoranthene	5	U
207-08-9	Benzo(k)fluoranthene	4	U
50-32-8	Benzo(a)pyrene	3	U
193-39-5	Indeno(1,2,3-cd)pyrene	3	U
53-70-3	Dibenzo(a,h)anthracene	4	U
191-24-2	Benzo(g,h,i)perylene	3	U

U = UNDETECTED
B = PRESENT IN BLANK
J = DETECTED, BUT BELOW PRACTICAL QUANTITATION LIMIT

DATE COLLECTED : 08/16/93
DATE RECEIVED : 08/17/93
DATE EXTRACTED : 08/19/93
DATE ANALYZED : 08/26/93

SEPTEMBER 1, 1993

WAYNE L. COOPER
LABORATORY DIRECTOR

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687 CARDINAL GLENNON

PESTICIDES & PCB ANALYSIS

EPA 608

SAMPLE ID: METHOD BLANK
LAB ID: OP3824

CAS#	PARAMETER	PRACTICAL QUANTITATION LIMIT	RESULTS
319-84-6	α-BHC	0.05 μg/l	U μg/l
319-85-7	β-BHC	0.05	0.01BJ
319-86-8	δ-BHC	0.05	U
58-89-9	γ-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
7421-93-4	Endrin aldehyde	0.10	U
12789-03-6	Chlordane	1.00	U
8001-35-2	Toxaphene	5.00	U
12674-11-2	PCB-1016	1.00	U
1104-28-2	PCB-1221	1.00	U
11141-16-5	PCB-1232	2.00	U
53469-21-9	PCB-1242	1.00	U
12672-29-6	PCB-1248	1.00	U
11097-69-1	PCB-1254	1.00	U
11096-82-5	PCB 1260	1.00	U

U = UNDETECTED
B = DETECTED IN BLANK

DATE COLLECTED : ---
DATE RECEIVED : ---
DATE ANALYZED : 08/27/93

SEPTEMBER 1, 1993

WAYNE L. COOPER
LABORATORY DIRECTOR

ENVIRONMETRICS
2345 Millpark Drive
Maryland Heights, MO 63043
(314) 427-0550

WELLINGTON ENVIRONMENTAL
607 HANLEY INDUSTRIAL COURT
ST. LOUIS, MO 63144

ATTN: JACKIE GRIGGS

INVOICE # 22743
PO # 930803-1687 CARDINAL GLENNON

PESTICIDES & PCB ANALYSIS

EPA 608

SAMPLE ID: 001
LAB ID: 9308796

CAS#	PARAMETER	PRACTICAL QUANTITATION LIMIT	RESULTS
319-84-6	α-BHC	0.05 μg/l	0.03J μg/l
319-85-7	β-BHC	0.05	U
319-86-8	δ-BHC	0.05	0.09
58-89-9	γ-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan Sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
7421-93-4	Endrin aldehyde	0.10	U
12789-03-6	Chlordane	1.00	U
8001-35-2	Toxaphene	5.00	U
12674-11-2	PCB-1016	1.00	U
1104-28-2	PCB-1221	1.00	U
11141-16-5	PCB-1232	2.00	U
53469-21-9	PCB-1242	1.00	U
12672-29-6	PCB-1248	1.00	U
11097-69-1	PCB-1254	1.00	U
11096-82-5	PCB 1260	1.00	U

U = UNDETECTED

SEPTEMBER 1, 1993

DATE COLLECTED : 08/16/93
DATE RECEIVED : 08/17/93
DATE ANALYZED : 08/27/93

WAYNE L. COOPER
LABORATORY DIRECTOR

B2

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: CARDINAL GLENNON HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 GRAND BOULEVARD

Monitoring Period: [ ](JAN-MAR) [X](APR-JUNE) [ ](JULY-SEPT) [ ](OCT-DEC)

Samples Collected By: WELLINGTON ENVIRONMENTAL CONSULTING & CONSTRUCTION, INC.

Analyses Performed By: ENVIRONMETRICS, INC.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBER ---------->		001						
DATES ON WHICH SAMPLES WERE COLLECTED-------->		5/4/93						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G,C,M, OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	100,994					GPD
BIOCHEMICAL OXYGEN DEMAND	300	C	174					mg/l
CHEMICAL OXYGEN DEMAND	600	C	620					mg/l
OIL AND GREASE	200	G	26					mg/l
pH	BETWEEN 5.5 - 11.5	G	8.1					----
TEMPERATURE	60	G	21					C°
TOTAL SUSPENDED SOLIDS	350	C	322					mg/l
SILVER	0.5	C	0.039					mg/l
TOTAL TOXIC ORGANICS	5.52	G	-----					mg/l

You must complete and sign the certification statements on the reverse side.

6-18-93

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☒ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify that the permitted facility does not discharge any wastes which are subject to pretreatment standards in 40 CFR _____ _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify that cyanide is not used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Scott Branham

Title: Utilities Supervisor Telephone: (314) 577-5600

Signature: Scott Branham Date: 6-2-93

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

RECEIVED
APR 7 1993
Environmental Compliance

April 5, 1993

Mr. Gunter H. Durdel
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913

Re: Industrial User Questionnaire

Dear Mr. Durdel:

Enclosed is the Industrial User Questionnaire pursuant to Federal General Pretreatment Regulations 40CFR304.8 (f) (I) (iii). If the information is acceptable, I will look forward to receiving a copy of the discharge permit.

Please send to my attention. Call me at 577-5616 if you need additional information.

Sincerely,

A.T. Wittrock
Risk Manager

AW/mb

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

RECEIVED
MAR 1 6 1993
DEPT. of ENVIRONMENTAL COMPLIANCE

Company Name: CARDINAL GLENNON HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 GRAND BOULEVARD

Monitoring Period: [X](JAN-MAR) [ ](APR-JUNE) [ ](JULY-SEPT) [ ](OCT-DEC)

Samples Collected By: WELLINGTON ENVIRONMENTAL CONSULTING & CONSTRUCTION, INC.

Analyses Performed By: ENVIRONMETRICS, INC.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBER ---------->		001						
DATES ON WHICH SAMPLES WERE COLLECTED---------->		2/24/93						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G,C,M, OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	100,994					GPD
BIOCHEMICAL OXYGEN DEMAND	300	C	124					mg/l
CHEMICAL OXYGEN DEMAND	600	C	280					mg/l
OIL AND GREASE	200	G	17					mg/l
pH	BETWEEN 5.5 - 11.5	G	8.8					----
TEMPERATURE	60	G	20					C°
TOTAL SUSPENDED SOLIDS	350	C	108					mg/l
SILVER	0.5	C	0.072					mg/l
TOTAL TOXIC ORGANICS	5.52	G	-----					mg/l

You must complete and sign the certification statements on the reverse side.

MSD 035834

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____.

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☒ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify that the permitted facility does not discharge any wastes which are subject to pretreatment standards in 40 CFR _____ _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify that cyanide is not used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____, I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Scott Branham

Title: Utilities Supervisor Telephone: (314) 577-5600

Signature: Scott Branham Date: 3-15-93

SMF 11/92

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

March 22, 1993

Al Wittrock
Director Risk Management
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

RE: Discharge Permit No: 41121954-00
1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

The Metropolitan St. Louis Sewer District Wastewater Discharge permit for the above premise expires on August 31, 1993.

Enclosed is an Industrial User Questionnaire along with detailed instructions to assist you in supplying the required information. This questionnaire serves as your permit application. We request that you return the original and yellow copy within 30 days after receipt of this letter.

After a review of the questionnaire and our existing data, we will prepare a draft permit and send it to you for comment.

Thank you for your cooperation. If you have any question or any specific problem providing the requested information, please contact Mark Montague, at 436-8756, or me, at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel

Gunter H. Durdel
Assistant Engineer

ldl

Enclosure

WELLINGTON
ENVIRONMENTAL
CONSULTING & CONSTRUCTION, INC.

RECEIVED
JAN 22 1993
Environmental Compliance

January 18, 1993

Gunter H. Durdel
Assistant Engineer
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Re: Industrial User Quarterly Self Monitoring Report
Cardinal Glennon Hospital
1465 South Grand Boulevard
Permit No: 41121954-00

Dear Mr. Durdel:

Wellington Environmental Consulting & Construction, Inc. (WECC) has been retained by Cardinal Glennon Hospital to perform the necessary quarterly wastewater discharge monitoring at their facility as defined by their current MSD permit. Results of monitoring for the quarter October through December 1992 are presented on the enclosed form.

With the exception of the Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) results at SP 001, all parameters analyzed were within required limits. The BOD concentration of 1,104 mg/l and the COD concentration of 1,100 mg/l exceed the permit limits of 300 and 600 mg/l, respectively. Per the current MSD permit, exceeding the limits for these parameters does not constitute a violation. We understand that this result will be used to determine any applicable surcharges.

If you have any questions or require additional information, please contact Ms. Jackie Griggs at 644-4930.

Sincerely,
WELLINGTON ENVIRONMENTAL
CONSULTING & CONSTRUCTION, INC.

Jacqueline R. Griggs
Environmental Engineer

607 Hanley Industrial Court • St. Louis, MO 63144 • (314) 644-4930

WELLINGTON
ENVIRONMENTAL
CONSULTING & CONSTRUCTION, INC.

I have read the above statements prepared my Wellington Environmental Consulting & Construction, Inc. for Cardinal Glennon Hospital, and believe them to be factual, to the best of my knowledge.

Scott Branham

Scott Branham
Cardinl Glennon Hospital

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

RECEIVED
JAN 22 1993
Environmental Compliance

Company Name: CARDINAL GLENNON HOSPITAL

Permit No: 41121954-00

Premise Address: 1465 SOUTH GRAND BOULEVARD

Monitoring Period: [ ](JAN-MAR) [ ](APR-JUNE) [ ](JULY-SEPT) [X](OCT-DEC)

Samples Collected By: WELLINGTON ENVIRONMENTAL CONSULTING & CONSTRUCTION, INC.

Analyses Performed By: ENVIRONMETRICS, INC.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBER ---------->		001						
DATES ON WHICH SAMPLES WERE COLLECTED--------->		12/30/92						
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G,C,M, OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow						UNITS
FLOW		E	100,994					GPD
BIOCHEMICAL OXYGEN DEMAND	300	C	1,104					mg/l
CHEMICAL OXYGEN DEMAND	600	C	1,100					mg/l
OIL AND GREASE	200	G	60					mg/l
pH	BETWEEN 5.5 - 11.5	G	8.1					----
TEMPERATURE	60	G	27					°C
TOTAL SUSPENDED SOLIDS	350	C	127					mg/l
SILVER	0.5	C	0.061					mg/l
TOTAL TOXIC ORGANICS	5.52	G	0.098					mg/l

You must complete and sign the certification statements on the reverse side.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and **PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY.** If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. **GO ON TO PART IV.**

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☒ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ _____.

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify that the permitted facility does not discharge any wastes which are subject to pretreatment standards in 40 CFR _____ _____.

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify that cyanide is not used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial statement A if it applies to you. **Everyone must complete the information under statement B and sign this report.**

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. **DISCHARGE MONITORING REPORT CERTIFICATION**

I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print or type name of signing official: Scott Branham

Title: Utilities Supervisor Telephone: (314) 577-5600

Signature: Scott Branham Date: 1-21-93

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

December 18, 1992

Al Wittrock
Director Risk Management
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

RE: Discharge Permit No: 41121954-00
Premise: 1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

You were recently issued an MSD Industrial Wastewater Discharge Permit for the premise referenced above. Your permit requires that you conduct self-monitoring of the permitted discharge points and that you submit periodic reports to the District containing the results of that monitoring.

Enclosed is a small supply of a reporting form which you should use in reporting your self monitoring data. Instructions for use of the form are also enclosed. You may copy these forms or you may contact us for an additional supply.

Please be sure to completely fill out each form used and to sign each form. The forms submitted to the District must bear original signatures. Machine or fax copies are not acceptable.

Your permit requires that you submit a report <u>each</u> quarter for <u>each</u> discharge point, even if you had no discharge during the quarter at some points. Sampling is to be done during each calendar quarter and the report is to be submitted to the District by the 28th day after the end of the quarter. To illustrate:

Sampling Must Be Conducted	Report is Due By
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

As stated in your permit, if you monitor any of the listed pollutants using the methods specified in the permit, more often than required by the permit, the results of all such additional monitoring and any additional flow measurements must be included in the quarterly reports.

We encourage you to conduct your sampling as early in each reporting quarter as you can. This will allow you time to correct any compliance problems the data may reveal and to then conduct the additional sampling necessary to establish a return to compliance. If a violation is detected, it is extremely important that corrections and additional sampling be completed within the same quarter if at all possible.

If you have any questions about the use of the enclosed form or your reporting obligations under the terms of your permit, please call Mark Montague at 436-8756 or Gunter Durdel at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H Durdel

Gunter Durdel
Assistant Engineer

ms

Enclosure

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

RECEIVED
JUL 7 1992
Environmental Compliance

July 6, 1992

Mr. Mark Montaque
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Re: Revised MSD Industrial User Questionnaire

Dear Mark:

Enclosed is the aforementioned questionnaire which you requested. I apologize for the delay.

Call me at 577-5616 if you have any additional questions.

Sincerely,

A. T. Wittrock

A. T. Wittrock
Director, Risk Management

ATW/cl

Enclosure

John Mathes & Associates, Inc.
A Burlington Environmental Inc. Company

210 West Sand Bank Road
P.O. Box 330
Columbia, Illinois 62236-0330
618/281-7173
314/241-1785
FAX 618/281-5120

RECEIVED
OCT 24 1991
DEPT. of ENVIRONMENTAL COMPLIANCE

October 21, 1991
Project 124063

Mr. Al Wittrock
Risk Manager
Cardinal Glennon Children's Hospital
1465 South Grand Boulevard
St. Louis, Missouri 63104-1095

Dear Mr. Wittrock:

Subject: MSD Industrial User Questionnaire

John Mathes & Associates, Inc., (Mathes) is pleased to present the enclosed copies of the Metropolitan St. Louis Sewer District Industrial User Questionnaire completed on behalf of Cardinal Glennon Children's Hospital (Cardinal Glennon). Please note that this questionnaire has been completed based on information supplied by Cardinal Glennon and the Metropolitan Sewer District.

If you have any questions regarding this questionnaire, please contact me directly. Otherwise, please sign one copy as indicated and forward the questionnaire and drawing to the following address as soon as possible:

Mr. Bob Zeeman
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

Thank you for allowing Mathes to be of service and we look forward to working with you in the future.

Sincerely yours,

JOHN MATHES & ASSOCIATES, INC.

Curt D. Fahnestock
Environmental Engineer

CDF/tjn/MSDQUEST.LET

Enclosures: Industrial User Questionnaire and Drawing

Cardinal Glennon Children's Hospital

1465 South Grand Blvd.
Saint Louis, Missouri
63104-1095
(314) 577-5600

May 26, 1992

6/3/92

Mr. Curt Fahnestock
Burlington Environmental Inc.
210 West Sand Bank Road
P. O. Box 330
Columbia, Illinois 62236-0330

Re: MSD request for additional information

Dear Curt:

Enclosed is the additional information requested by Mr. Mark Montague of the Metropolitan Sewer District. The reports show the priority pollutants for the Pediatric Research Institute and the Pathology Laboratories.

Mr. Montague had also inquired about the presence of silver recovery units in the hospital. The Radiology Department has four units that reclaim the silver bromide crystals from processing x-ray films. The crystals are then sold to Central States Refining Company.

Call me at (314) 577-5616 if you need additional information.

Sincerely,

A. T. Wittrock
Director, Risk Management

Enclosure
ATW/cl

PRI

Company Name: [illegible]
Premise Address: 1465 [illegible]th Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

Pediatric Research Institute

ECTION D - SEWER CONNECTION INFORMATION

Attach a scale drawing of your premise which shows:

a. All buildings, alleys, streets and other pertinent structures;

b. All sewers and drains, including all connections, inlets, manholes, vents and other access or control structures. Identify each sewer as sanitary, storm or combined and indicate its size.

c. Identify a sampling point for each connection to the public sewer.

d. Identify a sampling point for each discharge from a federally regulated categorical process.

e. Identify a sampling point for each discharge to a separate storm sewer or water course.

List each sampling point identified in D.1 c, d, and e above. Also include each connection for which there is no sampling point. Assign a sequential reference number to each point, starting with No. 1. Attach additional sheets, if necessary.

Reference Number	Sewer Size (inch)	Description of sewer sampling point or connection	Total Average Flow (GPD)
1	24"	Manhole in sidewalk on Vista Avenue, located at northwest corner of property.	70,000 GPD
2			
3			
4			
5			

ECTION E - WASTEWATER INFORMATION

If you listed water usage quantities only for items 6a through c, in Section C.6, you may skip this section. Otherwise, you must complete this section for all water usage listed in Section C.6. Attach additional sheets if necessary.

	Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection					
		1	2	3	4	5	Facility Total
a.	Sanitary						
b.	Irrigation & Lawn Watering						
c.	Non-Contact Cooling Water						
d.	Contact Cooling Water						
e.	Process (From C.8)						
f.	Plant & Equip. Washdown						
g.	Boiler Blowdown						
h.	Other ( )						
	Regeneration Waste (C.5)						
	Total (Same as D.2)						

If any of the above points discharge to a watercourse or a separate storm sewer, complete the following:

NPDES Outfall Number					
NPDES Permit Number					

Do any of the above points also convey stormwater from your premise ?

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Do you pretreat any of the wastes discharged through any of the above points?

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

P5

Company Name: [illegible]
Premise Address: 14[illegible] South Grand Blvd.
Account Number: 4[illegible]216400, 4112216100, 4112195400, and 4112216301

SECTION E • WASTEWATER INFORMATION (Cont'd)

6. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in D.4:

Point No.	Pretreatment System Description

3. Does your facility have:

a. A spill control plan? ☐ Yes ☒ No

b. A waste minimization plan? ☒ Yes ☐ No

c. A solvent management plan? ☒ Yes ☐ No

d. A slug discharge plan? ☐ Yes ☒ No.

7. If any wastewater analysis has been performed on the wastewater discharges from your facility attach a copy of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary. Not applicable

8. Priority Pollutant Information: Check the appropriate box by each listed chemical whether it is "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" on your premise, used in your manufacturing or service activity or generated as a by-product. Some pollutants are known by other names. Refer to the instruction booklet for those pollutants which have an asterisk (*).

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
1.	asbestos (fibrous)	☐	☐	☐	☐
2.	cyanide (total)	☐	☐	☐	☐
3.	antimony (total)	☐	☐	☐	☐
4.	arsenic (total)	☐	☐	☐	☐
5.	beryllium (total)	☐	☐	☐	☐
6.	cadmium (total)	☐	☐	☐	☐
7.	chromium (total)	☐	☐	☐	☐
8.	copper (total)	☐	☐	☐	☐
9.	lead (total)	☐	☐	☐	☐
10.	mercury (total)	☐	☐	☐	☐
11.	nickel (total)	☐	☐	☐	☐
12.	selenium (total)	☐	☐	☐	☐
13.	silver (total)	☐	☐	☐	☐
14.	thallium (total)	☐	☐	☐	☐
15.	zinc (total)	☐	☐	☐	☐
16.	acenaphthene	☐	☐	☐	☐
17.	acenaphthylene	☐	☐	☐	☐
18.	acrolein	☐	☐	☐	☐
19.	acrylonitrile	☐	☐	☐	☐
20.	aldrin	☐	☐	☐	☐
21.	anthracene	☐	☐	☐	☐
22.	benzene	☐	☐	☐	☐
23.	benzidine	☐	☐	☐	☐
24.	benzo (a) anthracene*	☐	☐	☐	☐
25.	benzo (a) pyrene	☐	☐	☐	☐
26.	benzo (b) fluoranthene	☐	☐	☐	☐
27.	benzo (g,h,i) perylene*	☐	☐	☐	☐
28.	benzo (k) fluoranthene*	☐	☐	☐	☐
29.	alpha-BHC	☐	☐	☐	☐
30.	beta-BHC	☐	☐	☐	☐
31.	delta-BHC	☐	☐	☐	☐
32.	gamma-BHC*	☐	☐	☐	☐
33.	bis (2-chloroethyl) ether*	☐	☐	☐	☐
34.	bis (2-chloroethoxy) methane*	☐	☐	☐	☐
35.	bis (2-chloroisopropyl) ether*	☐	☐	☐	☐
36.	Reserved	☐	☐	☐	☐
37.	bis (2-ethylhexyl) phthalate	☐	☐	☐	☐
38.	bromodichloromethane*	☐	☐	☐	☐
39.	bromoform*	☐	☐	☐	☐
40.	bromomethane*	☐	☐	☐	☐
41.	4-bromophenylphenyl ether	☐	☐	☐	☐
42.	butylbenzyl phthalate	☐	☐	☐	☐
43.	carbon tetrachloride*	☐	☐	☐	☐
44.	chlordane	☐	☐	☐	☐
45.	4-chloro-3-methylphenol*	☐	☐	☐	☐
46.	chlorobenzene	☐	☐	☐	☐
47.	chlorethane*	☐	☐	☐	☐
48.	2-chloroethylvinyl ether	☐	☐	☐	☐
49.	chloroform*	☐	☐	☐	☒
50.	chloromethane*	☐	☐	☐	☐
51.	2-chloronaphthalene	☐	☐	☐	☐
52.	2-chlorophenol*	☐	☐	☐	☐
53.	4-chlorophenylphenyl ether	☐	☐	☐	☐
54.	chrysene*	☐	☐	☐	☐
55.	4,4'-DDD*	☐	☐	☐	☐
56.	4,4'-DDE*	☐	☐	☐	☐
57.	4,4'-DDT*	☐	☐	☐	☐
58.	dibenzo (a,h) anthracene*	☐	☐	☐	☐
59.	dibromochloromethane*	☐	☐	☐	☐
60.	1,2-dichlorobenzene*	☐	☐	☐	☐
61.	1,3-dichlorobenzene*	☐	☐	☐	☐
62.	1,4-dichlorobenzene*	☐	☐	☐	☐
63.	3,3'-dichlorobenzidine	☐	☐	☐	☐
64.	Reserved	☐	☐	☐	☐
65.	1,1-dichloroethane*	☐	☐	☐	☐
66.	1,2-dichloroethane*	☐	☐	☐	☐
67.	1,1-dichloroethene*	☐	☐	☐	☐
68.	trans-1,2-dichloroethene*	☐	☐	☐	☐
69.	2,4-dichlorophenol	☐	☐	☐	☐
70.	1,2-dichloropropane*	☐	☐	☐	☐
71.	(cis & trans) 1,3-dichloropropene*	☐	☐	☐	☐
72.	dieldrin	☐	☐	☐	☐
73.	diethyl phthalate*	☐	☐	☐	☐
74.	2,4-dimethylphenol*	☐	☐	☐	☐
75.	dimethyl phthalate	☐	☐	☐	☐
76.	di-n-butyl phthalate	☐	☐	☐	☐

Continued on Page 6

Company Name: Car[illegible]al Glennon Children's Hospital
Premise Address: 146[illegible]outh Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

ECTION E - WASTEWATER INFORMATION (Cont'd)

iority Pollutant Information (Cont'd)

A = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
77.	di-n-octyl phthalate*	0	0	0	0
78.	4,6-dinitro-2-methylphenol*	0	0	0	0
79.	2,4-dinitrophenol	0	0	0	X
80.	2,4-dinitrotoluene	0	0	0	0
81.	2,6-dinitrotoluene	0	0	0	0
82.	1,2-diphenylhydrazine*	0	0	0	0
83.	endosulfan I*	0	0	0	0
84.	endosulfan II*	0	0	0	0
85.	endosulfan sulfate	0	0	0	0
86.	endrin	0	0	0	X
87.	endrin aldehyde	0	0	0	0
88.	ethylbenzene	0	0	0	0
89.	fluoranthene	0	0	0	0
90.	fluorene*	0	0	0	0
91.	heptachlor	0	0	0	0
92.	heptachlor epoxide	0	0	0	0
93.	hexachlorobenzene*	0	0	0	0
94.	hexachlorobutadiene	0	0	0	0
95.	hexachlorocyclopentadiene*	0	0	0	0
96.	hexachloroethane*	0	0	0	0
97.	indeno (1,2,3-cd) pyrene*	0	0	0	0
98.	isophorone*	0	0	0	0
99.	methylene chloride*	0	0	0	X
100.	naphthalene	0	0	0	0
101.	nitrobenzene	0	0	0	0
102.	2-nitrophenol	0	0	0	0

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
103.	4-nitrophenol*	0	0	0	0
104.	N-nitrosodimethylamine*	0	0	0	0
105.	N-nitrosodi-n-propylamine*	0	0	0	0
106.	N-nitrosodiphenylamine	0	0	0	0
107.	PCB-1016*	0	0	0	0
108.	PCB-1221*	0	0	0	0
109.	PCB-1232	0	0	0	0
110.	PCB-1242*	0	0	0	0
111.	PCB-1248*	0	0	0	0
112.	PCB-1254*	0	0	0	0
113.	PCB-1260*	0	0	0	0
114.	pentachlorophenol	0	0	0	0
115.	phenanthrene	0	0	0	0
116.	phenol	0	0	0	X
117.	pyrene	0	0	0	0
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin*	0	0	0	0
119.	1,1,2,2-tetrachloroethane*	0	0	0	0
120.	tetrachloroethene*	0	0	0	0
121.	toluene*	0	0	0	0
122.	toxaphene	0	0	0	0
123.	1,2,4-trichlorobenzene	0	0	0	0
124.	1,1,1-trichloroethane*	0	0	0	0
125.	1,1,2-trichloroethane*	0	0	0	0
126.	trichloroethene*	0	0	0	0
127.	Reserved	0	0	0	0
128.	2,4,6-trichlorophenol	0	0	0	0
129.	vinyl chloride	0	0	0	0

For priority pollutants in E.8 which are indicated "Known Present," list and provide the following data for each: (attach additional sheets if needed.)

NOTE: numbers 79, 85, & 99 are not used on a regular basis. Records show that they were on hand in previous years: Though not currently in stock, they could potentially be used some time again in the future

ITEM NO.	PRIORITY POLLUTANT	ANNUAL USAGE (LBS)	LOSS TO SEWER (LBS/YEAR)
14	Chloroform	(less than) < 30 lbs	0
1	2,4-dinitrophenol	< 0.1 lbs	0
85	endrin	< 0.1 lb	0
9	methylene Chloride	< 5 lbs	0
6	Phenol	< 30 lbs	0
-			
-			
-			
-			
-			
-			
-			
-			
-			

all Hazardous waste accumulated + shipped out

JUN 11 '91 9:48 FROM CGCH PRES OFFICE PAGE.021

MSD 035848

Company Name: [illegible]
Premise Address: 1465 [illegible]th Grand Blvd.
Account Number: 41[illegible]16400, 4112216100, 4112195400, and 4112216301

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, alleys, streets and other pertinent structures;
   b. All sewers and drains, including all connections, inlets, manholes, vents and other access or control structures. Identify each sewer as sanitary, storm or combined and indicate its size.
   c. Identify a sampling point for each connection to the public sewer.
   d. Identify a sampling point for each discharge from a federally regulated categorical process.
   e. Identify a sampling point for each discharge to a separate storm sewer or water course.

2. List each sampling point identified in D.1 c, d, and e above. Also include each connection for which there is no sampling point. Assign a sequential reference number to each point, starting with No. 1. Attach additional sheets, if necessary.

Reference Number	Sewer Size (inch)	Description of sewer sampling point or connection	Total Average Flow (GPD)
1	24"	Manhole in sidewalk on Vista Avenue, located at northwest corner of property.	70,000 GPD
2			
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. If you listed water usage quantities only for items 6a through c, in Section C.6, you may skip this section. Otherwise, you must complete this section for all water usage listed in Section C.6. Attach additional sheets if necessary.

	Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection					
		1	2	3	4	5	Facility Total
a.	Sanitary						
b.	Irrigation & Lawn Watering						
c.	Non-Contact Cooling Water						
d.	Contact Cooling Water						
e.	Process (From C.8)						
f.	Plant & Equip. Washdown						
g.	Boiler Blowdown						
h.	Other ( )						
	Regeneration Waste (C.5)						
	Total (Same as D.2)						

2. If any of the above points discharge to a watercourse or a separate storm sewer, complete the following:

NPDES Outfall Number					
NPDES Permit Number					

3. Do any of the above points also convey stormwater from your premise ?

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

4. Do you pretreat any of the wastes discharged through any of the above points?

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

Company Name

Premise Address: 1465 South Grand Blvd.

Account Number: 4[illegible]16400, 4112216100, 4112195400, [illegible] 4112216301

Hospital Laboratory

SECTION E - WASTEWATER INFORMATION (Cont'd)

. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in D.4:

Point No.	Pretreatment System Description

5.) Does your facility have:

a. A spill control plan? ☐ Yes ☒ No

b. A waste minimization plan? ☒ Yes ☐ No

c. A solvent management plan? ☒ Yes ☐ No

d. A slug discharge plan? ☐ Yes ☒ No.

7. If any wastewater analysis has been performed on the wastewater discharges from your facility attach a copy of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary. Not applicable

8. Priority Pollutant Information: Check the appropriate box by each listed chemical whether it is "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" on your premise, used in your manufacturing or service activity or generated as a by-product. Some pollutants are known by other names. Refer to the instruction booklet for those pollutants which have an asterisk (*).

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
1.	asbestos (fibrous)	☐	☒	☐	☐
2.	cyanide (total)	☐	☒	☐	☐
3.	antimony (total)	☐	☒	☐	☐
4.	arsenic (total)	☒	☐	☐	☐
5.	beryllium (total)	☐	☒	☐	☐
6.	cadmium (total)	☐	☒	☐	☐
7.	chromium (total)	☒	☐	☐	☐
8.	copper (total)	☒	☒	☐	☐
9.	lead (total)	☐	☒	☐	☐
10.	mercury (total)	☐	☐	☒	☐
11.	nickel (total)	☐	☐	☐	☐
12.	selenium (total)	☐	☒	☐	☐
13.	silver (total)	☒	☐	☐	☐
14.	thallium (total)	☐	☒	☐	☐
15.	zinc (total)	☐	☒	☐	☐
16.	acenaphthene	☐	☒	☐	☐
17.	acenaphthylene	☐	☒	☐	☐
18.	acrolein	☐	☒	☐	☐
19.	acrylonitrile	☐	☒	☐	☐
20.	aldrin	☐	☒	☐	☐
21.	anthracene	☐	☒	☐	☐
22.	benzene	☐	☒	☐	☐
23.	benzidine	☐	☒	☐	☐
24.	benzo (a) anthracene*	☐	☒	☐	☐
25.	benzo (a) pyrene	☐	☒	☐	☐
26.	benzo (b) fluoranthene	☐	☒	☐	☐
27.	benzo (g,h,i) perylene*	☐	☒	☐	☐
28.	benzo (k) fluoranthene*	☐	☒	☐	☐
29.	alpha-BHC	☐	☒	☐	☐
30.	beta-BHC	☐	☒	☐	☐
31.	delta-BHC	☐	☒	☐	☐
32.	gamma-BHC*	☐	☒	☐	☐
33.	bis (2-chloroethyl) ether*	☐	☒	☐	☐
34.	bis (2-chloroethoxy) methane*	☐	☒	☐	☐
35.	bis (2-chloroisopropyl) ether*	☐	☒	☐	☐
36.	Reserved	☐	☒	☐	☐
37.	bis (2-ethylhexyl) phthalate	☐	☒	☐	☐
38.	bromodichloromethane*	☐	☒	☐	☐
39.	bromoform*	☐	☒	☐	☐
40.	bromomethane*	☐	☒	☐	☐
41.	4-bromophenylphenyl ether	☐	☒	☐	☐
42.	butylbenzyl phthalate	☐	☒	☐	☐
43.	carbon tetrachloride*	☐	☒	☐	☐
44.	chlordane	☐	☒	☐	☐
45.	4-chloro-3-methylphenol*	☐	☒	☐	☐
46.	chlorobenzene	☐	☒	☐	☐
47.	chlorethane*	☐	☒	☐	☐
48.	2-chloroethylvinyl ether	☐	☒	☐	☐
49.	chloroform*	☐	☒	☐	☐
50.	chloromethane*	☐	☒	☐	☐
51.	2-chloronaphthalene	☐	☒	☐	☐
52.	2-chlorophenol*	☐	☒	☐	☐
53.	4-chlorophenylphenyl ether	☐	☒	☐	☐
54.	chrysene*	☐	☒	☐	☐
55.	4,4'-DDD*	☐	☒	☐	☐
56.	4,4'-DDE*	☐	☒	☐	☐
57.	4,4'-DDT*	☐	☒	☐	☐
58.	dibenzo (a,h) anthracene*	☐	☒	☐	☐
59.	dibromochloromethane*	☐	☒	☐	☐
60.	1,2-dichlorobenzene*	☐	☒	☐	☐
61.	1,3-dichlorobenzene*	☐	☒	☐	☐
62.	1,4-dichlorobenzene*	☐	☒	☐	☐
63.	3,3'-dichlorobenzidine	☐	☒	☐	☐
64.	Reserved	☐	☒	☐	☐
65.	1,1-dichloroethane*	☐	☒	☐	☐
66.	1,2-dichloroethane*	☐	☒	☐	☐
67.	1,1-dichloroethene*	☐	☒	☐	☐
68.	trans-1,2-dichloroethene*	☐	☒	☐	☐
69.	2,4-dichlorophenol	☐	☒	☐	☐
70.	1,2-dichloropropane*	☐	☒	☐	☐
71.	(cis & trans) 1,3-dichloropropene*	☐	☒	☐	☐
72.	dieldrin	☐	☒	☐	☐
73.	diethyl phthalate*	☐	☒	☐	☐
74.	2,4-dimethylphenol*	☐	☒	☐	☐
75.	dimethyl phthalate	☐	☒	☐	☐
76.	di-n-butyl phthalate	☐	☒	☐	☐

Continued on Page 6

Company Name: Car[illegible]l Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION E - WASTEWATER INFORMATION (Cont'd)

Priority Pollutant Information (Cont'd)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
77.	di-n-octyl phthalate*		✓		
78.	4,6-dinitro-2-methylphenol*		✓		
79.	2,4-dinitrophenol		✓		
80.	2,4-dinitrotoluene		✓		
81.	2,6-dinitrotoluene		✓		
82.	1,2-diphenylhydrazine*		✓		
83.	endosulfan I*		✓		
84.	endosulfan II*		✓		
85.	endosulfan sulfate		✓		
86.	endrin		✓		
87.	endrin aldehyde		✓		
88.	ethylbenzene		✓		
89.	fluoranthene		✓		
90.	fluorene*		✓		
91.	heptachlor		✓		
92.	heptachlor epoxide		✓		
93.	hexachlorobenzene*		✓		
94.	hexachlorobutadiene		✓		
95.	hexachlorocyclopentadiene*		✓		
96.	hexachloroethane*		✓		
97.	indeno (1,2,3-cd) pyrene*		✓		
98.	isophorone*		✓		
99.	methylene chloride*		✓		
100.	naphthalene		✓		
101.	nitrobenzene		✓		
102.	2-nitrophenol		✓		
103.	4-nitrophenol*		✓		
104.	N-nitrosodimethylamine*		✓		
105.	N-nitrosodi-n-propylamine*		✓		
106.	N-nitrosodiphenylamine		✓		
107.	PCB-1016*		✓		
108.	PCB-1221*		✓		
109.	PCB-1232		✓		
110.	PCB-1242*		✓		
111.	PCB-1248*		✓		
112.	PCB-1254*		✓		
113.	PCB-1260*		✓		
114.	pentachlorophenol		✓		
115.	phenanthrene		✓		
116.	phenol				✓
117.	pyrene		✓		
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin*		✓		
119.	1,1,2,2-tetrachloroethane*		✓		
120.	tetrachloroethene*		✓		
121.	toluene*		✓		
122.	toxaphene		✓		
123.	1,2,4-trichlorobenzene		✓		
124.	1,1,1-trichloroethane*		✓		
125.	1,1,2-trichloroethane*		✓		
126.	trichloroethene*		✓		
127.	Reserved		✓		
128.	2,4,6-trichlorophenol		✓		
129.	vinyl chloride		✓		

For priority pollutants in E.8 which are indicated "Known Present," list and provide the following data for each: (attach additional sheets if needed.)

ITEM NO.	PRIORITY POLLUTANT	ANNUAL USAGE (LBS)	LOSS TO SEWER (LBS/YEAR)
116	PHENOL	APPROX 50mL	25 mL / YEAR
D	MERCURY (THERMOMETERS)	< 0.1 lb	0.0 lb.

4112 1954-00
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 & 1505 S.GRAND BLVD.
ST. LOUIS, MO 63104

ACTUAL PERMIT INFORMATION 1992 - 1994

02-17-16 Moved to ARCHIVED PERMIT files.

PERMIT OVERFLOW

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

August 11, 1994

Al Wittrock
Risk Manager
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

Your Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit issued on August 31, 1993 for the premise identified above is hereby modified as per the attached page 9. This modification is to add a special condition authorizing the discharge of radioactive materials to the sewer system. This letter and the revised page 9 should be affixed to your permit as your official record and become a part thereof.

This modification does not affect any monitoring or analysis of your discharge that may be necessary to comply with other requirements of your permit and does not in any way relieve you of your obligations to achieve the discharge limitations as provided in the permit.

Please contact us if you have any questions.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

Bob Zeman, P.E.
Manager of Environmental Compliance

2. Permittee is authorized to discharge not more than 5 millicuries of radioactive material per year to the District's sanitary sewers. Such materials must be soluble, or dispersible if biological material, in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, in conjunction with other users' discharges of radioactive materials, causes the aggregate of all radioactive materials entering the District's treatment plant to exceed one (1) curie per year or causes interference as defined in MSD Ordinance 8472.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

THIS IS THE LAST PAGE OF THIS PERMIT

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

August 31, 1993

Al Wittrock
Director Risk Management
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

Enclosed is the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit for the premise identified above. This permit is issued pursuant to the federal pretreatment regulations in 40 CFR 403 as amended July 24, 1990. This permit has been prepared based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

The previous permit, effective August 15, 1992, is voided as of the effective date of the enclosed permit.

Monitoring reports required by the conditions of this permit must be submitted on a periodic basis. Copies of the necessary report forms are enclosed.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. Absence of a response within this time frame will be deemed acceptance, by you, of the provisions of this permit.

You may contact us at 436-8755 at any time if you have any question about your permit.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

ldl

Enclosures

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: **41121954-00**

EFFECTIVE DATE: **SEPTEMBER 01, 1993**
EXPIRATION DATE: **AUGUST 31, 1996**

ISSUED TO: **CARDINAL GLENNON HOSPITAL**
1465 S. GRAND BLVD
ST. LOUIS, MO 63104

SIC NUMBER(S): **8069**

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: **ONE**
SAMPLING PT. REF. NUMBER(S): **001**

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

Bob Zeman, P.E.
Industrial Waste Engineer

MSD 035856

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **001**

SAMPLING POINT LOCATION: **MH W OF BLDG & S OF VISTA AVE IN SDWLK SAMPLE S FLOW**

AVERAGE WASTEWATER FLOW (GPD): **48,800**

WASTEWATER SOURCE AND CATEGORY: **HOSPITAL WASTE + NCCW**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow	***	Daily Avg	***
Biochemical Oxygen Demand	****	Daily Avg	once/3 mo
Chemical Oxygen Demand	****	Daily Avg	once/3 mo
Oil and Grease (Total)	200	Instant	once/3 mo
pH Acidic (s.u.) Less than 7	5.5	Instant	once/3 mo
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/3 mo
Temperature (Degrees C)	60	Instant	once/3 mo
Total Suspended Solids	****	Daily Avg	once/3 mo
Silver (Total)	.5	Daily Avg	once/3 mo
Total Toxic Organics	5.52	Instant	once/yr

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per month. If additional flow measurements or estimates are made, all must be reported.

**** Monitoring requirement only. See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall self-monitor the discharge at each of the identified sampling points at the frequency specified in this permit. The permittee shall submit self-monitoring reports to the District's Department of Environmental Compliance identifying the concentrations of regulated substances in each of these discharges. Each report shall also include a record of all measured or estimated average daily flows during the reporting period.

2. The pollutants to be monitored are specified individually for each sampling point. The limitation, limitation type and monitoring frequency are given for each pollutant. **Except as noted in paragraph 3, of this section, composite samples shall be collected for all pollutants.** The limitation types are defined as follows:

An INSTANT limitation is the maximum allowable concentration of the pollutant in a grab sample for all pollutants except pH and temperature. For pH the INSTANT limitation is the minimum or maximum allowable instantaneous pH value reported in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature reported in degrees C.

A DAILY AVG limitation is the maximum allowable concentration of the pollutant in a composite sample collected within a 24 hour period.

A DAILY MAX limitation is the maximum allowable concentration of the pollutant in any sample collected within a 24 hour period.

A MONTHLY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in all daily samples collected within a calendar month. The concentrations of all daily samples analyzed using the methods specified in this permit must be included in the calculation.

A 4-DAY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in the daily samples collected on four consecutive sampling days. The sampling days are not necessarily consecutive calendar days.

A daily sample is any sample collected within a 24 hour period.

3. Unless specified otherwise in Section II of these conditions and except for the pollutants listed at the end of this paragraph, all samples collected to satisfy the monitoring and reporting requirements of this permit shall be **COMPOSITE SAMPLES** made up by combining individual grab samples collected within a 24 hour period. In no case may a composite sample be made from fewer than four grab samples. In all cases the individual grab samples must be adequately spaced so as to ensure a sample that is representative of the permittee's normal operations. Grab samples shall be collected for oil and grease, total phenol, cyanide, sulfide and volatile organics if required. Temperature and pH shall be measured at the point of discharge and the measurements reported as instantaneous values except, if continuous monitoring is employed, reporting shall be as per paragraph 7 below.

4. When monitoring is required for Total Toxic Organics (TTO), TTO shall be determined by summing all quantifiable values greater than .01 mg/l for the applicable toxic organics listed in 40 CFR 401.15. For discharges subject to categorical pretreatment standards, the applicable toxic organics are listed in the standard. For all other discharges the organics to be included in the TTO are all of those which are or may be present in the discharge.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH and/or temperature at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-C of Ordinance 8472. The permittee shall include with the quarterly self monitoring reports required by this Section, a summary of the continuous temperature and/or pH monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion and the total time for all excursions for temperature and the total time for all excursions for pH.

8. If the permittee monitors any of the listed pollutants using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. All self-monitoring reports shall be certified and signed in accordance with the provisions of District Ordinance 8472, Article X, Section Three. The signed reports shall be submitted every three months (Quarterly) to the District's Department of Environmental Compliance. Each report shall be postmarked no later than the 28th day of the month following the end of the monitoring period. **The first report is due by October 28, 1993.**

10. If any sampling performed by the permittee using the methods specified in this permit indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of surcharges under the provisions of the District's Sewer Service Charge Ordinances. Measured values which exceed 300 mg/l for BOD, 600 mg/l for COD and/or 350 mg/l for TSS may be subject to surcharge. If the permittee is currently subject to surcharge, the BOD, COD and TSS values used for surcharge billing are listed in the Special Conditions Section II of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in District Ordinance 8472, Article II, significant new or increased discharge means:

a. Any discharge from a new process or facility or a new source.

b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.

c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.

d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in District Ordinance 8472, Article VIII, Section Nine.

e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.

f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in District Ordinance 8472, Article II.

g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District's Department of Environmental Compliance by telephone of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:
a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 8472 Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of Sewer Use Ordinance No. 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District upon presentation of proper credentials and after execution of appropriate confidentiality agreements shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the user shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

1. The permittee and the District have identified connection points at which wastewater is discharged from the permittee's premise to the District in addition to any sampling points identified herein. It has been determined:

a). Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b). All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

Therefore, the permittee is not required, at this time, to establish sampling points or to monitor discharges at these connections. However, each quarterly monitoring report shall include a statement that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

~~THIS IS THE LAST PAGE OF THIS PERMIT~~

See Page 9 added 8/11/94 gd

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

FACT SHEET

Check If:
FIRST TIME PERMIT: ___
PERMIT RENEWAL: ✓
PERMIT REVISION: ___

Prepared by: gd
Date: 6-23-93
Checked By: BJ
Date: 6-28-93

PERMIT NO: 4112 1954-00 ISSUE DATE: 9-1-93
EXPIRATION DATE: 8-31-96
MODIFICATION DATE(S): 8-11-94

OTHER ACCOUNT NUMBERS: 4112216100, 41122163 01, 41122164 06
41124345 41124853

COMPANY NAME: Cardinal Glennon Hospital

PREMISE ADDRESS: 1465 S. Grand Blvd

SIC NUMBER(S): 8069

TYPE OF OPERATION: Children's Hospital

TOTAL NUMBER OF SAMPLING POINTS: One
NUMBER OF: ORDINANCE ✓ CATEGORICAL ___ COMBINED ___

CATEGORICAL INDUSTRY: YES ___ NO ✓
IF YES, 40 CFR ___ SUBPART ___

EXTRA STRENGTH SURCHAGE: YES ___ NO ✓
IF YES, BOD: ___ COD: ___ TSS: ___

RETURN FACTOR: YES ___ NO ✓ IF YES, PERCENT (%): ___

SPECIAL CONDITIONS: YES ✓ NO ___

SUPPORTING DOCUMENTS ATTACHED:

PERMIT PREPARATION CHECK LIST: YES ✓ NO ___
POLLUTANT & LIMITATIONS DOCUMENTATION SHEETS: YES ✓ NO ___
PRODUCTION BASED STDS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: ___
MOST STRICT STANDARDS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: ___
COMBINED WASTESTREAMS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: ___
OTHER: ___

COMMENTS: Connection w/out sampling point
8-11-94 Authorized to discharge radioactive wastes

MSD 035864

PERMIT NO: 4112 1954-00

SAMPLING POINT REFERENCE NUMBER: 001

SOURCE OF FLOW: Hospital Waste + NCCW

GENERAL POLLUTANTS:
BOD ✓ COD ✓ O & G ✓ PH ✓ TEMP ✓ TSS ✓
OTHER

PRIORITY POLLUTANTS: AG, T TO

BASIS FOR POLLUTANTS & LIMITATIONS: Ordinance #8472. AG is included because hospital processes X-ray films

SPECIAL CONDITION(S) REQUIRED: YES ____ NO ✓
IF YES, #____ #____ #____ #____ IS APPLICABLE.

SAMPLING POINT REFERENCE NUMBER: ____

SOURCE OF FLOW: ____

GENERAL POLLUTANTS:
BOD ___ COD ___ O & G ___ PH ___ TEMP ___ TSS ___
OTHER

PRIORITY POLLUTANTS: ____

BASIS FOR POLLUTANTS & LIMITATIONS: ____

SPECIAL CONDITION(S) REQUIRED: YES ____ NO ____
IF YES, #____ #____ #____ #____ IS APPLICABLE.

ompany Name: Cardinal Glennon Hosp Pt: 4 Prepared By: gd
Reviewed By / Date:
ct. Number: 4112 1954-00 Date: 6/23/93 ____/____
____/____

PERMIT PREPARATION CHECK LIST (Rev 06/15/93)

REVIEW THE PRETREATMENT DATABASE AND INDUSTRY FILE. ANSWER THE FOLLOWING QUESTIONS AND UPDATE THE DATABASE PRIOR TO DEVELOPING THE DRAFT PERMIT.

1. Are the correct SIC numbers listed? ✓Yes___No
   If No - add:_____.
   - delete:_____.

2. Do the Sampling Point Location comments specifically locate the sampling point(s)? ✓Yes___No

3. Are there any active wastewater connections to District sewers that have no identified sample points? ✓Yes___No
   If Yes - how many? one.
   Explain: City Lateral.
   If Yes - can Special Condition #10 be used? a✓ or b___? ✓Yes___No
   If Yes - is documentation sufficient? ✓Yes___No
   If No - is a compliance schedule necessary to establish documentation? ___Yes___No
   If Yes - Special Condition #20 is applicable.

4. Are there any inactive wastewater connections to District sewers? ___Yes✓No
   If Yes - does Special Condition #11 apply? ___Yes___No

5. Are there any sampling points identified as Dry Justified? ___Yes✓No
   If Yes - which sampling point(s)_____.
   Special Condition #9 is applicable.

6. Does company have upstream/downstream sampling points? ___Yes✓No
   If Yes - upstream # _____ & downstream # _____.
   If Yes - Special Condition #19 is applicable.

7. Does company have more than one water account? ✓Yes___No
   If Yes - is PSIM using the most appropriate account number? ✓Yes___No
   If No - what account number should be used?
   #_____. Prepare Jar 019 request.

8. If company has only one water account, do the discharge factors provide an accurate representation of the flows at each sampling point? N/A ___Yes___No
   If No - explain:_____.

9. Does company have a return factor less than 1.00 for any account? ___Yes✓No
   If Yes - list account number, return factor and date updated:
   #_____ RF_____ UPDATED_____
   #_____ RF_____ UPDATED_____
   Special Condition #13 is applicable.

MSD 035866

Acct. Number: 41121954-00

10. Do the Wastewater Source and Category comments accurately identify the wastewater discharged and the applicable categorical standards? ✓ Yes ___ No

11. Does company discharge any process waste? ✓ Yes ___ No
    If No - does Special Condition #2____ or #3____ apply? ___ Yes ✓ No

12. Are there sampling points which include no process waste flows? ___ Yes ✓ No
    If Yes - does Special Condition #9 apply? ___ Yes ___ No
    If Yes - which sampling point(s):_____.

13. Can grab samples be used in lieu of composite samples? ___ Yes ✓ No
    If Yes - which sampling point(s):_____.
    If Yes - is documentation adequate? ___ Yes ___ No
    Special Condition #12 is applicable.

14. Is company in surcharge - Category 2? ___ Yes ✓ No
    If Yes - date last certified:_____.
    Special Condition # 22 is applicable.

15. Do the ordinance discharge limits correspond to the watershed? ✓ Yes ___ No
    Watershed is classified small____ or large✓ river.

16. Do any sampling points have both Ordinance and Categorical limits? ___ Yes ✓ No
    If Yes - which sampling point(s):_____.
    Special Condition #8 is applicable. Attach worksheet.

17. Is the Combined Wastestream Formula (CWF) required? ___ Yes ✓ No
    If Yes - which sampling point(s):_____.
    If Yes - date last calculated:_____.
    Special Condition #7 is applicable. Attach CWF worksheet.

18. Are limitations based on production data? ___ Yes ✓ No
    If Yes - which sampling point(s):_____.
    If Yes - date last calculated:_____.
    Do Special Conditions #4, #5 & #6 apply? ___ Yes ___ No
    If Yes - which Special Condition(s):_____.

19. Is company a pharmaceutical manufacturer subject to 40 CFR 439? ___ Yes ✓ No
    If Yes - have they certified to the absence of cyanide? ___ Yes ___ No
    If Yes - Special Condition #23 is applicable.
    If No - must total cyanide limitations be adjusted? ___ Yes ___ No
    If Yes - calculate adjusted limitations. Attach worksheet.

20. Is company a soap and detergent manufacturer subject to 40 CFR 417? ___ Yes ✓ No
    If Yes - are they subject to Subparts O__, P__, Q__ or R__? ___ Yes ___ No
    If Yes - for Subpart O, Special Condition #25 is applicable.
    If Yes - for Subpart P, Special Condition #26 is applicable.
    If Yes - for Subpart Q, Special Condition #27 is applicable.
    If Yes - for Subpart R, Special Condition #28 is applicable.

21. Is company a coil coater subject to 40 CFR 465? ___ Yes ✓ No
    If Yes - Special Conditions #29 and #30 are applicable.

Acct. Number: 4112 1954-00

22. Is company a coil coater subject to 40 CFR 465 Subpart D? ___Yes ✓No
    If Yes - Special Condition #31 is applicable.

23. Is company a coil coater subject to 40 CFR 465? ___Yes ✓No
    If Yes - Special Condition #16b is applicable.
    If Yes - is there a separate categorical sampling point for the regulated waste? ___Yes___No
    If Yes - include O&G (Hydrocarbon) in the list of parameters at the categorical sampling point.
    If No - and categorical waste discharges at a combined ord/cat sampling point, include O&G (Total) and O&G (Hydrocarbon) in the list of parameters at the combined sampling point.

24. Is company a job shop electroplater with >10,000 gpd? ___Yes ✓No
    If Yes - Special Condition #17 is applicable.

25. Can company be exempted from monitoring for TTO at a categorical sampling point? ✓N/A___Yes___No
    If Yes - which sampling point(s):_____.
    Special Condition #14 ___or #15 ___is applicable.

26. May company monitor for Oil & Grease in lieu of TTO at a categorical sampling point? ✓N/A___Yes___No
    If Yes - which sampling point(s):_____.
    If Yes - Special Condition #16a is applicable.

27. Are all applicable priority pollutants listed at ordinance sampling points? ✓Yes___No
    If No - add:_____.
    - delete:_____.

28. Can company be exempted from monitoring for TTO at any ordinance sampling points? ___Yes ✓No
    If Yes - which sampling point(s)_____.
    If Yes - describe company's business:_____
    _____

29. Is company required to monitor for Total Phenols? ___Yes ✓No
    If Yes - is Special Condition #24 applicable? ___Yes___No

30. Are all SARA Data pollutants monitored? ✓N/A___Yes___No
    If No - do additional pollutants need to be monitored? ___Yes___No
    If Yes - list pollutant(s):_____.

31. Are all Hazardous Waste Report (403.12(p)) pollutants monitored? ✓N/A___Yes___No
    If No - do additional pollutants need to be monitored? ___Yes___No
    If Yes - list pollutant(s):_____.

32. Are there any additional pollutants, not in the database, which should be monitored? ___Yes ✓No
    If Yes - list pollutant(s):_____.
    Is Special Condition #18 applicable? ___Yes___No

Acct. Number: 41121954-00

33. Does company have a history of compliance problems? ___Yes ✓No
If Yes - is a compliance schedule required? ___Yes___No
If Yes - Special Condition #20 is applicable.

34. Are there any special billing provisions that require a Special Condition in the permit? ___Yes ✓No
If Yes - please describe:

35. Are any Special Conditions other than the standard Special Conditions needed? ___Yes ✓No
If Yes - please describe:

Summary: List all the Special Conditions applicable to this permit:

#10 #____ #____ #____ #____ #____ #____ #____ #____ #____

If Special Condition #20 is applicable, outline the requirements & dates below:

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

File Draft.

July 12, 1993

Al Wittrock
Director Risk Management
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

Re: Proposed Renewal of Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

We have completed our review of your application for renewal of the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit for the premise identified above. The current permit expires on August 31, 1993. Enclosed is a draft copy of the proposed permit renewal.

This draft has been prepared pursuant to the federal pretreatment regulations in 40 CFR 403 as amended July 24, 1990 and is based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

Please review this draft copy carefully. If you disagree with any of the terms or conditions of the proposed permit please inform us, in writing, within 15 working days of receipt. Absence of a response within this time frame will be deemed as acceptance of the draft permit and we will proceed to issue the final permit.

If you have any questions, please contact me at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel

Gunter H. Durdel
Assistant Engineer

ldl

Enclosure

DRAFT

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: **41121954-00**

EFFECTIVE DATE: **SEPTEMBER 01, 1993**
EXPIRATION DATE: **AUGUST 31, 1996**

ISSUED TO: **CARDINAL GLENNON HOSPITAL**
1465 S. GRAND BLVD
ST. LOUIS, MO 63104

SIC NUMBER(S): **8069**

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: **ONE**
SAMPLING PT. REF. NUMBER(S): **001**

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

Bob Zeman, P.E.
Industrial Waste Engineer

MSD 035871

DRAFT

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **001**

SAMPLING POINT LOCATION: **MH W OF BLDG & S OF VISTA AVE IN SDWLK SAMPLE S FLOW**

AVERAGE WASTEWATER FLOW (GPD): **48,800**

WASTEWATER SOURCE AND CATEGORY: **HOSPITAL WASTE + NCCW**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow	***	Daily Avg	***
Biochemical Oxygen Demand	****	Daily Avg	once/3 mo
Chemical Oxygen Demand	****	Daily Avg	once/3 mo
Oil and Grease (Total)	200	Instant	once/3 mo
pH Acidic (s.u.) Less than 7	5.5	Instant	once/3 mo
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/3 mo
Temperature (Degrees C)	60	Instant	once/3 mo
Total Suspended Solids	****	Daily Avg	once/3 mo
Silver (Total)	.5	Daily Avg	once/3 mo
Total Toxic Organics	5.52	Instant	once/yr

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per month. If additional flow measurements or estimates are made, all must be reported.

**** Monitoring requirement only. See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall self-monitor the discharge at each of the identified sampling points at the frequency specified in this permit. The permittee shall submit self-monitoring reports to the District's Department of Environmental Compliance identifying the concentrations of regulated substances in each of these discharges. Each report shall also include a record of all measured or estimated average daily flows during the reporting period.

2. The pollutants to be monitored are specified individually for each sampling point. The limitation, limitation type and monitoring frequency are given for each pollutant. **Except as noted in paragraph 3, of this section, composite samples shall be collected for all pollutants.** The limitation types are defined as follows:

An INSTANT limitation is the maximum allowable concentration of the pollutant in a grab sample for all pollutants except pH and temperature. For pH the INSTANT limitation is the minimum or maximum allowable instantaneous pH value reported in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature reported in degrees C.

A DAILY AVG limitation is the maximum allowable concentration of the pollutant in a composite sample collected within a 24 hour period.

A DAILY MAX limitation is the maximum allowable concentration of the pollutant in any sample collected within a 24 hour period.

A MONTHLY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in all daily samples collected within a calendar month. The concentrations of all daily samples analyzed using the methods specified in this permit must be included in the calculation.

A 4-DAY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in the daily samples collected on four consecutive <u>sampling</u> days. The sampling days are not necessarily consecutive calendar days.

A daily sample is <u>any</u> sample collected within a 24 hour period.

3. Unless specified otherwise in Section II of these conditions and except for the pollutants listed at the end of this paragraph, all samples collected to satisfy the monitoring and reporting requirements of this permit shall be **COMPOSITE SAMPLES** made up by combining individual grab samples collected within a 24 hour period. In no case may a composite sample be made from fewer than four grab samples. In all cases the individual grab samples must be adequately spaced so as to ensure a sample that is representative of the permittee's normal operations. Grab samples shall be collected for oil and grease, total phenol, cyanide, sulfide and volatile organics if required. Temperature and pH shall be measured at the point of discharge and the measurements reported as instantaneous values except, if continuous monitoring is employed, reporting shall be as per paragraph 7 below.

4. When monitoring is required for Total Toxic Organics (TTO), TTO shall be determined by summing all quantifiable values greater than .01 mg/l for the applicable toxic organics listed in 40 CFR 401.15. For discharges subject to categorical pretreatment standards, the applicable toxic organics are listed in the standard. For all other discharges the organics to be included in the TTO are all of those which are or may be present in the discharge.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH and/or temperature at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-C of Ordinance 8472. The permittee shall include with the quarterly self monitoring reports required by this Section, a summary of the continuous temperature and/or pH monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion and the total time for all excursions for temperature and the total time for all excursions for pH.

8. If the permittee monitors any of the listed pollutants using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. All self-monitoring reports shall be certified and signed in accordance with the provisions of District Ordinance 8472, Article X, Section Three. The signed reports shall be submitted every three months (Quarterly) to the District's Department of Environmental Compliance. Each report shall be postmarked no later than the 28th day of the month following the end of the monitoring period. **The first report is due by October 28, 1993.**

10. If any sampling performed by the permittee using the methods specified in this permit indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of surcharges under the provisions of the District's Sewer Service Charge Ordinances. Measured values which exceed 300 mg/l for BOD, 600 mg/l for COD and/or 350 mg/l for TSS may be subject to surcharge. If the permittee is currently subject to surcharge, the BOD, COD and TSS values used for surcharge billing are listed in the Special Conditions Section II of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in District Ordinance 8472, Article II, significant new or increased discharge means:

a. Any discharge from a new process or facility or a new source.

b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.

c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.

d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in District Ordinance 8472, Article VIII, Section Nine.

e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.

f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in District Ordinance 8472, Article II.

g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District's Department of Environmental Compliance by telephone of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:
a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 8472 Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of Sewer Use Ordinance No. 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District upon presentation of proper credentials and after execution of appropriate confidentiality agreements shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the user shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

1. The permittee and the District have identified connection points at which wastewater is discharged from the permittee's premise to the District in addition to any sampling points identified herein. It has been determined:

a). Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b). All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

Therefore, the permittee is not required, at this time, to establish sampling points or to monitor discharges at these connections. However, each quarterly monitoring report shall include a statement that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

THIS IS THE LAST PAGE OF THIS PERMIT

FOR MSD USE ONLY		
ACCOUNT NUMBER: 4112195400	CATEGORY: 1 2 3 (4) 5 6 9	
TA: BP TS: OMC	gd Reviewer's Initials	6/23/93 Date

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL USER QUESTIONNAIRE

Note to Signing Official: In accordance with Title 40 of the Code of Federal Regulations Part 403 Section 403.14, information and data provided in this questionnaire which identifies the nature and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other information shall be governed by procedures specified in 40 CFR Part 2. Should a discharge permit be required for your facility, the information in this questionnaire will be used to issue the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: Cardinal Glennon Children's Hospital
2. Mailing Address: 1465 South Grand Blvd.
   St. Louis, MO Zip Code 63104
3. Premise Address: Same as above
   Zip Code
4. Person Authorized to Sign Reporting Documents:
   Name and Title: Mr. Al Wittrock Risk Manager
   Tel. No. 314-577-5616
5. Check one: [] Existing Discharge
   [] Proposed Discharge If proposed, indicate the discharge start date:
6. Shift Information:
   a. Number of shifts per work day: 3 and work days per week: 7
   b. Average number of employees per shift: 1st 600± 2nd 350± 3rd 350± Total: 1300±
   c. Shift start times: 1st 8:00 a.m.± 2nd 4:00 p.m.± 3rd 12:00 a.m.±

SECTION B - PRODUCT OR SERVICE INFORMATION

1. Briefly describe the primary manufacturing or service activities at the premise address and list the applicable SIC number for each activity:

PRIMARY ACTIVITIES	SIC NUMBER
a. Health Care and Hospital	8062 9
b.	
c.	
d.	

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: ~~4112216400, 4112216100,~~ 4112195400, ~~4112216301~~

SECTION B - PRODUCT OR SERVICE INFORMATION (Cont'd)

2. Are primary activities generally batch or continuous processes? [X] batch [] continuous
3. Principal raw materials used: None
4. Principal products produced: None
5. Check all activities which are conducted at your premise in addition to the primary activities described in B.1. Indicate the SIC number, if known. Do not check activities which are already included in B.1.

	SIC NO.		SIC NO.
[] Adhesive & Sealants Mfg.		[] Mineral Mining & Processing	
[] Aluminum Forming		[] Nonferrous Metals Forming	
[] Asbestos Mfg.		[] Nonferrous Metals Mfg	
[] Battery Mfg.		[] Organic Chem., Plastics & Synthetic Fibers Mfg	
[] Builder's Paper and Roofing Felt Mfg.		[] Paint Formulating	
[] Carbon Black Mfg.		[] Painting, Finishing or Paint Stripping	
[] Cement Mfg.		[] Parts Washing	
[] Coil Coating		[] Paving and Roofing Materials	
[] Copper Forming		[] Pesticide Chem., Mfg., Formulating, Packaging	
[] Dairy Products Processing		[] Petroleum Refining	
[] Drum Reconditioning		[] Pharmaceutical Mfg	
[] Electrical and Electronic Components		[] Phosphate Mfg	
[] Electroplating		[] Photographic Processing	
[] Explosives Mfg.		[] Plastic Molding and Forming	
[] Feedlots		[] Porcelain Enameling	
[] Ferroalloy Mfg.		[] Printing & Publishing	
[] Fertilizer Mfg.		[] Pulp, Paper & Paperboard Mfg	
[X] Food Preparation	5812	[] Q. C. Laboratory	
[] Fruits and Vegetable Processing		[X] R. & D. Laboratory	8071
[X] General Offices	8011	[] Radioactive Materials Processing	
[] Glass Mfg.		[] Repair Shop, Garage	
[] Grain Milling		[] Rubber & Rubber Prod. Mfg.	
[] Gum & Wood Chemical Mfg.		[] Seafood Processing	
[] Hazardous Waste Treatment, Storage or Disposal		[] Soap and Detergent Mfg.	
[] Health Care & Hospital		[] Solvent Recycling	
[] Industrial Laundry		[] Steam Electric Power Generation	
[] Ink Formulating		[] Sugar Processing	
[] Inorganic Chemicals Mfg.		[] Textile Mills	
[] Iron and Steel Mfg.		[] Timber Products Mfg.	
[] Leather Tanning and Finishing		[] Transportation Equipment Cleaning	
[] Machine Shop		[] Transportation Services	
[] Machinery Mfg. or Rebuilding		[] Used Oil Reclamation	
[] Meat Processing		[] Vehicle/equipment Washing	
[] Metal Finishing		[] Warehousing	
[] Metal Molding and Casting		[] Waste Recycling	
		[] Others	

6. Are your processes subject to seasonal variation? [] Yes [X] No

If "Yes," explain and indicate the month(s) of peak activity. Processes are subject to variation, but variations are not necessarily due to season changes above.

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: ~~4112216400, 4112216188,~~ 4112195400
~~4112216381~~

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s):
   - [X] City of St. Louis Water Div.
   - [ ] St. Louis Co. Water Co.
   - [ ] Other Municipal Source: _____
   - [ ] Hauled by Contractor
   - [ ] Surface Water
   - [ ] Private Well
   - [ ] Other (describe) _____

2. Water Bill Addressee: Cardinal Glennon Children's Hospital

3. Water Service Account Numbers: 407328-227084, 405153-226370, 407331-227086, 407334-227088

4. List past twelve months water usage from: [X] Water Bill [ ] Other Sources

a. 1st quarter	1-16 1992	through	4-23 1992	9400 Ccf	_____ Ccf
b. 2nd quarter	4-27 1992	through	7-29 1992	10920 Ccf	_____ Ccf
c. 3rd quarter	7-28 1992	through	10-26 1992	10000 Ccf	_____ Ccf
d. 4th quarter	10-26 1992	through	1-25 1993	6840 Ccf	_____ Ccf

5. Describe any treatment or conditioning process performed on the raw water before use: _____

6. List water uses within your facility:

Type of Usage	Estimated Avg Usage (Gallons Per Day)	Type of Usage	Estimated Avg Usage (Gallons Per Day)
a. Sanitary	48,800	e. Process	None
b. Irrigation & Lawn Watering	2,170	f. Plant and equip. washdown	None
c. Non-contact cooling water	3,250	g. Boiler Feed	None
d. Contact cooling water	None	h. Other: _____	None
		i. Total a through h:	54,220

7. List water losses and wastewater discharges from your facility:

Type of Discharge	Estimated Avg Discharge (Gallons Per Day)	Type of Discharge	Estimated Avg Discharge (Gallons Per Day)
a. Municipal Sewer	48,800	d. Evaporation	3,250
b. Watercourse, storm drain, ground	2,170	e. Contained in product	None
c. Haulers	None	f. Total a through e:	54,220

Total at 7f must equal total at 6i.

8. List average water usage and average wastewater discharge for each activity listed in Section B.1 and B.5. Attach additional sheets if needed.

Item No.	Activity	Type of Discharge Cont.	Type of Discharge Batch	Avg Use (GPD)	Avg Discharge (GPD)	Date When Discharge First Commenced (if known)
1	Health Care & Hospital	[ ]	[X]	48800	48800	Unknown
2	R&D Laboratory	[ ]	[X]	1625	1625	Unknown
3	Food Preparation	[ ]	[X]	1625	1625	Unknown
4	General Offices	[ ]	[X]	2170	2170	Unknown
		[ ]	[ ]			

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 S. Grand Blvd.
Account Number: ~~4112216100, 4112216100,~~ 4112195400 ~~4112216301~~

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, alleys, streets and other pertinent structures;
   b. All sewers and drains, including all connections, inlets, manholes, vents and other access or control structures. Identify each sewer as sanitary, storm or combined and indicate its size.
   c. Identify a sampling point for each connection to the public sewer.
   d. Identify a sampling point for each discharge from a federally regulated categorical process.
   e. Identify a sampling point for each discharge to a separate storm sewer or water course.
2. List each sampling point identified in D.1 c, d, and e above. Also include each connection for which there is no sampling point. Assign a sequential reference number to each point, starting with No. 1. Attach additional sheets, if necessary.

Reference Number	Sewer Size (inch)	Description of sewer sampling point or connection	Total Average Flow (GPD)
1	24"	Manhole in sidewalk on Vista Avenue	70,000 GPD
2		located at northwest corner of property.	
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. If you listed water usage quantities only for items 6a through c, in Section C.6, you may skip this section. Otherwise, you must complete this section for all water usage listed in Section C.6. Attach additional sheets if necessary. ~~Not Applicable.~~ per tel call 6/23/93 gd

	Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection 1	2	3	4	5	Facility Total
a.	Sanitary	48,800					
b.	Irrigation & Lawn Watering						
c.	Non-Contact Cooling Water	3,250					
d.	Contact Cooling Water						
e.	Process (From C.8)						
f.	Plant & Equip. Washdown						
g.	Boiler Blowdown						
h.	Other ( )						
	Regeneration Waste (C.5)						
	Total (Same as D.2)	52,050					

2. If any of the above points discharge to a watercourse or a separate storm sewer, complete the following: Not Applicable.

NPDES Outfall Number					
NPDES Permit Number					

3. Do any of the above points also convey stormwater from your premise ? Not Applicable.

▯ Yes ▯ No	▯ Yes ▯ No	▯ Yes ▯ No	▯ Yes ▯ No	▯ Yes ▯ No

4. Do you pretreat any of the wastes discharged through any of the above points? Not Applicable.

▯ Yes ▯ No	▯ Yes ▯ No	▯ Yes ▯ No	▯ Yes ▯ No	▯ Yes ▯ No

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: [illegible], [illegible], 4112195400, 4112216301

SECTION E - WASTEWATER INFORMATION (Cont'd)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in D.4:

Point No.	Pretreatment System Description
	Not Applicable.

6. Does your facility have:

a. A spill control plan? [ ] Yes [X] No
b. A waste minimization plan? [ ] Yes [ ] No
c. A solvent management plan? [ ] Yes [ ] No
d. A slug discharge plan? [ ] Yes [X] No.

7. If any wastewater analysis has been performed on the wastewater discharges from your facility attach a copy of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary.

8. Priority Pollutant Information: Check the appropriate box by each listed chemical whether it is "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" on your premise, used in your manufacturing or service activity or generated as a by-product. Some pollutants are known by other names. Refer to the instruction booklet for those pollutants which have an asterisk (*).

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
1.	asbestos (fibrous)	[ ]	[X]	[ ]	[ ]
2.	cyanide (total)	[ ]	[X]	[ ]	[ ]
3.	antimony (total)	[ ]	[X]	[ ]	[ ]
4.	arsenic (total)	[X]	[ ]	[ ]	[ ]
5.	beryllium (total)	[ ]	[X]	[ ]	[ ]
6.	cadmium (total)	[ ]	[X]	[ ]	[ ]
7.	chromium (total)	[X]	[ ]	[ ]	[ ]
8.	copper (total)	[X]	[ ]	[ ]	[ ]
9.	lead (total)	[ ]	[X]	[ ]	[ ]
10.	mercury (total)	[ ]	[ ]	[ ]	[X]
11.	nickel (total)	[ ]	[X]	[ ]	[ ]
12.	selenium (total)	[ ]	[X]	[ ]	[ ]
13.	silver (total	[ ]	[X]	[ ]	[X]
14.	thallium (total)	[ ]	[X]	[ ]	[ ]
15.	zinc (total)	[ ]	[X]	[ ]	[ ]
16.	acenaphthene	[ ]	[X]	[ ]	[ ]
17.	acenaphthylene	[ ]	[X]	[ ]	[ ]
18.	acrolein	[ ]	[X]	[ ]	[ ]
19.	acrylonitrile	[ ]	[X]	[ ]	[ ]
20.	aldrin	[ ]	[X]	[ ]	[ ]
21.	anthracene	[ ]	[X]	[ ]	[ ]
22.	benzene	[ ]	[X]	[ ]	[ ]
23.	benzidine	[ ]	[X]	[ ]	[ ]
24.	benzo (a) anthracene*	[ ]	[X]	[ ]	[ ]
25.	benzo (a) pyrene	[ ]	[X]	[ ]	[ ]
26.	benzo (b) fluoranthene	[ ]	[X]	[ ]	[ ]
27.	benzo (g,h,i) perylene*	[ ]	[X]	[ ]	[ ]
28.	benzo (k) fluoranthene*	[ ]	[X]	[ ]	[ ]
29.	alpha-BHC	[ ]	[X]	[ ]	[ ]
30.	beta-BHC	[ ]	[X]	[ ]	[ ]
31.	delta-BHC	[ ]	[X]	[ ]	[ ]
32.	gamma-BHC*	[ ]	[X]	[ ]	[ ]
33.	bis (2-chloroethyl) ether*	[ ]	[X]	[ ]	[ ]
34.	bis (2-chloroethoxy) methane*	[ ]	[X]	[ ]	[ ]
35.	bis (2-chloroisopropyl) ether*	[ ]	[X]	[ ]	[ ]
36.	Reserved	[ ]	[X]	[ ]	[ ]
37.	bis (2-ethylhexyl) phthalate	[ ]	[X]	[ ]	[ ]
38.	bromodichloromethane*	[ ]	[X]	[ ]	[ ]
39.	bromoform*	[ ]	[X]	[ ]	[ ]
40.	bromomethane*	[ ]	[X]	[ ]	[ ]
41.	4-bromophenylphenyl ether	[ ]	[X]	[ ]	[ ]
42.	butylbenzyl phthalate	[ ]	[X]	[ ]	[ ]
43.	carbon tetrachloride*	[ ]	[X]	[ ]	[ ]
44.	chlordane	[ ]	[X]	[ ]	[ ]
45.	4-chloro-3-methylphenol*	[ ]	[X]	[ ]	[ ]
46.	chlorobenzene	[ ]	[X]	[ ]	[ ]
47.	chlorethane*	[ ]	[X]	[ ]	[ ]
48.	2-chloroethylvinyl ether	[ ]	[X]	[ ]	[ ]
49.	chloroform*	[ ]	[ ]	[ ]	[X]
50.	chloromethane*	[ ]	[X]	[ ]	[ ]
51.	2-chloronaphthalene	[ ]	[X]	[ ]	[ ]
52.	2-chlorophenol*	[ ]	[X]	[ ]	[ ]
53.	4-chlorophenylphenyl ether	[ ]	[X]	[ ]	[ ]
54.	chrysene*	[ ]	[X]	[ ]	[ ]
55.	4,4'-DDD*	[ ]	[X]	[ ]	[ ]
56.	4,4'-DDE*	[ ]	[X]	[ ]	[ ]
57.	4,4'-DDT*	[ ]	[X]	[ ]	[ ]
58.	dibenzo (a,h) anthracene*	[ ]	[X]	[ ]	[ ]
59.	dibromochloromethane*	[ ]	[X]	[ ]	[ ]
60.	1,2-dichlorobenzene*	[ ]	[X]	[ ]	[ ]
61.	1,3-dichlorobenzene*	[ ]	[X]	[ ]	[ ]
62.	1,4-dichlorobenzene*	[ ]	[X]	[ ]	[ ]
63.	3,3'-dichlorobenzidine	[ ]	[X]	[ ]	[ ]
64.	Reserved	[ ]	[X]	[ ]	[ ]
65.	1,1-dichloroethane*	[ ]	[X]	[ ]	[ ]
66.	1,2-dichloroethane*	[ ]	[X]	[ ]	[ ]
67.	1,1-dichloroethene*	[ ]	[X]	[ ]	[ ]
68.	trans-1,2-dichloroethene*	[ ]	[X]	[ ]	[ ]
69.	2,4-dichlorophenol	[ ]	[X]	[ ]	[ ]
70.	1,2-dichloropropane*	[ ]	[X]	[ ]	[ ]
71.	(cis & trans) 1,3-dichloropropene*	[ ]	[X]	[ ]	[ ]
72.	dieldrin	[ ]	[X]	[ ]	[ ]
73.	diethyl phthalate*	[ ]	[X]	[ ]	[ ]
74.	2,4-dimethylphenol*	[ ]	[X]	[ ]	[ ]
75.	dimethyl phthalate	[ ]	[X]	[ ]	[ ]
76.	di-n-butyl phthalate	[ ]	[X]	[ ]	[ ]

Continued on Page 6

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: ~~4112216600, 4112216100,~~ 4112195400, ~~4112216301~~

SECTION E - WASTEWATER INFORMATION (Cont'd)

Priority Pollutant Information (Cont'd)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
77.	di-n-octyl phthalate*	☐	☒	☐	☐
78.	4,6-dinitro-2-methylphenol*	☐	☒	☐	☐
79.	2,4-dinitrophenol	☐	☐	☐	☒
80.	2,4-dinitrotoluene	☐	☒	☐	☐
81.	2,6-dinitrotoluene	☐	☒	☐	☐
82.	1,2-diphenylhydrazine*	☐	☒	☐	☐
83.	endosulfan I*	☐	☒	☐	☐
84.	endosulfan II*	☐	☒	☐	☐
85.	endosulfan sulfate	☐	☐	☐	☒
86.	endrin	☐	☒	☐	☐
87.	endrin aldehyde	☐	☒	☐	☐
88.	ethylbenzene	☐	☒	☐	☐
89.	fluoranthene	☐	☒	☐	☐
90.	fluorene*	☐	☒	☐	☐
91.	heptachlor	☐	☒	☐	☐
92.	heptachlor epoxide	☐	☒	☐	☐
93.	hexachlorobenzene*	☐	☒	☐	☐
94.	hexachlorobutadiene	☐	☒	☐	☐
95.	hexachlorocyclopentadiene*	☐	☒	☐	☐
96.	hexachloroethane*	☐	☒	☐	☐
97.	indeno (1,2,3-cd) pyrene*	☐	☒	☐	☐
98.	isophorone*	☐	☒	☐	☐
99.	methylene chloride*	☐	☐	☐	☒
100.	naphthalene	☐	☒	☐	☐
101.	nitrobenzene	☐	☒	☐	☐
102.	2-nitrophenol	☐	☒	☐	☐
103.	4-nitrophenol*	☐	☒	☐	☐
104.	N-nitrosodimethylamine*	☐	☒	☐	☐
105.	N-nitrosodi-n-propylamine*	☐	☒	☐	☐
106.	N-nitrosodiphenylamine	☐	☒	☐	☐
107.	PCB-1016*	☐	☒	☐	☐
108.	PCB-1221*	☐	☒	☐	☐
109.	PCB-1232	☐	☒	☐	☐
110.	PCB-1242*	☐	☒	☐	☐
111.	PCB-1248*	☐	☒	☐	☐
112.	PCB-1254*	☐	☒	☐	☐
113.	PCB-1260*	☐	☒	☐	☐
114.	pentachlorophenol	☐	☒	☐	☐
115.	phenanthrene	☐	☒	☐	☐
116.	phenol	☐	☐	☐	☒
117.	pyrene	☐	☒	☐	☐
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin*	☐	☒	☐	☐
119.	1,1,2,2-tetrachloroethane*	☐	☒	☐	☐
120.	tetrachloroethene*	☐	☒	☐	☐
121.	toluene*	☐	☒	☐	☐
122.	toxaphene	☐	☒	☐	☐
123.	1,2,4-trichlorobenzene	☐	☒	☐	☐
124.	1,1,1-trichloroethane*	☐	☒	☐	☐
125.	1,1,2-trichloroethane*	☐	☒	☐	☐
126.	trichloroethene*	☐	☒	☐	☐
127.	Reserved	☐	☒	☐	☐
128.	2,4,6-trichlorophenol	☐	☒	☐	☐
129.	vinyl chloride	☐	☒	☐	☐

9. For priority pollutants in E.8 which are indicated "Known Present," list and provide the following data for each; (attach additional sheets if needed.)

ITEM NO.	PRIORITY POLLUTANT	ANNUAL USAGE (LBS)	LOSS TO SEWER (LBS/YEAR)
10	Mercury (Contained in thermometers)	0.1	0.0
13	Silver	unknown	0.0*
49	Chloroform	30.0	0.0
79	2, 4 Dinitrophenol	0.1	0.0
85	Endrin	0.1	0.0
99	Methylene Chloride	5.0	0.0
116	Phenol	30.0	0.1

*Silver bromide generated in the Diagnostic Imaging Department is recovered and sold to Central States Refining Company. Four silver recovery units are currently in use.

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: ~~4112216400, 4112216100,~~ 4112195400, ~~4112216301~~

SECTION F - NON-SEWERED WASTES

1. Do you generate any liquid wastes or sludges which are not disposed in the sewer system? [X] Yes [] No
If "Yes" complete items 2 and 3 below. If "No," skip remainder of this section. Note: Be sure to include wastewaters listed in Section C.7c.

2. Information on non-sewered waste:

Type of Waste	Estimated Quantity Disposed/yr	Units	Store on-site	Dispose on-site	Dispose off-site
[X] Acids and/or Alkalies	31	Liters	[]	[]	[X]
[X] Equip. Oils and/or Grease	150	Gallons	[]	[]	[X]
[] Infectious Waste			[]	[]	[]
[] Inks/Dyes			[]	[]	[]
[] Kitchen/Food Service Grease			[]	[]	[]
[X] Organic Compounds	71	Liters	[]	[]	[X]
[] Paints or Paint Sludges			[]	[]	[]
[] Pesticides			[]	[]	[]
[] Pretreatment Sludges			[]	[]	[]
[] Radioactive Waste			[]	[]	[]
[X] Solvents/Thinners	50	Gallons	[]	[]	[X]
[] Other			[]	[]	[]
			[]	[]	[]
			[]	[]	[]

3. List your USEPA and/or MDNR Hazardous Waste Generator numbers:

USEPA MDD075904839 MDNR C01310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. The following analytical information is required for each sampling point or each connection to the public sewer (see D.1.c), only if your water usage exceeds 80 Ccf per month. Representative samples of the wastewaters in each sewer must be collected and analyzed for the listed parameters. Concentrations are to be reported in mg/l (ppm).

Sewer Number (Refer to Section D.2)
(If more than 5 connections, attach additional sheets)

Daily Average Concentration For Each Sampling Point or Connection

Please refer to attached analytical data already on file with MSD.

Parameter (mg/l)	1	2	3	4	5
Total Solids					
Total Suspended Solids					
Biochemical Oxygen Demand$_5$					
Chemical Oxygen Demand					
Flow (gpd)					

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: ~~4112216480, 4112216100~~, 4112195400, ~~4112216301~~

SECTION G - INDUSTRIAL WASTE (Cont'd)

2. Sample handling information: Organization Name and Address

Please refer to attached analytical data already on file with MSD.

a. Samples collected by: _____

b. Samples analyzed by: _____

SECTION H - CERTIFICATION AND SIGNATURE

1. The following individual may be contacted regarding the information contained in this questionnaire:

Name and title of contact person: Al Wittrock, Risk Manager

Tel No. 314-577-5616

2. "I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name and title of signing official: Al Wittrock

Tel No. 314-577-5616

Signature Al Wittrock Date 7/6/93

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

August 12, 1992

Al Wittrock
Director, Risk Management
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Blvd
St. Louis, MO 63104

Dear Mr. Wittrock:

Enclosed is the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit for the premise identified above. This permit is issued pursuant to the federal pretreatment regulations in 40 CFR 403 as amended July 24, 1990. This permit has been prepared based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

Monitoring reports required by the conditions of this permit must be submitted on a periodic basis. Copies of the necessary report forms are being prepared and will be sent to you.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. Absence of a response within this time frame will be deemed acceptance, by you, of the provisions of this permit.

You may contact us at 436-8755 at any time if you have any question about your permit.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter Durdel
Assistant Engineer

ldl

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: **41121954-00**

EFFECTIVE DATE: **AUGUST 15, 1992**
EXPIRATION DATE: **AUGUST 31, 1993**

ISSUED TO: **CARDINAL GLENNON HOSPITAL**
1465 S. GRAND BLVD
ST. LOUIS, MO 63104

SIC NUMBER(S): **8069**

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: **ONE**
SAMPLING PT. REF. NUMBER(S): **001**

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

John R. Lodderhose, P.E.
Manager Environmental Compliance

MSD 035888

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **001**

SAMPLING POINT LOCATION: **MH W OF BLDG & S OF VISTA AVE IN SDWLK SAMP S FLOW**

AVERAGE WASTEWATER FLOW (GPD): **100,994**

WASTEWATER SOURCE AND CATEGORY: **HOSPITAL WASTES + NCCW**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow (GPD)	***	Daily Avg	***
Biochemical Oxygen Demand	300	Daily Avg	once/3 mo
Chemical Oxygen Demand	600	Daily Avg	once/3 mo
Oil and Grease (Total)	200	Instant	once/3 mo
pH Acidic (s.u.) Less than 7	5.5	Instant	once/3 mo
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/3 mo
Temperature (Degrees C)	60	Instant	once/3 mo
Total Suspended Solids	350	Daily Avg	once/3 mo
Silver (Total)	.5	Daily Avg	once/3 mo
Total Toxic Organics	5.52	Instant	once/yr

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per month. If additional flow measurements or estimates are made, all must be reported.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall self-monitor the discharge at each of the identified sampling points at the frequency specified in this permit. The permittee shall submit self-monitoring reports to the District's Department of Environmental Compliance identifying the concentrations of regulated substances in each of these discharges. Each report shall also include a record of all measured or estimated average daily flows during the reporting period.

2. The pollutants to be monitored are specified individually for each sampling point. The limitation, limitation type and monitoring frequency are given for each pollutant. The limitation types are defined as follows:

An INSTANT limitation is the maximum allowable concentration of the pollutant in a grab sample for all pollutants except pH and temperature. For pH the INSTANT limitation is the minimum or maximum allowable instantaneous pH value reported in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature reported in degrees C.

A DAILY AVG limitation is the maximum allowable concentration of the pollutant in a composite sample collected within a 24 hour period.

A DAILY MAX limitation is the maximum allowable concentration of the pollutant in any sample collected within a 24 hour period.

A MONTHLY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in all daily samples collected within a calendar month. The concentrations of all daily samples analyzed using the methods specified in this permit must be included in the calculation.

A 4-DAY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in the daily samples collected on four consecutive <u>sampling</u> days. The sampling days are not necessarily consecutive calendar days.

A daily sample is <u>any</u> sample collected within a 24 hour period.

3. Exceedances of the limitations for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and Total Suspended Solids (TSS), do not constitute violations of this permit. However, the values reported will be used by the District to assess the applicability of surcharges under the provisions of the District's Sewer Service Charge Ordinances. The limitations listed represent the concentrations of these pollutants found in normal wastewater as defined in the ordinances, except, if the permittee is currently subject to sewer service surcharges, the limitations listed are the concentrations being used for billing purposes. These values will be used until replaced by updated certified data in accordance with the procedures in the ordinances.

4. Unless specified elsewhere in this permit and except for the pollutants listed at the end of this paragraph, all samples collected to satisfy the monitoring and reporting requirements of this permit shall be composite samples made up by combining individual grab samples collected within a 24 hour period. In no case may a composite sample be made from fewer than four grab samples. In all cases the individual grab samples must be adequately spaced so as to ensure a sample that is representative of the permittee's normal operations. Grab samples shall be collected for oil and grease, total phenol, cyanide, sulfide and volatile organics if required. Temperature and pH shall be measured at the point of discharge and the measurements recorded as instantaneous values.

5. When monitoring is required for Total Toxic Organics (TTO), TTO shall be determined by summing all quantifiable values greater than .01 mg/l for the applicable toxic organics listed in 40 CFR 401.15. For discharges subject to categorical pretreatment standards, the applicable toxic organics are listed in the standard. For all other discharges the organics to be included in the TTO are all of those which are or may be present in the discharge.

6. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

7. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters.

8. If the permittee monitors any of the listed pollutants using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. All self-monitoring reports shall be certified and signed in accordance with the provisions of District Ordinance 8472, Article X, Section Three. The signed reports shall be submitted every three months (Quarterly) to the District's Department of Environmental Compliance. Each report shall be postmarked no later than the 28th day of the month following the end of the reporting period. The first report is due on **January 28, 1993.**

10. If any sampling performed by the permittee using the methods specified in this permit indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in District Ordinance 8472, Article II, significant new or increased discharge means:

a. Any discharge from a new process or facility or a new source.

b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.

c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.

d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in District Ordinance 8472, Article VIII, Section Nine.

e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.

f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in District Ordinance 8472, Article II.

g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District's Department of Environmental Compliance by telephone of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION OR MODIFICATION:

1. This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:
a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

2. This permit may be modified after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

F. TERMINATION OF DISCHARGE:

Whenever any discharge covered by this permit is permanently eliminated, this permit will be terminated or modified upon verification by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of Sewer Use Ordinance No. 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District upon presentation of proper credentials and after execution of appropriate confidentiality agreements shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the user shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

1. The permittee and the District have identified connection points at which wastewater is discharged from the permittee's premise to the District in addition to any sampling points identified herein. It has been determined:

a). Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b). All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

Therefore, the permittee is not required, at this time, to establish sampling points or to monitor discharges at these connections. However, each quarterly monitoring report shall include a statement that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

FACT SHEET

Check If:
FIRST TIME PERMIT: ✓
PERMIT RENEWAL: ___
PERMIT REVISION: ___

Prepared by: GD
Date: 5/27-93
Checked By: _____
Date: _____

PERMIT NO: 41121954-00 ISSUE DATE: Aug 15, 1992
EXPIRATION DATE: Aug 31, 1993
MODIFICATION DATE(S): _____

OTHER ACCOUNT NUMBERS: None

COMPANY NAME: Cardinal Glennon Hosp

PREMISE ADDRESS: 1465 S. Grand Blvd

SIC NUMBER(S): 8069

TYPE OF OPERATION: Childrens Hospital

TOTAL NUMBER OF SAMPLING POINTS: one
NUMBER OF: ORDINANCE ✓ CATEGORICAL ___ COMBINED ___

CATEGORICAL INDUSTRY: YES ___ NO ✓
IF YES, 40 CFR _____ SUBPART _____

EXTRA STRENGTH SURCHAGE: YES ___ NO ✓
IF YES, BOD: _____ COD: _____ TSS: _____

REDUCTION FACTOR: YES ___ NO ✓ IF YES, PERCENT (%): _____

SPECIAL CONDITIONS: YES ✓ NO ___

SUPPORTING DOCUMENTS ATTACHED:

PERMIT PREPARATION CHECK LIST: YES ✓ NO ___
POLLUTANT & LIMITATIONS DOCUMENTATION SHEETS: YES ✓ NO ___
PRODUCTION BASED STDS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: _____
MOST STRICT STANDARDS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: _____
COMBINED WASTESTREAMS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: _____
OTHER: _____

COMMENTS: There is Wastewater connection w/out sampling point. Requires Special Condition

MSD 035896

PERMIT NO: 41121954-00

SAMPLING POINT REFERENCE NUMBER: 001

SOURCE OF FLOW: Hospital Waste + NCCW

GENERAL POLLUTANTS:
BOD ✓ COD ✓ O & G ✓ PH ✓ TEMP ✓ TSS ✓
OTHER

PRIORITY POLLUTANTS: Silver & TTO

BASIS FOR POLLUTANTS & LIMITATIONS:
- Ordinance 8472
- Silver Recovery Units in Radiology Dept

SPECIAL CONDITION(S) REQUIRED: YES ____ NO ✓
IF YES, #____ #____ #____ #____ IS APPLICABLE.

SAMPLING POINT REFERENCE NUMBER: ____

SOURCE OF FLOW: ____

GENERAL POLLUTANTS:
BOD ____ COD ____ O & G ____ PH ____ TEMP ____ TSS ____
OTHER

PRIORITY POLLUTANTS: ____

BASIS FOR POLLUTANTS & LIMITATIONS: ____

SPECIAL CONDITION(S) REQUIRED: YES ____ NO ____
IF YES, #____ #____ #____ #____ IS APPLICABLE.

MSD 035897

9/22/92
03-K

Company Name: Cardinal Glennon Hosp **Your Initials:** MM

Acct. Number: 41121954 00 **Date:** 2-28-92

IU not complete

PERMIT PREPARATION CHECK LIST (Rev 3/5/92)

1. Are the correct SIC numbers listed? ✓ Yes ___ No
   If No - list changes: _____.

2. Do the Sample Point Location comments specifically locate the sample points? ✓ Yes ___ No

3. Do the Wastewater Source and Category comments identify the wastewater discharged and the applicable categorical standards? ✓ Yes ___ No

4. Do the ord. discharge limits correspond to the watershed? ✓ Yes ___ No
   Is the watershed classified small ____ or large ✓ river?

5. Is company in surcharge - Category 2? ___ Yes ✓ No
   If Yes - date last certified: _____.

6. Does company have a history of compliance problems? ___ Yes ✓ No
   If Yes - is a compliance schedule required? ___ Yes ___ No
   If Yes - Special Condition #20 is applicable.

7. Is the Combined Wastestream Formula (CWF) required? ___ Yes ✓ No
   If Yes - which sample point(s): _____.
   If Yes - date last calculated: _____.
   Special Condition #7 is applicable. Attach CWF worksheet.

8. Are limitations based on production data? ___ Yes ✓ No
   If Yes - which sample point(s): _____.
   If Yes - date last calculated: _____.
   Do Special Conditions #4, #5 & #6 apply? ___ Yes ✓ No
   If Yes - which condition(s): _____.

9. Does this company have a reduction factor? ___ Yes ✓ No
   If Yes - date last updated: _____.
   Special Condition #13 is applicable.

10. Does SIU discharge any process waste? ✓ Yes ___ No
    If No - does Special Conditions #2 or #3 apply? ___ Yes ___ No

11. Are there sample pts which include no process waste flows? ___ Yes ✓ No
    If Yes - does Special Condition #9 apply? ___ Yes ___ No
    If Yes - which sample point(s): _____.

12. Are there any additional pollutants, not in the database, which should be monitored? ___ Yes ✓ No
    If Yes - list pollutant(s): _____.
    Is Special Condition #18 applicable? ___ Yes ___ No

13. Are all SARA Data pollutants monitored? NA ___ Yes ___ No
    If No - do additional pollutants need to be monitored? ___ Yes ___ No
    If Yes - list pollutant(s): _____.

Acct. Number: 4112195400

14. Are all Haz Waste Report [403.12(p)] pollutants monitored? ___Yes___No
If No - do additional pollutants need to be monitored? ___Yes___No
If Yes - list pollutant(s): NA.

15. Are all applicable priority pollutants listed at Ordinance sample points? ✓Yes___No
If No - add: ___.
- delete: ___.
SILVER ?

16. Do any sample pts have both Ord. and Cat. limits? ___Yes ✓No
If Yes - which sample point(s): ___.
Special Condition #8 is applicable. Attach worksheet.

17. Are there any wastewater connections to District sewers that have no identified sample points? ✓Yes ✗No
If Yes - does Special Condition #10 ✓ or #11___ apply? ✓Yes___No

18. Does company have upstream/downstream sample points? ___Yes ✓No
If Yes - Special Condition #19 is applicable. Attach worksheet.

19. Do the discharge factors provide an accurate representation of the flows at each sample point? ✓Yes___No

20. Can grab samples be used in lieu of composite samples? ___Yes ✓No
If Yes - which sample point(s): ___.
Special Condition #12 is applicable.

21. Can company be exempted from monitoring for TTO at a categorical sample point? NA ___Yes NA No
If Yes - which sample point(s): ___.
Special Condition #14 or #15 is applicable.

22. May company monitor for Oil & Grease in lieu of TTO? NA ___Yes NA No
If Yes - which sample point(s): ___.
If Yes - Special Condition #16 is applicable.

23. Is company a job shop electroplater with >10k gpd? ___Yes ✓No
If Yes - Special Condition #17 is applicable.

24. Are there any special billing provisions that require a Special Condition in the permit? ___Yes ✓No
If Yes - please describe: ___

25. Are any Special Conditions other than the standard Special Conditions needed? ___Yes___No
If Yes - please describe: ___

Summary: List all the Special Conditions applicable to this permit:

#10 #___ #___ #___ #___ #___ #___ #___

NOTE

FOR MSD USE ONLY

ACCOUNT NUMBER: 4112954-00 CATEGORY: 1 2 3 4 5 6 7

TA: BP
TS: OLD MILL

MM — Reviewer's Initials
10-28-91 — Date

RECEIVED
OCT 24 1991
DEPT. of ENVIRONMENTAL COMPLIANCE

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL USER QUESTIONNAIRE

Note to Signing Official: In accordance with Title 40 of the Code of Federal Regulations Part 403 Section 403.14, information and data provided in this questionnaire which identifies the nature and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other information shall be governed by procedures specified in 40 CFR Part 2. Should a discharge permit be required for your facility, the information in this questionnaire will be used to issue the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: Cardinal Glennon Children's Hospital
2. Mailing Address: 1465 South Grand Blvd
   St. Louis, Missouri Zip Code 63104
3. Premise Address: Same As Above
   Zip Code
4. Person Authorized to Sign Reporting Documents:
   Name and Title: Mr. Al Wittrock, Risk Manager
   Tel. No. 314-577-5616
5. Check one: [] Existing Discharge
   [] Proposed Discharge If proposed, indicate the discharge start date:
6. Shift Information:
   a. Number of shifts per work day: 3 and work days per week: 7
   b. Average number of employees per shift: 1st 600 ± 2nd 350 ± 3rd 350 ± Total: 1300 ±
   c. Shift start times: 1st 8:00 am ± 2nd 4:00 pm ± 3rd 12:00 am ±

SECTION B - PRODUCT OR SERVICE INFORMATION

1. Briefly describe the primary manufacturing or service activities at the premise address and list the applicable SIC number for each activity:

PRIMARY ACTIVITIES	SIC NUMBER
a. Health Care and Hospital (children's hospital)	8069 ~~8062~~
b.	
c.	
d.	

See Revised Pg 1
Rcd 7/7/92 gd

JUN 11 '91 9:46 FROM CGCH PRES OFFICE PAGE.015

Note: This questionnaire is a revised edition submitted at the request of Mark Montaque with MSD. The original questionnaire was submitted in October 1991.

FOR MSD USE ONLY		
ACCOUNT NUMBER: 4112 1954-00	CATEGORY: 1 2 3 (6) 5 6 (5)	
TA: BP TS: OLD MILL	MM Reviewer's Initials	7-8-92 Date

RECEIVED
JUL 7 1992
Environmental Compliance

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL USER QUESTIONNAIRE

Note to Signing Official: In accordance with Title 40 of the Code of Federal Regulations Part 403 Section 403.14, Information and data provided in this questionnaire which identifies the nature and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other information shall be governed by procedures specified in 40 CFR Part 2. Should a discharge permit be required for your facility, the information in this questionnaire will be used to issue the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: Cardinal Glennon Children's Hospital
2. Mailing Address: 1465 South Grand Blvd.
   St. Louis, Missouri Zip Code 63104
3. Premise Address: Same As Above
   Zip Code
4. Person Authorized to Sign Reporting Documents:
   Name and Title: Mr. Al Wittrock, Risk Manager
   Tel. No. 314-577-5616
5. Check one: [X] Existing Discharge
   [ ] Proposed Discharge If proposed, indicate the discharge start date:
6. Shift Information:
   a. Number of shifts per work day: 3 and work days per week: 7
   b. Average number of employees per shift: 1st 600 ± 2nd 350 ± 3rd 350 ± Total: 1300 ±
   c. Shift start times: 1st 8:00 am ± 2nd 4:00 pm ± 3rd 12:00 am ±

SECTION B - PRODUCT OR SERVICE INFORMATION

1. Briefly describe the primary manufacturing or service activities at the premise address and list the applicable SIC number for each activity:

	PRIMARY ACTIVITIES	SIC NUMBER
a.	Health Care and Hospital	8062
b.		
c.		
d.		

Revised Pg 1
Rcd 7/7/92 gd

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION B - PRODUCT OR SERVICE INFORMATION (Cont'd)

2. Are primary activities generally batch or continuous processes? ☑ batch ☐ continuous

3. Principal raw materials used: None

4. Principal products produced: None

5. Check all activities which are conducted at your premise in addition to the primary activities described in B.1. Indicate the SIC number, if known. Do not check activities which are already included in B.1.

	SIC NO.		SIC NO.
☐ Adhesive & Sealants Mfg.		☐ Mineral Mining & Processing	
☐ Aluminum Forming		☐ Nonferrous Metals Forming	
☐ Asbestos Mfg.		☐ Nonferrous Metals Mfg	
☐ Battery Mfg.		☐ Organic Chem., Plastics & Synthetic Fibers Mfg	
☐ Builder's Paper and Roofing Felt Mfg.		☐ Paint Formulating	
☐ Carbon Black Mfg.		☐ Painting, Finishing or Paint Stripping	
☐ Cement Mfg.		☐ Parts Washing	
☐ Coil Coating		☐ Paving and Roofing Materials	
☐ Copper Forming		☐ Pesticide Chem., Mfg., Formulating, Packaging	
☐ Dairy Products Processing		☐ Petroleum Refining	
☐ Drum Reconditioning		☐ Pharmaceutical Mfg	
☐ Electrical and Electronic Components		☐ Phosphate Mfg	
☐ Electroplating		☐ Photographic Processing	
☐ Explosives Mfg.		☐ Plastic Molding and Forming	
☐ Feedlots		☐ Porcelain Enameling	
☐ Ferroalloy Mfg.		☐ Printing & Publishing	
☐ Fertilizer Mfg.		☐ Pulp, Paper & Paperboard Mfg	
☑ Food Preparation	5812	☐ Q. C. Laboratory	
☐ Fruits and Vegetable Processing		☑ R. & D. Laboratory	8071
☑ General Offices	8011	☐ Radioactive Materials Processing	
☐ Glass Mfg.		☐ Repair Shop, Garage	
☐ Grain Milling		☐ Rubber & Rubber Prod. Mfg.	
☐ Gum & Wood Chemical Mfg.		☐ Seafood Processing	
☐ Hazardous Waste Treatment, Storage or Disposal		☐ Soap and Detergent Mfg.	
☐ Health Care & Hospital		☐ Solvent Recycling	
☐ Industrial Laundry		☐ Steam Electric Power Generation	
☐ Ink Formulating		☐ Sugar Processing	
☐ Inorganic Chemicals Mfg.		☐ Textile Mills	
☐ Iron and Steel Mfg.		☐ Timber Products Mfg.	
☐ Leather Tanning and Finishing		☐ Transportation Equipment Cleaning	
☐ Machine Shop		☐ Transportation Services	
☐ Machinery Mfg. or Rebuilding		☐ Used Oil Reclamation	
☐ Meat Processing		☐ Vehicle/equipment Washing	
☐ Metal Finishing		☐ Warehousing	
☐ Metal Molding and Casting		☐ Waste Recycling	
		☐ Others	

6. Are your processes subject to seasonal variation? ☐ Yes ☑ No

If "Yes," explain and indicate the month(s) of peak activity. Processess are subject to variations, but variations are not necessarily due to season changes alone.

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s): [✓] City of St. Louis Water Div. [ ] St. Louis Co. Water Co. [ ] Other Municipal Source: [ ] Hauled by Contractor [ ] Surface Water [ ] Private Well [ ] Other (describe)

2. Water Bill Addressee: Cardinal Glennon Hospital

3. Water Service Account Numbers: 407328-227084, 405153-226370, 407331-227086, 407334-227088

4. List past twelve months water usage from:

				[✓] Water Bill	[ ] Other Sources
a. 1st quarter	July 19 90	through	October 19 90	8772 Ccf	Ccf
b. 2nd quarter	October 19 90	through	January 19 91	7904 Ccf	Ccf
c. 3rd quarter	January 19 91	through	April 19 91	3983 Ccf	Ccf
d. 4th quarter	April 19 91	through	July 19 91	5787 Ccf	Ccf

5. Describe any treatment or conditioning process performed on the raw water before use:

Zeolite Softening for cooling tower water.

6. List water uses within your facility:

Type of Usage	Estimated Avg Usage (Gallons Per Day)	Type of Usage	Estimated Avg Usage (Gallons Per Day)
a. Sanitary	48,800	e. Process	None
b. Irrigation & Lawn Watering	2,170	f. Plant and equip. washdown	None
c. Non-contact cooling water	3,250	g. Boiler Feed	None
d. Contact cooling water	None	h. Other:	
		i. Total a through h:	54,220

7. List water losses and wastewater discharges from your facility:

Type of Discharge	Estimated Avg Discharge (Gallons Per Day)	Type of Discharge	Estimated Avg Discharge (Gallons Per Day)
a. Municipal Sewer	48,800	d. Evaporation	3,250
b. Watercourse, storm drain, ground	2,170	e. Contained in product	None
c. Haulers	None	f. Total a through e:	54,220

Total at 7f must equal total at 6i.

8. List average water usage and average wastewater discharge for each activity listed in Section B.1 and B.5. Attach additional sheets if needed.

Item No.	Activity	Type of Discharge Cont.	Type of Discharge Batch	Est. Avg Use (GPD)	Est. Avg Discharge (GPD)	Date When Discharge First Commenced (if known)
1	Health Care & Hospital	[ ]	[✓]	48,800	48,800	Unknown
2	R&D Laboratory	[ ]	[✓]	1,625	1,625	Unknown
3	Food Preparation	[ ]	[✓]	1,625	1,625	Unknown
4	General Offices	[ ]	[✓]	2,170	2,170	Unknown
		[ ]	[ ]			

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, alleys, streets and other pertinent structures;
   b. All sewers and drains, including all connections, inlets, manholes, vents and other access or control structures. Identify each sewer as sanitary, storm or combined and indicate its size.
   c. Identify a sampling point for each connection to the public sewer.
   d. Identify a sampling point for each discharge from a federally regulated categorical process.
   e. Identify a sampling point for each discharge to a separate storm sewer or water course.
2. List each sampling point identified in D.1 c, d, and e above. Also include each connection for which there is no sampling point. Assign a sequential reference number to each point, starting with No. 1. Attach additional sheets, if necessary.

Reference Number	Sewer Size (inch)	Description of sewer sampling point or connection	Total Average Flow (GPD)
1	24"	Manhole in sidewalk on Vista Avenue, located at northwest corner of property.	70,000 GPD
2			
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. If you listed water usage quantities only for items 6a through c, in Section C.6, you may skip this section. Otherwise, you must complete this section for all water usage listed in Section C.6. Attach additional sheets if necessary.

	Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection 1	2	3	4	5	Facility Total
a.	Sanitary	✓					
b.	Irrigation & Lawn Watering						
c.	Non-Contact Cooling Water	✓					
d.	Contact Cooling Water						
e.	Process (From C.8)						
f.	Plant & Equip. Washdown						
g.	Boiler Blowdown						
h.	Other ( )						
	Regeneration Waste (C.5)						
	Total (Same as D.2)	70,000					

from Universal

2. If any of the above points discharge to a watercourse or a separate storm sewer, complete the following:

NPDES Outfall Number					
NPDES Permit Number					

3. Do any of the above points also convey stormwater from your premise ?

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

4. Do you pretreat any of the wastes discharged through any of the above points?

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

JUN 11 '91 9:47 FROM CGCH PRES OFFICE PAGE.019

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION E - WASTEWATER INFORMATION (Cont'd)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in D.4:

Point No.	Pretreatment System Description

6. Does your facility have:

Chemical Waste Disposal Plan

a. A spill control plan? ☐ Yes ☐ No
b. A waste minimization plan? ☐ Yes ☐ No
c. A solvent management plan? ☐ Yes ☐ No
d. A slug discharge plan? ☐ Yes ☐ No.

7. If any wastewater analysis has been performed on the wastewater discharges from your facility attach a copy of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary.

8. Priority Pollutant Information: Check the appropriate box by each listed chemical whether it is "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" on your premise, used in your manufacturing or service activity or generated as a by-product. Some pollutants are known by other names. Refer to the instruction booklet for those pollutants which have an asterisk (*).

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP	ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
1.	asbestos (fibrous)	☐	☐	☐	☐	39.	bromoform*	☐	☐	☐	☐
2.	cyanide (total)	☐	☐	☐	☐	40.	bromomethane*	☐	☐	☐	☐
3.	antimony (total)	☐	☐	☐	☐	41.	4-bromophenylphenyl ether	☐	☐	☐	☐
4.	arsenic (total)	☐	☐	☐	☐	42.	butylbenzyl phthalate	☐	☐	☐	☐
5.	beryllium (total)	☐	☐	☐	☐	43.	carbon tetrachloride*	☐	☐	☐	☐
6.	cadmium (total)	☐	☐	☐	☐	44.	chlordane	☐	☐	☐	☐
7.	chromium (total)	☐	☐	☐	☐	45.	4-chloro-3-methylphenol*	☐	☐	☐	☐
8.	copper (total)	☐	☐	☐	☐	46.	chlorobenzene	☐	☐	☐	☐
9.	lead (total)	☐	☐	☐	☐	47.	chlorethane*	☐	☐	☐	☐
10.	mercury (total)	☐	☐	☐	☐	48.	2-chloroethylvinyl ether	☐	☐	☐	☐
11.	nickel (total)	☐	☐	☐	☐	49.	chloroform*	☐	☐	☐	☒
12.	selenium (total)	☐	☐	☐	☐	50.	chloromethane*	☐	☐	☐	☐
13.	silver (total)	☐	☐	☐	☐	51.	2-chloronaphthalene	☐	☐	☐	☐
14.	thallium (total)	☐	☐	☐	☐	52.	2-chlorophenol*	☐	☐	☐	☐
15.	zinc (total)	☐	☐	☐	☐	53.	4-chlorophenylphenyl ether	☐	☐	☐	☐
16.	acenaphthene	☐	☐	☐	☐	54.	chrysene*	☐	☐	☐	☐
17.	acenaphthylene	☐	☐	☐	☐	55.	4,4'-DDD*	☐	☐	☐	☐
18.	acrolein	☐	☐	☐	☐	56.	4,4'-DDE*	☐	☐	☐	☐
19.	acrylonitrile	☐	☐	☐	☐	57.	4,4'-DDT*	☐	☐	☐	☐
20.	aldrin	☐	☐	☐	☐	58.	dibenzo (a,h) anthracene*	☐	☐	☐	☐
21.	anthracene	☐	☐	☐	☐	59.	dibromochloromethane*	☐	☐	☐	☐
22.	benzene	☐	☐	☐	☐	60.	1,2-dichlorobenzene*	☐	☐	☐	☐
23.	benzidine	☐	☐	☐	☐	61.	1,3-dichlorobenzene*	☐	☐	☐	☐
24.	benzo (a) anthracene*	☐	☐	☐	☐	62.	1,4-dichlorobenzene*	☐	☐	☐	☐
25.	benzo (a) pyrene	☐	☐	☐	☐	63.	3,3'-dichlorobenzidine	☐	☐	☐	☐
26.	benzo (b) fluoranthene	☐	☐	☐	☐	64.	Reserved	☐	☐	☐	☐
27.	benzo (g,h,i) perylene*	☐	☐	☐	☐	65.	1,1-dichloroethane*	☐	☐	☐	☐
28.	benzo (k) fluoranthene*	☐	☐	☐	☐	66.	1,2-dichloroethane*	☐	☐	☐	☐
29.	alpha-BHC	☐	☐	☐	☐	67.	1,1-dichloroethene*	☐	☐	☐	☐
30.	beta-BHC	☐	☐	☐	☐	68.	trans-1,2-dichloroethene*	☐	☐	☐	☐
31.	delta-BHC	☐	☐	☐	☐	69.	2,4-dichlorophenol	☐	☐	☐	☐
32.	gamma-BHC*	☐	☐	☐	☐	70.	1,2-dichloropropane*	☐	☐	☐	☐
33.	bis (2-chloroethyl) ether*	☐	☐	☐	☐	71.	(cis & trans) 1,3-dichloropropene*	☐	☐	☐	☐
34.	bis (2-chloroethoxy) methane*	☐	☐	☐	☐	72.	dieldrin	☐	☐	☐	☐
35.	bis (2-chloroisopropyl) ether*	☐	☐	☐	☐	73.	diethyl phthalate*	☐	☐	☐	☐
36.	Reserved	☐	☐	☐	☐	74.	2,4-dimethylphenol*	☐	☐	☐	☐
37.	bis (2-ethylhexyl) phthalate	☐	☐	☐	☐	75.	dimethyl phthalate	☐	☐	☐	☐
38.	bromodichloromethane*	☐	☐	☐	☐	76.	di-n-butyl phthalate	☐	☐	☐	☐

Continued on Page 6

See Revised Pg 5
Rcd 7/7/92 gal

JUN 11 '91 9:48 FROM CGCH PRES OFFICE PAGE.020

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 14[redacted]outh Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION E - WASTEWATER INFORMATION (Cont'd)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in D.4: NOT APPLICABLE.

Point No.	Pretreatment System Description

6. Does your facility have:

a. A spill control plan? [ ] Yes [✓] No
b. A waste minimization plan? [✓] Yes [ ] No
c. A solvent management plan? [✓] Yes [ ] No
d. A slug discharge plan? [ ] Yes [✓] No.

7. If any wastewater analysis has been performed on the wastewater discharges from your facility attach a copy of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary. NOT APPLICABLE.

8. Priority Pollutant Information: Check the appropriate box by each listed chemical whether it is "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" on your premise, used in your manufacturing or service activity or generated as a by-product. Some pollutants are known by other names. Refer to the instruction booklet for those pollutants which have an asterisk (*).

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
1.	asbestos (fibrous)	[ ]	[✓]	[ ]	[ ]
2.	cyanide (total)	[ ]	[✓]	[ ]	[ ]
3.	antimony (total)	[ ]	[✓]	[ ]	[ ]
4.	arsenic (total)	[✓]	[ ]	[ ]	[ ]
5.	beryllium (total)	[ ]	[✓]	[ ]	[ ]
6.	cadmium (total)	[ ]	[✓]	[ ]	[ ]
7.	chromium (total)	[✓]	[ ]	[ ]	[ ]
8.	copper (total)	[✓]	[ ]	[ ]	[ ]
9.	lead (total)	[ ]	[✓]	[ ]	[ ]
10.	mercury (total)	[ ]	[ ]	[ ]	[✓]
11.	nickel (total)	[ ]	[✓]	[ ]	[ ]
12.	selenium (total)	[ ]	[✓]	[ ]	[ ]
13.	silver (total)	[ ]	[ ]	[ ]	[✓]
14.	thallium (total)	[ ]	[✓]	[ ]	[ ]
15.	zinc (total)	[ ]	[✓]	[ ]	[ ]
16.	acenaphthene	[ ]	[✓]	[ ]	[ ]
17.	acenaphthylene	[ ]	[✓]	[ ]	[ ]
18.	acrolein	[ ]	[✓]	[ ]	[ ]
19.	acrylonitrile	[ ]	[✓]	[ ]	[ ]
20.	aldrin	[ ]	[✓]	[ ]	[ ]
21.	anthracene	[ ]	[✓]	[ ]	[ ]
22.	benzene	[ ]	[✓]	[ ]	[ ]
23.	benzidine	[ ]	[✓]	[ ]	[ ]
24.	benzo (a) anthracene*	[ ]	[✓]	[ ]	[ ]
25.	benzo (a) pyrene	[ ]	[✓]	[ ]	[ ]
26.	benzo (b) fluoranthene	[ ]	[✓]	[ ]	[ ]
27.	benzo (g,h,i) perylene*	[ ]	[✓]	[ ]	[ ]
28.	benzo (k) fluoranthene*	[ ]	[✓]	[ ]	[ ]
29.	alpha-BHC	[ ]	[✓]	[ ]	[ ]
30.	beta-BHC	[ ]	[✓]	[ ]	[ ]
31.	delta-BHC	[ ]	[✓]	[ ]	[ ]
32.	gamma-BHC*	[ ]	[✓]	[ ]	[ ]
33.	bis (2-chloroethyl) ether*	[ ]	[✓]	[ ]	[ ]
34.	bis (2-chloroethoxy) methane*	[ ]	[✓]	[ ]	[ ]
35.	bis (2-chloroisopropyl) ether*	[ ]	[✓]	[ ]	[ ]
36.	Reserved	[ ]	[✓]	[ ]	[ ]
37.	bis (2-ethylhexyl) phthalate	[ ]	[✓]	[ ]	[ ]
38.	bromodichloromethane*	[ ]	[✓]	[ ]	[ ]
39.	bromoform*	[ ]	[✓]	[ ]	[ ]
40.	bromomethane*	[ ]	[✓]	[ ]	[ ]
41.	4-bromophenylphenyl ether	[ ]	[✓]	[ ]	[ ]
42.	butylbenzyl phthalate	[ ]	[✓]	[ ]	[ ]
43.	carbon tetrachloride*	[ ]	[✓]	[ ]	[ ]
44.	chlordane	[ ]	[✓]	[ ]	[ ]
45.	4-chloro-3-methylphenol*	[ ]	[✓]	[ ]	[ ]
46.	chlorobenzene	[ ]	[✓]	[ ]	[ ]
47.	chlorethane*	[ ]	[✓]	[ ]	[ ]
48.	2-chloroethylvinyl ether	[ ]	[✓]	[ ]	[ ]
49.	chloroform*	[ ]	[ ]	[ ]	[✓]
50.	chloromethane*	[ ]	[✓]	[ ]	[ ]
51.	2-chloronaphthalene	[ ]	[✓]	[ ]	[ ]
52.	2-chlorophenol*	[ ]	[✓]	[ ]	[ ]
53.	4-chlorophenylphenyl ether	[ ]	[✓]	[ ]	[ ]
54.	chrysene*	[ ]	[✓]	[ ]	[ ]
55.	4,4'-DDD*	[ ]	[✓]	[ ]	[ ]
56.	4,4'-DDE*	[ ]	[✓]	[ ]	[ ]
57.	4,4'-DDT*	[ ]	[✓]	[ ]	[ ]
58.	dibenzo (a,h) anthracene*	[ ]	[✓]	[ ]	[ ]
59.	dibromochloromethane*	[ ]	[✓]	[ ]	[ ]
60.	1,2-dichlorobenzene*	[ ]	[✓]	[ ]	[ ]
61.	1,3-dichlorobenzene*	[ ]	[✓]	[ ]	[ ]
62.	1,4-dichlorobenzene*	[ ]	[✓]	[ ]	[ ]
63.	3,3'-dichlorobenzidine	[ ]	[✓]	[ ]	[ ]
64.	Reserved	[ ]	[✓]	[ ]	[ ]
65.	1,1-dichloroethane*	[ ]	[✓]	[ ]	[ ]
66.	1,2-dichloroethane*	[ ]	[✓]	[ ]	[ ]
67.	1,1-dichloroethene*	[ ]	[✓]	[ ]	[ ]
68.	trans-1,2-dichloroethene*	[ ]	[✓]	[ ]	[ ]
69.	2,4-dichlorophenol	[ ]	[✓]	[ ]	[ ]
70.	1,2-dichloropropane*	[ ]	[✓]	[ ]	[ ]
71.	(cis & trans) 1,3-dichloropropene*	[ ]	[✓]	[ ]	[ ]
72.	dieldrin	[ ]	[✓]	[ ]	[ ]
73.	diethyl phthalate*	[ ]	[✓]	[ ]	[ ]
74.	2,4-dimethylphenol*	[ ]	[✓]	[ ]	[ ]
75.	dimethyl phthalate	[ ]	[✓]	[ ]	[ ]
76.	di-n-butyl phthalate	[ ]	[✓]	[ ]	[ ]

Continued on Page 6

Revised Pg 5
Rcd 7/7/92 gd

JUN 11 '91 9:48 FROM LGCH PRES OFFICE PAGE.020

Company Name: C[illegible]nal Glennon Children's Hospital
Premise Address: 1[illegible] South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION E - WASTEWATER INFORMATION (Cont'd)

Priority Pollutant Information (Cont'd)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
77.	di-n-octyl phthalate*	0	0	0	0
78.	4,6-dinitro-2-methylphenol*	0	0	0	0
79.	2,4-dinitrophenol	0	0	0	X
80.	2,4-dinitrotoluene	0	0	0	0
81.	2,6-dinitrotoluene	0	0	0	0
82.	1,2-diphenylhydrazine*	0	0	0	0
83.	endosulfan I*	0	0	0	0
84.	endosulfan II*	0	0	0	0
85.	endosulfan sulfate	0	0	0	0
86.	endrin	0	0	0	X
87.	endrin aldehyde	0	0	0	0
88.	ethylbenzene	0	0	0	0
89.	fluoranthene	0	0	0	0
90.	fluorene*	0	0	0	0
91.	heptachlor	0	0	0	0
92.	heptachlor epoxide	0	0	0	0
93.	hexachlorobenzene*	0	0	0	0
94.	hexachlorobutadiene	0	0	0	0
95.	hexachlorocyclopentadiene*	0	0	0	0
96.	hexachloroethane*	0	0	0	0
97.	indeno (1,2,3-cd) pyrene*	0	0	0	0
98.	isophorone*	0	0	0	0
99.	methylene chloride*	0	0	0	X
100.	naphthalene	0	0	0	0
101.	nitrobenzene	0	0	0	0
102.	2-nitrophenol	0	0	0	0
103.	4-nitrophenol*	0	0	0	0
104.	N-nitrosodimethylamine*	0	0	0	0
105.	N-nitrosodi-n-propylamine*	0	0	0	0
106.	N-nitrosodiphenylamine	0	0	0	0
107.	PCB-1016*	0	0	0	0
108.	PCB-1221*	0	0	0	0
109.	PCB-1232	0	0	0	0
110.	PCB-1242*	0	0	0	0
111.	PCB-1248*	0	0	0	0
112.	PCB-1254*	0	0	0	0
113.	PCB-1260*	0	0	0	0
114.	pentachlorophenol	0	0	0	0
115.	phenanthrene	0	0	0	0
116.	phenol	0	0	0	X
117.	pyrene	0	0	0	0
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin*	0	0	0	0
119.	1,1,2,2-tetrachloroethane*	0	0	0	0
120.	tetrachloroethene*	0	0	0	0
121.	toluene*	0	0	0	0
122.	toxaphene	0	0	0	0
123.	1,2,4-trichlorobenzene	0	0	0	0
124.	1,1,1-trichloroethane*	0	0	0	0
125.	1,1,2-trichloroethane*	0	0	0	0
126.	trichloroethene*	0	0	0	0
127.	Reserved	0	0	0	0
128.	2,4,6-trichlorophenol	0	0	0	0
129.	vinyl chloride	0	0	0	0

Small City - Lab use

9. For priority pollutants in E.8 which are indicated "Known Present," list and provide the following data for each: (attach additional sheets if needed.)

ITEM NO.	PRIORITY POLLUTANT	ANNUAL USAGE (LBS)	LOSS TO SEWER (LBS/YEAR)

See Revised Pg 6
Rcd 7/7/92 gd

JUN 11 '91 9:48 FROM CGCH PRES OFFICE PAGE.021

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION E - WASTEWATER INFORMATION (Cont'd)

Priority Pollutant Information (Cont'd)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
77.	di-n-octyl phthalate*		✓		
78.	4,6-dinitro-2-methylphenol*		✓		
79.	2,4-dinitrophenol		✓		✓
80.	2,4-dinitrotoluene		✓		
81.	2,6-dinitrotoluene		✓		
82.	1,2-diphenylhydrazine*		✓		
83.	endosulfan I*		✓		
84.	endosulfan II*		✓		
85.	endosulfan sulfate		✓		✓
86.	endrin		✓		
87.	endrin aldehyde		✓		
88.	ethylbenzene		✓		
89.	fluoranthene		✓		
90.	fluorene*		✓		
91.	heptachlor		✓		
92.	heptachlor epoxide		✓		
93.	hexachlorobenzene*		✓		
94.	hexachlorobutadiene		✓		
95.	hexachlorocyclopentadiene*		✓		
96.	hexachloroethane*		✓		
97.	indeno (1,2,3-cd) pyrene*		✓		
98.	isophorone*		✓		
99.	methylene chloride*		✓		✓
100.	naphthalene		✓		
101.	nitrobenzene		✓		
102.	2-nitrophenol		✓		
103.	4-nitrophenol*		✓		
104.	N-nitrosodimethylamine*		✓		
105.	N-nitrosodi-n-propylamine*		✓		
106.	N-nitrosodiphenylamine		✓		
107.	PCB-1016*		✓		
108.	PCB-1221*		✓		
109.	PCB-1232		✓		
110.	PCB-1242*		✓		
111.	PCB-1248*		✓		
112.	PCB-1254*		✓		
113.	PCB-1260*		✓		
114.	pentachlorophenol		✓		
115.	phenanthrene		✓		
116.	phenol				✓
117.	pyrene		✓		
118.	2,3,7,8-tetrachlorodibenzo-p-dioxin*		✓		
119.	1,1,2,2-tetrachloroethane*		✓		
120.	tetrachloroethene*		✓		
121.	toluene*		✓		
122.	toxaphene		✓		
123.	1,2,4-trichlorobenzene		✓		
124.	1,1,1-trichloroethane*		✓		
125.	1,1,2-trichloroethane*				
126.	trichloroethene*		✓		
127.	Reserved		✓		
128.	2,4,6-trichlorophenol		✓		
129.	vinyl chloride		✓		

9. For priority pollutants in E.8 which are indicated "Known Present," list and provide the following data for each: (attach additional sheets if needed.)

ITEM NO.	PRIORITY POLLUTANT	ANNUAL USAGE (LBS)	LOSS TO SEWER (LBS/YEAR)
10	Mercury (Contained in thermometers)	< 0.1	0.0
49	Chloroform	< 30	0
79	2,4 Dinitrophenol	< 0.1	0
85	Endrin	< 0.1	0
99	Methylene Chloride	< 5	0
116	Phenol	< 30	< 0.1
13	Silver	Unknown	0*

* Silver bromide generated in the radiology lab is recovered and sold to Central States Refining Company. Four silver recovery units are currently in use.

Revised Pg 6, Rcd 7/7/92 gd

Company Name: Ca[illegible]nal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION F - NON-SEWERED WASTES

1. Do you generate any liquid wastes or sludges which are not disposed in the sewer system? [✓] Yes [ ] No
If "Yes" complete items 2 and 3 below. If "No," skip remainder of this section. Note: Be sure to include wastewaters listed in Section C.7c.

2. Information on non-sewered waste:

Type of Waste	Estimated Quantity Disposed/yr	Units	Store on-site	Dispose on-site	Dispose off-site
[✓] Acids and/or Alkalies	31	liters	[ ]	[ ]	[✓]
[ ] Equip. Oils and/or Greases			[ ]	[ ]	[ ]
[ ] Infectious Waste			[ ]	[ ]	[ ]
[ ] Inks/Dyes			[ ]	[ ]	[ ]
[ ] Kitchen/Food Service Grease			[ ]	[ ]	[ ]
[✓] Organic Compounds	71	liters	[ ]	[ ]	[✓]
[ ] Paints or Paint Studes			[ ]	[ ]	[ ]
[ ] Pesticides			[ ]	[ ]	[ ]
[ ] Pretreatment Sludges			[ ]	[ ]	[ ]
[ ] Radioactive Waste			[ ]	[ ]	[ ]
[ ] Solvents/Thinners			[ ]	[ ]	[ ]
[ ] Other			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]

3. List your USEPA and/or MDNR Hazardous Waste Generator numbers:

USEPA MOD075904839 MDNR 001310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. The following analytical information is required for each sampling point or each connection to the public sewer (see D.1.c), only if your water usage exceeds 80 Ccf per month. Representative samples of the wastewaters in each sewer must be collected and analyzed for the listed parameters. Concentrations are to be reported in mg/l (ppm).

Sewer Number (Refer to Section D.2)
(If more than 5 connections, attach additional sheets)

Daily Average Concentration For Each Sampling Point or Connection

PLEASE REFER TO ATTACHED ANALYTICAL DATA ALREADY ON FILE WITH MSD.

Parameter (mg/l)	1	2	3	4	5
Total Solids					
Total Suspended Solids					
Biochemical Oxygen Demands					
Chemical Oxygen Demand					
Flow (gpd)					

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112216400, 4112216100, 4112195400, and 4112216301

SECTION G - INDUSTRIAL WASTE (Cont'd) PLEASE REFER TO ATTACHED ANALYTICAL DATA ALREADY ON FILD WITH MSD.

2. Sample handling information: Organization Name and Address

   a. Samples collected by: _____

   b. Samples analyzed by: _____

SECTION H - CERTIFICATION AND SIGNATURE

1. The following individual may be contacted regarding the information contained in this questionnaire:

   Name and title of contact person: Curt D. Fahnestock

   John Mathes & Associates, Inc. Tel No. 618/281-7173

2. "I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

   Name and title of signing official: Al Wittrock, Director, Risk Management

   Cardinal Glennon Children's Hospital Tel No. (314) 577-5616

   Signature: Al Wittrock Date: 10/22/91

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

July 28, 1992

Mr. Al Wittrock
Director, Risk Management
CARDINAL GLENNON HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

ISSUED TO: Cardinal Glennon Hospital

RE: Proposed Discharge Permit No: 41121954-00
For premise at: 1465 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Wittrock:

Enclosed is a draft copy of the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit proposed for the premise identified above. This draft has been prepared pursuant to the federal pretreatment regulations in 40 CFR 403 as amended July 24, 1990 and is based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

Please review this draft copy carefully. If you disagree with any of the terms or conditions of the proposed permit please inform us, in writing, within 10 working days of receipt. Absence of a response within this time frame will be deemed as acceptance of the draft permit and we will proceed to issue the final permit.

If you have any questions, please contact me at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Gunter H. Durdel
Assistant Engineer

DRAFT COPY

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: **41121954-00**

EFFECTIVE DATE: **AUGUST 15, 1992**
EXPIRATION DATE: **AUGUST 31, 1993**

ISSUED TO: **CARDINAL GLENNON HOSPITAL**
1465 S. GRAND BLVD
ST. LOUIS, MO 63104

SIC NUMBER(S): **8069**

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: **ONE**
SAMPLING PT. REF. NUMBER(S): **001**

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

John R. Lodderhose, P.E.
Manager Environmental Compliance

MSD 035912

DRAFT COPY

Permit No: 41121954-00
Page No: 2

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **001**

SAMPLING POINT LOCATION: **MH W OF BLDG & S OF VISTA AVE IN SDWLK SAMP S FLOW**

AVERAGE WASTEWATER FLOW (GPD): **100,994**

WASTEWATER SOURCE AND CATEGORY: **HOSPITAL WASTES + NCCW**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow (GPD)	***	Daily Avg	***
Biochemical Oxygen Demand	300	Daily Avg	once/3 mo
Chemical Oxygen Demand	600	Daily Avg	once/3 mo
Oil and Grease (Total)	200	Instant	once/3 mo
pH Acidic (s.u.) Less than 7	5.5	Instant	once/3 mo
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/3 mo
Temperature (Degrees C)	60	Instant	once/3 mo
Total Suspended Solids	350	Daily Avg	once/3 mo
Silver (Total)	.5	Daily Avg	once/3 mo
Total Toxic Organics	5.52	Instant	once/yr

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per month. If additional flow measurements or estimates are made, all must be reported.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall self-monitor the discharge at each of the identified sampling points at the frequency specified in this permit. The permittee shall submit self-monitoring reports to the District's Department of Environmental Compliance identifying the concentrations of regulated substances in each of these discharges. Each report shall also include a record of all measured or estimated average daily flows during the reporting period.

2. The pollutants to be monitored are specified individually for each sampling point. The limitation, limitation type and monitoring frequency are given for each pollutant. The limitation types are defined as follows:

An INSTANT limitation is the maximum allowable concentration of the pollutant in a grab sample for all pollutants except pH and temperature. For pH the INSTANT limitation is the minimum or maximum allowable instantaneous pH value reported in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature reported in degrees C.

A DAILY AVG limitation is the maximum allowable concentration of the pollutant in a composite sample collected within a 24 hour period.

A DAILY MAX limitation is the maximum allowable concentration of the pollutant in any sample collected within a 24 hour period.

A MONTHLY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in all daily samples collected within a calendar month. The concentrations of all daily samples analyzed using the methods specified in this permit must be included in the calculation.

A 4-DAY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in the daily samples collected on four consecutive <u>sampling</u> days. The sampling days are not necessarily consecutive calendar days.

A daily sample is <u>any</u> sample collected within a 24 hour period.

3. Exceedances of the limitations for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and Total Suspended Solids (TSS), do not constitute violations of this permit. However, the values reported will be used by the District to assess the applicability of surcharges under the provisions of the District's Sewer Service Charge Ordinances. The limitations listed represent the concentrations of these pollutants found in normal wastewater as defined in the ordinances, except, if the permittee is currently subject to sewer service surcharges, the limitations listed are the concentrations being used for billing purposes. These values will be used until replaced by updated certified data in accordance with the procedures in the ordinances.

4. Unless specified elsewhere in this permit and except for the pollutants listed at the end of this paragraph, all samples collected to satisfy the monitoring and reporting requirements of this permit shall be composite samples made up by combining individual grab samples collected within a 24 hour period. In no case may a composite sample be made from fewer than four grab samples. In all cases the individual grab samples must be adequately spaced so as to ensure a sample that is representative of the permittee's normal operations. Grab samples shall be collected for oil and grease, total phenol, cyanide, sulfide and volatile organics if required. Temperature and pH shall be measured at the point of discharge and the measurements recorded as instantaneous values.

5. When monitoring is required for Total Toxic Organics (TTO), TTO shall be determined by summing all quantifiable values greater than .01 mg/l for the applicable toxic organics listed in 40 CFR 401.15. For discharges subject to categorical pretreatment standards, the applicable toxic organics are listed in the standard. For all other discharges the organics to be included in the TTO are all of those which are or may be present in the discharge.

6. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

7. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters.

8. If the permittee monitors any of the listed pollutants using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. All self-monitoring reports shall be certified and signed in accordance with the provisions of District Ordinance 8472, Article X, Section Three. The signed reports shall be submitted every three months (Quarterly) to the District's Department of Environmental Compliance. Each report shall be postmarked no later than the 28th day of the month following the end of the reporting period. The first report is due on **January 28, 1993**.

10. If any sampling performed by the permittee using the methods specified in this permit indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in District Ordinance 8472, Article II, significant new or increased discharge means:

a. Any discharge from a new process or facility or a new source.

b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.

c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.

d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in District Ordinance 8472, Article VIII, Section Nine.

e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.

f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in District Ordinance 8472, Article II.

g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District's Department of Environmental Compliance by telephone of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION OR MODIFICATION:

1. This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:
a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

2. This permit may be modified after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

F. TERMINATION OF DISCHARGE:

Whenever any discharge covered by this permit is permanently eliminated, this permit will be terminated or modified upon verification by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of Sewer Use Ordinance No. 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District upon presentation of proper credentials and after execution of appropriate confidentiality agreements shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the user shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

1. The permittee and the District have identified connection points at which wastewater is discharged from the permittee's premise to the District in addition to any sampling points identified herein. It has been determined:

a). Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b). All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

Therefore, the permittee is not required, at this time, to establish sampling points or to monitor discharges at these connections. However, each quarterly monitoring report shall include a statement that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

. Name: SSM Cardinal Glennon

ct #: 4112-1954-00

OLDER

CORRESPONDENCE

FROM

1996

THRU

1999

PERMIT OVERFLOW

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

April 16, 1999

Mr. Kevin R. Julius
Facilities Compliance Manager
CARDINAL GLENNON CHILDRENS'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Julius:

Your Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit issued on September 1, 1996, for the premise identified above, is hereby modified as per the attached page 9.

This modification is to revise Special Condition II.A.2 regarding the yearly amount of radioactive materials the permittee is allowed to discharge to the District's sanitary sewers. This change is in response to Mr. Haenchen's March 16, 1999 letter.

This letter and the revised page 9 should be affixed to your permit as your official record and become a part thereof.

This modification does not affect any monitoring or analysis of your discharge that may be necessary to comply with other requirements of your permit and does not in any way relieve you of your obligations to achieve the discharge limitations as provided in the permit.

Please contact us if you have any questions.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

Bob Zeman, P.E.
Manager of Environmental Compliance

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

These Special Conditions supplement and/or amend the General Conditions of Section I. Where there is any perceived conflict between the general and special conditions, the special condition shall govern.

A. SPECIAL CERTIFICATION & REPORTING REQUIREMENTS

1. At sampling point(s) **002** permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, permittee shall include, in the quarterly self monitoring report, a statement that there has been no change in the character of the wastes discharged at sampling point(s) **002** since the last report.

2. Permittee is authorized to discharge not more than **1.2** millicuries of radioactive material per year to the District's sanitary sewers. Such materials must be soluble, or dispersible if biological material, in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, in conjunction with other users' discharges of radioactive materials, causes the aggregate of all radioactive materials entering the District's treatment plant to exceed one (1) curie per year or causes interference as defined in MSD Ordinance 8472.

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

August 20, 1996

Mr. ~~Al T. Wittrock~~ Kevin R. Julius
Risk Manager, General Services
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Re: Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Wittrock:

Enclosed is the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit for the premise identified above. This permit is issued pursuant to the federal pretreatment regulations in 40 CFR 403 as amended October 25, 1995. This permit has been prepared based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. Changes include adding sampling point 002, adding a special condition that requires certification for the quarters in which no sampling is performed and deleting a special condition that required certification, in lieu of sampling, at active connections without sampling points. Several other minor changes were made to improve the clarity of the document.

The previous permit, effective September 1, 1993, is voided as of the effective date of the enclosed permit.

Monitoring reports required by the conditions of this permit must be submitted quarterly for the life of the permit. The first report due date, for this reissued permit, is based on a complete calendar quarter monitoring period. The permittee remains responsible for reporting for the preceding calendar quarter under the previous permit. Copies of the necessary report forms are enclosed.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. Absence of a response within this time frame will be deemed acceptance, by you, of the provisions of this permit.

You may contact us at 436-8755 at any time if you have any question about your permit.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Gunter H. Durdel
Assistant Engineer

ldl

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: **41121954-00**

EFFECTIVE DATE: **SEPTEMBER 1, 1996**
EXPIRATION DATE: **APRIL 30, 2000**

ISSUED TO: **CARDINAL GLENNON CHILDREN'S HOSPITAL**
1465 & 1505 S. GRAND BLVD.
ST. LOUIS, MO 63104

SIC NUMBER(S): **8069**

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: **TWO**
SAMPLING PT. REF. NUMBER(S): **001, 002**

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

Bob Zeman, P.E.
Manager of Environmental Compliance

MSD 035924

UNITED STATES POSTAL SERVICE

SAINT LOUIS MO 63
PM
27 APR
2000

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPT. of ENVIRONMENTAL COMPLIANCE
10 EAST GRAND AVENUE
ST. LOUIS, MISSOURI 63147

63147/2388

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, a[illegible]. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Kevin R. Julius, Fac. Comp.Mgr.
CARDINAL GLENNON CHILDREN'S HOSP
1465 South Grand Blvd.
St. Louis, MO 63104

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*

B. Date of Delivery

C. Signature

X 03#130

☐ Agent
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
Z 542 016 189

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **001**

SAMPLING POINT LOCATION: **MH W OF BLDG, S OF VISTA IN SIDEWLK, SAMPLE S FLOW**

AVERAGE WASTEWATER FLOW (GPD): **27,324**

WASTEWATER SOURCE AND CATEGORY: **HOSPITAL WASTE + NCCW**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow	***	Daily Avg	***
Biochemical Oxygen Demand	****	Daily Avg	once/3 mo
Chemical Oxygen Demand	****	Daily Avg	once/3 mo
Oil and Grease (Total)	200	Instant	once/3 mo
pH Acidic (s.u.) Less than 7	5.5	Instant	once/3 mo
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/3 mo
Temperature (Degrees C)	60	Instant	once/3 mo
Total Suspended Solids	****	Daily Avg	once/3 mo
Silver (Total)	.5	Daily Avg	once/3 mo
Total Toxic Organics	5.52	Instant	once/yr

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **002**

SAMPLING POINT LOCATION: **FLOW FROM S IN MH 75'W OF NW CORNER OF BLDG 1505**

AVERAGE WASTEWATER FLOW (GPD): **858**

WASTEWATER SOURCE AND CATEGORY: **SANITARY ONLY**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow	***	Daily Avg	***
Biochemical Oxygen Demand	****	Daily Avg	once/yr
Chemical Oxygen Demand	****	Daily Avg	once/yr
Oil and Grease (Total)	200	Instant	once/yr
pH Acidic (s.u.) Less than 7	5.5	Instant	once/yr
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/yr
Temperature (Degrees C)	60	Instant	once/yr
Total Suspended Solids	****	Daily Avg	once/yr
Total Toxic Organics	5.52	Instant	once/yr

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall self-monitor the discharge at each of the identified sampling points at the frequency specified in this permit. The permittee shall submit self-monitoring reports to the District's Department of Environmental Compliance identifying the concentrations of regulated substances in each of these discharges. Each report shall also include a record of all measured or estimated average daily flows during the reporting period.

2. The pollutants to be monitored are specified individually for each sampling point. The limitation, limitation type and monitoring frequency are given for each pollutant. **Except as noted in paragraph 3, of this section, composite samples shall be collected for all pollutants.** The limitation types are defined as follows:

An INSTANT limitation is the maximum allowable concentration of the pollutant in a grab sample for all pollutants except pH and temperature. For pH the INSTANT limitation is the minimum or maximum allowable instantaneous pH value reported in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature reported in degrees C.

A DAILY AVG limitation is the maximum allowable concentration of the pollutant in a composite sample collected within a 24 hour period.

A DAILY MAX limitation is the maximum allowable concentration of the pollutant in any sample collected within a 24 hour period.

A MONTHLY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in all daily samples collected within a calendar month. The concentrations of all daily samples analyzed using the methods specified in this permit must be included in the calculation.

A 4-DAY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in the daily samples collected on four consecutive <u>sampling</u> days. The sampling days are not necessarily consecutive calendar days.

A daily sample is <u>any</u> sample collected within a 24 hour period.

3. Unless specified otherwise in Section II of these conditions and except for the pollutants listed at the end of this paragraph, all samples collected to satisfy the monitoring and reporting requirements of this permit shall be **COMPOSITE SAMPLES** made up by combining individual grab samples collected within a 24 hour period. In no case may a composite sample be made from fewer than four grab samples. In all cases the individual grab samples must be adequately spaced so as to ensure a sample that is representative of the permittee's normal operations. Grab samples shall be collected for oil and grease, total phenol, cyanide, sulfide and volatile organics if required. Temperature and pH shall be measured at the point of discharge and the measurements reported as instantaneous values except, if continuous monitoring is employed, reporting shall be as per paragraph 7 below.

4. When monitoring is required for Total Toxic Organics (TTO), TTO shall be determined by summing all quantifiable values greater than .01 mg/l for the applicable toxic organics listed in 40 CFR 401.15. For discharges subject to categorical pretreatment standards, the applicable toxic organics are listed in the standard. For all other discharges the organics to be included in the TTO are all of those which are or may be present in the discharge.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH and/or temperature at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-C of Ordinance 8472. The permittee shall include with the quarterly self monitoring reports required by this Section, a summary of the continuous temperature and/or pH monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion and the total time for all excursions for temperature and the total time for all excursions for pH.

8. If the permittee monitors any of the listed pollutants using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. All self-monitoring reports shall be certified and signed in accordance with the provisions of District Ordinance 8472, Article X, Section Three. The signed reports shall be submitted every three months (Quarterly) to the District's Department of Environmental Compliance. Each report shall be postmarked no later than the 28th day of the month following the end of the monitoring period. **The first report is due by January 28, 1997.**

10. If any sampling performed by the permittee using the methods specified in this permit indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of surcharges under the provisions of the District's Sewer Service Charge Ordinances. Measured values which exceed 300 mg/l for BOD, 600 mg/l for COD and/or 350 mg/l for TSS may be subject to surcharge. If the permittee is currently subject to surcharge, the BOD, COD and TSS values used for surcharge billing are listed in the Special Conditions Section II of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in District Ordinance 8472, Article II, significant new or increased discharge means:

a. Any discharge from a new process or facility or a new source.

b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.

c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.

d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in District Ordinance 8472, Article VIII, Section Nine.

e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.

f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in District Ordinance 8472, Article II.

g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District's Department of Environmental Compliance by telephone of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:
a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 8472 Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of Sewer Use Ordinance No. 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District upon presentation of proper credentials and after execution of appropriate confidentiality agreements shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the user shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

These Special Conditions supplement and/or amend the General Conditions of Section I. Where there is any perceived conflict between the general and special conditions, the special condition shall govern.

A. SPECIAL CERTIFICATION & REPORTING REQUIREMENTS

1. At sampling point(s) **002** permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, permittee shall include, in the quarterly self monitoring report, a statement that there has been no change in the character of the wastes discharged at sampling point(s) **002** since the last report.

2. Permittee is authorized to discharge not more than **5** millicuries of radioactive material per year to the District's sanitary sewers. Such materials must be soluble, or dispersible if biological material, in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, in conjunction with other users' discharges of radioactive materials, causes the aggregate of all radioactive materials entering the District's treatment plant to exceed one (1) curie per year or causes interference as defined in MSD Ordinance 8472.

See Revised Page 9
dtd 4-16-99

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

THIS IS THE LAST PAGE OF THIS PERMIT

Metropolitan
St. Louis Sewer
District

Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

July 15, 1996

Mr. Al T. Wittrock
Risk Manager, General Services
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Blvd.
St. Louis, MO 63104

Re: Renewal of Discharge Permit No: 41121954-00
For premise at: 1465 & 1505 S. Grand Blvd.
St. Louis, MO 63104

Dear Mr. Wittrock:

We have completed our review of your application for renewal of the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit for the premise identified above. The current permit expires on August 31, 1996. Enclosed is a draft copy of the proposed permit renewal.

Except as noted in this paragraph, the terms and conditions of this draft permit renewal are substantially the same as in the current permit. Changes include adding sampling point 002, adding a special condition that requires certification for the quarters in which no sampling is performed and deleting a special condition that required certification, in lieu of sampling, at active connections without sampling points. Several other minor changes have been made to improve the clarity of the document.

This draft has been prepared pursuant to the federal pretreatment regulations in 40 CFR 403 as amended October 25, 1995 and is based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

Please review this draft copy carefully. If you disagree with any of the terms or conditions of the proposed permit please inform us, in writing, within 15 working days of receipt. Absence of a response within this time frame will be deemed as acceptance of the draft permit and we will proceed to issue the final permit.

If you have any questions, please contact me at 436-8755.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel

Gunter H. Durdel
Assistant Engineer

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: **41121954-00**

EFFECTIVE DATE: **SEPTEMBER 1, 1996**
EXPIRATION DATE: **APRIL 30, 2000**

ISSUED TO: **CARDINAL GLENNON CHILDREN'S HOSPITAL**
1465 & 1505 S. GRAND BLVD.
ST. LOUIS, MO 63104

SIC NUMBER(S): **8069**

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: **ONE**
SAMPLING PT. REF. NUMBER(S): **001**

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Gunter H. Durdel
Assistant Engineer

Bob Zeman, P.E.
Manager of Environmental Compliance

MSD 035937

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **001**

SAMPLING POINT LOCATION: **MH W OF BLDG, S OF VISTA IN SIDEWLK, SAMPLE S FLOW**

AVERAGE WASTEWATER FLOW (GPD): **27,324**

WASTEWATER SOURCE AND CATEGORY: **HOSPITAL WASTE + NCCW**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow	***	Daily Avg	***
Biochemical Oxygen Demand	****	Daily Avg	once/3 mo
Chemical Oxygen Demand	****	Daily Avg	once/3 mo
Oil and Grease (Total)	200	Instant	once/3 mo
pH Acidic (s.u.) Less than 7	5.5	Instant	once/3 mo
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/3 mo
Temperature (Degrees C)	60	Instant	once/3 mo
Total Suspended Solids	****	Daily Avg	once/3 mo
Silver (Total)	.5	Daily Avg	once/3 mo
Total Toxic Organics	5.52	Instant	once/yr

DRAFT

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: **002**

SAMPLING POINT LOCATION: **FLOW FROM S IN MH 75'W OF NW CORNER OF BLDG 1505**

AVERAGE WASTEWATER FLOW (GPD): **858**

WASTEWATER SOURCE AND CATEGORY: **SANITARY ONLY**

POLLUTANT DISCHARGE LIMITS
(mg/l unless otherwise specified)

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow	***	Daily Avg	***
Biochemical Oxygen Demand	****	Daily Avg	once/yr
Chemical Oxygen Demand	****	Daily Avg	once/yr
Oil and Grease (Total)	200	Instant	once/yr
pH Acidic (s.u.) Less than 7	5.5	Instant	once/yr
pH Basic (s.u.) Greater than or equal to 7	11.5	Instant	once/yr
Temperature (Degrees C)	60	Instant	once/yr
Total Suspended Solids	****	Daily Avg	once/yr
Total Toxic Organics	5.52	Instant	once/yr

DRAFT

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall self-monitor the discharge at each of the identified sampling points at the frequency specified in this permit. The permittee shall submit self-monitoring reports to the District's Department of Environmental Compliance identifying the concentrations of regulated substances in each of these discharges. Each report shall also include a record of all measured or estimated average daily flows during the reporting period.

2. The pollutants to be monitored are specified individually for each sampling point. The limitation, limitation type and monitoring frequency are given for each pollutant. **Except as noted in paragraph 3, of this section, composite samples shall be collected for all pollutants.** The limitation types are defined as follows:

An INSTANT limitation is the maximum allowable concentration of the pollutant in a grab sample for all pollutants except pH and temperature. For pH the INSTANT limitation is the minimum or maximum allowable instantaneous pH value reported in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature reported in degrees C.

A DAILY AVG limitation is the maximum allowable concentration of the pollutant in a composite sample collected within a 24 hour period.

A DAILY MAX limitation is the maximum allowable concentration of the pollutant in any sample collected within a 24 hour period.

A MONTHLY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in all daily samples collected within a calendar month. The concentrations of all daily samples analyzed using the methods specified in this permit must be included in the calculation.

A 4-DAY AVG limitation is the maximum allowable average concentration of the pollutant determined by calculating the arithmetic average of the concentrations found in the daily samples collected on four consecutive <u>sampling</u> days. The sampling days are not necessarily consecutive calendar days.

A daily sample is <u>any</u> sample collected within a 24 hour period.

DRAFT

3. Unless specified otherwise in Section II of these conditions and except for the pollutants listed at the end of this paragraph, all samples collected to satisfy the monitoring and reporting requirements of this permit shall be **COMPOSITE SAMPLES** made up by combining individual grab samples collected within a 24 hour period. In no case may a composite sample be made from fewer than four grab samples. In all cases the individual grab samples must be adequately spaced so as to ensure a sample that is representative of the permittee's normal operations. Grab samples shall be collected for oil and grease, total phenol, cyanide, sulfide and volatile organics if required. Temperature and pH shall be measured at the point of discharge and the measurements reported as instantaneous values except, if continuous monitoring is employed, reporting shall be as per paragraph 7 below.

4. When monitoring is required for Total Toxic Organics (TTO), TTO shall be determined by summing all quantifiable values greater than .01 mg/l for the applicable toxic organics listed in 40 CFR 401.15. For discharges subject to categorical pretreatment standards, the applicable toxic organics are listed in the standard. For all other discharges the organics to be included in the TTO are all of those which are or may be present in the discharge.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH and/or temperature at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-C of Ordinance 8472. The permittee shall include with the quarterly self monitoring reports required by this Section, a summary of the continuous temperature and/or pH monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion and the total time for all excursions for temperature and the total time for all excursions for pH.

8. If the permittee monitors any of the listed pollutants using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. All self-monitoring reports shall be certified and signed in accordance with the provisions of District Ordinance 8472, Article X, Section Three. The signed reports shall be submitted every three months (Quarterly) to the District's Department of Environmental Compliance. Each report shall be postmarked no later than the 28th day of the month following the end of the monitoring period. **The first report is due by January 28, 1997.**

10. If any sampling performed by the permittee using the methods specified in this permit indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of surcharges under the provisions of the District's Sewer Service Charge Ordinances. Measured values which exceed 300 mg/l for BOD, 600 mg/l for COD and/or 350 mg/l for TSS may be subject to surcharge. If the permittee is currently subject to surcharge, the BOD, COD and TSS values used for surcharge billing are listed in the Special Conditions Section II of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in District Ordinance 8472, Article II, significant new or increased discharge means:

a. Any discharge from a new process or facility or a new source.

b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.

c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.

d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in District Ordinance 8472, Article VIII, Section Nine.

e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.

f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in District Ordinance 8472, Article II.

g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District's Department of Environmental Compliance by telephone of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:
a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

DRAFT

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 8472 Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of Sewer Use Ordinance No. 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District upon presentation of proper credentials and after execution of appropriate confidentiality agreements shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the user shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

DRAFT

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in District Ordinance 8472, Article II.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all the conditions of District Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24 hours a day by calling the Metropolitan St. Louis Sewer District dispatcher at 768-6260.

3. During normal business hours, notifications may be made by calling the Department of Environmental Compliance at 436-8710.

SECTION II - SPECIAL CONDITIONS:

These Special Conditions supplement and/or amend the General Conditions of Section I. Where there is any perceived conflict between the general and special conditions, the special condition shall govern.

A. SPECIAL CERTIFICATION & REPORTING REQUIREMENTS

1. At sampling point(s) **002** permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, permittee shall include, in the quarterly self monitoring report, a statement that there has been no change in the character of the wastes discharged at sampling point(s) **002** since the last report.

2. Permittee is authorized to discharge not more than **5** millicuries of radioactive material per year to the District's sanitary sewers. Such materials must be soluble, or dispersible if biological material, in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, in conjunction with other users' discharges of radioactive materials, causes the aggregate of all radioactive materials entering the District's treatment plant to exceed one (1) curie per year or causes interference as defined in MSD Ordinance 8472.

DRAFT

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

THIS IS THE LAST PAGE OF THIS PERMIT

DRAFT

MET POLITAN ST. LOUIS SEWER D TRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

FACT SHEET

Check If:
FIRST TIME PERMIT: ___
PERMIT RENEWAL: ✓
PERMIT REVISION: ___

Prepared by: gd
Date: 5-13-96
Checked by: BS
Date: 5/14/96

PERMIT NO: 4112/954-00 EFFECTIVE DATE: 9-1-96

EXPIRATION DATE: 4-30-00
MODIFICATION DATE(S): ___

OTHER ACCOUNT NUMBERS: NONE

COMPANY NAME: Cardinal Glennon Children's Hospital

PREMISE ADDRESS: 1465 & 1505 S. Grand Blvd.

SIC NUMBER(S): 8069

TYPE OF OPERATION: Childrens Hospital

TOTAL NUMBER OF SAMPLING POINTS: TWO
NUMBER OF: ORDINANCE 2 CATEGORICAL ___ COMBINED ___

CATEGORICAL INDUSTRY: YES ___ NO ✓
IF YES, 40 CFR ___ SUBPART ___

EXTRA STRENGTH SURCHARGE: YES ___ NO ✓
IF YES, BOD: ___ COD: ___ TSS: ___

RETURN FACTOR: YES ___ NO ✓ IF YES, PERCENT (%): ___

SPECIAL CONDITIONS: YES ✓ NO ___

SUPPORTING DOCUMENTS ATTACHED:

PERMIT PREPARATION CHECK LIST: YES ✓ NO ___
POLLUTANT & LIMITATIONS DOCUMENTATION SHEETS: YES ✓ NO ___
PRODUCTION BASED STDS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: ___
MOST STRICT STANDARDS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: ___
COMBINED WASTESTREAMS CALCULATION SHEETS: YES ___ NO ___ N/A ✓
IF YES, FOR SAMPLING POINT: ___
OTHER: ___

COMMENTS: Allowed to discharge radioactive materials.

Rev: 10/27/93

MSD 035947

PERMIT NO: 4112[illegible]54-00

SAMPLING POINT REFERENCE NUMBER: 001

WASTEWATER SOURCES: Hospital Waste + NCCW
FLOW RATE (GPD): 27,324
BASIS FOR FLOW RATE: IUQ

GENERAL POLLUTANTS:
BOD ✓ COD ✓ O & G ✓ PH ✓ TEMP ✓ TSS ✓
OTHER

PRIORITY POLLUTANTS: AG, TTO

BASIS FOR POLLUTANTS & LIMITATIONS: Ordinance #8472.
AG is monitored because facility contains X-Ray unit.

SPECIAL CONDITION(S) REQUIRED: YES ____ NO ✓
IF YES, #____ #____ #____ #____ IS APPLICABLE.

SAMPLING POINT REFERENCE NUMBER: 002

WASTEWATER SOURCES: Sanitary Only
FLOW RATE (GPD): 858
BASIS FOR FLOW RATE: IUQ

GENERAL POLLUTANTS:
BOD ✓ COD ✓ O & G ✓ PH ✓ TEMP ✓ TSS ✓
OTHER

PRIORITY POLLUTANTS: TTO

BASIS FOR POLLUTANTS & LIMITATIONS: Ordinance #8472.
Once/year monitoring due to type of flow and to low volume.

SPECIAL CONDITION(S) REQUIRED: YES ✓ NO ____
IF YES, #E.4 #____ #____ #____ IS APPLICABLE.

MSD 035948

Company Name: Cardinal Glennon Children's Hosp Cat: 4

Acct. Number: 4112/954-00 Date: 5-13-96

Prepared By: gd

Reviewed By / Date: _____/_____

_____/_____

PERMIT PREPARATION CHECK LIST (Rev 02/29/96)

REVIEW THE PRETREATMENT DATABASE AND INDUSTRY FILE. ANSWER THE FOLLOWING QUESTIONS AND UPDATE THE DATABASE PRIOR TO DEVELOPING THE DRAFT PERMIT. ATTACH COMPLETED CHECK LIST TO PERMIT FACT SHEET.

1. Are the correct SIC numbers listed? ✓ Yes ___ No
   If No - add:_____.
   - delete:_____.

2. Is user in surcharge - Category 2? ___ Yes ✓ No
   If Yes - date last certified:_____.
   Special Condition F.2 is applicable.

3. Does user have more than one water account? ___ Yes ✓ No
   If Yes - is PSIM using the most appropriate account number? ___ Yes ___ No
   If No - what account number should be used?
   #_____. Prepare Jar 019 request.

4. If user has only one water account, do the discharge factors provide an accurate representation of the flows at each sampling point? ___ N/A ✓ Yes ___ No
   If No - explain:_____.

5. Does user have a return factor less than 1.00 for any account? ___ Yes ✓ No
   If Yes - list account number, return factor and date updated:
   #_____ RF_____ UPDATED_____.
   #_____ RF_____ UPDATED_____.
   Special Condition F.1 is applicable.

6. Does user discharge water from a source not included in MSD's billing system? ___ Yes ✓ No
   If Yes - Special Condition F.3 is applicable.

7. Has user been granted a variance from an ordinance limitation? ___ Yes ✓ No
   If Yes - parameter(s)_____at sampling point(s)_____.
   Special Condition C.4 is applicable.

8. Does user discharge any radioactive waste? ✓ Yes ___ No
   If Yes - Special Condition E.18 is applicable?

9. Do all of the user's active connections, to the District sewers, have identified sampling points? ✓ Yes ___ No
   If No - how many do not? _____.
   Explain:_____.
   If No - can Special Condition E.5, E.6, E.7 or E.8 be used? ___ Yes ___ No
   If Yes - is documentation sufficient? ___ Yes ___ No
   If No - is compl schedule necessary to establish documentation? ___ Yes ___ No
   If Yes - Special Condition G.1 is applicable.

10. Does user have upstream/downstream sampling points? ___ Yes ✓ No
    If Yes - upstream # _____ & downstream # _____.
    If Yes - Special Conditions D.11 and E.9 are applicable.

MSD 035949

Acct. Number: 4112195[redacted]-00

11. Are there any inactive wastewater connections to District sewers? ___Yes ✓No
    If Yes - does Special Condition E.10 apply? ___Yes ___No

12. Do the Sampling Point Location comments specifically locate the sampling point(s)? ✓Yes ___No

13. Do the Wastewater Source and Category comments accurately identify the wastewater discharged and the applicable categorical standards? ✓Yes ___No

14. Are there any sampling points identified as Dry Justified? ___Yes ✓No
    If Yes - which sampling point(s) _____.
    Special Condition E.3 is applicable.

15. Are there sampling points which convey stormwater in addition to wastewater? ___Yes ✓No
    If Yes - which sampling point(s): _____.
    Special Condition D.10 is applicable.

16. Are there sampling points subject to a NPDES permit? ___Yes ✓No
    If Yes - which sampling point(s): _____.
    Special Condition E.14 is applicable.

17. Does user discharge any process waste? ✓Yes ___No
    If No - does Special Condition B.1, B.2 or B.3 apply? ___Yes ___No

18. Are there sampling points which convey <u>no</u> process waste flows? ✓Yes ___No
    If Yes - does Special Condition E.3 apply? ___Yes ✓No
    If Yes - which sampling point(s): _____.

19. Can grab samples be used in lieu of composite samples? ___Yes ✓No
    If Yes - which sampling point(s): _____.
    If Yes - is documentation adequate? ___Yes ___No
    Special Condition D.1 is applicable.

20. Are there sampling points with less than quarterly sampling frequency for <u>all</u> parameters? ✓Yes ___No
    If Yes - which sampling point(s): 002.
    Special Condition E.4 is applicable.

21. Do the ordinance discharge limits correspond to the watershed? ✓Yes ___No
    Watershed is classified small____ or large ✓ river.

22. Are all <u>applicable</u> priority pollutants listed at ordinance sampling points? ✓Yes ___No
    If No - add: _____.
    - delete: _____.

23. Can user be exempted from monitoring for local limits TTO at any ordinance sampling point(s)? ___Yes ✓No
    If Yes - which sampling point(s) _____.
    If Yes - explain _____

Acct. Number: 4/121954[illegible]00

24. Does user have a history of compliance problems at this or a previous location? ___Yes ✓ No
    If Yes - is a compliance schedule required? ___Yes___No
    If Yes - Special Condition G.1 is applicable.

25. Is user a categorical user? ___Yes ✓ No
    If No - questions 26 through 39 can be skipped.

26. Do any sampling points have both Ordinance & Categorical limits? ___Yes___No
    If Yes - which sampling point(s):_____.
    Special Condition C.3 is applicable. Attach worksheet.

27. Is the Combined Wastestream Formula (CWF) required? ___Yes___No
    If Yes - which sampling point(s):_____.
    If Yes - date last calculated:_____.
    Special Condition C.2 is applicable. Attach CWF worksheet.

28. Are there process discharges, from a categorical operation, for which standards have not been promulgated? ___Yes___No
    If Yes - which sampling point(s):_____.
    Is Special Condition E.20 applicable? ___Yes___No

29. Are categorical limitations based on production rates? ___Yes___No
    If Yes - which sampling point(s):_____.
    If Yes - date last calculated:_____.
    Do Special Conditions C.1, E.1 or E.2 apply? ___Yes___No
    If Yes - which Special Condition(s):_____.

30. Are categorical limitations mass limits? ___Yes___No
    If Yes - which sampling point(s):_____.
    Special Condition E.19 is applicable.

31. Is user a job shop electroplater with >10,000 gpd? ___Yes___No
    If Yes - Special Condition D.2 is applicable.

32. Is user a soap and detergent manufacturer subject to 40 CFR 417? ___Yes___No
    If Yes - are they subject to Subparts O__, P__, Q__ or R__? ___Yes___No
    If Yes - for Subpart O, Special Condition B.4 is applicable.
    If Yes - for Subpart P, Special Condition B.5 is applicable.
    If Yes - for Subpart Q, Special Condition B.6 is applicable.
    If Yes - for Subpart R, Special Condition B.7 is applicable.

33. Is user a leather tanner/finisher subject to 40 CFR 425? ___Yes___No
    If Yes - under Appendix A, Special Condition D.6 is applicable.
    If Yes - under Appendix B, Special Condition D.7 is applicable.

34. Is user a pharmaceutical manufacturer subject to 40 CFR 439? ___Yes___No
    If Yes - have they certified to the absence of cyanide? ___Yes___No
    If Yes - Special Condition E.15 is applicable.
    If No - must total cyanide limitations be adjusted? ___Yes___No
    If Yes - calculate adjusted limitations. Attach worksheet.

35. Is user a metal molder/caster subject to 40 CFR 464? ___Yes___No
    If Yes - Special Condition D.4 is applicable.

Acct. Number: 4112195[redacted]-00

36. Is user a coil coater subject to 40 CFR 465? ___Yes ✓No
    If Yes - Special Conditions D.5 and E.16 are applicable.
    If Yes - is user subject to 40 CFR 465 Subpart D? ___Yes ___No
      If Yes - Special Conditions D.9 and E.17 are applicable.
      If Yes - is there a separate categorical sampling point for the regulated waste? ___Yes ___No
        If Yes - include O&G (Hydrocarbon) in the list of parameters at the categorical sampling point.
        If No - and categorical waste discharges at a combined ord/cat sampling point, include O&G (Total) and O&G (Hydrocarbon) in the list of parameters at the combined sampling point.

37. Do any sampling points have both Ordinance & Categorical TTO limits? ___Yes ___No
    If Yes - which sampling point(s):_____.
    Is Special Condition E.13 applicable? ___Yes ___No
      If Yes - explain:_____.

38. Can user certify, in lieu of monitoring, for categorical TTO at a categorical or combined sampling point? ___Yes ___No
    If Yes - which sampling point(s):_____.
    Special Condition E.11 ____ or E.12 ____ is applicable.

39. May user monitor for Oil & Grease, in lieu of TTO, at a categorical sampling point? ___Yes ___No
    If Yes - which sampling point(s):_____.
    If Yes - Special Condition D.8 is applicable.
    If Yes - is a modification of Special Condition E.13 applicable? ___Yes ___No

40. Is user required to monitor for Total Phenols? ___Yes ✓No
    If Yes - is Special Condition D.3 applicable? ___Yes ___No

41. Are all SARA Data pollutants monitored? ✓N/A ___Yes ___No
    If No - do additional pollutants need to be monitored? ___Yes ___No
    If Yes - list pollutant(s):_____.

42. Are all Haz Waste Report (403.12(p)) pollutants monitored? ✓N/A ___Yes ___No
    If No - do additional pollutants need to be monitored? ___Yes ___No
    If Yes - list pollutant(s):_____.

43. Are there any special billing provisions, not previously listed, that require a Special Condition in the permit? ___Yes ✓No
    If Yes - describe:

    _____

    _____

44. Are any Special Conditions other than the standard Special Conditions needed? ___Yes ✓No
    If Yes - please describe:

    _____

    _____

    _____

Acct. Number: 4112195[illegible]-00

SUMMARY: List all the Special Conditions applicable to this permit:

#E.18 #E.4 #_____ #_____ #_____ #_____ #_____ #_____ #_____

If Special Condition G.1 is applicable, outline the requirements & dates below:

_____

_____

_____

_____

_____

_____

_____

_____

MSD

R MSD USE ONLY		
ACCOUNT NUMBER: 41121954-00	CATEGORY: 1 2 3 4 5 6 8 9	
TA: BP TS: Old Mill Creek	gd Reviewer's Initials	3/13/96 Date

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL USER QUESTIONNAIRE

Note to Signing Official: In accordance with Title 40 of the Code of Federal Regulations Part 403 Section 403.14, information and data provided in this questionnaire which identifies the nature and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other information shall be governed by procedures specified in 40 CFR Part 2. Should a discharge permit be required for your facility, the information in this questionnaire will be used to issue the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: Cardinal Glennon Children's Hospital
2. Mailing Address: 1465 South Grand Blvd.
   St. Louis, MO 63104 Zip Code 63104
3. Premise Address: ~~xxxxx~~ 1465 South Grand and 1505 South Grand
   St. Louis, MO Zip Code 63104
4. Person Authorized to Sign Reporting Documents:
   Name and Title: Al T. Wittrock - Risk Manager (General Services)
   Tel No. 314-577-5616/5308
5. Check one: [X] Existing Discharge
   [] Proposed Discharge If proposed, indicate discharge start date: _____
6. Shift Information:
   a. Number of shifts per work day: 3 and work days per week: 7
   b. Average number of employees per shift: 1st 600± 2nd 400± 3rd 350± Total: 1350±
   c. Shift start times: 1st 0800 2nd 1600 3rd 2400

SECTION B - PRODUCT OR SERVICE INFORMATION

1. Briefly describe the primary manufacturing or service activities at the premise address and list the applicable SIC number for each activity:

	PRIMARY ACTIVITIES	SIC NUMBER
a.	Health Care and Hospital	8062
b.		
c.		
d.		

RECEIVED
MAR 11 1996
Environmental Compliance

MSD 035954

Company Name: Cardinal Glennon Children's Hosp.
Premise Address: 1465 South Grand Blvd.
Account Number: 4112195400

SECTION B - PRODUCT OR SERVICE INFORMATION (Cont'd)

2. Are primary activities generally batch or continuous processes? [] batch [] continuous
3. Principal raw materials used: _____
4. Principal products produced: _____
5. Check all activities which are conducted at your premise in addition to the primary activities described in B.1 above. Indicate the SIC number, if known. Do not check activities which are already included in B.1.

	SIC NO.		SIC NO.
[] Adhesive & Sealants Mfg.		[] Mineral Mining & Processing	
[] Aluminum Forming		[] Nonferrous Metals Forming	
[] Asbestos Mfg.		[] Nonferrous Metals Mfg	
[] Battery Mfg.		[] Organic Chem., Plastics & Synthetic Fibers Mfg	
[] Builder's Paper and Roofing Felt Mfg.		[] Paint Formulating	
[] Carbon Black Mfg.		[] Painting, Finishing or Paint Stripping	
[] Cement Mfg.		[] Parts Washing	
[] Coil Coating		[] Paving and Roofing Materials	
[] Copper Forming		[] Pesticide Chem., Mfg., Formulating, Packaging	
[] Dairy Products Processing		[] Petroleum Refining	
[] Drum Reconditioning		[] Pharmaceutical Mfg	
[] Electrical and Electronic Components		[] Phosphate Mfg	
[] Electroplating		[] Photographic Processing	
[] Explosive Mfg.		[] Plastic Molding and Forming	
[] Feedlots		[] Porcelain Enameling	
[] Ferroalloy Mfg.		[] Printing & Publishing	
[] Fertilizer Mfg.		[] Pulp, Paper & Paperboard Mfg	
[X] Food Preparation	5812	[] Q. C. Laboratory	
[] Fruits and Vegetable Processing		[X] R & D Laboratory	8071
[X] General Offices	8011	[] Radioactive Materials Processing	
[] Glass Mfg.		[] Repair Shop, Garage	
[] Grain Milling		[] Rubber & Rubber Prod. Mfg.	
[] Gum & Wood Chemical Mfg.		[] Seafood Processing	
[] Hazardous Waste Treatment, Storage or Disposal		[] Soap and Detergent Mfg.	
[] Health Care & Hospital		[] Solvent Recycling	
[] Industrial Laundry		[] Steam Electric Power Generation	
[] Ink Formulating		[] Sugar Processing	
[] Inorganic Chemicals Mfg.		[] Textile Mills	
[] Iron and Steel Mfg.		[] Timber Products Mfg.	
[] Leather Tanning and Finishing		[] Transportation Equipment Cleaning	
[] Machine Shop		[] Transportation Services	
[] Machinery Mfg. or Rebuilding		[] Used Oil Reclamation	
[] Meat Processing		[] Vehicle/equipment Washing	
[] Metal Finishing		[] Warehousing	
[] Metal Molding and Casting		[] Waste Recycling	
		[] Others _____	

RECEIVED
MAR 1 1 1994
Environmental Compliance

6. Are your processes subject to seasonal variation? [] Yes [X] No
If "Yes," explain and indicate the month(s) of peak activity. Processes are subject to variation, but variations are not necessarily due to season changes.

Company Name: Cardinal Glennon Children's Hosp.
Premise Address: 1435 So. Grand Blvd
Account Number: 4112195400

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s):
   - [X] City of St. Louis Water Div.
   - [ ] St. Louis Co. Water Co.
   - [ ] Other Municipal Source
   - [ ] Hauled by Contractor
   - [ ] Surface water
   - [ ] Private Well
   - [ ] Other (describe)

2. Water Bill Addressee: Cardinal Glennon Children's Hospital

3. Water Service Account Numbers: 407328-227084, 407331-227086,405153-226370

4. List past twelve months water usage from:

					[X] Water Bills	[ ] Other Sources
a. 1st quarter	1/25 1995	through	4/21 1995		3400 73 Ccf	Ccf
b. 2nd quarter	4/21 1995	through	7/21 1995		4330 80 Ccf	Ccf
c. 3rd quarter	7/22 1995	through	10/23 1995		4960 73 Ccf	Ccf
d. 4th quarter	10/24 1995	through	1/25 1996		3050 77 Ccf	Ccf
					15740 303	

5. Describe any treatment or conditioning process performed on the raw water before use: N/A

6. Identify all water uses within your facility:

Water Uses	Estimated average daily use (Gallons per Day)
a. Sanitary	28858
b. Irrigation & lawn watering	2170
c. Non-contact cooling water	3250
d. Contact cooling water	
e. Process water	1836
f. Plant & equipment washdown	
g. Boiler feed	
h. Other uses	
i. Total of USES (6a through 6h):	33114

7. Identify all water losses and wasterwater discharges from your facility:

Water Losses & Discharges	Estimated average daily loss/discharge (Gallons per Day)
a. Municipal sewer	28182
b. Watercourse, storm drain, ground	2170
c. Haulers	
d. ~~Evaporation~~ Closed loop	2762
e. Contained in product	
f. Total of LOSSES & DISCHARGES: (7a through 7e must equal total at 6i)	33114

8. List average water usage and average wastewater discharge for each activity listed in Sections B.1 and B.5. Attach additional sheets if needed.

Item No.	Activity	Type of Discharge Cont.	Batch	Avg Use (GPD)	Avg Discharge (GPD)	Date When Activity First Commenced At This Facility
1	Health Care & Hospital	[ ]	[ ]	33114	33114	unknown
		[ ]	[ ]			
		[ ]	[ ]			
		[ ]	[ ]			
		[ ]	[ ]			

RECEIVED
MAR 11 1994
Environmental Compliance

Company Name: Cardinal Glennon Children's Hosp
Premise Address: 1465 South Grand Blvd.
Account Number: 4112195400

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, alleys, streets and other pertinent structures;
   b. All sewers and drains, including all connections, inlets, manholes, vents and other access or control structures. Identify each sewer as sanitary, storm or combined and indicate its size.
   c. Identify a sampling point for each connection to the public sewer.
   d. Identify a sampling point for each discharge from a federally regulated categorical process.
   e. Identify a sampling point for each discharge to a separate storm sewer or water course.
2. List each sampling point identified in D.1c, d, e above. Also include each connection for which there is no sampling point. Assign a sequential reference number to each point, starting with No. 1. Attach additional sheets, if necessary.

Reference Number	Sewer Size (inch)	Description of sewer sampling point or connection	Total Daily Average Flow (GPD)
1		24" Manhole in Vista Ave sidewalk, NW corner of property.	32256
2		8" Hole on parking lot, west side of Shaw/Bakery Bldg.	858
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. List the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets if necessary.

Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection listed in D.2. Main 1	Shaw/Bakery 2	3	4	5	Facility Total
a. Sanitary	25000	858				
b. Irrigation & Lawn Watering	2170					
c. Non-Contact Cooling Water	~~8250~~					
d. Contact Cooling Water	~~1086~~					
e. Process (From C.8)	1836					
f. Plant & Equipment Washdown						
g. Boiler Blowdown						
h. Other (_____)						
Regeneration Waste (C.5)						
Totals (Same as D.2)	29494	858				

2. If any of the above points discharge to a watercourse or a separate storm sewer, complete the following: NA

NPDES Outfall Number					
NPDES Permit Number					

RECEIVED
MAR 1 1 1995
Environmental Compliance

3. Do any of the above sampling points also convey stormwater from your premise ? NA

☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

4. Do you pretreat any of the wastes discharged through any of the above points?

☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
silver recovery				

Company Name: Cardinal Glennon Children's Hosp.
Premise Address: 1465 So. Grand Blvd.
Account Number: 4112195400

SECTION E - WASTEWATER INFORMATION (Cont'd)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in E.4:

Point No.	Pretreatment System Description

RECEIVED
MAR 11 1996
Environmental Compliance

6. Does your facility have:
   a. A spill control plan? [ ] Yes [X] No
   b. A waste minimization plan? [X] Yes [ ] No
   c. A solvent management plan? [X] Yes [ ] No
   d. A slug discharge control plan? [ ] Yes [X] No

7. If any wastewater analysis has been performed on the wastewater discharges from your facility attach a copy of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary.

8. Priority Pollutant Information: Check the appropriate box by each listed chemical whether it is "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" on your premise, used in your manufacturing or service activity or generated as a by-product. Some pollutants are known by other names. Refer to the instruction booklet for those pollutants which have an asterisk (*).

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP	ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
1.	asbestos (fibrous)	[ ]	[X]	[ ]	[ ]	39.	bromoform*	[ ]	[X]	[ ]	[ ]
2.	cyanide (total)	[ ]	[X]	[ ]	[ ]	40.	bromomethane*	[ ]	[X]	[ ]	[ ]
3.	antimony (total)	[ ]	[X]	[ ]	[ ]	41.	4-bromophenylphenyl ether	[ ]	[X]	[ ]	[ ]
4.	arsenic (total)	[X]	[ ]	[ ]	[ ]	42.	butylbenzyl phthalate	[ ]	[X]	[ ]	[ ]
5.	beryllium (total)	[ ]	[X]	[ ]	[ ]	43.	carbon tetrachloride*	[ ]	[X]	[ ]	[ ]
6.	cadmium (total)	[ ]	[X]	[ ]	[ ]	44.	chlordane	[ ]	[X]	[ ]	[ ]
7.	chromium (total)	[X]	[ ]	[ ]	[ ]	45.	4-chloro-3-methylphenol*	[ ]	[X]	[ ]	[ ]
8.	copper (total)	[X]	[ ]	[ ]	[ ]	46.	chlorobenzene	[ ]	[X]	[ ]	[ ]
9.	lead (total)	[ ]	[X]	[ ]	[ ]	47.	chlorethane*	[ ]	[X]	[ ]	[ ]
10.	mercury (total)	[ ]	[ ]	[ ]	[X]	48.	2-chloroethylvinyl ether	[ ]	[X]	[ ]	[ ]
11.	nickel (total)	[ ]	[X]	[ ]	[ ]	49.	chloroform*	[ ]	[ ]	[ ]	[X]
12.	selenium (total)	[ ]	[X]	[ ]	[ ]	50.	chloromethane*	[ ]	[X]	[ ]	[ ]
13.	silver (total	[ ]	[X]	[ ]	[X]	51.	2-chloronaphthalene	[ ]	[X]	[ ]	[ ]
14.	thallium total)	[ ]	[X]	[ ]	[ ]	52.	2-chlorophenol*	[ ]	[X]	[ ]	[ ]
15.	zinc (total)	[ ]	[X]	[ ]	[ ]	53.	4-chlorophenylphenyl ether	[ ]	[X]	[ ]	[ ]
16.	acenaphthene	[ ]	[X]	[ ]	[ ]	54.	chrysene*	[ ]	[X]	[ ]	[ ]
17.	acenaphthylene	[ ]	[X]	[ ]	[ ]	55.	4,4'-DDD*	[ ]	[X]	[ ]	[ ]
18.	acrolein	[ ]	[X]	[ ]	[ ]	56.	4,4'-DDE*	[ ]	[X]	[ ]	[ ]
19.	acrylonitrile	[ ]	[X]	[ ]	[ ]	57.	4,4'-DDT*	[ ]	[X]	[ ]	[ ]
20.	aldrin	[ ]	[X]	[ ]	[ ]	58.	dibenzo (a,h) anthracene*	[ ]	[X]	[ ]	[ ]
21.	anthracene	[ ]	[X]	[ ]	[ ]	59.	dibromochloromethane*	[ ]	[X]	[ ]	[ ]
22.	benzene	[ ]	[X]	[ ]	[ ]	60.	1,2-dichlorobenzene*	[ ]	[X]	[ ]	[ ]
23.	benzidine	[ ]	[X]	[ ]	[ ]	61.	1,3-dichlorobenzene*	[ ]	[X]	[ ]	[ ]
24.	benzo (a) anthracene*	[ ]	[X]	[ ]	[ ]	62.	1,4-dichlorobenzene*	[ ]	[X]	[ ]	[ ]
25.	benzo (a) pyrene	[ ]	[X]	[ ]	[ ]	63.	3,3'-dichlorobenzidine	[ ]	[X]	[ ]	[ ]
26.	benzo (b) fluoranthene	[ ]	[X]	[ ]	[ ]	64.	Reserved	[ ]	[X]	[ ]	[ ]
27.	benzo (g,h,i) perylene*	[ ]	[X]	[ ]	[ ]	65.	1,1-dichloroethane*	[ ]	[X]	[ ]	[ ]
28.	benzo (k) fluoranthene*	[ ]	[X]	[ ]	[ ]	66.	1,2-dichloroethane*	[ ]	[X]	[ ]	[ ]
29.	alpha-BHC	[ ]	[X]	[ ]	[ ]	67.	1,1-dichloroethene*	[ ]	[X]	[ ]	[ ]
30.	beta-BHC	[ ]	[X]	[ ]	[ ]	68.	trans-1,2-dichloroethene*	[ ]	[X]	[ ]	[ ]
31.	delta-BHC	[ ]	[X]	[ ]	[ ]	69.	2,4-dichlorophenol	[ ]	[X]	[ ]	[ ]
32.	gamma-BHC*	[ ]	[X]	[ ]	[ ]	70.	1,2-dichloropropane*	[ ]	[X]	[ ]	[ ]
33.	bis (2-chloroethyl) ether*	[ ]	[X]	[ ]	[ ]	71.	(cis & trans) 1,3-dichloropropene*	[ ]	[X]	[ ]	[ ]
34.	bis (2-chloroethoxy) methane*	[ ]	[X]	[ ]	[ ]	72.	dieldrin	[ ]	[X]	[ ]	[ ]
35.	bis (2-chloroisopropyl) ether*	[ ]	[X]	[ ]	[ ]	73.	diethylphthalate*	[ ]	[X]	[ ]	[ ]
36.	Reserved	[ ]	[X]	[ ]	[ ]	74.	2,4-dimethylphenol*	[ ]	[X]	[ ]	[ ]
37.	bis (2-ethylhexyl) phthalate	[ ]	[X]	[ ]	[ ]	75.	dimethyl phthalate	[ ]	[X]	[ ]	[ ]
38.	bromodichloromethane*	[ ]	[X]	[ ]	[ ]	76.	di-n-butyl phthalate	[ ]	[X]	[ ]	[ ]

Continued on Page 6

Company Name: Cardinal Glnnon Children's Hosp.
Premise Address: 1465 So Grand Blvd
Account Number: 4112195400

SECTION E - WASTEWATER INFORMATION (Cont'd)

Priority Pollutant Information (Cont'd)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP	ITEM NO.	PRIORITY POLLUTANT	SA	KA	SP	KP
77.	di-n-octyl phthalate*	[]	[]	[]	[]	103.	4-nitrophenol*	[]	[]	[]	[]
78.	4,6-dinitro-2-methylphenol*	[]	[]	[]	[]	104.	N-nitrosodimethylamine*	[]	[]	[]	[]
79.	2,4-dinitrophenol	[]	[]	[]	[]	105.	N-nitrosodi-n-propylamine*	[]	[]	[]	[]
80.	2,4-dinitrotoluene	[]	[]	[]	[]	106.	N-nitrosodiphenylamine	[]	[]	[]	[]
81.	2,6-dinitrotoluene	[]	[]	[]	[]	107.	PCB-1016*	[]	[]	[]	[]
82.	1,2-diphenylhydrazine*	[]	[]	[]	[]	108.	PCB-1221*	[]	[]	[]	[]
83.	endosulfan I*	[]	[]	[]	[]	109.	PCB-1232	[]	[]	[]	[]
84.	endosulfan II*	[]	[]	[]	[]	110.	PCB-1242*	[]	[]	[]	[]
85.	endosulfan sulfate	[]	[]	[]	[]	111.	PCB-1248*	[]	[]	[]	[]
86.	endrin	[]	[]	[]	[]	112.	PCB-1254*	[]	[]	[]	[]
87.	endrin aldehyde	[]	[]	[]	[]	113.	PCB-1260*	[]	[]	[]	[]
88.	ethylbenzene	[]	[]	[]	[]	114.	pentachlorophenol	[]	[]	[]	[]
89.	fluoranthene	[]	[]	[]	[]	115.	phenanthrene	[]	[]	[]	[]
90.	fluorene*	[]	[]	[]	[]	116.	phenol	[]	[]	[]	[]
91.	heptachlor	[]	[]	[]	[]	117.	pyrene	[]	[]	[]	[]
92.	heptachlor epoxide	[]	[]	[]	[]	118.	2,3,7,8-tetrachlorodibenzo-p-dioxin*	[]	[]	[]	[]
93.	hexachlorobenzene*	[]	[]	[]	[]	119.	1,1,2,2-tetrachloroethane*	[]	[]	[]	[]
94.	hexachlorobutadiene	[]	[]	[]	[]	120.	tetrachloroethene*	[]	[]	[]	[]
95.	hexachlorocyclopentadiene*	[]	[]	[]	[]	121.	toluene*	[]	[]	[]	[]
96.	hexachloroethane*	[]	[]	[]	[]	122.	toxaphene	[]	[]	[]	[]
97.	indeno (1,2,3-cd) pyrene*	[]	[]	[]	[]	123.	1,2,4-trichlorobenzene	[]	[]	[]	[]
98.	isophorone*	[]	[]	[]	[]	124.	1,1,1-trichloroethane*	[]	[]	[]	[]
99.	methylene chloride*	[]	[]	[]	[]	125.	1,1,2-trichloroethane*	[]	[]	[]	[]
100.	naphthalene	[]	[]	[]	[]	126.	trichloroethene*	[]	[]	[]	[]
101.	nitrobenzene	[]	[]	[]	[]	127.	Reserved	[]	[]	[]	[]
102.	2-nitrophenol	[]	[]	[]	[]	128.	2,4,6-trichlorophenol	[]	[]	[]	[]
						129.	vinyl chloride*	[]	[]	[]	[]

9. For priority pollutants in E.8 which are indicated "Known Present," list and provide the following data for each: (attach additional sheets if needed.)

ITEM NO.	PRIORITY POLLUTANT	HOW USED	ANNUAL USAGE (LBS)	LOSS TO SEWER (LBS/YEAR)
10	Mercury (Contained in thermometers)		0.1	0.0
13	Silver		unknown	0.0*
49	Chloroform		30.0	0.0
79	2,4 Dinitrophenol		0.1	0.0
85	Endrin		0.1	0.0
99	Methylene Chloride		5.0	0.0
116	Phenol		30.0	0.1

RECEIVED
MAR 1 1 1996
Environmental Compliance

* Silver bromide generated in the Diagnostic Imaging Department is recovered and sold to Central States Refining Company. Four silver recovery units are currently in use.

MSD 035959

Company Name: Ca[illegible]nal Glennon Children's Hosp
Premise Address: 1465 So. Grand
Account Number: 4112195400

SECTION F - NON-SEWERED WASTES

1. Do you generate any liquid wastes or sludges which are not disposed in the sewer system? [X] Yes [ ] No
If "Yes" complete items 2 and 3 below. If "No," skip remainder of this section: Note: Be sure to include wastewaters listed in Section C.7c.

2. Information on non-sewered waste:

Type of Waste	Estimated Quantity Disposed/yr	Units	Store on-site	Dispose on-site	Dispose off-site
[X] Acids and/or Alkalies	31	liters	[ ]	[ ]	[X]
[X] Equip. Oils and/or Grease	150	gallons	[ ]	[ ]	[X]
[ ] Infectious Waste	989	lbs.	[ ]	[ ]	[ ]
[ ] Inks/Dyes			[ ]	[ ]	[ ]
[ ] Kitchen/Food Service Grease			[ ]	[ ]	[ ]
[X] Organic Compounds	71	liters	[ ]	[ ]	[X]
[ ] Paints or Paint Sludges			[ ]	[ ]	[ ]
[ ] Pesticides			[ ]	[ ]	[ ]
[ ] Pretreatment Sludges			[ ]	[ ]	[ ]
[ ] Radioactive Waste			[ ]	[ ]	[ ]
[X] Solvents/Thinners	xx[illegible]x 20	gallons	[ ]	[ ]	[X]
[ ] Other _____			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]
			[ ]	[ ]	[ ]

3. List your USEPA and/or MDNR Hazardous Waste generator numbers:

USEPA MOD075904839 MDNR 001310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. The following analytical information is required for each sampling point or each connection to the public sewer (see D.1.c), only if your water usage exceeds 80 Ccf per month. Representative samples of the wastewaters in each sewer must be collected and analyzed for the listed parameters. Concentrations are to be reported in mg/l.

Sewer Number (Refer to Section D.2)
(If more than 5, attach additional sheets)

Daily Average Concentration For Each Sampling Point or Connection

Parameter (mg/l)	1	2	3	4	5
Total Solids					
Total Suspended Solids					
Biochemical Oxygen Demand$_5$					
Chemical Oxygen Demand					
Flow (gpd)					
Date Sampled					
Time Sampled					
Type of Sample					

RECEIVED
MAR 1 1 1995
Environmental Compliance

Company Name: Cardinal Glennon Children's
Premise Address: 1465 So. Grand Blvd.
Account Number: 4112195400

SECTION G - INDUSTRIAL WASTE (Cont'd)

2. Sample handling information: Organization Name and Address

   a. Samples collected by: SITEX Environmental INC. 11905 Borman Dr. St. Louis, MO

   b. Samples analyzed by: Kiesel Environmental Laboratory

SECTION H - CERTIFICATION AND SIGNATURE

1. The following individual may be contacted regarding the information contained in this questionnaire:

   Name and title of contact person: A. T. Wittrock

   Tel No. 314-577-5616/5308

2. "I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

   Name and title of signing official: A.T. Wittrock - Risk Management - General Services

   Tel No. 314-577-5616/5308

   Signature: A.T. Wittrock Date: 3/8/96

List attachments included with this questionnaire:

RECEIVED
MAR 11 1996
Environmental Compliance

4112 1954-00
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 & 1505 S.GRAND BLVD.
ST. LOUIS, MO 63104

OLDER ACTUAL PERMIT INFORMATION IS IN BROWN FOLDER BEHIND THIS FILE

01-22-15 Moved to ARCHIVED PERMIT files. MI

PERMIT OVERFLOW

MSD-DEC INDUSTRY SAMPLING MAP

Company Name: CARDINAL GLENNON HOSP.

Premise Address: 1465 S. GRAND

Zip Code: 63104

Nearest Intersection: VISTA

Wunnenberg: H21-38 Base Map: 20F3

MSD Account No.: 41121954-00

Total No. of Active Sample Points: 1

Active SP Nos: 001

Facility Contact: AL WITTROCK

Secondary Contact: DON MONTGOMERY

Must contact prior to sampling: Yes ____ No X

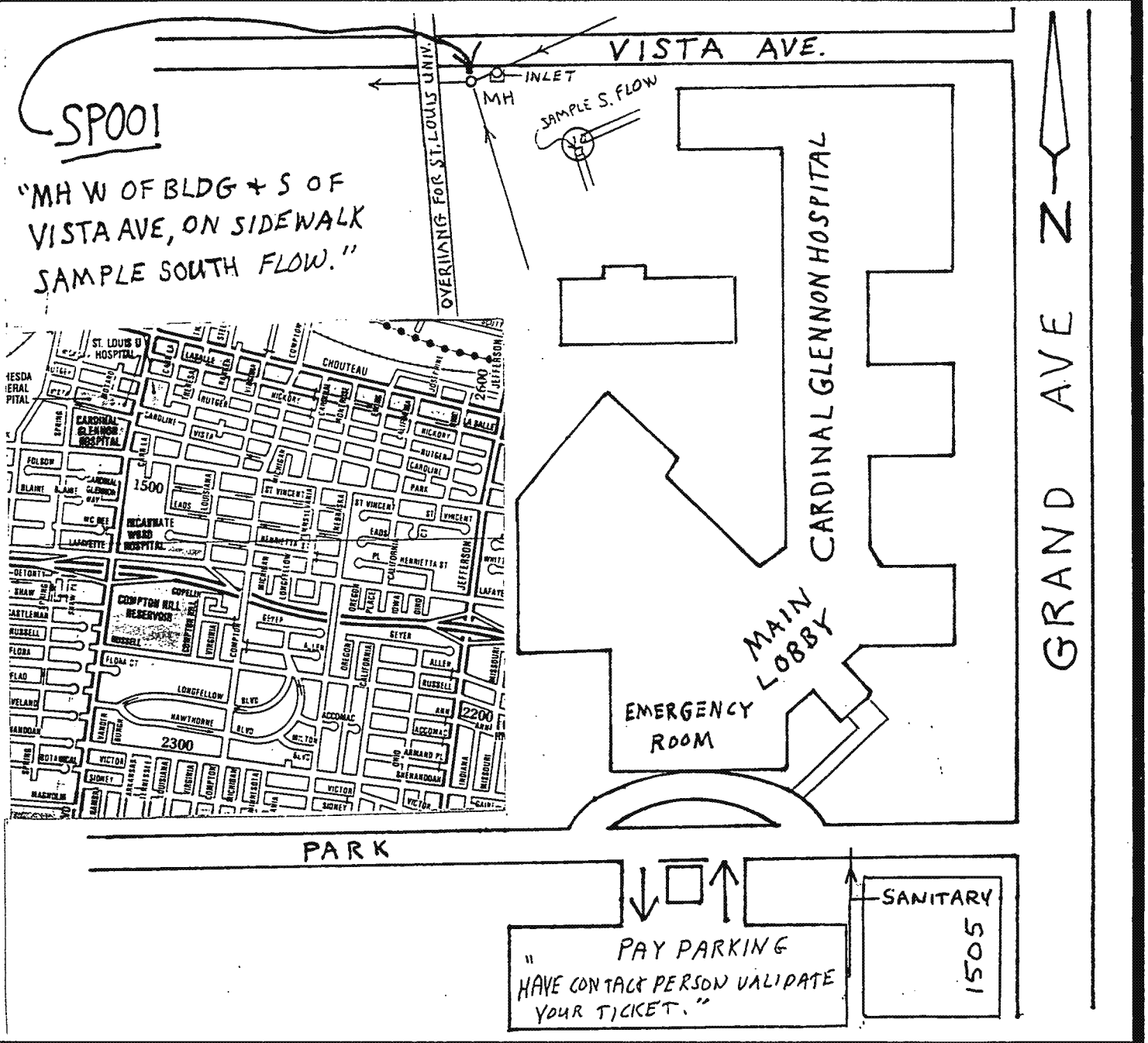
Reason: ____

Company wants to split samples: Yes ____ No X

Special Sampling Requirements or Instructions: ____

Map Effective Date: 02-16-96 By: JEG DMM 2-22-96 Map Revision Date: ____ By: ____

Map Revision Date: ____ By: ____ Map Void Date: ____ By: ____



SP MAP DMM-1/95-1

MAP IS INVALID IF NOT DATED AND INITIALED OR IF VOID DATE IS FILLED IN