Sewer Acct.#: **1020548900**

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

Address: **1465 South Grand Blvd.**

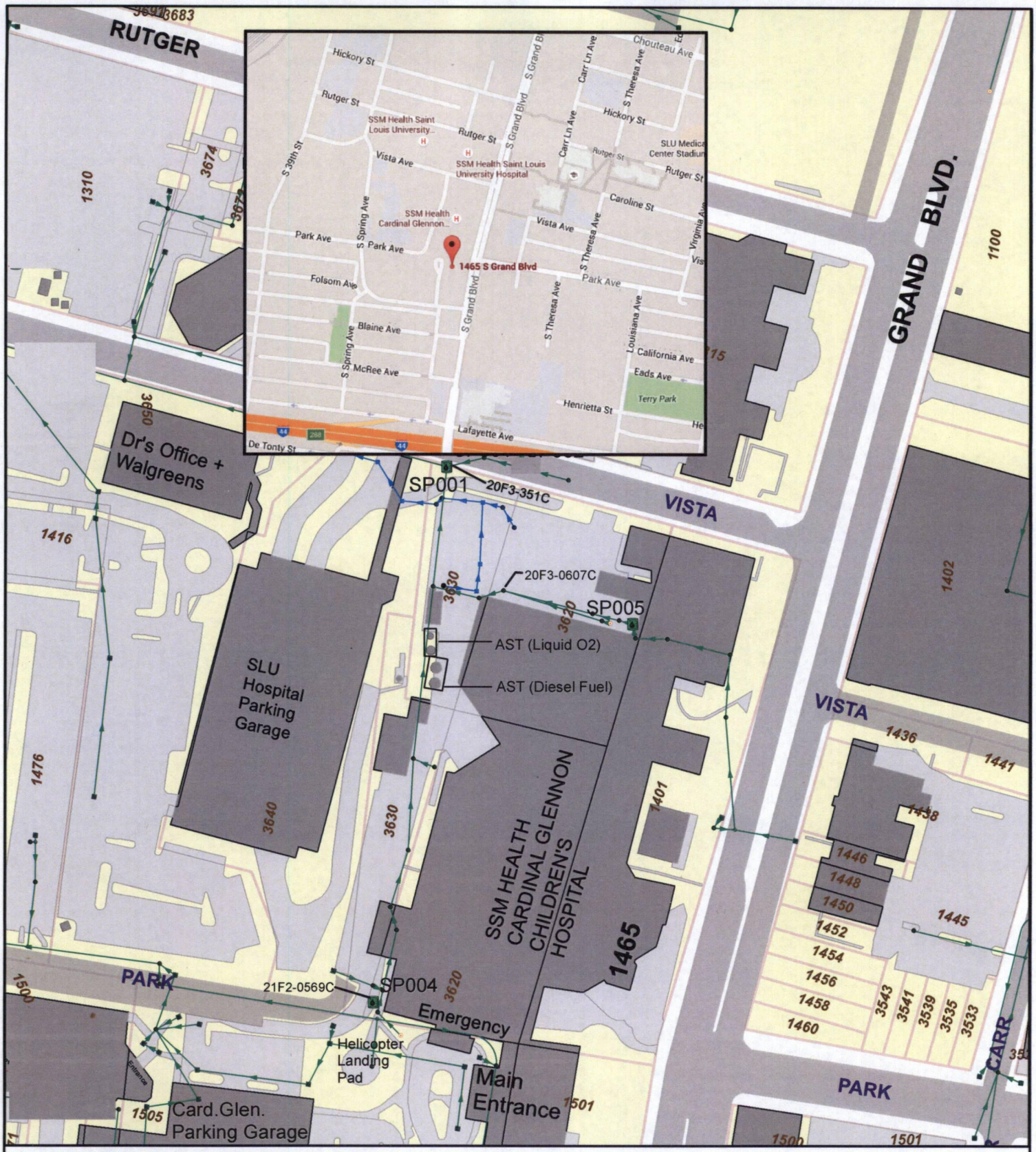
City: **St. Louis**

State and Zip: **MO 63104**

2-07-15 Name ch

Industry ID	File Code	File Description
64230	30	INDUSTRY

MSD-DEC INDUSTRY SAMPLING MAP



SP001: MH on sidewalk S of Vista Avenue, E of overhead walkway, Flow from S
SP004: MH 3' W from SW corner of emergency bldg
SP005: Manhole 12' N, 10'W from NW inside corner of the N bldg

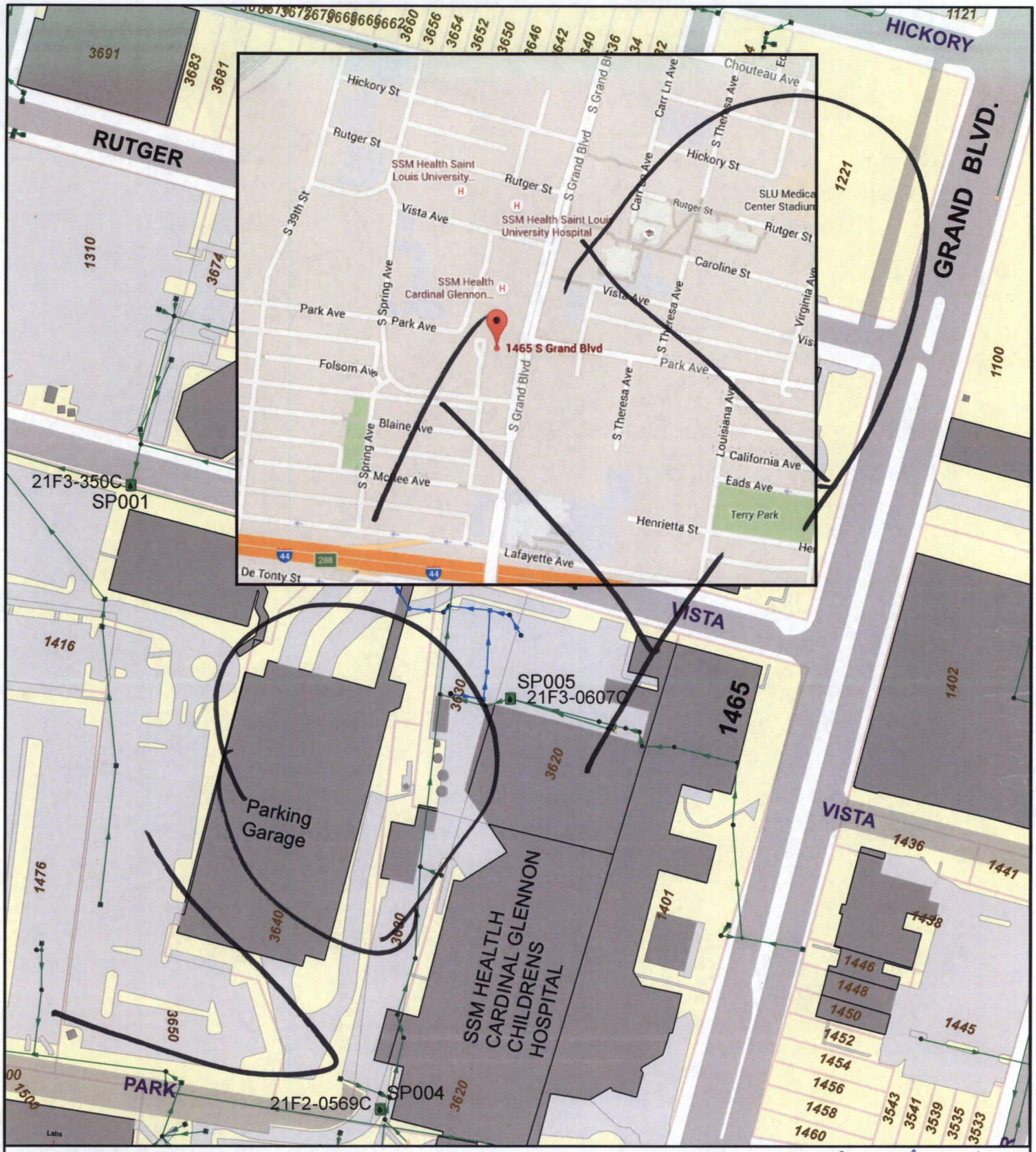
Company Name: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL
Premise Address: 1465 South Grand Blvd
Zip: 63104

MSD Account No: 1020548900
Drawn By: SMR
Date: 07/08/16

Page 1 of 1

MSD-DEC INDUSTRY SAMPLING MAP

MSD



SP001: MH on sidewalk S of Vista Avenue, E of overhead walkway, Flow from SE
SP004: MH 3' W from SW corner of emergency building
SP005: Manhole 12' N, 10' E from NW corner of the west building

VOID BY SR ON 07-08-2016

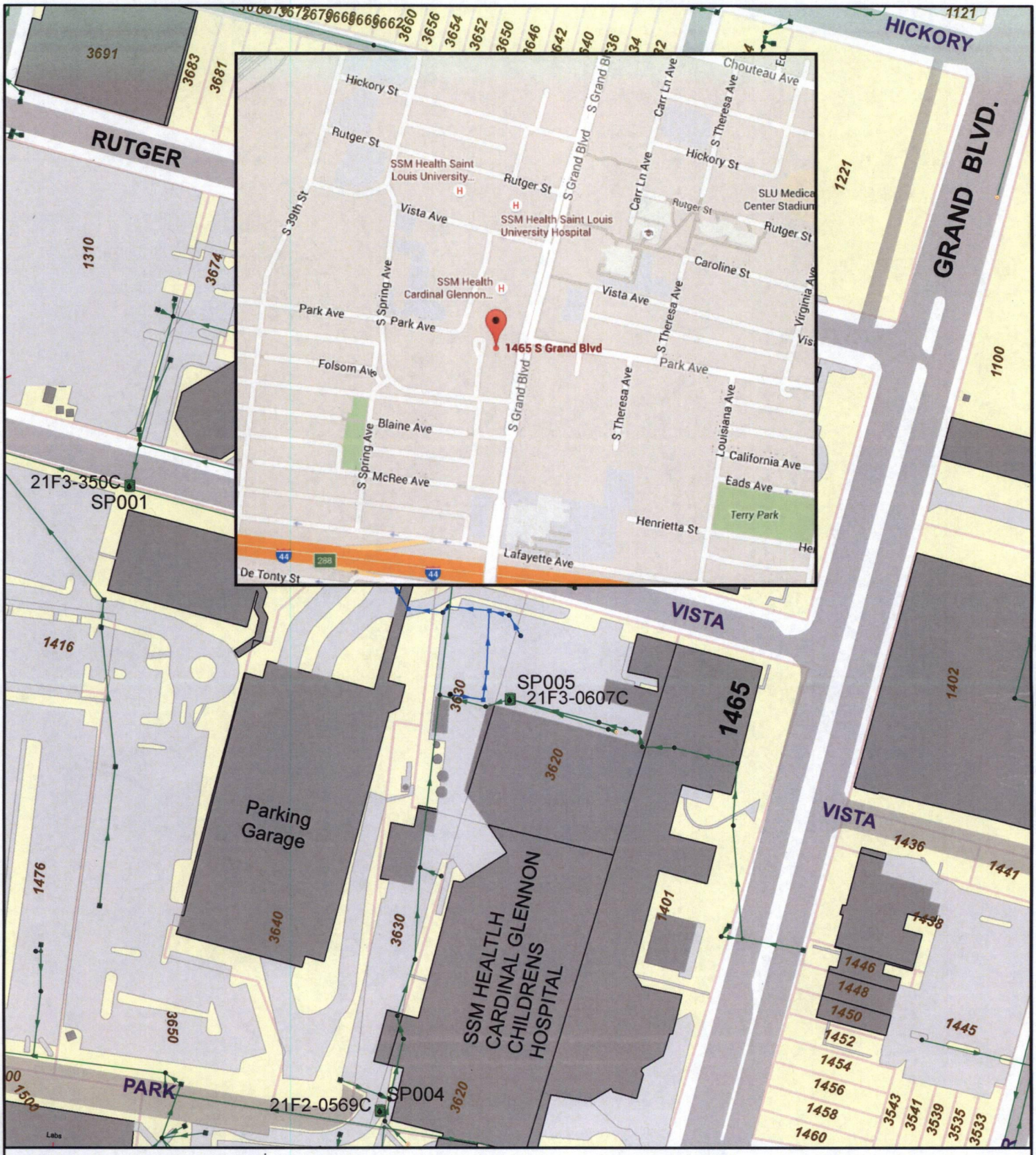
Company Name: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL
Premise Address: 1465 South Grand Blvd
Zip: 63104

MSD Account No: 1020548900
Drawn By: DWK
Date:11/02/15

Page 1 of 1

MSD 035111

MSD-DEC INDUSTRY SAMPLING MAP



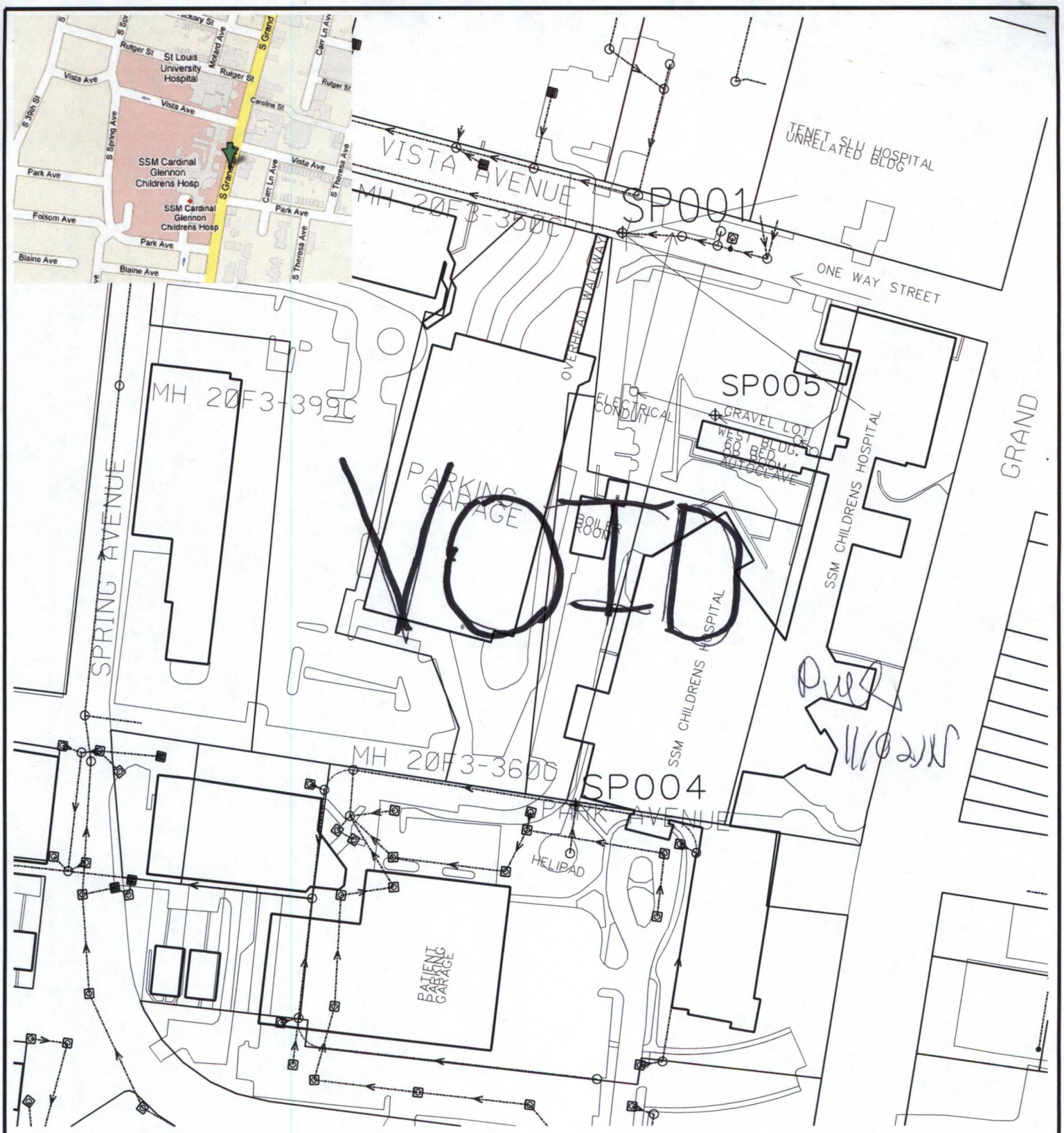
SP001: MH on sidewalk S of Vista Avenue, E of overhead walkway, Flow from SE
SP004: MH 3' W from SW corner of emergency building
SP005: Manhole 12' N, 10' E from NW corner of the west building

Company Name: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL
Premise Address: 1465 South Grand Blvd
Zip: 63104

MSD Account No: 1020548900
Drawn By: DWK
Date:11/02/15

MSD

MSD-DEC INDUSTRY SAMPLING MAP



SP001: MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE
SP004: MH 3' W from SW corner of emergency building
SP005: Manhole 12' N, 10' E from the NW corner of the west building

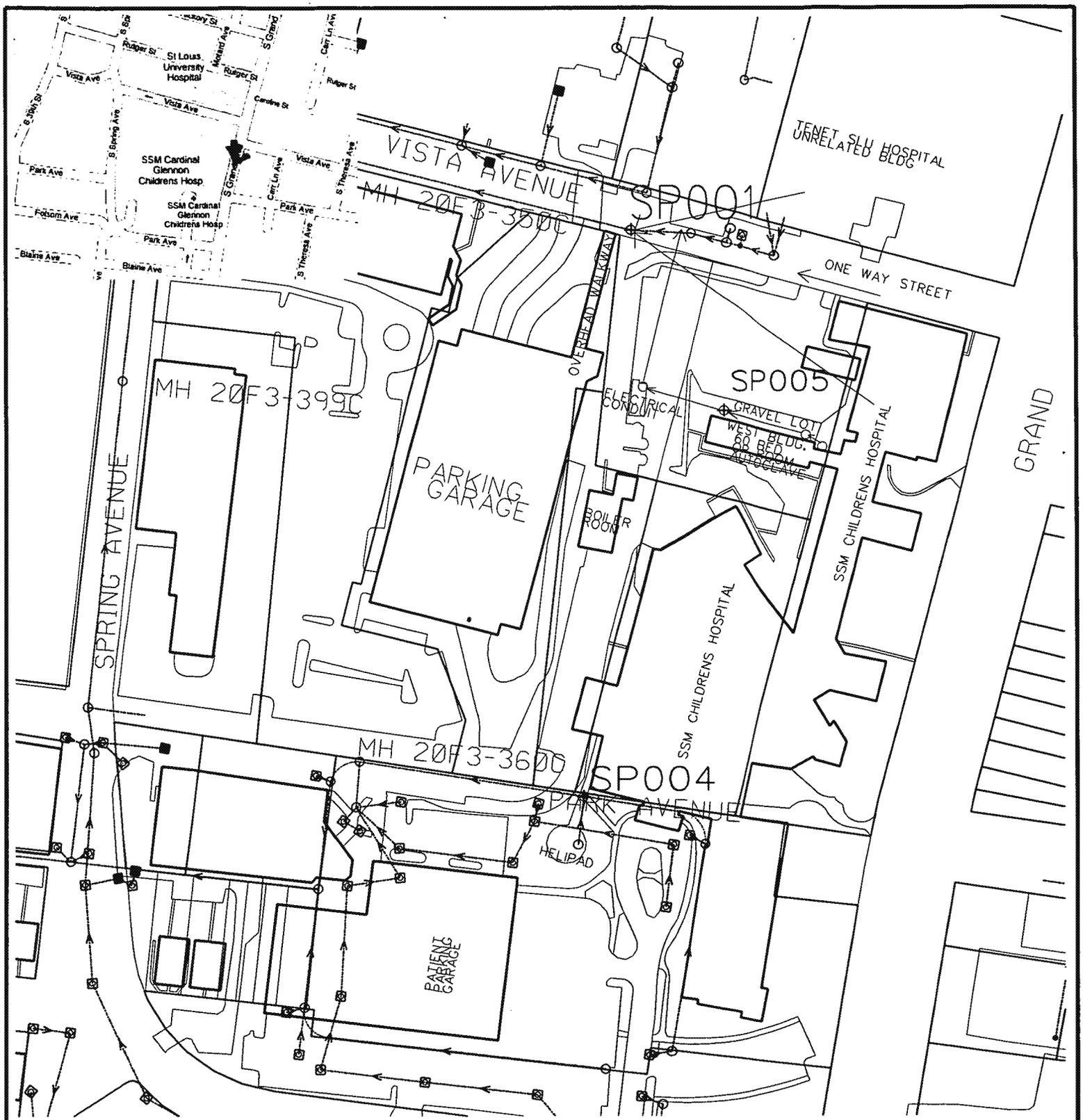
VOID

Company Name: SSM CARDINAL GLENNON CHILDS. HOSP | MSD Account No.: 1020548900 | Drawn by: SMR

Premise Address: 1465 SOUTH GRAND BLVD. | Zip: 63104 | Date: 7/5/12 | Page 1 of 1

MSD 035113

MSD-DEC INDUSTRY SAMPLING MAP



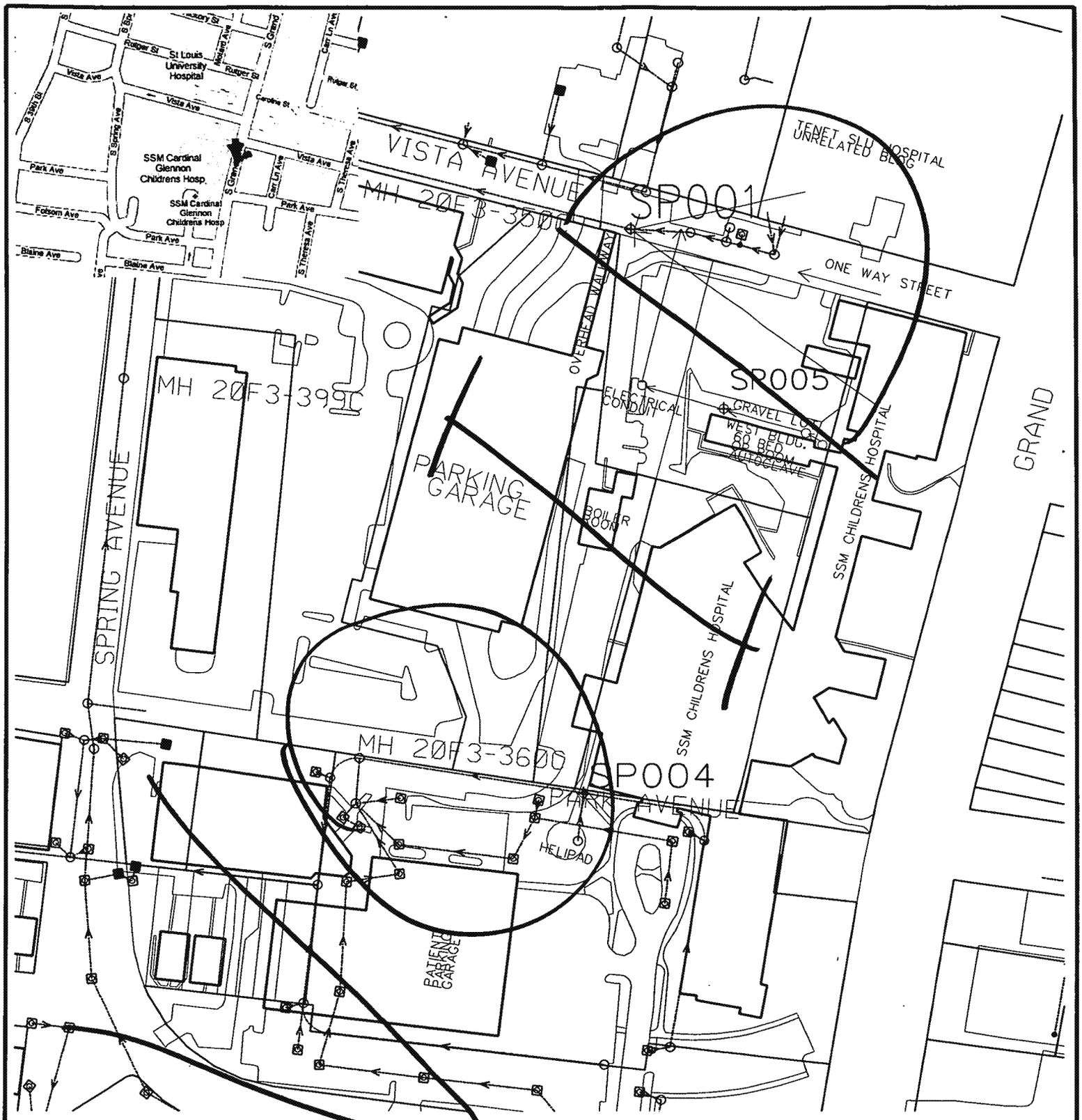
SP001: MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE
SP004: MH 3' W from SW corner of emergency building
SP005: Manhole 12' N, 10' E from the NW corner of the west building

Company Name: SSM CARDINAL GLENNON CHILDS. HOSP	MSD Account No.: 1020548900	Drawn by: SMR
Premise Address: 1465 SOUTH GRAND BLVD.	Zip: 63104 Date: 7/5/12	Page 1 of 1

MSD

MSD

MSD-DEC INDUSTRY SAMPLING MAP



SP001: MH on sidewalk S of Vista Ave, E of overhead walkway, Flow from SE
SP004: MH 3' W from SW corner of emergency building
SP005: Manhole 12' N, 10' E from the NW corner of the west building

VOID - 7/5/12 - SR

Company Name: SSM CARDINAL GLENNON CHILDS. HOSP MSD Account No.: 41121954-00

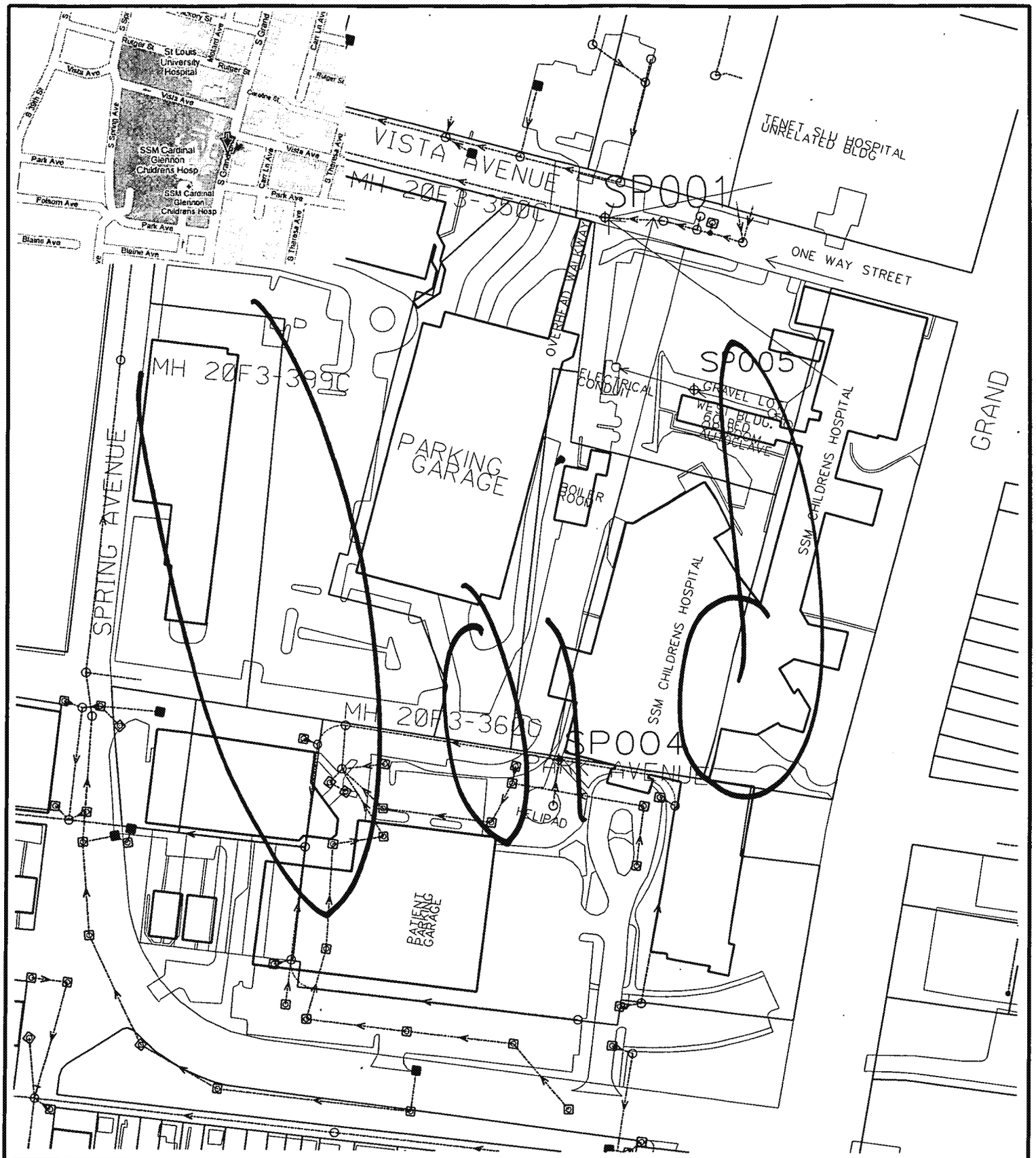
Premise Address: 1465 SOUTH GRAND BLVD. Zip: 63104 Date: 2/19/09

Page 1 of 1

MSD 035115

MSD

MSD-DEC INDUSTRY SAMPLING MAP



Company Name: SSM CARDINAL GLENNON CHILDS. HOSP MSD Account No.: 41121954-00

Premise Address: 1465 SOUTH GRAND BLVD. Zip:63104 Date:1/25/08

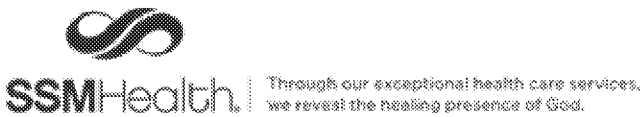
Page 1 of 1

Carly Reidt

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Friday, May 7, 2021 11:03 AM
To: DEC Pretreatment
Cc: Carly Reidt
Subject: Q1 Monitoring Reports
Attachments: MSD_New SLUH_1st Quarter_2021.pdf; MSD_Legacy SLUH_1st Quarter_2021.pdf; MSD_CG-SL_1st Quarter_2021.pdf; MSD_SM-SL_1st Quarter_2021.pdf

Madison Himelright, MPH, CPH
Environmental Safety & Emergency Preparedness (ESEP)
SSM Health – St. Louis Region
1015 Corporate Square Drive St. Louis, MO 63132
Office: (314) 989-6134
Cell: (540) 336-4469
madison.himelright@ssmhealth.com

SSM St. Mary's Hospital – St. Louis
SSM St. Clare Hospital – Fenton
SSM Cardinal Glennon Children's Hospital – St. Louis
SSM Saint Louis University Hospital – St. Louis
SSM St. Mary's Hospital – Jefferson City



Confidentiality Notice. This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2020 Expiration Date: 04/30/2025

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		1/7/2021		1/7/2021		1/7/2021		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		9:00am		9:45am		9:20am		
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	72,175	E	7,879	E	8,861	gpd
BOD	—	C	218	C	295	C	198	mg/L
COD	—	C	620	C	690	C	450	mg/L
Oil + Grease	200	G	18	G	11	G	24	mg/L
Temperature	60	G	26.1	G	15.2	G	16.0	deg. C
Phenols, Total	21	G	0.092	G	0.16	G	0.070	mg/L
Total Suspended Solids	—	C	260	C	50	C	230	mg/L
Total Toxic Organics	5.844	CG		CG		CG		mg/L
pH	5.5-11.5	G	9.73	G	8.54	G	8.68	SU

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Madison Hunnewright
	Title: Environmental Safety Specialist Telephone: 314-989-6134
	Signature: [signature] Date: 5/5/2021

Metropolitan St. Louis
Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.436.8710 www.stlmsd.com

April 8, 2021

Kevin Ferguson
Associate Radiation Safety Officer
ST LOUIS UNIVERSITY HEALTH SCIENCES CENTER
1402 S. Grand Blvd.
Caroline Bldg. – C305
St. Louis, MO 63104

Re: Radioactive Materials Discharges

Dear Mr. Ferguson,

We have reviewed your January 12, 2021 request for permission to cease the submittal of radioactive material discharge reports from the following facilities:

- **ANHEUSER-BUSCH INSTITUTE**
  1755 S. Grand Boulevard
- **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL**
  1465 S. Grand Boulevard
- **SSM HEALTH ST LOUIS UNIVERSITY HOSPITAL**
  1201 S. Grand Boulevard
- **SSM HEALTH ST LOUIS UNIVERSITY HOSPITAL**
  3635 & 3655 Vista Avenue

Per your March 26, 2021 email, we understand that the above facilities (excluding the new St. Louis University Hospital) were authorized to dispose of radioactive material due to the presence of various laboratories leasing space at those locations. Those laboratories have moved out over a decade ago. The new St. Louis University Hospital at 3635 & 3655 Vista Avenue does not have any research labs, nor will there be any in the future.

Based on the information you provided, we are revoking the approval for the facilities listed above to discharge small quantities of radioactive material to the Metropolitan St. Louis Sewer District. Following the submittal of the 1st quarter 2021 reports, due no later than **April 28, 2021**, quarterly reports from each will no longer be required. Additionally, revised permits for SSM Health Cardinal Glennon Children's Hospital and SSM Health St. Louis University Hospital (both the new and legacy locations) will be issued, with the quarterly radioactive materials reporting requirement removed.

If you wish to resume discharge of radioactive material to MSD's sewer system, you must obtain approval from us prior to any discharge. Your request must contain at least the following information:

- A list itemizing the isotopes used, and identifying those to be discharged
- Decay rates (half-life) for those isotopes to be discharged
- Information concerning the form of radiation emitted by each isotope (i.e. alpha, beta, gamma)
- The total level of radiation anticipated to be discharged, along with a list of the radiation level corresponding to each isotope
- The discharge locations of the radioactive materials within your facility, and the connection points to MSD's sewers for these discharge locations
- Verification that the material is readily soluble or readily dispersible biological material
- Copies of your radioactive materials licenses

Thank you for your assistance in helping us to comply with state and federal regulations. If you have any questions, please contact me at 314.436.8762.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Carly Reidt

Carly Reidt
Assistant Engineer

ec: Doug Mendoza
Dave Kupke
Mike Kynion

FILE: ANHEUSER-BUSCH INSTITUTE, 1020566700, Industry
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL, 1020548900, Industry
SSM HEALTH ST LOUIS UNIVERSITY HOSPITAL, 1020548801, Industry
SSM HEALTH ST LOUIS UNIVERSITY HOSPITAL, 1055710900, Industry

Carly Reidt

From: Kevin Ferguson <kevin.ferguson@slu.edu>
Sent: Friday, March 26, 2021 9:52 AM
To: Carly Reidt
Subject: Re: Request for Discontinuation of Authorization for Some Drain Disposal Locations

Hi Carly,

I wish I could provide something like that, but our NRC license doesn't work that way. We have one broad scope license that covers both the University and Hospital, and it uses street boundaries to spell out where licensed materials can be used. Potentially any building owned by the University or Hospital in this part of town could be used for rad. materials under our license. Here is what that section of the license says:

"Licensed material may be used or stored at the licensee's facilities bounded by Olive Boulevard on the north, Shaw Avenue on the south, Compton Avenue on the east, and 39th Street on the west, St. Louis Missouri".

The license also does specifically spell out that Nuclear Medicine and PET/CT departments in the Hospital may use licensed materials. However, there would be no drain disposal of radioactive materials from these clinical areas other than possibly exempt patient excreta. This category of waste is exempt from reporting by NRC and MSD.

The only reason there was ever a drain disposal authorization for the old hospital was due to some labs on the 10th and 11th floor of Bordley Pavilion that were leased space from the hospital. They were all moved out more than a decade ago. Also, over two decades ago there were a few research labs in West Pavilion (Bethesda Eye Institute at the time) that utilized some drain disposal. They were moved out prior to my arrival (23 years ago) and there have been no drain disposals of rad. mat. there since.

Cardinal Glennon also had some old labs down the basement which were leased space. They never drain disposed anything since I came to SLU and were moved out over a decade ago. We no longer have a presence in Cardinal Glennon, and Cardinal Glennon has their own NRC license for the clinical use of rad. materials.

ABI also had leased space on the 5th floor that the labs were moved out of more than a decade ago. There may still be some hospital clinical labs here, but none are authorized for rad. materials and there are no plans to authorize any users in that space, nor would we allow drain disposal in the unlikely event that did happen.

Two labs on Frost campus are authorized for rad. materials, but only one has any on hand. We do not put any rad. materials down the drain on Frost campus and have not for at least a decade. If any aqueous rad. waste was generated, it would disposed via the Med. School drain.

We have not drain disposed rad. materials in various locations throughout the campus for years and have only used one drain in the Med. School for this purpose in the recent past. There has never been any authorization in individual labs for drain disposal. We have mostly only authorized one drain per building (there were two in one building in one case). This was partly to make tracking easier and partly because we didn't want to contaminate all the plumbing in our buildings. The research use of radioactive materials has steadily declined for the past two decades and will likely continue to do so as other methods are replacing its use. Of the currently authorized drain disposal locations, only Frost campus has any current authorization for rad.

materials (other than Med. School). Since we would be picking up other waste streams (such as dry solid waste and scintillation vials) from Frost anyway, it just makes sense to pick up any aqueous waste as well and dispose down a single sink (which is what we have done on the rare occasions it has been required in the past decade from Frost campus).

Sorry for the lengthy email. I just wanted to be a little more detailed in my explanation. If MSD decides that we need to retain these authorized locations then we will continue to report them every quarter, but we will not be actually using them for rad. materials disposal, except for the Med. School drain.

Please let me know if you need anything else.

Thanks,
Kevin

Kevin Ferguson
Associate Radiation Safety Officer
Research Integrity and Safety Group

Office of the Vice President for Research
Saint Louis University

314-977-6896
kevin.ferguson@slu.edu

Caroline C-305

From: Carly Reidt <creidt@stlmsd.com>
Sent: Thursday, March 25, 2021 2:00 PM
To: Kevin Ferguson <kevin.ferguson@slu.edu>
Subject: [External] RE: Request for Discontinuation of Authorization for Some Drain Disposal Locations

Hi Kevin!

Question for you…I'm assuming all of the facilities that are no longer discharging the radioactive materials have an NRC license, except for maybe the new SLU Hospital. Do you by any chance have any sort of documentation from the NRC showing the licenses have been terminated? If you do, that might be helpful.

Thanks again for your patience!

-Carly

Carly Reidt
Assistant Engineer -- Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147

Carly Reidt

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Monday, February 1, 2021 4:00 PM
To: DEC Pretreatment
Cc: Carly Reidt
Subject: 4th quarter self monitoring report- Cardinal Glennon
Attachments: MSD_Cardinal Glennon_4thQuarter_2020.pdf; PDC_Cardinal Glennon_4thQuarter_2020.pdf

---

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		10/2/2020		10/2/2020		10/2/2020		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		8:12 am		10:25am		9:50am		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	110	C	>180	C	170	mg/L
COD	—	C	320	C	1400	C	620	mg/L
Oil + Grease	200	G	19	G	<20	G	33	mg/L
Silver	.5	C	----	C	-----	C	----	mg/L
Temperature	60	G	25.5	G	20.9	G	22.8	deg C
Phenol	21	G	0.063	G	0.22	G	0.18	mg/L
Total Suspended Solids	—	C	110	C	260	C	270	mg/L
pH	5.5-11.5	G	9.35	G	7.24	G	8.68	SU
Total toxic organics	5.844	C,G	----	C,G	----	C,G	----	mg/L

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Madison Himelright
	Title: Environmental Safety Specialist Telephone:
	Signature: Madison Himelright Date: 1/11/2021

Carly Reidt

From: Kevin Ferguson <kevin.ferguson@slu.edu>
Sent: Tuesday, January 12, 2021 11:04 AM
To: Carly Reidt
Subject: Request for Discontinuation of Authorization for Some Drain Disposal Locations
Attachments: Letter to MSD - Deletion of Permits Radionuclide Discharge - 2021-01-01DRAFT.docx

Hi Carly,

Here is the letter we previously discussed requesting the discontinuation of authorization for several disposal locations. The only one we would like to retain is the Med. School location.

With research radionuclide use in decline for several decades now and few disposals needed, there is no reason to retain any other location. The legacy hospital at one time housed research labs, but neither it nor the new hospital currently have any research labs, nor are there plans for any. There will be no radionuclide discharges in either the legacy or new hospital that are not exempt patient related. Please let me know if you need anything else.

Thanks,
Kevin

Kevin Ferguson
Associate Radiation Safety Officer
Research Integrity and Safety Group

Office of the Vice President for Research
Saint Louis University

314-977-6896
kevin.ferguson@slu.edu

Caroline C-305

SAINT LOUIS UI

SAINT LOUIS UNIVERSITY.
EST. 1818

ASSOCIATE RADIATION SAFETY OFFICER

ENVIRONMENTAL HEALTH & SAFETY

1402 South Grand Blvd.
Caroline Building – C305
St. Louis, MO 63104

P: 314-977-6896
M: 636-667-6687
F: 314-977-5560
kevin.ferguson@slu.edu

www.slu.edu

January 11, 2021

Carly Reidt
Assistant Engineer - Environmental Compliance
Metropolitan St. Louis Sewer District
10 East Grand Avenue
St. Louis, MO 63147

SUBJECT: Request for Deletion of Authorized Locations for Drain Disposal of Low-Level Radionuclide Effluents

Dear Ms. Reidt:

We would like to request that the radioactive materials discharge permits be discontinued for the locations listed below. None of these locations have been used in many years and/or there are no plans to use them in the future. There will be no radioactive materials discharged into the sewer system from either the legacy SSM SLU Hospital or the new SSM SLU Hospital that are not exempt patient related.

1. **Saint Louis University Health Sciences Center; Anheuser Busch Institute**
   Permit No: 41122251-02
   Premise No: 1755 South Grand Boulevard, 63104

2. **Saint Louis University; Frost Campus**
   Permit No: *(none specified)*
   Premise No: 3505 Laclede Avenue, 63103

3. **Cardinal Glennon Hospital**
   Permit No: *(none specified)*
   Premise No: 1465 S. Grand, 63104

4. **Saint Louis University Hospital *(legacy permit)***
   Permit No: 41121951-00
   Premise No: 3635 Vista at Grand Boulevard, 63104

5. **SSM Saint Louis University Hospital *(recently issued permit)***
   Permit No: 1020548801
   Premise No: 3635 & 3655 Vista Avenue, Saint Louis, MO 63110

We are planning to continue small radioactive materials discharges (well below regulatory limits) from the location listed below and would like to retain this permit.

- **Saint Louis University Health Sciences Center; Medical School**
  Permit No: 41121936-00
  Premise No: 1402 South Grand Boulevard, 63104

Higher purpose. Greater good.

If you have any questions regarding this request, please contact me at (636) 667-6687 or at kevin.ferguson@slu.edu.

Sincerely,

Kevin Ferguson
Associate Radiation Safety Officer

Copies to: Dana Baum, Ph.D., Chairperson, Radiation Safety Committee
Matthew Christian, Associate Vice President for Research
Kelly Baumer, Vice President Specialty Services, SSM Health Saint Louis University Hospital
Mark Haenchen, M.S., J.D., Executive Director, Environmental Health & Safety; and Radiation Safety Officer
Madison Himelright, Environmental Safety Specialist, SSM Health Saint Louis University Hospital

Higher purpose. Greater good.

PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

October 14, 2020

Madison Himelright
SSM Health
1015 Corporate Square Drive #110
St Louis, MO 63132

RE: Cardinal Glennon Children's Hospital

Dear Madison Himelright:

Please find enclosed the analytical results for the **6** sample(s) the laboratory received on **10/2/20 12:20 pm** and logged in under work order **0100380**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Sincerely,

Amy Holmes
Project Manager
(314) 595-7336
aholmes@pdclab.com

NELAP ACCREDITED TNI LABORATORY

SAMPLE RECEIPT CHECK LIST

Work Order 0100380

YES	Samples received within temperature compliance
YES	COC present
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
NO	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Samples are free from signs of damage & contamination
NO	No headspace >6 mm present in VOA vials or TOX bottles
NO	Sulfide bottle(s) completely filled if required
NO	Trip blank(s) received if required
NO	Custody seals used
NO	Custody seals intact
YES	All analyses received within holding times
YES	Short hold time analysis requested
NO	RUSH TAT requested
YES	Field parameters recorded on COC
YES	Current PDC COC submitted
NO	Sample receipt case narrative provided

ANALYTICAL RESULTS

Sample: 0100380-01
Name: MSD 001 Comp (by overhead walkway)
Matrix: Waste Water - Composite

Sampled: 10/02/20 08:12
Received: 10/02/20 12:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	110	mg/L		10/02/20 13:00	1	6.0	10/07/20 12:35	NJM	SM 5210B
COD	320	mg/L		10/06/20 20:46	1	50	10/07/20 13:37	NJM	SM 5220D
Solids - total suspended solids (TSS)	110	mg/L		10/05/20 08:57	1	4.0	10/05/20 12:03	SJP	SM 2540D

Sample: 0100380-02
Name: MSD 001 Grab (by overhead walkway)
Matrix: Waste Water - Grab

Sampled: 10/02/20 08:18
Received: 10/02/20 12:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	9.35	pH Units		10/02/20 08:18	1		10/02/20 08:18	LGG	Field*
Temperature, Field Measured	25.5	°C		10/02/20 08:18	1		10/02/20 08:18	LGG	Field*
General Chemistry - PIA									
Oil & Grease - total	19	mg/L		10/12/20 07:48	1.010816	5.1	10/12/20 16:30	DLE	EPA 1664A
General Chemistry - STL									
Phenol	0.063	mg/L		10/05/20 10:28	1	0.050	10/05/20 15:29	BCH	EPA 420.1

Sample: 0100380-03
Name: MSD 004 Comp (by emergency bldg)
Matrix: Waste Water - Composite

Sampled: 10/02/20 10:25
Received: 10/02/20 12:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	>180	mg/L		10/02/20 13:00	1	6.0	10/07/20 12:35	NJM	SM 5210B
COD	1400	mg/L		10/06/20 20:46	1	100	10/07/20 13:37	NJM	SM 5220D
Solids - total suspended solids (TSS)	260	mg/L		10/05/20 08:57	1	10	10/05/20 12:03	SJP	SM 2540D

ANALYTICAL RESULTS

Sample: 0100380-04
Name: MSD 004 Grab (by emergency bldg)
Matrix: Waste Water - Grab

Sampled: 10/02/20 10:30
Received: 10/02/20 12:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	7.24	pH Units		10/02/20 10:30	1		10/02/20 10:30	LGG	Field*
Temperature, Field Measured	20.9	°C		10/02/20 10:30	1		10/02/20 10:30	LGG	Field*
General Chemistry - PIA									
Oil & Grease - total	< 20	mg/L		10/12/20 07:48	4.070004	20	10/12/20 16:30	DLE	EPA 1664A
General Chemistry - STL									
Phenol	0.22	mg/L		10/05/20 10:28	1	0.050	10/05/20 15:29	BCH	EPA 420.1

Sample: 0100380-05
Name: MSD 005 Comp (NW corner west bldg)
Matrix: Waste Water - Composite

Sampled: 10/02/20 09:50
Received: 10/02/20 12:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	170	mg/L		10/02/20 13:00	1	6.0	10/07/20 12:35	NJM	SM 5210B
COD	620	mg/L		10/06/20 20:46	1	50	10/07/20 13:37	NJM	SM 5220D
Solids - total suspended solids (TSS)	270	mg/L		10/05/20 08:57	1	10	10/05/20 12:03	SJP	SM 2540D

Sample: 0100380-06
Name: MSD 005 Grab (NW corner west bldg)
Matrix: Waste Water - Grab

Sampled: 10/02/20 10:00
Received: 10/02/20 12:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.68	pH Units		10/02/20 10:00	1		10/02/20 10:00	LGG	Field*
Temperature, Field Measured	22.8	°C		10/02/20 10:00	1		10/02/20 10:00	LGG	Field*
General Chemistry - PIA									
Oil & Grease - total	33	mg/L		10/12/20 07:48	4.014452	20	10/12/20 16:30	DLE	EPA 1664A
General Chemistry - STL									
Phenol	0.18	mg/L		10/05/20 10:28	1	0.050	10/05/20 15:29	BCH	EPA 420.1

NOTES

Specifications regarding method revisions and method modifications used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Certified by: Amy Holmes, Project Manager

MSD 035135

PDC LABORATORIES, INC.
WWW.PDCLAB.COM

REGULATORY PROGRAM (Check one:)		NPDES	
MORBCA		RCRA	
CCDD		TACO: RES OR IND/COMM	

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED _____

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT: SSM Health- Cardinal Glennon Children's Hospital
PROJECT NUMBER: Quarterly (2,3,4)
PROJECT LOCATION:
PURCHASE ORDER #:
ADDRESS: 1015 Corporate Square Dr #110
PHONE NUMBER: (314) 989-6134
E-MAIL:
DATE SHIPPED:
CITY STATE ZIP: St. Louis, MO 63132
SAMPLER (PLEASE PRINT): Luke Grounke
SAMPLER'S SIGNATURE:
CONTACT PERSON: Leslie Thornburg

MATRIX TYPES: WW- WASTEWATER; DW- DRINKING WATER; GW- GROUND WATER; WSL- SLUDGE; NAS- NON AQUEOUS SOLID; LCH- LEACHATE; OIL- OIL; SOL- SOIL; SOL-SOLID

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 000380
LOGGED BY:
CLIENT:
PROJECT:
PROJ. MGR.:
CUSTODY SEAL #:

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	BOD, TSS	COD	Phenols	O&G				REMARKS
MSD 001 Comp (by overhead walkway)	10/2/20 10/2/20	8:12 8:12		X	WW	2	2,6	X	X						pH= 9.35
MSD 001 Grab (by overhead walkway)	10/2/20	8:18	X		WW	3	1,2			X	X				Temp= 25.5
MSD 004 Comp (by emergency bldg)	10/2/20 10/2/20	10:25 10:25		X	WW	2	2,6	X	X						pH= 7.29
MSD 004 Grab (by emergency bldg)	10/2/20	10:30	X		WW	3	1,2			X	X				Temp= 20.9
MSD 005 Comp (NW corner west bldg)	10/2/20 10/2/20	9:50 9:50		X	WW	2	2,6	X	X						pH= 8.08
MSD 005 Grab (NW corner west bldg)	10/2/20	10:00	X		WW	3	1,2			X	X				Temp= 22.8
															Field Sampling Fee
															3 Autosampler Rental

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CHECK) (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE) ☐ NORMAL ☐ RUSH
DATE RESULTS NEEDED
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL ☐ PHONE ☐
EMAIL IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:

6 I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7 RELINQUISHED BY: (SIGNATURE)	DATE 10/2/20 TIME 1220	RECEIVED BY: (SIGNATURE)	DATE 10/2/20 TIME 1220
RELINQUISHED BY: (SIGNATURE)	DATE TIME	RECEIVED BY: (SIGNATURE)	DATE TIME
RELINQUISHED BY: (SIGNATURE)	DATE TIME	RECEIVED BY: (SIGNATURE)	DATE TIME

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 20.8 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

Carly Reidt

From:	Kevin Ferguson <kevin.ferguson@slu.edu>
Sent:	Monday, January 11, 2021 1:28 PM
To:	DEC Pretreatment
Subject:	SLU Rad. Materials Discharge Report 4th Quarter 2020
Attachments:	SLU_RadReport4thQtr2020.pdf

Hi St. Louis MSD Team,

Here is the Rad. Materials Discharge report for Saint Louis University for the 4th Quarter 2020. Please let me know if you need anything else.

Thanks,
Kevin

Kevin Ferguson
Associate Radiation Safety Officer
Research Integrity and Safety Group

Office of the Vice President for Research
Saint Louis University

314-977-6896
kevin.ferguson@slu.edu

Caroline C-305

SAINT LOUIS UI

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KH

I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Kevin Ferguson Date: 01/11/2021

Carly Reidt

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Tuesday, October 20, 2020 10:33 AM
To: DEC Pretreatment
Subject: 3rd Qtr Self Monitoring Report - Cardinal Glennon
Attachments: MSD_Cardinal Glennon_3rdQuarter_2020.pdf

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		9/22/2020		9/23/2020		9/22/2020		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		11:07		10:45		12:30		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	76	C	>360	C	120	mg/L
COD	—	C	270	C	870	C	360	mg/L
Oil + Grease	200	G	6.1	G	17	G	<5.0	mg/L
Silver	.5	C		C		C		mg/L
Temperature	60	G	26.1	G	25.4	G	26.2	deg C
Phenol	21	G	0.084	G	0.077	G	0.063	mg/L
Total Suspended Solids	—	C	30	C	720	C	160	mg/L
pH	5.5-11.5	G	8.41	G	9.17	G	8.41	SU
Total toxic organics	5.844	C,G		C,G		C,G		mg/L

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Madison Himelright
	Title: Environmental Safety Specialist Telephone:
	Signature: Madison Himelright Date: 10/20/2020

Carly Reidt

From: Kevin Ferguson <kevin.ferguson@slu.edu>
Sent: Friday, October 9, 2020 10:02 AM
To: DEC Pretreatment
Subject: SLU Rad. Materials Discharge Report 3rd Quarter 2020
Attachments: SLU_RadReport3rdQtr2020.pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Hi St. Louis MSD Team,

Here is the Rad. Materials Discharge report for Saint Louis University for the 3rd Quarter 2020. Please let me know if you need anything else.

Thanks,
Kevin

Kevin Ferguson
Associate Radiation Safety Officer
Research Integrity and Safety Group

Office of the Vice President for Research
Saint Louis University

314-977-6896
kevin.ferguson@slu.edu

Caroline C-305

SAINT LOUIS UI

INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KH

I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Kevin Ferguson Date: 10/09/2020

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

INDUSTRIAL WASTEWATER DISCHARGE PERMIT 1020548900 - 1

ANNUAL PERMIT FEE NOTICE

for **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL**
at
1465 S Grand Blvd
Saint Louis, MO 63104

For permits in effect on 10/01/2020.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2020 through September 30, 2021 issued in accordance with the Metropolitan St. Louis District Ordinances #14853 for the location at **1465 S Grand Blvd.**

Base charge @ $180.00 per permit			$ 180.00
Volume charge @$0.86 per average daily Ccf	80.65	Ccfs	$ 69.36
Sample Point Charge @$120.00 per sample point	3	points	$ 360.00
		Total Fee Due:	**$ 609.36**

For inquiries about the Annual Permit Fee, please call 314-436-8710.
For inquiries about payment of the fee, please call 1-866-281-5737.

THIS IS NOT A BILL
DO NOT PAY SEPARATELY
FEE IS INCLUDED ON MONTHLY BILL

Kevin Smith
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S Grand Blvd
Saint Louis, MO 631041095

Christopher J. Bulmahn

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Monday, July 6, 2020 1:21 PM
To: Carly Reidt
Subject: 2nd Quarter Self Monitoring Reports- Cardinal Glennon
Attachments: MSD_Cardinal Glennon_2ndQuarter_2020.pdf; PDC_Cardinal Glennon_2ndQuarter_2020.pdf

Madison Himelright, MPH, CPH | Specialist
Environmental Safety & Emergency Preparedness
SSM Health – St. Louis
1015 Corporate Square Drive St. Louis, MO 63132
Office: (314) 989-6134
Cell: (540) 336-4469
madison.himelright@ssmhealth.com

SSMHealth | [illegible]

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		6/9/2020		6/9/2020		6/9/2020		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		10:45		11:10		10:30		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	280	C	140	C	120	mg/L
COD	—	C	570	C	330	C	200	mg/L
Oil & Grease	200	G	10	G	<5.1	G	<5.1	mg/L
Silver	.5	C	—	C	—	C	—	mg/L
Temperature	60	G	26.7	G	23.2	G	26.7	deg C
Phenol	21	G	<0.050	G	0.084	G	<0.050	mg/L
Total Suspended Solids	—	C	320	C	63	C	12	mg/L
pH	5.5-11.5	G	8.61	G	7.96	G	8.34	SU
Total toxic organics	5.844	C,G	—	C,G	—	C,G	—	mg/L

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Madison Himeright
	Title: Environmental Safety Specialist Telephone: 314 989 6184
	Signature: [illegible] Date: 7/6/2020

ANALYTICAL RESULTS

Sample: 0061836-01 **Sampled:** 06/09/20 10:45
Name: MSD 001 Comp (by overhead walkway) **Received:** 06/09/20 12:22
Matrix: Waste Water - Composite

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	280	mg/L		06/10/20 08:13	1	6.0	06/15/20 08:13	BCH	SM 5210B
COD	570	mg/L		06/11/20 08:56	1	5.0	06/11/20 17:36	BCH	SM 5220D
Solids - total suspended solids (TSS)	320	mg/L		06/11/20 09:20	1	4.0	06/11/20 17:26	SJP	SM 2540D

Sample: 0061836-02 **Sampled:** 06/09/20 10:45
Name: MSD 001 grab (by overhead walkway) **Received:** 06/09/20 12:22
Matrix: Waste Water - Grab

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.61	pH Units		06/09/20 10:45	1		06/09/20 10:45	AFH	Field*
Temperature, Field Measured	26.7	°C		06/09/20 10:45	1		06/09/20 10:45	AFH	Field*
General Chemistry - STL									
Oil & Grease - total	10	mg/L		06/11/20 08:50	1.009082	5.0	06/11/20 16:14	SJP	EPA 1664
Phenol	< 0.050	mg/L		06/11/20 10:03	1	0.050	06/11/20 16:02	JCB	EPA 420.1

Sample: 0061836-03 **Sampled:** 06/09/20 11:10
Name: MSD 004 composite (by emergency bldg) **Received:** 06/09/20 12:22
Matrix: Waste Water - Composite

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	140	mg/L		06/10/20 08:13	1	6.0	06/15/20 08:13	BCH	SM 5210B
COD	330	mg/L		06/11/20 08:56	1	5.0	06/11/20 17:36	BCH	SM 5220D
Solids - total suspended solids (TSS)	63	mg/L		06/11/20 09:20	1	4.0	06/11/20 17:26	SJP	SM 2540D

ANALYTICAL RESULTS

Sample: 0061836-04
Name: MSD 004 grab (by emergency bldg)
Matrix: Waste Water - Grab

Sampled: 06/09/20 11:10
Received: 06/09/20 12:22

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	7.96	pH Units		06/09/20 11:10	1		06/09/20 11:10	AFH	Field*
Temperature, Field Measured	23.2	°C		06/09/20 11:10	1		06/09/20 11:10	AFH	Field*
General Chemistry - STL									
Oil & Grease - total	< 5.1	mg/L		06/11/20 08:50	1.01626	5.1	06/11/20 16:14	SJP	EPA 1664
Phenol	0.084	mg/L		06/11/20 10:03	1	0.050	06/11/20 16:02	JCB	EPA 420.1

Sample: 0061836-05
Name: MSD 005 composite (NW corner west bldg)
Matrix: Waste Water - Composite

Sampled: 06/09/20 10:30
Received: 06/09/20 12:22

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	120	mg/L	Mbod, Srcl	06/10/20 08:13	1	6.0	06/15/20 08:13	BCH	SM 5210B
COD	200	mg/L		06/11/20 08:56	1	5.0	06/11/20 17:36	BCH	SM 5220D
Solids - total suspended solids (TSS)	12	mg/L		06/11/20 09:20	1	4.0	06/11/20 17:26	SJP	SM 2540D

Sample: 0061836-06
Name: MSD 005 grab (NW corner west bldg)
Matrix: Waste Water - Grab

Sampled: 06/09/20 10:30
Received: 06/09/20 12:22

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.34	pH Units		06/09/20 10:30	1		06/09/20 10:30	AFH	Field*
Temperature, Field Measured	26.1	°C		06/09/20 10:30	1		06/09/20 10:30	AFH	Field*
General Chemistry - STL									
Oil & Grease - total	< 5.1	mg/L		06/11/20 08:50	1.025641	5.1	06/11/20 16:14	SJP	EPA 1664
Phenol	< 0.050	mg/L		06/11/20 10:03	1	0.050	06/11/20 16:02	JCB	EPA 420.1

PDC LABORATORIES, INC.
WWW.PDCLAB.COM

REGULATORY PROGRAM (Check one:)	NPDES ☐
MORBCA ☐	RCRA ☐
CCDD ☐	TACO: RES OR IND/COMM ☐

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED _____

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT	PROJECT NUMBER	PROJECT LOCATION	PURCHASE ORDER #
SSM Health- Cardinal Glennon Children's Hospital	2, 3, 4-Qtrs		
ADDRESS	**PHONE NUMBER**	**E-MAIL**	**DATE SHIPPED**
1015 Corporate Square Dr #110	(314) 989-6134		
CITY STATE ZIP St. Louis, MO 63132	**SAMPLER (PLEASE PRINT)** Adam Grant		**MATRIX TYPES:** WW- WASTEWATER, DW- DRINKING WATER, GW- GROUND WATER, WWSL- SLUDGE, NAS- NON AQUEOUS SOLID, LCHT-LEACHATE, OIL-OIL, SS-SOIL, SOL-SOLID
CONTACT PERSON Leslie Thornburg	**SAMPLER'S SIGNATURE**		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 0061836
LOGGED BY: _____
CLIENT: _____
PROJECT: _____
PROJ. MGR.: _____
CUSTODY SEAL #: _____

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE (CLIENT PROVIDED)	BOD, TSS	COD	Phenols	O&G				REMARKS
MSD 001 Comp (by overhead walkway)	6/9/2020 - 6/9/2020	1000 - 1015		X	WW	2	2,6	X	X						pH= 8.61
MSD 001 Grab (by overhead walkway)	6/9/2020	1015	X		WW	3	1,2			X	X				Temp= 26.7°C
MSD 004 Comp (by emergency bldg)	6/9/2020 - 6/9/2020	1015 - 1116		X	WW	2	2,6	X	X						pH= 7.96
MSD 004 Grab (by emergency bldg)	6/9/2020	1110	X		WW	3	1,2			X	X				Temp= 23.2°C
MSD 005 Comp (NW corner west bldg)	6/9/2020 - 6/9/2020	1030 - 1030		X	WW	2	2,6	X	X						pH= 8.39
MSD 005 Grab (NW corner west bldg)	6/9/2020	1030	X		WW	3	1,2			X	X				Temp= 26.1°C
															Field Sampling Fee
															3 Autosampler Rental

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CHECK) (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE) ☐ NORMAL ☐ RUSH — DATE RESULTS NEEDED
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL ☐ PHONE ☐
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7 RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
TRENT D	6/9/20 12:22	[signature]	6-9-20 12:22
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 13.1 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Carly Reidt

1020548900

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Wednesday, March 18, 2020 10:12 AM
To: Carly Reidt
Subject: Cardinal Glennon Q1 Self Monitoring Report
Attachments: MSD_1stQuarter_2020.pdf; PDC_1stQuarter_2020.pdf

Attached!

Madison Himelright, MPH, CPH | Specialist
Environmental Safety & Emergency Preparedness
SSM Health – St. Louis
1015 Corporate Square Drive St. Louis, MO 63132
Office: (314) 989-6134
Cell: (540) 336-4469
madison.himelright@ssmhealth.com

SSMHealth. | Through our exceptional health care services, we reveal the healing presence of God.

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		3/4-3/5/2020		3/4-3/5/2020		3/4-3/5/2020		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		10:30-11:05		11:30		11:30-11:50		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	330	C	620	C	370	mg/L
COD	—	C	770	C	850	C	650	mg/L
Oil + Grease	200	G	19	G	22	G	13	mg/L
Silver	.5	C	<0.0050	C	<0.0050	C	<0.0050	mg/L
Temperature	60	G	20.2	G	15.7	G	18.1	deg C
Phenol	21	G	0.077	G	0.15	G	0.084	mg/L
Total Suspended Solids	—	C	480	C	1100	C	650	mg/L
pH	5.5-11.5	G	8.28	G	8.45	G	8.47	SU
Total toxic organics	5.844	C,G	—	C,G	—	C,G	—	mg/L

You must complete and sign the certification statements on the second page.

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Madison Himelright

Title: Environmental Safety Specialist Telephone: 314-989-6134

Signature: [signature] Date: 3/18/2020

PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

March 18, 2020

Madison Himelright
SSM Health
1015 Corporate Square Drive #110
St Louis, MO 63132

RE: Cardinal Glennon Children's Hospital

Dear Madison Himelright:

Please find enclosed the analytical results for the **6** sample(s) the laboratory received on **3/5/20 2:33 pm** and logged in under work order **0031272**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Sincerely,

Amy J. Holmes

Amy Holmes
Project Manager
(314) 595-7336
aholmes@pdclab.com

NELAP ACCREDITED TNI LABORATORY

Customer #: 277898

MSD 035153

ANALYTICAL RESULTS

Sample: 0031272-01
Name: MSD 001 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 10:30
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	330	mg/L	Mbod	03/06/20 14:54	1	6.0	03/11/20 11:54	BCH	SM 5210B*
COD	770	mg/L		03/09/20 08:19	1	5.0	03/09/20 13:55	BCH	SM 5220D*
Solids - total suspended solids (TSS)	480	mg/L		03/09/20 07:45	1	4.0	03/09/20 09:11	sci	SM 2540D*
Pesticides - PIA									
4,4'-DDD	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
4,4'-DDE	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
4,4'-DDT	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
Aldrin	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Alpha-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Aroclor 1016	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Aroclor 1221	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 00:29	JMT	EPA 608
Aroclor 1232	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Aroclor 1242	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Aroclor 1248	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Aroclor 1254	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 00:29	JMT	EPA 608
Aroclor 1260	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 00:29	JMT	EPA 608
Aroclors - Total	< 50	ug/L		03/09/20 13:28	1	50	03/12/20 00:29	JMT	EPA 608
Beta-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Chlordane (technical)	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Delta-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Dieldrin	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
Endosulfan I	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Endosulfan II	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
Endosulfan sulfate	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
Endrin	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
Endrin aldehyde	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:29	JMT	EPA 608
gamma-BHC (Lindane)	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Heptachlor	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Heptachlor epoxide	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:29	JMT	EPA 608
Methoxychlor	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Toxaphene	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:29	JMT	EPA 608
Semivolatile Organics - STL									
1,2,4-Trichlorobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*

ANALYTICAL RESULTS

Sample: 0031272-01
Name: MSD 001 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 10:30
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
2,4,6-Trichlorophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:07	JKA	EPA 625*
2,4-Dichlorophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
2,4-Dimethylphenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
2,4-Dinitrophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:07	JKA	EPA 625*
2,4-Dinitrotoluene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
2,6-Dinitrotoluene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
2-Chloronaphthalene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
2-Chlorophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
2-Nitrophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
3,3'-Dichlorobenzidine	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:07	JKA	EPA 625*
4,6-Dinitro-2-methylphenol	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 00:07	JKA	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
4-Chloro-3-methylphenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
4-Chlorophenylphenyl ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
4-Nitrophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:07	JKA	EPA 625*
Acenaphthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Acenaphthylene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Azobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Benzidine	< 80.0	ug/L		03/09/20 08:30	1	80.0	03/11/20 00:07	JKA	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Benzo(a)pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Benzo(b)fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Benzo(g,h,i)perylene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Benzo(k)fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Bis(2-chloroethoxy) methane	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Bis(2-chloroethyl) ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Butyl benzyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Chrysene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Dibenzo(a,h)anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Diethyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Dimethyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Di-n-butyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Di-n-octyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*

ANALYTICAL RESULTS

Sample: 0031272-01
Name: MSD 001 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 10:30
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Diphenylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Fluorene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Hexachlorobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Hexachlorobutadiene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Hexachlorocyclopentadiene	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:07	JKA	EPA 625*
Hexachloroethane	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Isophorone	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Naphthalene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Nitrobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
N-Nitrosodimethylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
N-Nitrosodi-n-propylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Pentachlorophenol	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 00:07	JKA	EPA 625*
2,3,7,8-TCDD Screen	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 00:07	JKA	EPA 625*
Phenanthrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Phenol	10.7	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:07	JKA	EPA 625*
Total Metals - STL									
Silver	< 0.0050	mg/L		03/06/20 12:30	1	0.0050	03/09/20 18:25	JMW1	EPA 200.7*

ANALYTICAL RESULTS

Sample: 0031272-02
Name: MSD 001 Grab
Matrix: Waste Water - Grab

Sampled: 03/05/20 11:05
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.28	pH Units		03/05/20 11:05	1		03/05/20 11:05	LGG	SM*
Temperature, Field Measured	20.2	°C		03/05/20 11:05	1		03/05/20 11:05	LGG	SM*
General Chemistry - STL									
Oil & Grease - total	19	mg/L		03/09/20 08:24	1.014199	5.1	03/09/20 16:23	SJP	EPA 1664*
Phenol	0.077	mg/L		03/06/20 08:27	1	0.050	03/06/20 08:27	KAM	EPA 420.1*
Volatile Organics - PIA									
1,1,1-Trichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,3-Dichloropropene - Total	< 15	ug/L		03/11/20 09:04	1	15	03/11/20 19:32	AEIH/JJI	EPA 624*
1,2-Dichloropropane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
1,4-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		03/11/20 14:50	1	5.0	03/11/20 21:25	JJI	EPA 624
Acrolein	< 50	ug/L		03/11/20 09:04	1	50	03/11/20 19:32	AEIH/JJI	EPA 624
Acrylonitrile	< 50	ug/L		03/11/20 09:04	1	50	03/11/20 19:32	AEIH/JJI	EPA 624
Benzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Bromodichloromethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Bromoform	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Bromomethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 19:32	AEIH/JJI	EPA 624
Carbon tetrachloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Chlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Chloroethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 19:32	AEIH/JJI	EPA 624
Chloroform	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Chloromethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 19:32	AEIH/JJI	EPA 624
Dibromochloromethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
trans-1,2-Dichloroethene	< 20	ug/L		03/11/20 09:04	1	20	03/11/20 19:32	AEIH/JJI	EPA 624
Ethylbenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Methylene chloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624

ANALYTICAL RESULTS

Sample: 0031272-02
Name: MSD 001 Grab
Matrix: Waste Water - Grab

Sampled: 03/05/20 11:05
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Tetrachloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Toluene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Trichloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624
Vinyl chloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:32	AEIH/JJI	EPA 624

Sample: 0031272-03
Name: MSD 004 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 11:30
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	620	mg/L		03/06/20 14:54	1	6.0	03/11/20 11:54	BCH	SM 5210B*
COD	850	mg/L		03/09/20 08:19	10	50	03/09/20 13:55	BCH	SM 5220D*
Solids - total suspended solids (TSS)	1100	mg/L		03/09/20 07:45	1	4.0	03/09/20 09:11	sci	SM 2540D*
Total Metals - STL									
Silver	< 0.0050	mg/L		03/06/20 12:30	1	0.0050	03/09/20 18:30	JMW1	EPA 200.7*

TTO = CCl = 0.0107 mg/L
CCY = Non-detect = 0 mg/L
OCS = Non-detect = 0 mg/L

ANALYTICAL RESULTS

Sample: 0031272-04
Name: MSD 004 Grab
Matrix: Waste Water - Grab

Sampled: 03/05/20 11:30
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.45	pH Units		03/05/20 11:30	1		03/05/20 11:30	LGG	SM*
Temperature, Field Measured	15.7	°C		03/05/20 11:30	1		03/05/20 11:30	LGG	SM*
General Chemistry - STL									
Oil & Grease - total	22	mg/L		03/09/20 08:24	1.013171	5.1	03/09/20 16:23	SJP	EPA 1664*
Phenol	0.15	mg/L		03/06/20 08:27	1	0.050	03/06/20 08:27	KAM	EPA 420.1*
Volatile Organics - PIA									
1,1,1-Trichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,3-Dichloropropene - Total	< 15	ug/L		03/11/20 09:04	1	15	03/11/20 19:59	AEIH/JJI	EPA 624*
1,2-Dichloropropane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
1,4-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		03/11/20 14:50	1	5.0	03/11/20 21:51	JJI	EPA 624
Acrolein	< 50	ug/L		03/11/20 09:04	1	50	03/11/20 19:59	AEIH/JJI	EPA 624
Acrylonitrile	< 50	ug/L		03/11/20 09:04	1	50	03/11/20 19:59	AEIH/JJI	EPA 624
Benzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Bromodichloromethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Bromoform	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Bromomethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 19:59	AEIH/JJI	EPA 624
Carbon tetrachloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Chlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Chloroethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 19:59	AEIH/JJI	EPA 624
Chloroform	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Chloromethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 19:59	AEIH/JJI	EPA 624
Dibromochloromethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
trans-1,2-Dichloroethene	< 20	ug/L		03/11/20 09:04	1	20	03/11/20 19:59	AEIH/JJI	EPA 624
Ethylbenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Methylene chloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624

ANALYTICAL RESULTS

Sample: 0031272-04
Name: MSD 004 Grab
Matrix: Waste Water - Grab

Sampled: 03/05/20 11:30
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Tetrachloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Toluene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Trichloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624
Vinyl chloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 19:59	AEIH/JJI	EPA 624

ANALYTICAL RESULTS

Sample: 0031272-05
Name: MSD 005 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 11:50
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	370	mg/L		03/06/20 14:54	1	6.0	03/11/20 11:54	BCH	SM 5210B*
COD	650	mg/L		03/09/20 08:19	1	5.0	03/09/20 13:55	BCH	SM 5220D*
Solids - total suspended solids (TSS)	650	mg/L		03/09/20 07:45	1	4.0	03/09/20 09:11	sci	SM 2540D*
Pesticides - PIA									
4,4'-DDD	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
4,4'-DDE	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
4,4'-DDT	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
Aldrin	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Alpha-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Aroclor 1016	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Aroclor 1221	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 00:52	JMT	EPA 608
Aroclor 1232	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Aroclor 1242	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Aroclor 1248	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Aroclor 1254	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 00:52	JMT	EPA 608
Aroclor 1260	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 00:52	JMT	EPA 608
Aroclors - Total	< 50	ug/L		03/09/20 13:28	1	50	03/12/20 00:52	JMT	EPA 608
Beta-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Chlordane (technical)	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Delta-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Dieldrin	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
Endosulfan I	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Endosulfan II	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
Endosulfan sulfate	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
Endrin	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
Endrin aldehyde	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 00:52	JMT	EPA 608
gamma-BHC (Lindane)	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Heptachlor	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Heptachlor epoxide	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 00:52	JMT	EPA 608
Methoxychlor	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Toxaphene	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 00:52	JMT	EPA 608
Semivolatile Organics - STL									
1,2,4-Trichlorobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*

ANALYTICAL RESULTS

Sample: 0031272-05
Name: MSD 005 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 11:50
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
2,4,6-Trichlorophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:37	JKA	EPA 625*
2,4-Dichlorophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
2,4-Dimethylphenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
2,4-Dinitrophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:37	JKA	EPA 625*
2,4-Dinitrotoluene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
2,6-Dinitrotoluene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
2-Chloronaphthalene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
2-Chlorophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
2-Nitrophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
3,3'-Dichlorobenzidine	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:37	JKA	EPA 625*
4,6-Dinitro-2-methylphenol	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 00:37	JKA	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
4-Chloro-3-methylphenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
4-Chlorophenylphenyl ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
4-Nitrophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:37	JKA	EPA 625*
Acenaphthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Acenaphthylene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Azobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Benzidine	< 80.0	ug/L		03/09/20 08:30	1	80.0	03/11/20 00:37	JKA	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Benzo(a)pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Benzo(b)fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Benzo(g,h,i)perylene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Benzo(k)fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Bis(2-chloroethoxy) methane	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Bis(2-chloroethyl) ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Butyl benzyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Chrysene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Dibenzo(a,h)anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Diethyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Dimethyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Di-n-butyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Di-n-octyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*

ANALYTICAL RESULTS

Sample: 0031272-05
Name: MSD 005 Comp
Matrix: Waste Water - Composite

Sampled: 03/05/20 11:50
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Diphenylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Fluorene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Hexachlorobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Hexachlorobutadiene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Hexachlorocyclopentadiene	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 00:37	JKA	EPA 625*
Hexachloroethane	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Isophorone	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Naphthalene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Nitrobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
N-Nitrosodimethylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
N-Nitrosodi-n-propylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Pentachlorophenol	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 00:37	JKA	EPA 625*
2,3,7,8-TCDD Screen	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 00:37	JKA	EPA 625*
Phenanthrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Phenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 00:37	JKA	EPA 625*
Total Metals - STL									
Silver	< 0.0050	mg/L		03/06/20 12:30	1	0.0050	03/09/20 18:34	JMW1	EPA 200.7*

ANALYTICAL RESULTS

Sample: 0031272-06
Name: MSD 005 Grab
Matrix: Waste Water - Grab

Sampled: 03/05/20 12:05
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.47	pH Units		03/05/20 12:05	1		03/05/20 12:05	LGG	SM*
Temperature, Field Measured	18.1	°C		03/05/20 12:05	1		03/05/20 12:05	LGG	SM*
General Chemistry - STL									
Oil & Grease - total	13	mg/L		03/09/20 08:24	1.013171	5.1	03/09/20 16:23	SJP	EPA 1664*
Phenol	0.084	mg/L		03/06/20 08:27	1	0.050	03/06/20 08:27	KAM	EPA 420.1*
Volatile Organics - PIA									
1,1,1-Trichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,3-Dichloropropene - Total	< 15	ug/L		03/11/20 09:04	1	15	03/11/20 20:26	AEIH/JJI	EPA 624*
1,2-Dichloropropane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
1,4-Dichlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		03/11/20 14:50	1	5.0	03/11/20 22:17	JJI	EPA 624
Acrolein	< 50	ug/L		03/11/20 09:04	1	50	03/11/20 20:26	AEIH/JJI	EPA 624
Acrylonitrile	< 50	ug/L		03/11/20 09:04	1	50	03/11/20 20:26	AEIH/JJI	EPA 624
Benzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Bromodichloromethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Bromoform	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Bromomethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 20:26	AEIH/JJI	EPA 624
Carbon tetrachloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Chlorobenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Chloroethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 20:26	AEIH/JJI	EPA 624
Chloroform	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Chloromethane	< 10	ug/L		03/11/20 09:04	1	10	03/11/20 20:26	AEIH/JJI	EPA 624
Dibromochloromethane	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
trans-1,2-Dichloroethene	< 20	ug/L		03/11/20 09:04	1	20	03/11/20 20:26	AEIH/JJI	EPA 624
Ethylbenzene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Methylene chloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624

ANALYTICAL RESULTS

Sample: 0031272-06
Name: MSD 005 Grab
Matrix: Waste Water - Grab

Sampled: 03/05/20 12:05
Received: 03/05/20 14:33

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Tetrachloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Toluene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Trichloroethene	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624
Vinyl chloride	< 5.0	ug/L		03/11/20 09:04	1	5.0	03/11/20 20:26	AEIH/JJI	EPA 624

NOTES

Specifications regarding method revisions and method modifications used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPIL - Springfield, IL - 1210 Capitol Airport Drive, Springfield, IL 62707
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17592

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - Pending
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

Mbod Test replicates show more than 30% difference between high and low values

Amy F. Holmes

Certified by: Amy Holmes, Project Manager

MSD 035167

PDC LABORATORIES, INC.
WWW.PDCLAB.COM

REGULATORY PROGRAM (Check one:)		NPDES	
MORBCA	☐	RCRA	☐
CCDD	☐	TACO: RES OR IND/COMM	☐

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED _____

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

(1) CLIENT: SSM Health- Cardinal Glennon Children's Hospital
PROJECT NUMBER: 1st Qtr-Annual
PROJECT LOCATION:
PURCHASE ORDER #:
ADDRESS: 1015 Corporate Square Dr #110
PHONE NUMBER: (314) 989-6134
E-MAIL:
DATE SHIPPED:
CITY STATE ZIP: St. Louis, MO 63132
SAMPLER (PLEASE PRINT):
CONTACT PERSON: Leslie Thornburg
SAMPLER'S SIGNATURE:

MATRIX TYPES:
WW-WASTEWATER
DW-DRINKING WATER
GW-GROUND WATER
WWSL-SLUDGE
NAS-NON AQUEOUS SOLID
LCHT-LEACHATE
OIL-OIL
SO-SOIL
SOL-SOLID

(3) ANALYSIS REQUESTED

(4) (FOR LAB USE ONLY)
LOGIN # 0031272
LOGGED BY:
CLIENT:
PROJECT:
PROJ. MGR.:
CUSTODY SEAL #:

(2) SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE (CLIENT PROVIDED)	BOD, TSS	COD	Silver	625, 608	624, 2-Cleve	O&G	Phenols	REMARKS
MSD 001 Comp (by overhead walkway)	3/4-3/5/20	1030-1130		X	WW	6	2,3,6	X	X	X	X				pH= 8.28
MSD 001 Grab (by overhead walkway)		11:05	X		WW	5	1,2					X	X	X	Temp= 20.2
MSD 004 Comp (by emergency bldg)	3/4-3/5	11:30-11:30		X	WW	6	2,3,6	X	X	X	X				pH= 8.45
MSD 004 Grab (by emergency bldg)		11:30	X		WW	5	1,2					X	X	X	Temp= 15.7
MSD 005 Comp (NW corner west bldg)	3/4-3/5	11:50-11:50		X	WW	6	2,3,6	X	X	X	X				pH= 8.47
MSD 005 Grab (NW corner west bldg)		12:05	X		WW	5	1,2					X	X	X	Temp= 18.1
															Field Sampling Fee
															3 Autosampler Rental

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

(5) TURNAROUND TIME REQUESTED (PLEASE CHECK) (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE) ☐ NORMAL ☐ RUSH
DATE RESULTS NEEDED
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL ☐ PHONE ☐
EMAIL IF DIFFERENT FROM ABOVE:
PHONE # IF DIFFERENT FROM ABOVE:

(6) *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

(7)

RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
[signature]	3/5/2020 14:32	[signature]	3/5/20 14:33
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	DATE / TIME

(8) COMMENTS: (FOR LAB USE ONLY)
SAMPLE TEMPERATURE UPON RECEIPT 11.4 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

Qualtrax ID #3219

PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

March 12, 2020

Madison Himelright
SSM Health
1015 Corporate Square Drive #110
St Louis, MO 63132

RE: Cardinal Glennon Children's Hospital

Dear Madison Himelright:

Please find enclosed the analytical results for the **1** sample(s) the laboratory received on **3/6/20 12:15 pm** and logged in under work order **0031396**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Sincerely,

Amy J. Holmes

Amy Holmes
Project Manager
(314) 595-7336
aholmes@pdclab.com

NELAP ACCREDITED TNI LABORATORY

ANALYTICAL RESULTS

Sample: 0031396-01
Name: MSD 004 Comp
Matrix: Waste Water - Composite

Sampled: 03/06/20 11:30
Received: 03/06/20 12:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Pesticides - PIA									
4,4'-DDD	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
4,4'-DDE	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
4,4'-DDT	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
Aldrin	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Alpha-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Aroclor 1016	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Aroclor 1221	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 01:14	JMT	EPA 608
Aroclor 1232	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Aroclor 1242	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Aroclor 1248	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Aroclor 1254	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 01:14	JMT	EPA 608
Aroclor 1260	< 10	ug/L		03/09/20 13:28	1	10	03/12/20 01:14	JMT	EPA 608
Aroclors - Total	< 50	ug/L		03/09/20 13:28	1	50	03/12/20 01:14	JMT	EPA 608
Beta-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Chlordane (technical)	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Delta-BHC	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Dieldrin	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
Endosulfan I	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Endosulfan II	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
Endosulfan sulfate	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
Endrin	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
Endrin aldehyde	< 1.0	ug/L		03/09/20 13:28	1	1.0	03/12/20 01:14	JMT	EPA 608
gamma-BHC (Lindane)	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Heptachlor	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Heptachlor epoxide	< 0.50	ug/L		03/09/20 13:28	1	0.50	03/12/20 01:14	JMT	EPA 608
Methoxychlor	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Toxaphene	< 5.0	ug/L		03/09/20 13:28	1	5.0	03/12/20 01:14	JMT	EPA 608
Semivolatile Organics - STL									
1,2,4-Trichlorobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
2,4,6-Trichlorophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 01:08	JKA	EPA 625*
2,4-Dichlorophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
2,4-Dimethylphenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
2,4-Dinitrophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 01:08	JKA	EPA 625*
2,4-Dinitrotoluene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*

ANALYTICAL RESULTS

Sample: 0031396-01
Name: MSD 004 Comp
Matrix: Waste Water - Composite

Sampled: 03/06/20 11:30
Received: 03/06/20 12:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
2,6-Dinitrotoluene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
2-Chloronaphthalene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
2-Chlorophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
2-Nitrophenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
3,3'-Dichlorobenzidine	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 01:08	JKA	EPA 625*
4,6-Dinitro-2-methylphenol	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 01:08	JKA	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
4-Chloro-3-methylphenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
4-Chlorophenylphenyl ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
4-Nitrophenol	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 01:08	JKA	EPA 625*
Acenaphthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Acenaphthylene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Azobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Benzidine	< 80.0	ug/L		03/09/20 08:30	1	80.0	03/11/20 01:08	JKA	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Benzo(a)pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Benzo(b)fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Benzo(g,h,i)perylene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Benzo(k)fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Bis(2-chloroethoxy) methane	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Bis(2-chloroethyl) ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Butyl benzyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Chrysene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Dibenzo(a,h)anthracene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Diethyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Dimethyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Di-n-butyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Di-n-octyl phthalate	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Diphenylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Fluoranthene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Fluorene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Hexachlorobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Hexachlorobutadiene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*

ANALYTICAL RESULTS

Sample: 0031396-01
Name: MSD 004 Comp
Matrix: Waste Water - Composite

Sampled: 03/06/20 11:30
Received: 03/06/20 12:15

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Hexachlorocyclopentadiene	< 20.0	ug/L		03/09/20 08:30	1	20.0	03/11/20 01:08	JKA	EPA 625*
Hexachloroethane	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Isophorone	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Naphthalene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Nitrobenzene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
N-Nitrosodimethylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
N-Nitrosodi-n-propylamine	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Pentachlorophenol	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 01:08	JKA	EPA 625*
2,3,7,8-TCDD Screen	< 50.0	ug/L		03/09/20 08:30	1	50.0	03/11/20 01:08	JKA	EPA 625*
Phenanthrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Phenol	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*
Pyrene	< 10.0	ug/L		03/09/20 08:30	1	10.0	03/11/20 01:08	JKA	EPA 625*

NOTES

Specifications regarding method revisions and method modifications used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050
TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPIL - Springfield, IL - 1210 Capitol Airport Drive, Springfield, IL 62707
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17592

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389
TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - Pending
Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050
Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Amy F. Holmes

Certified by: Amy Holmes, Project Manager

PDC LABORATORIES, INC.
WWW.PDCLAB.COM

REGULATORY PROGRAM (Check one:)		NPDES	
MORBCA		RCRA	
CCDD		TACO: RES OR IND/COMM	

CHAIN OF CUSTODY RECORD

STATE WHERE SAMPLE COLLECTED_____

MSD 035173

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT	PROJECT NUMBER	PROJECT LOCATION	PURCHASE ORDER #
SSM Health- Cardinal Glennon Children's Hospital	1st Qtr-Annual		
ADDRESS: 1015 Corporate Square Dr #110	PHONE NUMBER: (314) 989-6134	E-MAIL	DATE SHIPPED
CITY STATE ZIP: St. Louis, MO 63132	SAMPLER (PLEASE PRINT): Luke Giovanine		MATRIX TYPES: WW- WASTEWATER, DW- DRINKING WATER, GW- GROUND WATER, WWSL- SLUDGE, NAS- NON AQUEOUS SOLID, LCHT-LEACHATE, OIL-OIL, SO-SOIL, SOL-SOLID
CONTACT PERSON: Leslie Thornburg	SAMPLER'S SIGNATURE: [signature]		

3 ANALYSIS REQUESTED

4 (FOR LAB USE ONLY)
LOGIN # 0031396
LOGGED BY:
CLIENT:
PROJECT:
PROJ. MGR.:
CUSTODY SEAL #:

2 SAMPLE DESCRIPTION (UNIQUE DESCRIPTION AS IT WILL APPEAR ON THE ANALYTICAL REPORT)	DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	SAMPLE TYPE COMP	MATRIX TYPE	BOTTLE COUNT	PRES CODE CLIENT PROVIDED	BOD, TSS	COD	Silver	625, 608 (3 bottles)	624, 2-Cleve	O&G	Phenols	REMARKS
~~MSD 001 Comp (by overhead walkway)~~ MS 3/6/20				X	WW	6	2,3,6	X	X	X	X				pH=
~~MSD 001 Grab (by overhead walkway)~~ MS 3/6/20			X		WW	5	1,2					X	X	X	Temp=
								MS 3/6/20							
MSD 004 Comp (by emergency bldg)	3/6/2020	11:30		X	WW	6	2,3,6	X	X	X	X				pH=
~~MSD 004 Grab (by emergency bldg)~~ MS 3/6/20			X		WW	5	1,2					X	X	X	Temp=
													3/6/20		
~~MSD 005 Comp (NW corner west bldg)~~ MS 3/6/20				X	WW	6	2,3,6	X	X	X	X				pH=
~~MSD 005 Grab (NW corner west bldg)~~ MS 3/6/20			X		WW	5	1,2					X	X	X	Temp=
															Field Sampling Fee
															3 Autosampler Rental

CHEMICAL PRESERVATION CODES: 1 – HCL | 2 – H2SO4 | 3 – HNO3 | 4 – NAOH | 5 – NA2S2O3 | 6 – UNPRESERVED | 7 – OTHER

5 TURNAROUND TIME REQUESTED (PLEASE CHECK) (RUSH TAT IS SUBJECT TO PDC LABS APPROVAL AND SURCHARGE) [X] NORMAL [ ] RUSH
DATE RESULTS NEEDED
RUSH RESULTS VIA (PLEASE CIRCLE) EMAIL [ ] PHONE [ ]
EMAIL IF DIFFERENT FROM ABOVE: PHONE # IF DIFFERENT FROM ABOVE:

6 *I understand that by initialing this box I give the lab permission to proceed with analysis, even though it may not meet all sample conformance requirements as defined in the receiving facility's Sample Acceptance Policy and the data will be qualified. Qualified data may NOT be acceptable to report to all regulatory authorities.*
PROCEED WITH ANALYSIS AND QUALIFY RESULTS: (INITIALS) _____

7 RELINQUISHED BY: (SIGNATURE)	DATE 3/6/2020 TIME 12:15	RECEIVED BY: (SIGNATURE)	DATE 3/6/20 TIME 12:15
RELINQUISHED BY: (SIGNATURE)	DATE TIME	RECEIVED BY: (SIGNATURE)	DATE TIME
RELINQUISHED BY: (SIGNATURE)	DATE TIME	RECEIVED BY: (SIGNATURE)	DATE TIME

8 COMMENTS: (FOR LAB USE ONLY)

SAMPLE TEMPERATURE UPON RECEIPT 18.3 °C
CHILL PROCESS STARTED PRIOR TO RECEIPT Y OR N
SAMPLE(S) RECEIVED ON ICE Y OR N
SAMPLE ACCEPTANCE NONCONFORMANT REPORT IS NEEDED Y OR N
DATE AND TIME TAKEN FROM SAMPLE BOTTLE _____

SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL 1020548900

Carly Reidt

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Wednesday, February 26, 2020 10:42 AM
To: Carly Reidt CR
Subject: RE: IUQ with signature

Hi Carly,

Cardinal Glennon is 100% digital. Thanks for correcting that!

-----Original Message-----
From: Carly Reidt <creidt@stlmsd.com>
Sent: Monday, February 24, 2020 1:52 PM
To: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Subject: RE: IUQ with signature

CAUTION: This email originated from outside of the SSM Health organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Questions? Contact the TSC at 314-644-7345 or your local Help Desk.

Hey Madison!

I'm working on the draft permit for Cardinal Glennon and have a quick question. I'm debating whether or not to remove the monitoring for silver. Do you know if they develop x-rays there, or is it all digital? I think that's really the main source of silver from hospitals. Let me know! I'm also going to look at the results from MSD sampling for the last several years to see if it's been detected or not.

-Carly

-----Original Message-----
From: Himelright, Madison [mailto:Madison.Himelright@ssmhealth.com]
Sent: Thursday, January 16, 2020 10:55 AM
To: Carly Reidt
Subject: IUQ with signature

Carly,

I just noticed that we failed to have John sign off on of the IUQ. The document with his signature is attached.

Madison

-----Original Message-----
From: noreply@ssmhealth.com <noreply@ssmhealth.com>
Sent: Thursday, January 16, 2020 11:04 AM
To: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Subject: Message from "RNP002673CA58D2"

This E-mail was sent from "RNP002673CA58D2" (MP C4504).

Scan Date: 01.16.2020 11:03:53 (-0600)
Queries to: noreply@ssmhealth.com

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

Facility Name	Monitoring Location Name	Sample Start	Sample End	Substance	Result	Unit
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	1/21/2015 9:40	1/22/2015 9:40	Silver (Total)	0.02	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	4/8/2015 8:31	4/9/2015 8:19	Silver (Total)	< .006	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	5/12/2015 9:45	5/13/2015 9:45	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	7/22/2015 9:10	7/23/2015 9:10	Silver (Total)	0.02	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/19/2015 7:30	8/20/2015 7:18	Silver (Total)	< .006	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	10/22/2015 10:20	10/23/2015 10:20	Silver (Total)	0.02	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	1/28/2016 9:50	1/29/2016 9:50	Silver (Total)	0.02	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	5/10/2016 10:35	5/11/2016 10:35	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/18/2016 11:00	8/19/2016 11:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/23/2016 8:06	8/24/2016 7:54	Silver (Total)	< .00001	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	11/22/2016 13:00	11/23/2016 13:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	2/6/2017 11:00	2/7/2017 11:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	6/1/2017 11:00	6/2/2017 11:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	7/10/2017 8:57	7/11/2017 8:45	Silver (Total)	< .0001	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/16/2017 12:00	8/17/2017 12:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	11/20/2017 12:30	11/21/2017 12:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	2/6/2018 12:30	2/7/2018 12:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	6/11/2018 11:00	6/12/2018 11:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	6/12/2018 11:00	6/12/2018 11:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/7/2018 12:30	8/8/2018 12:30	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/8/2018 12:30	8/8/2018 12:30	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	9/12/2018 9:10	9/13/2018 8:58	Silver (Total)	< .0001	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	11/19/2018 11:15	11/20/2018 11:15	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	11/20/2018 11:15	11/20/2018 11:15	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	2/27/2019 12:15	2/28/2019 12:15	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	2/28/2019 12:15	2/28/2019 12:15	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	5/29/2019 13:00	5/30/2019 13:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	5/30/2019 13:00	5/30/2019 13:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/19/2019 13:00	8/20/2019 13:00	Silver (Total)	< 0.0020	mg/L

SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	8/20/2019 13:00	8/20/2019 13:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	11/20/2019 13:00	11/21/2019 13:00	Silver (Total)	< 0.010	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	11/21/2019 14:00	11/21/2019 14:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	1	12/5/2019 8:03	12/6/2019 7:51	Silver (Total)	< .0001	mg/L

Facility Name	Monitoring Location Name	Sample Start	Sample End	Substance	Result	Unit
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	1/21/2015 9:55	1/22/2015 9:55	Silver (Total)	< .01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	4/8/2015 8:53	4/9/2015 8:41	Silver (Total)	< .006	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	5/12/2015 10:00	5/13/2015 10:00	Silver (Total)	< .01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	7/22/2015 9:25	7/23/2015 9:25	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/19/2015 7:21	8/20/2015 7:09	Silver (Total)	< .006	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	10/22/2015 10:35	10/23/2015 10:35	Silver (Total)	< .01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	1/28/2016 10:05	1/29/2016 10:05	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	5/10/2016 10:50	5/11/2016 10:50	Silver (Total)	< .01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/18/2016 12:00	8/19/2016 12:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/23/2016 8:55	8/24/2016 8:43	Silver (Total)	< .00001	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	11/22/2016 14:00	11/23/2016 14:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	2/6/2017 10:30	2/7/2017 10:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	6/1/2017 12:15	6/2/2017 12:15	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	7/10/2017 8:45	7/11/2017 8:33	Silver (Total)	< .0001	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/16/2017 13:00	8/17/2017 13:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	11/20/2017 13:30	11/21/2017 13:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	2/6/2018 13:30	2/7/2018 13:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	6/11/2018 12:00	6/12/2018 12:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	6/12/2018 12:00	6/12/2018 12:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/7/2018 13:00	8/8/2018 13:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/8/2018 13:00	8/8/2018 13:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	9/12/2018 8:33	9/13/2018 8:21	Silver (Total)	0.0002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	11/19/2018 12:00	11/20/2018 12:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	11/20/2018 12:00	11/20/2018 12:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	2/27/2019 13:00	2/28/2019 13:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	2/28/2019 13:00	2/28/2019 13:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	5/29/2019 14:00	5/30/2019 14:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	5/30/2019 14:00	5/30/2019 14:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/19/2019 13:30	8/20/2019 13:30	Silver (Total)	< 0.0020	mg/L

SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	8/20/2019 13:30	8/20/2019 13:30	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	11/20/2019 13:30	11/21/2019 13:30	Silver (Total)	< 0.010	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	11/21/2019 15:00	11/21/2019 15:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	4	12/5/2019 7:53	12/6/2019 7:41	Silver (Total)	< .001	mg/L

Facility Name	Monitoring Location Name	Sample Start	Sample End	Substance	Result	Unit
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	1/22/2015 10:15	1/23/2015 10:15	Silver (Total)	0.02	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	5/14/2015 9:50	5/15/2015 9:50	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	7/23/2015 9:45	7/24/2015 9:45	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	10/27/2015 10:45	10/28/2015 10:45	Silver (Total)	0.02	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	2/1/2016 10:15	2/2/2016 10:15	Silver (Total)	0.01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	5/12/2016 10:40	5/13/2016 10:40	Silver (Total)	< .01	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	8/18/2016 11:30	8/19/2016 11:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	11/22/2016 13:30	11/23/2016 13:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	2/6/2017 12:00	2/7/2017 12:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	6/1/2017 11:30	6/2/2017 11:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	8/16/2017 12:30	8/17/2017 12:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	11/20/2017 13:30	11/21/2017 13:30	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	2/6/2018 11:00	2/7/2018 11:00	Silver (Total)	< .002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	6/11/2018 11:30	6/12/2018 11:30	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	6/12/2018 11:30	6/12/2018 11:30	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	8/7/2018 12:00	8/8/2018 12:00	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	8/8/2018 12:00	8/8/2018 12:00	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	11/19/2018 10:45	11/20/2018 10:45	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	11/20/2018 10:45	11/20/2018 10:45	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	2/27/2019 11:30	2/28/2019 11:30	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	2/28/2019 11:30	2/28/2019 11:30	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	5/29/2019 13:30	5/30/2019 13:30	Silver (Total)	< 0.002	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	5/30/2019 13:30	5/30/2019 13:30	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	8/19/2019 12:30	8/20/2019 12:30	Silver (Total)	< 0.0020	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	8/20/2019 12:30	8/20/2019 12:30	Silver (Total)		mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	11/20/2019 12:30	11/21/2019 12:30	Silver (Total)	< 0.010	mg/L
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL	5	11/21/2019 13:00	11/21/2019 13:00	Silver (Total)		mg/L

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1620548900

CK

Carly Reidt

From: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Sent: Tuesday, December 10, 2019 11:49 AM
To: Carly Reidt
Subject: Q4 Lab Results and Self Monitoring Reports- SLUH, CG, SM-SL
Attachments: Self Monitoring Report Q4 SLUH.pdf; Q4 Cardinal Glennon 2019 Self Monitoring Report.pdf; Q4 MSD St. Mary's Self Monitoring Report.pdf; PDC Q4 Results.pdf; PDC Q4 Results.pdf; PDC Q4 Results.pdf

Carly,

I have attached the quarter 4 self-monitoring reports and lab results for SLUH, Cardinal Glennon, and St. Mary's Hospital. Let me know if there is anything else you need.

Madison

-----Original Message-----
From: noreply@ssmhealth.com <noreply@ssmhealth.com>
Sent: Tuesday, December 10, 2019 11:40 AM
To: Himelright, Madison <Madison.Himelright@ssmhealth.com>
Subject: Message from "RNP002673CA58D2"

This E-mail was sent from "RNP002673CA58D2" (MP C4504).

Scan Date: 12.10.2019 11:39:56 (-0600)
Queries to: noreply@ssmhealth.com

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		11/20-21/19		11/20-21/19		11/20-21/19		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		13:00-13:00		13:30-13:30		12:30-12:30		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	110	C	170	C	86	mg/L
COD	—	C	260	C	540	C	390	mg/L
Oil + Grease	200	G	33	G	40	G	<17	mg/L
Silver	.5	C	<0.010	C	<0.010	C	<0.010	mg/L
Temperature	60	G	20.4	G	18.0	G	17.8	deg C
Phenol	21	G	0.025	G	0.17	G	0.044	mg/L
Total Suspended Solids	—	C	35	C	66	C	61	mg/L
pH	5.5-11.5	G	8.34	G	8.39	G	8.59	SU
Total toxic organics	5.844	C,G	—	C,G	—	C,G	—	mg/L

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Madison Himelright
	Title: Environmental Safety Specialist Telephone: 314-989-6134
	Signature: [illegible] Date: 12/6/19

10/7/19

To whom this may concern,

I have searched our MSDS data base, and did not locate any of the referenced chemicals to be at our facility.

Please let me know if there is anything I can help with in the future.

Thank you.

Kevin Smith
Plant Operations Team Leader
SSM Cardinal Glennon Children's Hospital 1020598400
1465 S. Grand Blvd
St. Louis. Mo 63104
Office 314-268-2768
In house mobile 314-678-2031
Fax 314-577-5314
Kevin.smith@ssmhealth.com
cardinalglennon.com

RECEIVED
OCT 08 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PFAS Chemicals Questionnaire

In accordance with Sewer Use Ordinance 15048, the Metropolitan St. Louis Sewer District's Division of Environmental Compliance is requiring the completion of the questionnaire below on the use of per- and poly-fluoroalkyl substances (PFAS) by industrial users. Please note that your answers will be used solely for informational purposes in anticipation of potential future regulatory requirements. This questionnaire must be completed and certified by the proper Authorized Signatory for your facility, as described on Page 2.

1. **FACILITY INFORMATION:**

Name: SSM Cardinal Glennon Hospital

Street: 1465 South Grand Blvd.

City: St. Louis **State:** Mo **Zip:** 63104

2. **QUESTIONNAIRE:**

A. Do you produce any products, byproducts, wastes, or other materials that you know to contain or that you would reasonably suspect to contain any PFAS chemicals? If so, please describe in detail the amounts and occurrences of such materials.

No

B. Do you purchase, otherwise obtain, or use any raw materials, commercial products, or other substances or materials that contain or that you would reasonably suspect to contain any PFAS chemicals? If so, please describe in detail the amounts and occurrences of such materials.

No

C. Do you have, have any access to, or are you aware of, any information or data on the occurrence, concentration, or amount of any PFAS chemicals or constituents in water, air, solid waste, or other discharges, emissions, or waste streams from or associated with your facility? If so, please describe.

No

RECEIVED

OCT 08 2019

DIVISION OF
ENVIRONMENTAL COMPLIANCE

D. Identify the nature, source, and location of any data of which you are aware, but which is not under your possession or under your control, relating to the occurrence, concentration, or amount of PFAS chemicals or constituents identified as being present at your facility.

N/A

E. In addition to completing the above questions, please provide any additional information, such as lab data sheets and chain of custody forms, or other documentation, to support your responses.

3. CERTIFICATION:

As required by Ordinance 15048, you must sign and complete the information below.

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

Full Name (printed): Kevin Smith Title: Team Lead Plant Operations

Signature: Kevin Smith Date: 10/7/19

Signatory requirements: A president, secretary, treasurer or vice president in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or the manager of one or more manufacturing, production or operation facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Return completed questionnaire to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147

RECEIVED
OCT 08 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

List of Substances

Analyte	Acronym	Chemical Abstract Services Registry Number (CASRN)
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
~~Perfluorobutanesulfonic acid~~	PFBS	375-73-5
~~Perfluorodecanoic acid~~	PFDA	335-76-2
~~Perfluorododecanoic acid~~	PFDoA	307-55-1
~~Perfluoroheptanoic acid~~	PFHpA	375-85-9
~~Perfluorohexanesulfonic acid~~	PFHxS	355-46-4
~~Perfluorohexanoic acid~~	PFHxA	307-24-4
~~Perfluorononanoic acid~~	PFNA	375-95-1
~~Perfluorooctanesulfonic acid~~	PFOS	1763-23-1
~~Perfluorooctanoic acid~~	PFOA	335-67-1
~~Perfluorotetradecanoic acid~~	PFTA	376-06-7
~~Perfluorotridecanoic acid~~	PFTrDA	72629-94-8
~~Perfluoroundecanoic acid~~	PFUnA	2058-94-8
~~Perfluoropentanoic acid~~	PFPeA	2706-90-3
~~Perfluorobutanoic acid~~	PFBA	375-22-4
~~Perfluorodecanesulfonic acid~~	PFDS	335-77-3
~~Perfluorononanesulfonic acid~~	PFNS	68259-12-1
~~Perfluoroheptanesulfonic acid~~	PFHpS	375-92-8
~~Perfluoropentanesulfonic acid~~	PFPeS	2706-91-4
~~Perfluorooctanesulfonamide~~	PFOSA	754-91-6
~~Fluorotelomer sulphonic acid 8:2~~	FtS 8:2	39108-34-4
~~Fluorotelomer sulphonic acid 6:2~~	FtS 6:2	27619-97-2
~~Fluorotelomer sulphonic acid 4:2~~	FtS 4:2	757124-72-4

RECEIVED
OCT 08 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

December 03, 2019

Madison Himelright
SSM Health
1015 Corporate Square Drive #110
St Louis, MO 63132

RE: Cardinal Glennon Children's Hospital

Dear Madison Himelright:

Please find enclosed the analytical results for the **6** sample(s) the laboratory received on **11/21/19 4:20 pm** and logged in under work order **9113980**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Sincerely,

Amy Holmes
Project Manager
(314) 595-7336
aholmes@pdclab.com

ANALYTICAL RESULTS

Sample: 9113980-01
Name: MSD 001 by overhead walkway
Matrix: Waste Water - Composite

Sampled: 11/21/19 13:00
Received: 11/21/19 16:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
BOD	110	mg/L	B3	11/22/19 15:23	1	4.0	11/22/19 15:23	KCC/CRD	SM 5210B
COD	260	mg/L		11/26/19 07:47	1	6.0	11/26/19 07:47	KCC	SM 5220D
Solids - total suspended solids (TSS)	35	mg/L		11/26/19 08:38	1	4.5	11/26/19 10:27	CPC/TMS	SM 2540D
Total Metals - PIA									
Silver	< 0.010	mg/L		11/25/19 11:35	1	0.010	11/26/19 14:34	ZSA	EPA 200.7

Sample: 9113980-02
Name: MSD 001 by overhead walkway
Matrix: Waste Water - Grab

Sampled: 11/21/19 14:00
Received: 11/21/19 16:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.34	pH Units		11/21/19 14:00	1		11/21/19 14:00	LLO	SM*
Temperature, Field Measured	20.4	°C		11/21/19 14:00	1		11/21/19 14:00	LLO	SM*
General Chemistry - PIA									
Oil & Grease - total	33	mg/L		12/03/19 08:39	4.27716	21	12/03/19 16:10	JEG	EPA 1664
Phenolics	0.025	mg/L		11/27/19 11:59	1	0.0050	12/02/19 08:51	LAM	EPA 420.4

ANALYTICAL RESULTS

Sample: 9113980-03
Name: MSD 004 by emergency building
Matrix: Waste Water - Composite

Sampled: 11/21/19 13:30
Received: 11/21/19 16:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
BOD	170	mg/L	B3	11/22/19 15:23	1	4.0	11/22/19 15:23	KCC/CRD	SM 5210B
COD	540	mg/L		11/26/19 07:47	1	6.0	11/26/19 07:47	KCC	SM 5220D
Solids - total suspended solids (TSS)	66	mg/L		11/26/19 08:38	1	9.1	11/26/19 10:27	CPC/TMS	SM 2540D
Total Metals - PIA									
Silver	< 0.010	mg/L		11/25/19 11:35	1	0.010	11/26/19 14:36	ZSA	EPA 200.7

Sample: 9113980-04
Name: MSD 004 by emergency building
Matrix: Waste Water - Grab

Sampled: 11/21/19 15:00
Received: 11/21/19 16:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.39	pH Units		11/21/19 15:00	1		11/21/19 15:00	LLO	SM*
Temperature, Field Measured	18.0	°C		11/21/19 15:00	1		11/21/19 15:00	LLO	SM*
General Chemistry - PIA									
Oil & Grease - total	40	mg/L		12/03/19 08:39	4.122012	21	12/03/19 16:10	JEG	EPA 1664
Phenolics	0.17	mg/L		11/27/19 11:59	1	0.0050	12/02/19 08:50	LAM	EPA 420.4

Sample: 9113980-05
Name: MSD 005 by NW corner west building
Matrix: Waste Water - Composite

Sampled: 11/21/19 12:30
Received: 11/21/19 16:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - PIA									
BOD	86	mg/L	B3	11/22/19 15:23	1	4.0	11/22/19 15:23	KCC/CRD	SM 5210B
COD	390	mg/L		11/26/19 07:48	1	6.0	11/26/19 07:48	KCC	SM 5220D
Solids - total suspended solids (TSS)	61	mg/L		11/26/19 08:38	1	7.1	11/26/19 10:27	CPC/TMS	SM 2540D
Total Metals - PIA									
Silver	< 0.010	mg/L		11/25/19 11:35	1	0.010	11/26/19 14:51	ZSA	EPA 200.7

ANALYTICAL RESULTS

Sample: 9113980-06
Name: MSD 005 by NW corner west building
Matrix: Waste Water - Grab

Sampled: 11/21/19 15:00
Received: 11/21/19 16:20

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.59	pH Units		11/21/19 15:00	1		11/21/19 15:00	LLO	SM*
Temperature, Field Measured	17.8	°C		11/21/19 15:00	1		11/21/19 15:00	LLO	SM*
General Chemistry - PIA									
Oil & Grease - total	< 17	mg/L		12/03/19 08:39	3.49406	17	12/03/19 16:10	JEG	EPA 1664
Phenolics	0.044	mg/L		11/27/19 11:59	1	0.0050	12/02/19 08:49	LAM	EPA 420.4

NOTES

Specifications regarding method revisions and method modifications used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314 W Crystal Lake Road A, McHenry, IL 60050
TNI Accreditation for Drinking Water, Wastewater, Fields of Testing through IL EPA Lab No. 100279
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100230
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Hazardous/Solid Waste Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPIL - Springfield, IL - 1210 Capitol Airport Drive, Springfield, IL 62707
TNI Accreditation through IL EPA Lab No. 100323

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - St. Louis, MO - 3278 N Highway 67, Florissant, MO 63033
TNI Accreditation for Wastewater, Hazardous and Solid Wastes Fields of Testing through KS Lab No. E-10389
TNI Accreditation for Wastewater, Hazardous, and Solid Waste Analysis through IL EPA No. 200080
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 171050
Missouri Department of Natural Resources
Microbiological Laboratory Service for Drinking Water

Qualifiers

B3 Unseeded dilution water depletion is > 0.2 mg/L.

Amy F Holmes

Certified by: Amy Holmes, Project Manager

MSD 035193

PDC Laboratories, Inc. – St. Louis
3278 N. Highway 67
Florissant, MO 63033
www.pdclab.com

CHAIN OF CUSTODY RECORD

Phone (314) 432-0550 or (314) 921-4488
Fax (314) 432-4977 or (314) 921-4494

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

CLIENT: SSM Health Cardinal Glennon Children's Hospital	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED	ANALYSIS REQUESTED	(FOR LAB USE ONLY)
ADDRESS: 1015 Corporate Square Dr #110	PHONE NUMBER: 314-989-6134	CELL NUMBER: 314-678-5123	EMAIL ADDRESS		LOGIN # 9113980
CITY, STATE, ZIP: St. Louis, MO 63132	SAMPLER: [illegible]		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID		LOGGED BY:
CONTACT PERSON: Leslie Thornburg	SAMPLER'S SIGNATURE: [illegible]				LAB PROJ #: TEMPLATE: PROJ. MGR:

SAMPLE DESCRIPTION AS YOU WANT ON REPORT	DATE COLLECTED	TIME COLLECTED	G	C	MATRIX	PRESERVATIVE	COD	BOD, TSS	Silver	Oil & Grease	Phenol (2 bottle)			REMARKS
MSD 001, by overhead walkway	11/20-21/19	13:00-13:00		x	WW	H2SO4,4C	X							
(Quarterly 2nd, 3rd, 4th)	↓	↓		x	WW	Cool 4C		x						pH = 8.34
				x	WW	HNO3			x					Temp = 20.4°C
	11/21/19	14:00	x		WW	HCl, 4C				x				
	↓	↓	x		WW	H2SO4/ 4C					x			
MSD 004, by emergency building	11/20-21/19	13:30-13:30		x	WW	H2SO4,4C	X							pH = 8.39
(Quarterly 2nd, 3rd, 4th)	↓	↓		x	WW	Cool 4C		x						Temp = 18.0°C
				x	WW	HNO3			x					
	11/21/19	15:00	x		WW	HCl, 4C				x				
	↓	↓	x		WW	H2SO4/ 4C					x			Field Sampling Fee
														3 autosamplers

TURNAROUND TIME (RUSH TAT IS SUBJECT TO PDC LABS APROVAL AND SURCHARGE)
☐ Normal (8-10 Bus Days) ☐ Rush (5 Bus Days) ☐ 1-2 Business Days ☐ Same Day

Date Due _____ Results by: ☐ E-Mail ☐ FAX ☐ Phone Call

The sample temperature will be measured upon receipt at the lab. By initialing this area, you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area, you allow the lab to proceed with analytical testing regardless of the sample temperature. _____

RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
[illegible]	11/21/19	16:20	[illegible]	11/21/19	1620
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time

COMMENTS: (FOR LAB USE ONLY)

Sample Temperature upon receipt	1.4	degrees C
Chill process started prior to receipt	Y or N	
Sample(s) received on ice	Y or N	
Proper bottles received in good condition	Y or N	
Bottles filled with adequate volume	Y or N	
Samples received within hold time(s)	Y or N	(Excludes typical field parameters)
Date and Time taken from sample bottle		

MSD 035194

PDC Laboratories, Inc. – St. Louis
3278 N. Highway 67
Florissant, MO 63033
www.pdclab.com

CHAIN OF CUSTODY RECORD

Phone (314) 432-0550 or (314) 921-4488
Fax (314) 432-4977 or (314) 921-4494

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

CLIENT: SSM Health- Cardinal Glennon Children's Hospital	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED	ANALYSIS REQUESTED
ADDRESS: 1015 Corporate Square Dr #110	PHONE NUMBER: 314-989-6134	CELL NUMBER: 314-678-5123	EMAIL ADDRESS	
CITY, STATE, ZIP: St. Louis, MO 63132	SAMPLER: Lawrence Oliver		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID	
CONTACT PERSON: Leslie Thornburg	SAMPLER'S SIGNATURE: [signature]			

(FOR LAB USE ONLY)
LOGIN # 9113980
LOGGED BY:
LAB PROJ #
TEMPLATE:
PROJ. MGR:

SAMPLE DESCRIPTION AS YOU WANT ON REPORT	DATE COLLECTED	TIME COLLECTED	G	C	MATRIX	PRESERVATIVE	COD	BOD, TSS	Silver	Oil & Grease	Phenol (2 bottle)			REMARKS
MSD 005, by NW corner west building	11/20-21/19	12:30-12:30		x	WW	H2SO4,4C	X							
(Quarterly 2nd, 3rd, 4th)	↓	↓		x	WW	Cool 4C		x						pH = 8.59
	↓	↓		x	WW	HNO3			x					Temp = 17.8°C
	11/21/19	13:00	x		WW	HCl, 4C				x				
	↓	↓	x		WW	H2SO4/ 4C					x			

TURNAROUND TIME (RUSH TAT IS SUBJECT TO PDC LABS APROVAL AND SURCHARGE)
☐ Normal (8-10 Bus Days) ☐ Rush (5 Bus Days) ☐ 1-2 Business Days ☐ Same Day
Date Due _____ Results by: ☐ E-Mail ☐ FAX ☐ Phone Call

The sample temperature will be measured upon receipt at the lab. By initialing this area, you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area, you allow the lab to proceed with analytical testing regardless of the sample temperature. _____

RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
[signature]	11/21/19	16:20	[signature]	11/21/19	1620
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time

COMMENTS: (FOR LAB USE ONLY)

Sample Temperature upon receipt	1.4 degrees C
Chill process started prior to receipt	Y or N
Sample(s) received on ice	Y or N
Proper bottles received in good condition	Y or N
Bottles filled with adequate volume	Y or N
Samples received within hold time(s)	Y or N (Excludes typical field parameters)
Date and Time taken from sample bottle	

SUBCONTRACT ORDER
Transfer Chain of Custody

PDC Laboratories, Inc.

9113980

SENDING LABORATORY

PDC Laboratories, Inc.
3278 N Highway 67
Florissant, MO 63033
(800) 333-3278

RECEIVING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(309) 692-9688

Sample: 9113980-01
Name: MSD 001 by overhead walkway

Sampled: 11/21/19 13:00
Matrix: Waste Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
Ag 200.7 WWTot	12/03/19 16:00	05/19/20 13:00	250p - HNO3
BOD	12/03/19 16:00	11/23/19 13:00	Lp - un
COD	12/03/19 16:00	12/19/19 13:00	250p H2SO4
EPA 200.2	12/03/19 16:00	12/19/19 13:00	(Samples 1,3,5)
Solids-TSS	12/03/19 16:00	11/28/19 13:00	

Sample: 9113980-02
Name: MSD 001 by overhead walkway

Sampled: 11/21/19 14:00
Matrix: Waste Water
Preservative: HCl, cool <6

Analysis	Due	Expires	Comments
O&G SPE	12/03/19 16:00	12/19/19 14:00	Lg-Unpres
Phenol	12/03/19 16:00	12/19/19 14:00	250ag - H2SO4
			Lg-HCL (Samples 2,4,6)

Sample: 9113980-03
Name: MSD 004 by emergency building

Sampled: 11/21/19 13:30
Matrix: Waste Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
Ag 200.7 WWTot	12/03/19 16:00	05/19/20 13:30	
BOD	12/03/19 16:00	11/23/19 13:30	
COD	12/03/19 16:00	12/19/19 13:30	
EPA 200.2	12/03/19 16:00	12/19/19 13:30	
Solids-TSS	12/03/19 16:00	11/28/19 13:30	

SUBCONTRACT ORDER
Transfer Chain of Custody

PDC Laboratories, Inc.

9113980

SENDING LABORATORY

PDC Laboratories, Inc.
3278 N Highway 67
Florissant, MO 63033
(800) 333-3278

RECEIVING LABORATORY

PDC Laboratories, Inc.
2231 W Altorfer Dr
Peoria, IL 61615
(309) 692-9688

Sample: **9113980-04**
Name: MSD 004 by emergency building

Sampled: 11/21/19 15:00
Matrix: Waste Water
Preservative: HCl, cool <6

Analysis	Due	Expires	Comments
O&G SPE	12/03/19 16:00	12/19/19 15:00	
Phenol	12/03/19 16:00	12/19/19 15:00	

Sample: **9113980-05**
Name: MSD 005 by NW corner west building

Sampled: 11/21/19 13:30
Matrix: Waste Water
Preservative: HNO3, pH <2

Analysis	Due	Expires	Comments
Ag 200.7 WWTot	12/03/19 16:00	05/19/20 13:30	
BOD	12/03/19 16:00	11/23/19 13:30	
COD	12/03/19 16:00	12/19/19 13:30	
EPA 200.2	12/03/19 16:00	12/19/19 13:30	
Solids-TSS	12/03/19 16:00	11/28/19 13:30	

Sample: **9113980-06**
Name: MSD 005 by NW corner west building

Sampled: 11/21/19 15:00
Matrix: Waste Water
Preservative: HCl, cool <6

Analysis	Due	Expires	Comments
O&G SPE	12/03/19 16:00	12/19/19 15:00	
Phenol	12/03/19 16:00	12/19/19 15:00	

SUBCONTRACT ORDER
Transfer Chain of Custody

PDC Laboratories, Inc.

9113980

Please email results to Amy Holmes at aholmes@pdclab.com

Date Shipped: 11/22/19 Total # of Containers: 18 Sample Origin (State): _____ PO #: _____

Turn-Around Time Requested ☒ NORMAL ☐ RUSH Date Results Needed: _____

Relinquished By	Date/Time	Received By	Date/Time
Jill Clarke	11/22/19	J Mestre	11/22/19 7:00
J Monroe	11/22/19 10:45	[illegible]	11/22/19 1045

Sample Temperature Upon Receipt	7.5 °C
Sample(s) Received on Ice	Y or N
Proper Bottles Received in Good Condition	Y or N
Bottles Filled with Adequate Volume	Y or N
Samples Received Within Hold Time	Y or N
Date/Time Taken From Sample Bottle	Y or N

Ck

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs - Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		8/19/19 - 8/20/19		8/19/19 - 8/20/19		8/19/19 - 8/20/19		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		13:00 - 13:00		13:30 - 13:30		12:30 - 12:30		
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	49,000	E	5,400	E	6,100	gpd
BOD	—	C	98	C	340	C	150	mg/L
COD	—	C	240	C	800	C	390	mg/L
TSS	—	C	35	C	360	C	140	mg/L
Silver	5	C	<0.0020	C	<0.0020	C	<0.0020	mg/L
pH	5.5-11.5	G	8.34	G	8.47	G	8.59	pH units
oil & grease - total	200	G	18	G	12	G	<0.5	mg/L
phenol	21	G	0.12	G	0.17	G	0.23	mg/L
temperature	60	G	26.8	G	25.4	G	24.4	°C

RECEIVED

You must complete and sign the certification statements on the second page.

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Madison Himelright
	Title: Env. Safety Specialist Telephone: 314-989-6134
	Signature: [illegible] Date: 11/1/19

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.

PROFESSIONAL • DEPENDABLE • COMMITTED

August 28, 2019

Madison Himelright
SSM Health
1015 Corporate Square Drive #110
St Louis, MO 63132

RE: Cardinal Glennon Children's Hospital

Dear Madison Himelright:

Please find enclosed the analytical results for the **6** sample(s) the laboratory received on **8/20/19 3:13 pm** and logged in under work order **9084246**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of PDC Laboratories, Inc.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

PDC Laboratories, Inc. appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the Director of Client Services, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lgrant@pdclab.com.

Sincerely,

Amy Holmes
Project Manager
(314) 595-7336
aholmes@pdclab.com

NELAP ACCREDITED TNI LABORATORY

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Customer #: 277898

www.pdclab.com

MSD 035200

ANALYTICAL RESULTS

Sample: 9084246-01
Name: MSD 001 by overhead walkway
Matrix: Waste Water - Composite

Sampled: 08/20/19 13:00
Received: 08/20/19 15:13

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	98	mg/L	Mbod	08/21/19 08:07	1	6.0	08/21/19 08:07	sjp	SM 5210B
COD	240	mg/L		08/27/19 08:22	1	5.0	08/27/19 15:24	sjp	SM 5220D
Solids - total suspended solids (TSS)	35	mg/L		08/22/19 08:17	1	4.0	08/22/19 11:20	SJP	SM 2540D
Total Metals - STL									
Silver	< 0.0020	mg/L		08/22/19 08:47	1	0.0020	08/23/19 10:55	WMN	EPA 200.7

Sample: 9084246-02
Name: MSD 001 by overhead walkway
Matrix: Waste Water - Grab

Sampled: 08/20/19 13:00
Received: 08/20/19 15:13

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.34	pH Units		08/20/19 13:00	1		08/20/19 13:00	LLO	SM*
Temperature, Field Measured	26.8	°C		08/20/19 13:00	1		08/20/19 13:00	LLO	SM*
General Chemistry - STL									
Oil & Grease - total	18	mg/L		08/26/19 10:08	1.013171	5.1	08/26/19 10:08	KAM	EPA 1664
Phenol	0.12	mg/L		08/22/19 08:46	1	0.050	08/22/19 13:06	SCI	EPA 420.1

Sample: 9084246-03
Name: MSD 004 by emergency building
Matrix: Waste Water - Composite

Sampled: 08/20/19 13:30
Received: 08/20/19 15:13

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	340	mg/L	Mbod	08/21/19 08:07	1	6.0	08/21/19 08:07	sjp	SM 5210B
COD	800	mg/L		08/27/19 08:22	1	5.0	08/27/19 15:24	sjp	SM 5220D
Solids - total suspended solids (TSS)	360	mg/L		08/22/19 08:17	1	4.0	08/22/19 11:20	SJP	SM 2540D
Total Metals - STL									
Silver	<0.0020	mg/L		08/22/19 08:47	1	0.0020	08/23/19 10:57	WMN	EPA 200.7

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

ANALYTICAL RESULTS

Sample: 9084246-04
Name: MSD 004 by emergency building
Matrix: Waste Water - Grab

Sampled: 08/20/19 13:30
Received: 08/20/19 15:13

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.47	pH Units		08/20/19 13:30	1		08/20/19 13:30	LLO	SM*
Temperature, Field Measured	25.4	°C		08/20/19 13:30	1		08/20/19 13:30	LLO	SM*
General Chemistry - STL									
Oil & Grease - total	12	mg/L		08/26/19 10:08	1.009082	5.0	08/26/19 10:08	KAM	EPA 1664
Phenol	0.17	mg/L		08/22/19 08:46	1	0.050	08/22/19 13:06	SCI	EPA 420.1

Sample: 9084246-05
Name: MSD 005 by NW corner west building
Matrix: Waste Water - Composite

Sampled: 08/20/19 12:30
Received: 08/20/19 15:13

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
General Chemistry - STL									
BOD	150	mg/L		08/21/19 08:07	1	6.0	08/21/19 08:07	sjp	SM 5210B
COD	390	mg/L		08/27/19 08:22	1	5.0	08/27/19 15:24	sjp	SM 5220D
Solids - total suspended solids (TSS)	140	mg/L		08/22/19 08:17	1	4.0	08/22/19 11:20	SJP	SM 2540D
Total Metals - STL									
Silver	< 0.0020	mg/L		08/22/19 08:47	1	0.0020	08/23/19 10:59	WMN	EPA 200.7

Sample: 9084246-06
Name: MSD 005 by NW corner west building
Matrix: Waste Water - Grab

Sampled: 08/20/19 12:30
Received: 08/20/19 15:13

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Field - STL									
pH	8.59	pH Units		08/20/19 12:30	1		08/20/19 12:30	LLO	SM*
Temperature, Field Measured	24.4	°C		08/20/19 12:30	1		08/20/19 12:30	LLO	SM*
General Chemistry - STL									
Oil & Grease - total	< 5.0	mg/L		08/26/19 10:08	1.005025	5.0	08/26/19 10:08	KAM	EPA 1664
Phenol	0.23	mg/L		08/22/19 08:46	1	0.050	08/22/19 13:06	SCI	EPA 420.1

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

NOTES

Specific method revisions used for analysis are available upon request.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314 W Crystal Lake Road A, McHenry, IL 60050
TNI Accreditation for Drinking Water, Wastewater, Fields of Testing through IL EPA Lab No. 100279
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W Altorfer Drive, Peoria, IL 61615
TNI Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100230
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17553
Drinking Water Certifications: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Hazardous/Solid Waste Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPIL - Springfield, IL - 1210 Capitol Airport Drive, Springfield, IL 62707
TNI Accreditation through IL EPA Lab No. 100323

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807
USEPA DMR-QA Program

STL - St. Louis, MO - 3278 N Highway 67, Florissant, MO 63033
TNI Accreditation for Wastewater, Hazardous and Solid Wastes Fields of Testing through KS Lab No. E-10389
TNI Accreditation for Wastewater, Hazardous, and Solid Waste Analysis through IL EPA No. 200080
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 171050
Missouri Department of Natural Resources
Microbiological Laboratory Service for Drinking Water

Qualifiers

Mbod Test replicates show more than 30% difference between high and low values

Amy F. Holmes

Certified by: Amy Holmes, Project Manager

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

RECEIVED
NOV 01 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035204

PDC Laboratories, Inc. – St. Louis
3278 N. Highway 67
Florissant, MO 63033
www.pdclab.com

CHAIN OF CUSTODY RECORD

Phone (314) 432-0550 or (314) 921-4488
Fax (314) 432-4977 or (314) 921-4494

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

CLIENT	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED	ANALYSIS REQUESTED	(FOR LAB USE ONLY)
SSM Health- Cardinal Glennon Children's Hospital					
ADDRESS: 1015 Corporate Square Dr #110	PHONE NUMBER: 314-989-6134	CELL NUMBER: 314-678-5123	EMAIL ADDRESS		LOGIN # 90842246
CITY, STATE, ZIP: St. Louis, MO 63132	SAMPLER: [illegible]		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID		LOGGED BY:
CONTACT PERSON: Leslie Thornburg	SAMPLER'S SIGNATURE: [illegible]				LAB PROJ # TEMPLATE: PROJ. MGR:

SAMPLE DESCRIPTION AS YOU WANT ON REPORT	DATE COLLECTED	TIME COLLECTED	G	C	MATRIX	PRESERVATIVE	COD	BOD, TSS	Silver	Oil & Grease	Phenol (2 bottle)			REMARKS
MSD 001, by overhead walkway	8/19-20/19	13:00-13:00		x	WW	H2SO4,4C	X							
(Quarterly 2nd, 3rd, 4th)	↓	↓		x	WW	Cool 4C		x						pH = 8.34
				x	WW	HNO3			x					Temp = 26.8°C
	8/20/19	13:00	x		WW	HCl, 4C				x				
	↓	↓	x		WW	H2SO4/ 4C					x			
MSD 004, by emergency building	8/19-20/19	13:30-13:30		x	WW	H2SO4,4C	X							pH = 8.47
(Quarterly 2nd, 3rd, 4th)	↓	↓		x	WW	Cool 4C		x						Temp = 25.9°C
				x	WW	HNO3			x					
	8/20/19	13:30	x		WW	HCl, 4C				x				
	↓	↓	x		WW	H2SO4/ 4C					x			Field Sampling Fee
														3 autosamplers

TURNAROUND TIME (RUSH TAT IS SUBJECT TO PDC LABS APROVAL AND SURCHARGE)
☐ Normal (8-10 Bus Days) ☐ Rush (5 Bus Days) ☐ 1-2 Business Days ☐ Same Day

Date Due _____ Results by: ☐ E-Mail ☐ FAX ☐ Phone Call

The sample temperature will be measured upon receipt at the lab. By initialing this area, you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area, you allow the lab to proceed with analytical testing regardless of the sample temperature. _____

RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
[illegible]	8/20/19	15:13	[illegible]	8/20/19	1513
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time

COMMENTS: (FOR LAB USE ONLY)

Sample Temperature upon receipt [illegible] °C
Chill process started prior to receipt Y or N
Sample(s) received on ice Y or N
Proper bottles received in good condition Y or N
Bottles filled with adequate volume Y or N
Samples received within hold time(s) Y or N (excluding chemical field parameters)
Date and Time taken from sample bottle

RECEIVED
NOV 01 2019
DIVISION OF ENVIRONMENTAL COMPLIANCE

MSD 035205

PDC Laboratories, Inc. – St. Louis
3278 N. Highway 67
Florissant, MO 63033
www.pdclab.com

CHAIN OF CUSTODY RECORD

Phone (314) 432-0550 or (314) 921-4488
Fax (314) 432-4977 or (314) 921-4494

ALL SHADED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

CLIENT: SSM Health- Cardinal Glennon Children's Hospital	PROJECT NUMBER	P.O. NUMBER	MEANS SHIPPED	ANALYSIS REQUESTED	(FOR LAB USE ONLY)
ADDRESS: 1015 Corporate Square Dr #110	PHONE NUMBER: 314-989-6134	CELL NUMBER: 314-678-5123	EMAIL ADDRESS		LOGIN # 9084246
CITY, STATE, ZIP: St. Louis, MO 63132	SAMPLER: [illegible]		MATRIX TYPES: WW-WASTEWATER, DW-DRINKING WATER, GW-GROUND WATER, WWSL-SLUDGE, NAS-SOLID		LOGGED BY:
CONTACT PERSON: Leslie Thornburg	SAMPLER'S SIGNATURE: [illegible]				LAB PROJ # TEMPLATE: PROJ. MGR:

SAMPLE DESCRIPTION AS YOU WANT ON REPORT	DATE COLLECTED	TIME COLLECTED	G	C	MATRIX	PRESERVATIVE	COD	BOD, TSS	Silver	Oil & Grease	Phenol (2 bottle)			REMARKS
MSD 005, by NW corner west building	8/19-20/19	12:30-12:30		X	WW	H2SO4,4C	X							
(Quarterly 2nd, 3rd, 4th)	↓	↓		X	WW	Cool 4C		X						pH = 8.59
	↓	↓		X	WW	HNO3			X					Temp = 24.4°C
	8/20/19	12:30	X		WW	HCl, 4C				X				
		↓	X		WW	H2SO4/ 4C					X			

TURNAROUND TIME (RUSH TAT IS SUBJECT TO PDC LABS APROVAL AND SURCHARGE)
☐ Normal (8-10 Bus Days) ☐ Rush (5 Bus Days) ☐ 1-2 Business Days ☐ Same Day

Date Due _____ Results by: ☐ E-Mail ☐ FAX ☐ Phone Call

The sample temperature will be measured upon receipt at the lab. By initialing this area, you request that the lab notify you, before proceeding with analysis, if the sample temperature is outside of the range of 0.1-6.0°C. By not initialing this area, you allow the lab to proceed with analytical testing regardless of the sample temperature. _____

RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
[illegible]	8/20/19	15:13	[illegible] Clark	8/20/19	1513
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time
RELINQUISHED BY: (Signature)	Date	Time	RECEIVED BY:	Date	Time

COMMENTS: (FOR LAB USE ONLY)

Sample Temperature upon receipt 10.8 degrees C
Chill process started prior to receipt Y or N
Sample(s) received on ice Y or N
Proper bottles received in good condition Y or N
Bottles filled with adequate volume Y or N
Samples received within hold time(s) Y or N (Excludes typical field parameters)
Date and Time taken from sample bottle

RECEIVED
NOV 01 2019
DIVISION OF ENVIRONMENTAL COMPLIANCE

MSD

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

PART I: IDENTIFYING INFORMATION

Company Name: SSM Cardinal Glennon Hospital 1020548900
Permit No:
Premise No: 1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: [signature] Date: 10/9/19

RECEIVED
OCT 09 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

INDUSTRIAL WASTEWATER DISCHARGE PERMIT 1020548900

for **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL**
at
1465 S. Grand Blvd.
St. Louis, MO 63104

ANNUAL PERMIT FEE NOTICE

For permits in effect on 10/01/19.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2019 through September 30, 2020 issued in accordance with the Metropolitan St. Louis District Fee Ordinances for the location at **1465 S. Grand Blvd.**

Base charge @ $180.00 per permit			$ 180.00
Volume charge @$0.86 per average daily Ccf	55.7	Ccfs	$ 47.90
Sample Point Charge @$120.00 per sample point	3	points	$ 360.00
		Total Fee Due:	**$ 587.90**

For inquiries about the Annual Permit Fee, please call 314-436-8710.
For inquiries about payment of the fee, please call 1-866-281-5737.

September 26, 2019

SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL
Attn: Kevin Smith
1465 South Grand Blvd.
St. Louis, MO 0

Re: Request for Information, PFAS Chemicals
For premise at: 1465 S. Grand Boulevard, St. Louis, MO 63104

Dear Kevin Smith:

You may have recently heard news or other reports regarding per- and poly-fluoroalkyl substances (PFAS) and their impact on the environment or human health. PFAS are a group of manmade chemicals used in both industrial and everyday products. Some common examples of industries and consumer products that utilize PFAS include:

- Fire-fighting: Aqueous film-forming foams (AFFF)
- Household Goods: Non-stick cookware, cleaning products, waxes & polishes, paints
  September 19, 2019
- Paper & Packaging: Cardboard, fast food packaging
- Metal Plating
- Textiles: Waterproof outerwear, carpets & upholstery

This group also includes the more highly studied and highly publicized PFOA, PFOS, and GenX chemicals. Currently the US Environmental Protection Agency has issued a health advisory for PFOA and PFOS in drinking water. While there are no regulatory requirements for wastewater treatment at this time, the EPA has been directed to investigate these chemicals for possible development of such regulations.

The Metropolitan St. Louis Sewer District's Division of Environmental Compliance is requesting information from industrial users on the possible use, production, and discharge of per- and poly-fluoroalkyl substances (PFAS) to evaluate the potential impact of these chemicals on the MSD system. In accordance with Sewer Use Ordinance 15048, your facility is required to complete and submit the enclosed questionnaire on the use of PFAS at your facility.

This letter is to provide to you the questionnaire to be completed and submitted to MSD. This completed questionnaire is due no later than December 2, 2019. Please retain a copy for your files. Submit the completed questionnaire to the following address:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147

Please note that your answers on the questionnaire are solely for informational purposes in anticipation of potential future regulatory requirements. At this time MSD is not requiring industrial users to monitor for PFAS, or make adjustments to their facility operations. For more information on PFAS, please visit the US EPA's informational webpage at: https://www.epa.gov/pfas.

We appreciate your cooperation and support in helping us to comply with the federal regulations. If you have any questions or need assistance in completing the questionnaire, please contact me at 314.436.8762.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Carly Reidt

Carly Reidt
Associate Engineer

Enclosures: PFAS Questionnaire

ec: Doug Mendoza
Carly Reidt

PFAS Chemicals Questionnaire

In accordance with Sewer Use Ordinance 15048, the Metropolitan St. Louis Sewer District's Division of Environmental Compliance is requiring the completion of the questionnaire below on the use of per- and poly-fluoroalkyl substances (PFAS) by industrial users. Please note that your answers will be used solely for informational purposes in anticipation of potential future regulatory requirements. This questionnaire must be completed and certified by the proper Authorized Signatory for your facility, as described on Page 2.

1. FACILITY INFORMATION:

Name: _____

Street: _____

City: _____ **State:** _____ **Zip:** _____

2. QUESTIONNAIRE:

A. Do you produce any products, byproducts, wastes, or other materials that you know to contain or that you would reasonably suspect to contain any PFAS chemicals? If so, please describe in detail the amounts and occurrences of such materials.

_____

_____

_____

_____

B. Do you purchase, otherwise obtain, or use any raw materials, commercial products, or other substances or materials that contain or that you would reasonably suspect to contain any PFAS chemicals? If so, please describe in detail the amounts and occurrences of such materials.

_____

_____

_____

_____

C. Do you have, have any access to, or are you aware of, any information or data on the occurrence, concentration, or amount of any PFAS chemicals or constituents in water, air, solid waste, or other discharges, emissions, or waste streams from or associated with your facility? If so, please describe.

_____

_____

_____

_____

D. Identify the nature, source, and location of any data of which you are aware, but which is not under your possession or under your control, relating to the occurrence, concentration, or amount of PFAS chemicals or constituents identified as being present at your facility.

_____

_____

_____

_____

E. In addition to completing the above questions, please provide any additional information, such as lab data sheets and chain of custody forms, or other documentation, to support your responses.

3. CERTIFICATION:

As required by Ordinance 15048, you must sign and complete the information below.

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

Full Name (printed): _____ Title: _____

Signature: _____ Date: _____

Signatory requirements: A president, secretary, treasurer or vice president in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or the manager of one or more manufacturing, production or operation facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Return completed questionnaire to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147

List of Substances

Analyte	Acronym	Chemical Abstract Services Registry Number (CASRN)
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorotetradecanoic acid	PFTA	376-06-7
Perfluorotridecanoic acid	PFTrDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorobutanoic acid	PFBA	375-22-4
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorononanesulfonic acid	PFNS	68259-12-1
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluoropentanesulfonic acid	PFPeS	2706-91-4
Perfluorooctanesulfonamide	PFOSA	754-91-6
Fluorotelomer sulphonic acid 8:2	FtS 8:2	39108-34-4
Fluorotelomer sulphonic acid 6:2	FtS 6:2	27619-97-2
Fluorotelomer sulphonic acid 4:2	FtS 4:2	757124-72-4

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

September 16, 2019

Kevin Smith
Team Leader, Plant Operations
SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 South Grand Boulevard
St. Louis, MO 63104

Re: Discharge Permit No: 1020548900 – 1
For premise at: 1465 South Grand Boulevard, St. Louis, MO 63104

Dear Mr. Smith:

The Metropolitan St. Louis Sewer District Wastewater Discharge permit for the above premise expires on April 30, 2020. Under the terms of the permit, you must apply for renewal at least 180 days prior to the expiration date.

We have enclosed an Industrial User Questionnaire form and instructions. You also may download an electronic version from MSD's website at www.stlmsd.com. This questionnaire serves as your permit application. Please complete and return the questionnaire to us no later than **November 1, 2019**. You may skip Section H of the questionnaire. Please retain a copy for your files.

We will use the questionnaire and our records on your facility to prepare a draft permit. The draft permit will be sent to you for comment, prior to sending a final permit.

We appreciate your cooperation and support in helping us to comply with the federal regulations. If you have any questions or need assistance in completing the questionnaire, please contact me at 314.436.8762.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Carly Reidt

Carly Reidt
Associate Engineer

Enclosures: IUQ form, instructions

ec: Doug Mendoza

8

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL Account #: 1020548900
Premise Address: 1465 South Grand Blvd Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Leslie Thornburg
Title: Specialist-ESSEP Phone#: (314) 989-6134
Inspector: Carly Reidt
Others Present: Mike Jones (Plant Operations Supervisor), Kevin Smith (Plant Op. Team Leader)
Inspection Date: **8/8/19** Time: From 9:25 AM To 10:25 AM (Last Insp. 8/9/18)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: _____
   B. Were any changes (including to the primary or changes only to suffixes) for acct no's with RFs? NA☐ Yes☐ No☒
   C. If yes to B, was Cost Recovery Unit informed of the change(s)? NA☒ Yes☐ No☐
   D. Did all acct no's have water usage in PT database? Yes☒ No☐
   E. If no to D, explain: _____

2. DOES COMPANY HAVE WATER/WASTEWATER SOURCES OTHER THAN FROM INCOMING WATER METERS? Yes☐ No☒
   If yes: A. Are volumes reported to MSD? Yes☐ No☐
   If no: Write company and require submittal of volumes, method of measurement & calibration, etc.
   If yes: B. Are volumes read with meters ☐ or other methods ☐?
   If other methods: C. Describe: _____
   [See "Special Handling" question for review of company's records]

3. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Hospital Waste	Cont	Yes	Daily	001, 004, 005
NCCW - Autoclaves	Batch	Yes	Daily	005
Kitchen Waste	Batch	Yes	Daily	001
	(None)	N/A		
	(None)	N/A		
	(None)	N/A		

4. DOES COMPANY HAVE ANY STORM WATER DISCHARGES TO THE SEPARATE SANITARY SEWER? Yes☐ No☒
   (Including: slotted MH/vent covers, uncovered or unbermed outside wash pads, etc.)
   If yes: A. Describe: _____
   (Write company and have discharge properly mitigated and/or rerouted to storm.)

5. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
None	N/A

6. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐

If yes:
- A. List sample points: 001
- B. What is the frequency for cleaning & maintenance? Monthly
- C. Were cleaning & maintenance logs reviewed for to verify frequency? (must be done) Yes☒ No☐
- D. If No to C: Explain: _____
- E. Has company been in SNC in the past two years for food-based oil & grease violations? Yes☐ No☒
- F. If Yes to E: Is frequency for cleaning & maintenance at least once/quarter? NA☐ Yes☐ No☐
- G If No to F, require company to begin cleaning at least once/quarter. Was this done? NA☐ Yes☐ No☐
- H. Are any additives used in traps? Yes☐ No☒
- I. If yes to H, was company warned MSD will bill them for blockages they cause? NA☐ Yes☐ No☐
- J. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

7. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☒ No☐

If yes:
- A. Ask company: Did they notify MSD's Plan Review group? Unknown☒ Yes☐ No☐
- B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☒
- C. Comments: Per facility contacts, additions were made but no new sewers are in the addition.

8. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes:
- A. List pollutants & process: _____
- B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐
- C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐
  (MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)
- D. Comments: _____

9. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐
(including those that are 'No PSES' and 'General Stds Only')

If yes:
- A. List regulation & describe operations (including any discharge):
  40 CFR 460 Subpart A - Hospital Point Source Category
- B. Explain why it is N/A: General standards only.

10. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☐ No☒

If yes:
- A. List regulation & describe operations (including any discharge):
  _____
- B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☐

If yes to B:
- C. Batch ☐ or Continuous ☐? Volume verified how? _____
- D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐
- E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐
- F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐
  (If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

11. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒
(New certification also is required for each permit renewal)

If yes:
- A. Certification date: _____
- B. Pollutants accepted by MSD as absent: _____
- C Were any requested "absent" pollutants rejected by MSD? Yes☐ No☐
  If yes to C: D. List them and explain why: _____
- E. Were all the accepted pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐
  (If compared to intake water levels, explain details below)
  If no to E: F. Explain: _____
  G. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐
- H. Comments: _____

12. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes:
- A. At which points? _____
- B. Current applied factor: _____ Is it correct? Yes☐ No☐
- C. If no, list correct factor/explain? _____

13. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

14. ARE ANY RADIOACTIVE MATERIALS HANDLED (other than solely from sealed sources)? Yes☒ No☐

If yes: A. Describe operations & disposal: Radioactive isotopes for diagnostic purposes; material allowed to decay then sent offsite.

B. Does company have an NRC license? Yes☒ No☐

C. If No, explain why not: _____

D. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☐ Yes☒ No☐

(If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)

E. Amount discharged in most recent four complete calendar quarters: 0 mCi

F. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

G. If No, explain why not: _____

15. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

16. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒

(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:

No excessive use noticed while walking through facility. Usage appears fairly consistent over the last 3 years but has been increasing: ~52,608 gpd (2016-2017), ~57,483 gpd (2017-2018), ~61,195 gpd (2018-2019).

17. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Cooling towers/boilers, lawn irrigation losses; current RF of 0.51. Value below is from most recent IUQ (01/21/2015).

B. What is the approximate daily volume that is not discharged? 19220

C. Was "Return Factor Program" brochure given to company? Yes☒ No☐

(regardless of whether some water is not discharged to sewer)

18. INCOMING & OUTGOING WATER/WASTEWATER VOLUME

A. What is the TOTAL avg daily INCOMING water volume (from water meters + unmetered sources)? 61195

B. What is the TOTAL avg daily volume DISCHARGED to sewer (from all sample point flow streams)? 60928

C. Difference: 267

D. Does difference agree with amt not discharged from above question (within 20% of incoming amt)? Yes☐ No☒

If no to D: E. Explain: Amount discharged based on previous IUQ; taking into consideration the RF the amount discharged should be much lower. The facility's permit is up for renewal; a new IUQ was sent and numbers will be adjusted accordingly upon receipt.

19. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____

B. Latest approval date: _____

C. Is the approved variance more than 5 years old? Yes☐ No☐

(If yes to C, a new variance must be requested – write company)

20. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____

B. Date originally applied: _____, or as part of variance above? ☐

21. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

22. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

23. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☒ No☐

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐

Spills? ☐ Slug discharges? ☐ Other? Elevator shaft flooded

B. Explain any marked: Backflow preventer outside of building froze/broke; water flowed into elevator shaft and hydraulic fluid went into storm drain. Issue was reported to appropriate authorities and cleaned up.

24. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?

ASTs had spill kits, were double-walled, & equipped with alarms; lab chemicals were properly stored based on observations during walk-through.

25. DOES COMPANY HAVE ANY WASTEWATER DISCHARGES TO STORM SEWERS OR TO GROUND? Yes☐ No☒

If yes: A. Describe: _____

B. Is discharge covered by an NPDES Permit? Yes☐ No☐

If no to B: Write company & require that discharge be ceased, rerouted to sanitary sewer or elsewhere internally, or company obtain an NPDES permit.

26. DOES COMPANY HAVE ANY NPDES PERMITS? Yes☐ No☒ Or NO EXPOSURE CERTIFICATIONS? Yes☐ No☒

If yes for NPDES: A. Receiving stream:_____

B. Does it have a MDNR general permit for stormwater discharges from industrial activities? Yes☐ No☐

If yes to B: Permit #: MO-R_____

C. Does it have a MDNR general permit for wastewater discharges? Yes☐ No☐

If yes to C: Permit #: MO-G_____ Permitted activity:_____

D. Does it have a MDNR site specific permit for wastewater discharges? Yes☐ No☐

If yes to D: Permit #: MO0_____

Outfall	Description	Vol (GPD)	Components

E. Comments: _____

27. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____

B. What needs to be done? _____

C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

28. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control, and Countermeasures Plan	November 2017
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? Yes☒ No☐
(must be done)

C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒

D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☐

E. Explain why/why not for C or D: Plan includes description of discharge/drainage controls, discharge prevention measures, spill response procedures, emergency contact information, etc.

29. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____

B. Priority pollutants (or "none"): _____

C. How is spent solvent disposed? _____

(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

30. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A.

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Chloroform, phenols	Lab reagents	Yes☐ No☒	Consumed/hauled	Yes☒ No☐
BTEX, naphthalene	Diesel fuel & generators	Yes☐ No☒	Consumed as fuel	Yes☒ No☐
Acetone	Lab reagent	Yes☐ No☒	Consumed/hauled	Yes☐ No☒
Methanol	Lab reagent	Yes☐ No☒	Consumed/hauled	Yes☐ No☒
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

31. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes:
- A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
- B. If no to A, date of last update for SMP: _____
- C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
- D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
  (If no to C or D, write company and require submittal and/or update)

32. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐
- A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
  (Must post if company generates process wastewater or stores chemicals of concern)

33. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. How frequently is sampling required? Quarterly
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

34. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☐ No☒

If yes:
- E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
- F. If no to A,B,C, or E, _____ explain needed changes:

35. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
- A. At which SPs? _____
- B. Are discharge limits in PT database "alert only"? (If not, change to that & make note: _____) Yes☐ No☐
- C. Does company submit quarterly summaries? Yes☐ No☐
- D. If no, explain: _____

36. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
- A. Is company having the samples analyzed Yes☐ No☐
- B. How does company insure proper preservation, holding times & analytical methods? _____
- C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
- D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
- E. If no to C, or D, explain: _____
- F. Does company still want to split samples? Yes☐ No☐
- G. Comments: _____

37. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. What is required to be reported? Radioactive material discharge report
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

38. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes: A. Type and date: _____

B. Have the reports & actions been on-time & complete? Yes☐ No☐

C. If no, explain: _____

39. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐

[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no: A. Describe: _____

B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

40. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no: A. How long does company retain records? _____

B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐

C. Where are they kept? Records are kept electronically.

41. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:

☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____

☒ Process discharge => 25,000 GPD Total process volume: 30,628

☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____

☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____

TP ADW organic capacity: _____. Percent: _____

☐ Reasonable potential for adverse effect on operations Why? _____

☐ Reasonable potential for violating PT std or req't Which ones & why? _____

B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no: C. What is Bldg owner name (use DBA if avail.)? _____
(check E-CIS CAPS Customer Info)

D: What is Bldg owner mailing address? _____
(check E-CIS CAPS Customer Info)

42. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes: A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐

B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐

C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐

D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐

E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
(And explain why/why not: _____)

F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
Acceptance letter date: _____ Or write company with requirement ☐

G. If no to D or yes to E, are limits "alert only" on PT database? Yes☐ No☐

H. Comments: _____

43. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes: A. Why? _____

B. Are any changes needed to reasons/details? Yes☐ No☐

C. If yes, explain: _____

D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐
[Including comparison with meters/measuring methods for billing reports]

44. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:

SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐

Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

45. SAMPLE POINTS

						Auto-sampler ready?	DJ (y/n)
SP #	001	Fed.Reg.	N/A	Components:	NCCW + Sanitary + Storm + Boiler Blowdown + Hospital Waste + Kitchen Waste	Yes	No
SP #	004	Fed.Reg.	N/A	Components:	Sanitary + Storm + Hospital Waste	Yes	No
SP #	005	Fed.Reg.	N/A	Components:	Hospital Waste + Storm + NCCW + Sanitary	Yes	No
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A

46. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes: A. List SPs: _____

B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

47. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes: A. List SPs and reasons: _____

48. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes: A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐

B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐

C. If No to B, explain:_____

(Must also write company and require installation of SP)

49. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes: A. List Sample Points: 001, 004, & 005

50. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

C. Is it possible to use an auto-sampler to collect samples (regardless of volume or batches)? Yes☒ No☐

Update PT database indicator as needed.

D. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒

E. If yes to D, list SPs & describe: _____

F. If yes to D, was company directed to take corrective actions? Yes☐ No☐

51. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/8/16

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

52. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☒ No☐

If yes: A. List needed changes: Notify facility prior to sampling; (314) 966-5600 ext. 5000.

53. IS COMPANY LOCATED WITHIN AN MSD HAZARDOUS AREA BOUNDARY? Yes☐ No☒

If yes: A. Has it been marked as such in the PT database? Yes☐ No☐

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

Kevin Smith mentioned that they were considering having the steam power plant tie into SLU hosptial; was unsure whether or not this would have an impact on their RF. Aside from this, no other major changes since the previous inspection.

Industrial Data Report

Facility Name:	SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL		
Facility Identifier:	1020548900	Facility Type:	Industrial User
Physical Location:	1465 S Grand BOULEVARD Saint Louis, MO 63104	Mailing Address:	1465 South Grand Blvd Saint Louis, MO 631041095
MSD Base Map Page / Section:	20 / F3	Facility ID:	642

GENERAL INFORMATION

MSD Sewer Accounts

Account Number	Status
1020548900	Active

Contact Information

First Name:	Last Name:	Title:	Contact Type:	Responsibilities:	Email:	Business Phone:	Cell Phone:
Ms. Wanda	Clark	Plant Operations Assistant	Facility	Field Contact 2nd Alt		314-577-5600	
Mr. Mike	Jones	Plant Operations Supervisor	Facility	Authorized Signatory, Field Contact - Primary	Michael.Jones3@ssmhealth.com	314-577-5327	314-678-5123
Mr. Kevin	Smith	Team Leader Plant Operations	Facility	Authorized Signatory, Billing Contact, Field Contact 1st Alt, Office Contact - Primary		314-268-2768	314-678-2031
Ms. Leslie	Thornburg	MPH, Spec ESSEP	Facility	Authorized Signatory, Office Contact 2nd Alt		314-989-6134	816-518-9214

Inspection

Template:	Industrial Facility Inspection	Start Date:	08/08/2019 09:25 AM
Inspection Type:	Industrial Facility Inspection	End Date:	08/08/2019 10:25 AM

Facility Groups

Group Name	Group Category	Group Description
RF	Facility Classification	Return Factor Facility
SIU	Facility Classification	Significant Industrial User
TOX	Facility Classification	Toxics-Bearing Process Water or Wastes
rf_>1000	Return Factor Criteria	Return Factor(s) total >= $1,000/year
*VOL>25K	SIU Criteria	Process Discharge => 25,000 GPD

Permit Information

Industrial Data Report

Permit No.:	1020548900 - 1	Permit Type:	Pretreatment
Effective Date:	5/1/2015 12:00:00AM	Expiration Date:	4/30/2020 12:00:00AM
Issued Date:	5/1/2015 12:00:00AM	Permit Status:	Issued

Work Requirement

Task Template	Start Date	End Date	No. of Time	Frequency	Sample Location
Industrial Facility Inspection	06/01/2004	06/30/2099	1	Once/year	
Radiation Discharge	07/29/2004	04/30/2020	1	Once/3 mo	
Return Factor Inspection	06/01/2018	06/30/2099	1	Once/11 years	
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Metals - Ag (T04); Oil & Grease (G00); Phenolic Organics - Acids (G00); Total Phenols (single test) (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	05/01/2015	04/30/2020	1	Once/year	001
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Metals - Ag (T04); Oil & Grease (G00); Phenolic Organics - Acids (G00); Total Phenols (single test) (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	05/01/2015	04/30/2020	1	Once/year	004
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00); Phenolic Organics - Acids (G00); Total Phenols (single test) (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	05/01/2015	04/30/2020	1	Once/year	005

PRODUCTION/SERVICES INFORMATION

Operation Description: Pediatric hospital services

Shift Information

Shift	Start Time	End Time	Average No. of Employees
1	08:00 AM	04:00 PM	600
2	04:00 PM	12:00 AM	400
3	12:00 PM	08:00 PM	350

SIC

SIC Code	SIC Name	SIC Description
8069	8069	Specialty hospitals exc. psychiatric

Industrial Data Report

Raw Material List

Raw material list has not been entered, or does not exist, for the facility.

CHEMICAL INVENTORY INFORMATION

Industrial Data Report

Full Disclosure of Chemicals

Substance Name	Presence Ind	Categorically Related?
(cis & trans) 1,3-Dichloropropene	Known Absent	
1,1,1-Trichloroethane	Known Absent	
1,1,2,2-Tetrachloroethane	Known Absent	
1,1,2-Trichloroethane	Known Absent	
1,1-Dichloroethane	Known Absent	
1,1-Dichloroethene	Known Absent	
1,2,4-Trichlorobenzene	Known Absent	
1,2-Dichlorobenzene	Known Absent	
1,2-Dichloroethane	Known Absent	
1,2-Dichloropropane	Known Absent	
1,2-Diphenylhydrazine	Known Absent	
1,3-Dichlorobenzene	Known Absent	
1,4-Dichlorobenzene	Known Absent	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Known Absent	
2,4,6-Trichlorophenol	Known Absent	
2,4-Dichlorophenol	Known Absent	
2,4-Dimethylphenol	Known Absent	
2,4-Dinitrophenol	Known Present	
2,4-Dinitrotoluene	Known Absent	
2,6-Dinitrotoluene	Known Absent	
2-Chloroethyl vinyl ether	Known Absent	
2-Chloronaphthalene	Known Absent	
2-Chlorophenol	Known Absent	
2-Nitrophenol	Known Absent	
3,3-Dichlorobenzidine	Known Absent	
4,4'-DDD	Known Absent	
4,4'-DDE	Known Absent	
4,4'-DDT	Known Absent	
4,6-Dinitro-2-Methylphenol	Known Absent	
4-Bromophenyl phenyl ether	Known Absent	
4-Chloro-3-Methylphenol	Known Absent	
4-Chlorophenyl phenyl ether	Known Absent	
4-Nitrophenol	Known Absent	
Acenaphthene	Known Present	
Acenaphthylene	Known Present	
Acrolein	Suspected Absent	
Acrylonitrile	Known Absent	

Industrial Data Report

Aldrin	Known Absent
Alpha-BHC	Known Absent
Anthracene	Known Absent
Antimony (Total)	Suspected Absent
Arsenic (Total)	Suspected Absent
Asbestos (Fibrous)	Suspected Present
Benzene	Known Present
Benzidine	Known Absent
Benzo (A) Anthracene	Known Present
Benzo (A) Pyrene	Known Present
Benzo (B) Fluoranthene	Known Present
Benzo (G,H,I) Perylene	Known Present
Benzo (K) Fluoranthene	Known Present
Beryllium (Total)	Suspected Absent
Beta-BHC	Known Absent
Bis (2-Chloroethoxy) Methane	Known Absent
Bis (2-Chloroethyl) Ether	Known Absent
Bis (2-Chloroisopropyl) Ether	Known Absent
Bis (2-EthylHexyl) Phthalate	Known Absent
Bromodichloromethane	Known Absent
Bromoform	Known Absent
Bromomethane	Known Absent
Butylbenzyl Phthalate	Known Absent
Cadmium (Total)	Suspected Absent
Carbon Tetrachloride	Known Absent
Chlordane	Known Absent
Chlorobenzene	Known Absent
Chloroethane	Known Absent
Chloroform	Known Present
Chloromethane	Known Absent
Chromium (Total)	Suspected Absent
Chrysene	Known Present
Copper (Total)	Suspected Absent
Cyanide (Total)	Known Absent
Delta-BHC	Known Absent
Di-n-butyl Phthalate	Known Absent
Di-n-octyl Phthalate	Suspected Absent
Dibenzo (A,H) Anthracene	Known Present
Dibromochloromethane	Known Absent

Industrial Data Report

Dieldrin	Known Absent
Diethyl Phthalate	Known Absent
Dimethyl Phthalate	Known Absent
Endosulfan I	Known Absent
Endosulfan II	Known Absent
Endosulfan Sulfate	Known Absent
Endrin	Known Absent
Endrin Aldehyde	Known Absent
Ethylbenzene	Known Present
Fluoranthene	Known Present
Fluorene	Known Present
Gamma-BHC	Known Absent
Heptachlor	Known Absent
Heptachlor Epoxide	Known Absent
Hexachlorobenzene	Known Absent
Hexachlorobutadiene	Known Absent
Hexachlorocyclopentadiene	Known Absent
Hexachloroethane	Suspected Absent
Indeno (1,2,3-cd) pyrene	Known Present
Isophorone	Known Absent
Lead (Total)	Suspected Present
Mercury (Total)	Suspected Present
Methylene Chloride	Suspected Absent
N-Nitrosodi-n-Propylamine	Known Absent
N-Nitrosodimethylamine	Suspected Absent
N-Nitrosodiphenylamine	Known Absent
Naphthalene	Known Present
Nickel (Total)	Suspected Absent
Nitrobenzene	Suspected Absent
PCB - 1016	Known Absent
PCB - 1221	Known Absent
PCB - 1232	Known Absent
PCB - 1242	Known Absent
PCB - 1248	Known Absent
PCB - 1254	Known Absent
PCB - 1260	Known Absent
Pentachlorophenol	Known Present
Phenanthrene	Known Present
Phenol	Known Present

Industrial Data Report

Pyrene	Known Present
Selenium (Total)	Suspected Absent
Silver (Total)	Known Present
Tetrachloroethene	Suspected Absent
Thallium (Total)	Suspected Absent
Toluene	Known Present
Toxaphene	Known Absent
Trans-1,2-Dichloroethene	Known Absent
Trichloroethene	Known Absent
Vinyl Chloride	Known Absent
Zinc (Total)	Known Present

Process List

Process Name	Process Description	Seasonal?	Status	Process Detail
Non-Sewered: Off-Site Disposal			A	Acids and/or Alkalies, Equipment Oils and/or Grease, Infectious Waste, Kitchen/Food Service Grease, Organic Compounds, Other, Paints or Paint Sludges, Solvents/Thinners
Non-Sewered: On-Site Storage			A	Acids and/or Alkalies, Equipment Oils and/or Grease, Infectious Waste, Kitchen/Food Service Grease, Organic Compounds, Other, Paints or Paint Sludges, Solvents/Thinners
Product/Service	General hospital		A	

Control Plans

Name	Type	Approval Date	Status
001310	MDNR - Hazardous Waste Program	11/10/2000	Approved
24-00196-07	Nuclear Regulatory Commission	11/03/1997	Approved
MOD075904839	EPA - Hazardous Waste Program	09/29/1997	Approved
Slug Discharge/Spill Control Plan (start 7/1/2004)	Slug Discharge/Spill Control Plan	07/01/2004	Approved

PROCESS FLOW DETAILS

Industrial Data Report

Process Flow Details

Flow Stream Name	Flow Direction	Flow Type	Status
1020548900	Incoming	Water Supply	A

Flow Data List

Start Date	End Date	Reading Type	Flow Value
02/22/2019	04/22/2019	Total Volume	16335.0000 CCF
12/08/2018	02/21/2019	Total Volume	8765.0000 CCF
08/26/2018	12/07/2018	Total Volume	7804.0000 CCF
02/02/2018	08/25/2018	Total Volume	15699.0000 CCF

Average Daily Volume: 144.82 CCF

Total Average Daily Volume: 144.82 CCF

Facility Flow Methodology

Name	Formula	Flow Start Date	Return Factor
ImportedRF1020548900	(@1020548900 - @COOLING_TOWER - @IRRIGATION) / @1020548900	01/17/2018	0.51

PRETREATMENT INFORMATION

Pretreatment System(s)

Pretreatment Type:	Primary Purpose:	Effective Date:	Sample Location
Grease Trap		02/20/2003	001

SAMPLE LOCATION INFORMATION

Sample Locations

Location Name	Location Type	Sample Location Description	Status	Flow Stream Name (Fed Regulation)
001	SP - Ordinance Only	MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from S	A	Boiler Blowdown (), Hospital Waste (), Kitchen Waste (), Non Contact Cooling Water (), Sanitary (), Storm Water ()
004	SP - Ordinance Only	MH 3' W from SW corner of emergency bldg	A	Hospital Waste (), Sanitary (), Storm Water ()
005	SP - Ordinance Only	Manhole 12' N, 10' W from the NW inside corner of W bldg	A	Hospital Waste (), Non Contact Cooling Water (), Sanitary (), Storm Water ()

Industrial Data Report

501	SP - Dummy for Data Entry	No physical sample point, for radioactive materials monitoring results only	A
L-01	LAT - Sanitary Or San+Storm (Combined)	LIne from building northwest to Vista Av.	A
L-03	LAT - Sanitary Or San+Storm (Combined)	8" line exiting NW from SW main hospital entrance into manhole	A
L-04	LAT - Sanitary Or San+Storm (Combined)	8" lateral exiting W from North side West building	A
LR-01	LAT - Radiation Discharge	No physical lateral, for radioactive materials' receiving treatment plant only	A

Industrial Data Report

Sample Locations Flow Data by Sample Location and Flow Stream

Sample Location: 001 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Boiler Blowdown	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	1265 GPD

Hospital Waste	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	18742 GPD

Kitchen Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	5000 GPD

Non Contact Cooling Water	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	1710 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	22680 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/24/2009	04/30/2020	Average	0 GPD

Sample Location: 004 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Hospital Waste	Outgoing	Dilution	Continuous

Industrial Data Report

Sample Locations Flow Data by Meter Reads only

Sample Location: 001 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Boiler Blowdown		01/21/2015	04/30/2020	Average	1265 GPD
Hospital Waste		01/21/2015	04/30/2020	Average	18742 GPD
Kitchen Waste		01/21/2015	04/30/2020	Average	5000 GPD
Non Contact Cooling Water		01/21/2015	04/30/2020	Average	1710 GPD
Sanitary		01/21/2015	04/30/2020	Average	22680 GPD
Storm Water		11/24/2009	04/30/2020	Average	0 GPD

Sample Location: 004 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Hospital Waste		01/21/2015	04/30/2020	Average	2199 GPD
Sanitary		01/21/2015	04/30/2020	Average	3200 GPD
Storm Water		12/17/2010	04/30/2020	Average	0 GPD

Sample Location: 005 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Hospital Waste		01/21/2015	04/30/2020	Average	4687 GPD
Non Contact Cooling Water		01/21/2015	04/30/2020	Average	325 GPD
Sanitary		01/21/2015	04/30/2020	Average	1120 GPD
Storm Water		11/24/2009	04/30/2020	Average	0 GPD

Associated Sample Locations

Location Name	Associated Location Name	Associated Location Status
L-01	001	A
L-02	002	I
	003	I
L-03	004	A
L-04	005	A
LR-01	501	A

Industrial Data Report

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	2199 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	3200 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	12/17/2010	04/30/2020	Average	0 GPD

Sample Location: 005 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Hospital Waste	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	4687 GPD

Non Contact Cooling Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	325 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	1120 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/24/2009	04/30/2020	Average	0 GPD

Industrial Data Report

ADDITIONAL COMMENTS

Facility Comments

Comment Type	Comment
Facility Special Instructions	SP004 access is through gate entrance by the helipad. Notify facility prior to sampling by contacting (314) 966-5600, ext. 5000.

MSD 035234

CK

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

grab samples

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		5/29-5/30/19		5/29-5/30/19		5/29-5/30/19		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		1300-1300		1400-1400		1330-1330		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	140	C	110	C	54	mg/L
COD	—	C	330	C	340	C	150	mg/L
Oil + Grease	200	G	25	G	14	G	14	mg/L
Silver	5	C	<0.0020	C	<0.0020	C	<0.0020	mg/L
Temperature	60	G	24.6	G	24.6	G	22.1	deg C
Phenol	21	G	<0.050	G	<0.050	G	<0.05	mg/L
Total Suspended Solids	—	C	43	C	52	C	27	mg/L
pH	5.5-11.5	G	7.92	G	8.14	G	8.37	SU
Total toxic organics	5.844	C,G	----	C,G	----	C,G	----	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
JUN 11 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035235

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Leslie Thornburg
	Title: Environmental Safety Specialist Telephone: 3149896134
	Signature: Leslie Thornburg Date: 6/11/2019

RECEIVED
JUN 11 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

QK 03/29/19

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004 (grab)		005 (grab)		(grab)
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		2/27-2/28/19		2/27-2/28/19		2/27-2/28/19		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		12:15-12:15		1300-1300		11:30-1130		
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	49,000	E	5400	E	6100	gpd
BOD	—	C	270	C	160	C	1400	mg/L
COD	—	C	670	C	390	C	2500	mg/L
Oil & Grease	200	G	14	G	11	G	60	mg/L
Silver	.5	C	<.002	C	<.002	C	<.002	mg/L
Temperature	60	G	14.4	G	14.8	G	13.5	deg C
Phenol	21	G	.067	G	<.05	G	0.10	mg/L
Total Suspended Solids	—	C	120	C	61	C	360	mg/L
pH	5.5-11.5	G	7.7	G	8.55	G	8.45	SU
Total toxic organics	5.844	C,G	1.01	C,G	.97	C,G	1.03	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Leslie Thornburg

Title: Environmental Safety Specialist Telephone: 314-989-6134

Signature: Leslie Thornburg Date: 3/13/19

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024725-01
Name: MSD 001 comp quarterly
Matrix: Waste Water - Composite

Sampled: 02/28/19 12:15
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
General Chemistry - STL							
BOD	270	mg/L		02/28/19 17:24	02/28/19 17:24	hyy	SM 5210B
COD	670	mg/L		03/05/19 08:17	03/05/19 08:17	hyy	SM 5220D
Solids - total suspended solids (TSS)	120	mg/L		03/05/19 08:09	03/05/19 11:20	SJP	SM 2540D
Semivolatile Organics - STL							
1,2,4-Trichlorobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2,3,7,8-TCDD Screen	< 50.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*24 %*	*10-102*		*03/04/19 09:10*	*03/05/19 18:08*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2,4-Dinitrophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2,6-Dinitrotoluene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*34 %*	*12.2-95.2*		*03/04/19 09:10*	*03/05/19 18:08*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*12 %*	*10-48.3*		*03/04/19 09:10*	*03/05/19 18:08*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
3,3'-Dichlorobenzidine	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 50.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
4-Nitrophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Azobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625*
Benzidine	< 80.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Chrysene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024726-01
Name: MSD 001 comp quarterly
Matrix: Waste Water - Composite

Sampled: 02/28/19 12:15
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Diethyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Fluorene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Hexachlorocyclopentadiene	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Isophorone	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Naphthalene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*30 %*	*18.9-92.4*		*03/04/19 09:10*	*03/05/19 18:08*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Pentachlorophenol	< 50.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Phenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Surrogate: Phenol- d5	*9 %*	*10-32.4*	*X*	*03/04/19 09:10*	*03/05/19 18:08*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*42 %*	*15.8-107*		*03/04/19 09:10*	*03/05/19 18:08*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:08	MAK	EPA 625
Total Metals - STL							
Silver	< 0.0020	mg/L		03/04/19 09:17	03/06/19 14:33	WPS	EPA 200.7

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024726-02
Name: MSD 001 grab quarterly
Matrix: Waste Water - Grab

Sampled: 02/28/19 12:15
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Field - STL							
pH	7.70	pH Units		02/28/19 12:15	02/28/19 12:15	LLO	SM*
Temperature, Field Measured	14.4	°C		02/28/19 12:15	02/28/19 12:15	LLO	SM*
General Chemistry - STL							
Oil & Grease - total	14	mg/L		03/05/19 07:40	03/05/19 07:40	kam	EPA 1664
Phenol	0.087	mg/L		03/07/19 09:01	03/07/19 15:41	SCI	EPA 420.1
Volatile Organics - STL							
1,1,1-Trichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*59.6-134*		*03/01/19 10:00*	*03/01/19 14:19*	*CH*	*EPA 624*
1,2-Dichloropropane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
1,3-Dichloropropene - Total	< 10	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624*
1,4-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Acrolein	< 50	ug/L	Q3, R	03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Acrylonitrile	< 10	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Benzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Bromodichloromethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Surrogate: Bromofluorobenzene	*104 %*	*59.3-148*		*03/01/19 10:00*	*03/01/19 14:19*	*CH*	*EPA 624*
Bromoform	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Bromomethane	< 10	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Carbon tetrachloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Chlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Chloroethane	< 10	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Chloroform	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Chloromethane	< 10	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Dibromochloromethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Ethylbenzene	5.1	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Methylene chloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Tetrachloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Toluene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Surrogate: Toluene-d8	*108 %*	*64.4-132*		*03/01/19 10:00*	*03/01/19 14:19*	*CH*	*EPA 624*
trans-1,2-Dichloroethene	< 10	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Trichloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624
Vinyl chloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 14:19	CH	EPA 624

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024725-03
Name: MSD 004 comp quarterly
Matrix: Waste Water - Composite

Sampled: 02/28/19 13:00
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
General Chemistry - STL							
BOD	160	mg/L		02/28/19 17:24	02/28/19 17:24	hyy	SM 5210B
COD	390	mg/L		03/05/19 08:17	03/05/19 08:17	hyy	SM 5220D
Solids - total suspended solids (TSS)	61	mg/L		03/05/19 08:09	03/05/19 11:20	SJP	SM 2540D
Semivolatile Organics - STL							
1,2,4-Trichlorobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2,3,7,8-TCDD Screen	< 50.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*32 %*	*10-102*		*03/04/19 09:10*	*03/05/19 18:37*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2,4-Dinitrophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2,6-Dinitrotoluene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*35 %*	*12.2-95.2*		*03/04/19 09:10*	*03/05/19 18:37*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*15 %*	*10-48.3*		*03/04/19 09:10*	*03/05/19 18:37*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
3,3'-Dichlorobenzidine	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 50.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
4-Nitrophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Azobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625*
Benzidine	< 80.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Chrysene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625

Customer #: 277898

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024725-03
Name: MSD 004 comp quarterly
Matrix: Waste Water - Composite

Sampled: 02/28/19 13:00
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Diethyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Fluorene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Hexachlorocyclopentadiene	< 20.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Isophorone	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Naphthalene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*30 %*	*18.9-92.4*		*03/04/19 09:10*	*03/05/19 18:37*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Pentachlorophenol	< 50.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Phenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Surrogate: Phenol- d5	*10 %*	*10-32.4*		*03/04/19 09:10*	*03/05/19 18:37*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*43 %*	*15.8-107*		*03/04/19 09:10*	*03/05/19 18:37*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 18:37	MAK	EPA 625
Total Metals - STL							
Silver	< 0.0020	mg/L		03/04/19 09:17	03/06/19 14:55	WPS	EPA 200.7

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024725-04
Name: MSD 004 grab quarterly
Matrix: Waste Water - Grab

Sampled: 02/28/19 13:15
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Field - STL							
pH	8.55	pH Units		02/28/19 13:15	02/28/19 13:15	LLO	SM*
Temperature, Field Measured	14.8	°C		02/28/19 13:15	02/28/19 13:15	LLO	SM*
General Chemistry - STL							
Oil & Grease - total	11	mg/L		03/05/19 07:40	03/05/19 07:40	kam	EPA 1664
Phenol	< 0.050	mg/L		03/07/19 09:01	03/07/19 15:41	SCI	EPA 420.1
Volatile Organics - STL							
1,1,1-Trichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*91 %*	*59.6-134*		*03/01/19 10:00*	*03/01/19 15:46*	*CH*	*EPA 624*
1,2-Dichloropropane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
1,3-Dichloropropene - Total	< 10	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624*
1,4-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Acrolein	< 50	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Acrylonitrile	< 10	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Benzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Bromodichloromethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Surrogate: Bromofluorobenzene	*94 %*	*59.3-148*		*03/01/19 10:00*	*03/01/19 15:46*	*CH*	*EPA 624*
Bromoform	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Bromomethane	< 10	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Carbon tetrachloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Chlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Chloroethane	< 10	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Chloroform	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Chloromethane	< 10	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Dibromochloromethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Ethylbenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Methylene chloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Tetrachloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Toluene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Surrogate: Toluene-d8	*97 %*	*64.4-132*		*03/01/19 10:00*	*03/01/19 15:46*	*CH*	*EPA 624*
trans-1,2-Dichloroethene	< 10	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Trichloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624
Vinyl chloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 15:46	CH	EPA 624

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024725-05
Name: MSD 005 comp quarterly
Matrix: Waste Water - Composite

Sampled: 02/28/19 11:30
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
General Chemistry - STL							
BOD	1400	mg/L		02/28/19 17:24	02/28/19 17:24	hyy	SM 5210B
COD	2500	mg/L		03/05/19 08:17	03/05/19 08:17	hyy	SM 5220D
Solids - total suspended solids (TSS)	360	mg/L		03/05/19 08:09	03/05/19 11:20	SJP	SM 2540D
Semivolatile Organics - STL							
1,2,4-Trichlorobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2,3,7,8-TCDD Screen	< 50.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*20 %*	*10-102*		*03/04/19 09:10*	*03/05/19 20:07*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2,4-Dinitrophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2,6-Dinitrotoluene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*39 %*	*12.2-95.2*		*03/04/19 09:10*	*03/05/19 20:07*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*13 %*	*10-48.3*		*03/04/19 09:10*	*03/05/19 20:07*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
3,3'-Dichlorobenzidine	< 20.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 50.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
4-Nitrophenol	< 20.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Azobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625*
Benzidine	< 80.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Chrysene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024725-05
Name: MSD 005 comp quarterly
Matrix: Waste Water - Composite

Sampled: 02/28/19 11:30
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Diethyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Fluorene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Hexachlorocyclopentadiene	< 20.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Isophorone	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Naphthalene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*31 %*	*18.9-92.4*		*03/04/19 09:10*	*03/05/19 20:07*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Pentachlorophenol	< 50.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Phenol	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Surrogate: Phenol- d5	*10 %*	*10-32.4*		*03/04/19 09:10*	*03/05/19 20:07*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*33 %*	*15.8-107*		*03/04/19 09:10*	*03/05/19 20:07*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		03/04/19 09:10	03/05/19 20:07	MAK	EPA 625
Total Metals - STL							
Silver	< 0.0020	mg/L		03/04/19 09:17	03/06/19 14:57	WPS	EPA 200.7

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

ANALYTICAL RESULTS

Sample: 9024726-06
Name: MSD 005 grab quarterly
Matrix: Waste Water - Grab

Sampled: 02/28/19 11:30
Received: 02/28/19 14:53

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Field - STL							
pH	8.45	pH Units		02/28/19 11:30	02/28/19 11:30	LLO	SM*
Temperature, Field Measured	13.5	°C		02/28/19 11:30	02/28/19 11:30	LLO	SM*
General Chemistry - STL							
Oil & Grease - total	60	mg/L		03/05/19 07:40	03/05/19 07:40	kam	EPA 1664
Phenol	0.10	mg/L		03/07/19 09:01	03/07/19 15:41	SCI	EPA 420.1
Volatile Organics - STL							
1,1,1-Trichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*99 %*	*59.6-134*		*03/01/19 10:00*	*03/01/19 16:15*	*CH*	*EPA 624*
1,2-Dichloropropane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
1,3-Dichloropropene - Total	< 10	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624*
1,4-Dichlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Acrolein	< 50	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Acrylonitrile	< 10	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Benzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Bromodichloromethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Surrogate: Bromofluorobenzene	*98 %*	*59.3-148*		*03/01/19 10:00*	*03/01/19 16:15*	*CH*	*EPA 624*
Bromoform	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Bromomethane	< 10	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Carbon tetrachloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Chlorobenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Chloroethane	< 10	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Chloroform	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Chloromethane	< 10	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Dibromochloromethane	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Ethylbenzene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Methylene chloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Tetrachloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Toluene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Surrogate: Toluene-d8	*103 %*	*64.4-132*		*03/01/19 10:00*	*03/01/19 16:15*	*CH*	*EPA 624*
trans-1,2-Dichloroethene	< 10	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Trichloroethene	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624
Vinyl chloride	< 5.0	ug/L		03/01/19 10:00	03/01/19 16:15	CH	EPA 624

RECEIVED
MAR 14 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
2231 West Altorfer Drive
Peoria, IL 61615
(800) 752-6651

NOTES

Specific method revisions used for analysis are available upon request.

Certifications

CHI - McHenry, IL
TNI Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100279
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL
TNI Accreditation for Drinking Water, Wastewater, Hazardous and Solid Wastes Fields of Testing through IL EPA Lab No. 100230
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 17553
Missouri Department of Natural Resources Certificate of Approval for Microbiological Laboratory Service No. 870
Drinking Water Certifications: Iowa (240); Kansas (E-10338); Missouri (870)
Wastewater Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)
Hazardous/Solid Waste Certifications: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPIL - Springfield, IL
NELAP/NELAC accredidation through the Illinois EPA, PAS IL 100323

SPMO - Springfield, MO
USEPA DMR-QA Program

STL - St. Louis, MO
TNI Accreditation for Wastewater, Hazardous and Solid Wastes Fields of Testing through KS Lab No. E-10389
Accreditation of Laboratories for Wastewater, Hazardous, and Solid Waste Analysis through IL EPA No. 200080
Illinois Department of Public Health Bacteriological Analysis in Drinking Water Approved Laboratory Registry No. 171050
Drinking Water Certifications: Missouri (1050)
Missouri Department of Natural Resources

* Not a TNI accredited analyte

Qualifiers

Q3 Matrix Spike/Matrix Spike Duplicate both failed % recovery acceptance limits. The associated blank spike recovery was acceptable.
R Matrix Spike/Matrix Spike Duplicate Failed %Relative Percent Difference criterion.
X Surrogate recovery failed to meet the required acceptance criteria. There is evidence of matrix interference.

Janet Clutters

Certified by: Janet Clutters, Project Manager

4

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

PART I: IDENTIFYING INFORMATION

Company Name: SSM Cardinal Glennon Hospital
Permit No: 1026548900
Premise No: 1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 1/10/2020

RECEIVED
JAN 10 2020
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
4/19

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		11/19-11/20/18		11/19-11/20/18		11/19-11/20/18		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		11:15-11:15 grab		12:00-12:00 grab		10:45-10:45 grab		
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	49000	E	5400	E	~~6200~~ 6100	gpd
BOD	—	C	140	C	200	C	83	mg/L
COD	—	C	290	C	470	C	790	mg/L
Oil & Grease	200	G	31	G	12	G	23	mg/L
Silver	0.5	C	<.0020	C	<.0020	C	<.0020	mg/L
Temperature	60	G	17	G	17.1	G	15.7	deg C
Phenol	.21	G	.085	G	.15	G	.10	mg/L
Total Suspended Solids	—	C	33	C	47	C	34	mg/L
pH	5.5-11.5	G	7.82	G	8.10	C	8.35	SU
Total toxic organics	5.844	C,G	—	C,G	—	C,G	—	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
JAN 07 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Leslie Thornburg

Title: ESSEP Specialist Telephone: 314-989-6134

Signature: Leslie Thornburg Date: 11/28/2018

SR
4/15/19

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

PART I: IDENTIFYING INFORMATION

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 63104**
Reporting Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ■(OCT-DEC)

1020-5489-00

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

RADIONUCLIDE	ACTIVITY DISCHARGED (millicuries)
None	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF

I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 12/4/19

RECEIVED
JAN 07 2019
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

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

Attn: Kevin Smith
Team Leader Plant Operations

INDUSTRIAL WASTEWATER DISCHARGE PERMIT NUMBER 1020548900

ANNUAL PERMIT FEE NOTICE

For permits in effect as of 10/01/2018.

Fee will be included on the next regular monthly bill from the Metropolitan St. Louis Sewer District.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2018 through September 30, 2019 issued in accordance with the Metropolitan St. Louis District Ordinance #14853 for the location at **1465 South Grand Blvd.**
As a reminder, the permit fees below reflect new fees that were adopted last year. This was the first fee increase since 1992.

Base charge @ $180.00 per permit			$180.00
Volume charge @$0.86 per average daily Ccf	118.76	Ccfs	$102.13
Sample Point Charge @$120.00 per sample point	3	points	$360.00
		Total Fee Due:	**$642.13**

For inquiries about the Annual Permit Fee, please call 314-436-8710. For inquiries about payment of the fee, which will appear on your upcoming monthly bill, please call 1-866-281-5737.

THIS IS NOT A BILL
DO NOT PAY NOW

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 10/9/18

RECEIVED
OCT 09 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR 4/19

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		8/7/18-8/8/18		8/7-8/8		8/7-8/8		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		12:30-12:30		13:00-13:00		12:00-12:00		
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	49000	E	5400	E	~~6400~~ 6100	gpd
BOD	—	C	63	C	120	C	120	mg/L
COD	—	C	280	C	460	C	410	mg/L
Oil & Grease	200	G	29	G	15	G	8.5	mg/L
Silver	0.5	C	<.0020	C	<.0020	C	<.0020	mg/L
Temperature	60	G	28	G	27.4	G	26.2	deg C
Phenol	21	G	<.05	G	.10	G	.086	mg/L
Total Suspended Solids	—	C	26	C	55	C	180	mg/L
pH	5.5-11.5	G	8.08	G	8.0	C	8.2	SU
Total toxic organics	5.844	C,G	—	C,G	—	C,G	—	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED

AUG 29 2018

DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Leslie Thornburg

Title: ESSEP Specialist Telephone: 314-989-6134

Signature: Leslie Thornburg Date: 8/20/2018

RECEIVED
AUG 23 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

8

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL Account #: 1020548900
Premise Address: 1465 S Grand Blvd Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Plant Ops Team Leader Phone#: 314.268.2768
Inspector: Scott Rehmer
Others Present: Mike Jones (Plant Ops Supervisor); Leslie Thornburg (Specialist - ESSEP)
Inspection Date: **8/9/18** Time: From 08:30 AM To 10:15 AM (Last Insp. 7/7/17)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: Three meters, one premise address, thus ONE account #
   B. Were any changes (including to the primary or changes only to suffixes) for acct no's with RFs? NA☐ Yes☐ No☒
   C. If yes to B, was Cost Recovery Unit informed of the change(s)? NA☒ Yes☐ No☐
   D. Did all acct no's have water usage on PIMS? Yes☐ No☒
   E. If no to D, explain: PIMS shows usage thru July 2017; ECIS still current.

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Hospital waste	Cont	Yes	Daily	001, 004, 005
NCCW - autoclaves	Batch	Yes	Daily	005
Kitchen waste - dietary, food prep	Cont	Yes	Daily	001
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
None	n/a

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
If yes:
   A. List sample points: 001
   B. What is the frequency for cleaning & maintenance? ~ monthly (company called FILTA)
   C. Were cleaning & maintenance logs reviewed for to verify frequency? (must be done) Yes☒ No☐
   D. If No to C: Explain: _____
   E. Has company been in SNC in the past two years for food-based oil & grease violations? Yes☐ No☒
   F. If Yes to E: Is frequency for cleaning & maintenance at least once/quarter? NA☒ Yes☐ No☐
   G. If No to F, require company to begin cleaning at least once/quarter. Was this done? NA☒ Yes☐ No☐
   H. Are any additives used in traps? Yes☐ No☒
   I. If yes to H, was company warned MSD will bill them for blockages they cause? NA☒ Yes☐ No☐
   J. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
If yes:
   A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes:
- A. List pollutants & process: _____
- B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐
- C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐
  (MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)
- D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐
(including those that are 'No PSES' and 'General Stds Only')

If yes:
- A. List regulation & describe operations (including any discharge):
  40 CFR 460 Subpart A - n/a - hospital point source category
- B. Explain why it is N/A: Subpart has not been promulgated, thus general standards apply.

8. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☐ No☒

If yes:
- A. List regulation & describe operations (including any discharge):
  _____
- B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☐

If yes to B:
- C. Batch ☐ or Continuous ☐? Volume verified how? _____
- D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐
- E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐
- F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐
  (If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

9. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒
(New certification also is required for each permit renewal)

If yes:
- A. Certification date: _____
- B. Pollutants accepted by MSD as absent: _____
- C Were any requested "absent" pollutants rejected by MSD? Yes☐ No☐

  If yes to C: D. List them and explain why: _____
- E. Were all the accepted pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐
  (If compared to intake water levels, explain details below)

  If no to E: F. Explain: _____
  - G. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐
- H. Comments: _____

10. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes:
- A. At which points? _____
- B. Current applied factor: _____ Is it correct? Yes☐ No☐
- C. If no, list correct factor/explain? _____

11. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes:
- A. At which points? _____
- B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐
- C. If yes to B, explain: _____

12. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes:
- A. Describe operations & disposal: Radioactive isotopes are used for diagnostic purposes
- B. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☐ Yes☒ No☐
  (If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)
- C. Amount discharged in most recent four complete calendar quarters: None (0 mCi)
- D. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

13. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

14. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:
During the walk-through, saw no excessive water usage for hospital this size; most of their usage comes from hospital waste associated with patient care, employee sanitary use, kitchen waste, boilers, cooling towers, & lawn irrigation.

15. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Cooling towers & boilers; addition of lawn watering may reduce their RF, currently 0.51.

B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

16. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____

B. Latest approval date: _____

C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

17. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____

B. Date originally applied: _____, or as part of variance above? ☐

18. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

20. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____

B. Explain any marked: _____

21. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?
The large fuel tanks are double walled, all solvents and lab solvent waste are in appropriate containers and cabinets, all rendering containers are kept away from drains.

22. DOES COMPANY HAVE ANY NPDES PERMITS? Yes☐ No☒

If yes: A. Receiving stream:_____

B. Does it have a MDNR general permit for stormwater discharges from industrial activities? Yes☐ No☐
If yes to B: Permit #: MO-R_____

C. Does it have a MDNR general permit for wastewater discharges? Yes☐ No☐
If yes to C: Permit #: MO-G_____ Permitted activity:_____

D. Does it have a MDNR site specific permit for wastewater discharges? Yes☐ No☐
If yes to D: Permit #: MO0_____

Outfall	Description	Vol (GPD)	Components

E. Comments: _____

23. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____

B. What needs to be done? _____

C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

24. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control, & CounterMeasures Plan	November 2017
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? Yes☒ No☐
(must be done)

C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒

D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☒

E. Explain why/why not for C or D: Current plan appears to be comprehensive & addresses prevention, spills, contacts, response, cleanup, storage containers, containments, inspections, plant physical layout, etc.

25. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____

B. Priority pollutants (or "none"): _____

C. How is spent solvent disposed? _____
(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

26. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A. Solvent name/ components

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Chloroform, phenols, etc.	Lab reagent	Yes☐ No☒	Consumed or hauled	Yes☒ No☐
BTEX, naphthalene	Diesel fuel, generators	Yes☐ No☒	Used for fuel	Yes☒ No☐
Acetone	Lab reagent	Yes☐ No☒	Consumed or hauled	Yes☐ No☒
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

27. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes: A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
B. If no to A, date of last update for SMP: _____
C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
(If no to C or D, write company and require submittal and/or update)

28. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐
A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
(Must post if company generates process wastewater or stores chemicals of concern)

29. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes: A. Is requirement contained in permit ☒ or other document ☐.
B. If other document, date & description: _____
C. How frequently is sampling required? Quarterly
D. How frequently are reports required? Quarterly
E. Have reports been on-time, complete & signed by proper person? Yes☐ No☐
F. If no, explain: _____

30. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes: A. Does sample collection time period match co's production shifts? Yes☒ No☐
B. Are representative grab/comp samples collected? Yes☒ No☐
C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
D. Does company measure pH and/or temperature itself? Yes☐ No☒
If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
F. If no to A,B,C, or E, _____
explain needed changes:

31. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes: A. At which SPs? _____
B. Are discharge limits in PIMS "alert only"? (If not, change to that & make note: _____) Yes☐ No☐
C. Does company submit quarterly summaries? Yes☐ No☐
D. If no, explain: _____

32. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
- A. Is company having the samples analyzed Yes☐ No☐
- B. How does company insure proper preservation, holding times & analytical methods? _____
- C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
- D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
- E. If no to C, or D, explain: _____
- F. Does company still want to split samples? Yes☐ No☐
- G. Comments: _____

33. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. What is required to be reported? Rad material discharge report
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

34. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes:
- A. Type and date: _____
- B. Have the reports & actions been on-time & complete? Yes☐ No☐
- C. If no, explain: _____

35. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐
[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no:
- A. Describe: _____
- B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

36. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no:
- A. How long does company retain records? _____
- B. Was company told to retain for at least 5 years, per ordinance? Yes☒ No☐
- C. Where are they kept? All MSD records are kept in main office. hard copies & electronic.

37. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes:
- A. Check & explain applicable criteria:
  - ☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____
  - ☒ Process discharge => 25,000 GPD Total process volume: ~ 31,000 gpd
  - ☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____
  - ☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____ TP ADW organic capacity: _____. Percent: _____
  - ☐ Reasonable potential for adverse effect on operations Why? _____
  - ☐ Reasonable potential for violating PT std or req't Which ones & why? _____
- B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no:
- C. What is Bldg owner name (use DBA if avail.)? _____ (check E-CIS CAPS Customer Info)
- D: What is Bldg owner mailing address? _____ (check E-CIS CAPS Customer Info)

38. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes:
- A. Indicate correct classifications:
  SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
  Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
- B. Explain changes: _____

39. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes:
- A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐
- B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐
- C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐
- D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐
- E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
  (And explain why/why not: _____)
- F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
  Acceptance letter date: _____ Or write company with requirement ☐
- G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐
- H. Comments: _____

40. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes:
- A. Why? _____
- B. Are any changes needed to reasons/details? Yes☐ No☐
- C. If yes, explain: _____
- D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

41. SAMPLE POINTS

						Auto-sampler ready?	DJ (y/n)
SP #	001	Fed.Reg.		Components:	Hospital ww, Kitchen ww, Boiler blow; NCCW-cooling tower, Sanitary, Storm	Yes	No
SP #	004	Fed.Reg.		Components:	Hospital ww, Sanitary, Storm	Yes	No
SP #	005	Fed.Reg.		Components:	Hospital ww, Sanitary, NCCW-autoclaves, Storm	Yes	No
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A

42. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes:
- A. List SPs: _____
- B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

43. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes:
- A. List SPs and reasons: _____

44. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes:
- A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐
- B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐
- C. If No to B, explain:_____
  (Must also write company and require installation of SP)

45. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes:
- A. List Sample Points: 001, 004, 005

46. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐
- A. If any SPs cannot be located or opened, explain: _____
- B. If any SP descript's need to be changed, explain: _____
- C. Is it possible to use an auto-sampler to collect samples (regardless of volume or batches)? Yes☒ No☐
  Update PIMS indicator as needed.
- D. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒
  - E. If yes to C, list SPs & describe: _____
  - F. If yes to C, was company directed to take corrective actions? Yes☐ No☐

47. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/8/16

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

48. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

Water usage shows increase; from July 2017-2018 shows water in ~28,050 ccf, or ~57.5 k-gpd; compare to July 2016-2017 which shows water in ~25,671 ccf, or ~52.6 k-gpd; and July 2015-2016 which shows water in ~22,859 ccf, or ~46.8 k-gpd;
Per Q.15, contact is now metering their lawn watering, and may inquire in the future in regards to updating their RF
No other significant changes to previous inspection.

Industrial Data Report

Facility Name:	SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL		
Facility Identifier:	1020548900	Facility Type:	Industrial User
Physical Location:	1465 S Grand BOULEVARD Saint Louis, MO 63104	Mailing Address:	1465 South Grand Blvd Saint Louis, MO 631041095
MSD Base Map Page / Section:	20 / F3	Facility ID:	642

GENERAL INFORMATION

MSD Sewer Accounts

Account Number	Status
1020548900	Active

Contact Information

First Name:	Last Name:	Title:	Contact Type:	Responsibilities:	Email:	Business Phone:	Cell Phone:
Ms. Wanda	Clark	Plant Operations Assistant	Facility	Field Contact 2nd Alt		314-577-5600	
Mr. Mike	Jones	Plant Operations Supervisor	Facility	Authorized Signatory, Field Contact - Primary	Michael.Jones3@ssmhealth.com	314-577-5327	
Mr. Kevin	Smith	Team Leader Plant Operations	Facility	Authorized Signatory, Billing Contact, Field Contact 1st Alt, Office Contact - Primary		314-268-2768	
Ms. Leslie	Thornburg	MPH, Spec ESSEP	Facility	Authorized Signatory, Office Contact 2nd Alt		314-989-6134	

Inspection

Template:	Industrial Facility Inspection	Start Date:	08/09/2018 08:30 AM
Inspection Type:	Facility Inspection	End Date:	08/09/2018 10:15 AM

Facility Groups

Group Name	Group Category	Group Description
SIU	Facility Classification	Significant Industrial User
TOX	Facility Classification	Toxics-Bearing Process Water or Wastes
RF	Return Factor Criteria	Return Factor Facility
rf_>1000	Return Factor Criteria	Return Factor(s) total >= $1,000/year
*VOL>25K	SIU Criteria	Process Dischcharge => 25,000 GPD

Permit Information

Industrial Data Report

Permit No.:	1020548900 - 1	Permit Type:	Pretreatment
Effective Date:	5/1/2015 12:00:00AM	Expiration Date:	4/30/2020 12:00:00AM
Issued Date:	5/1/2015 12:00:00AM	Permit Status:	Issued

Work Requirement

Task Template	Start Date	End Date	No. of Time	Frequency	Sample Location
Industrial Facility Inspection	06/01/2004	06/30/2050	1	Once/year	
Radiation Discharge	10/01/2005	04/30/2020	1	Once/3 mo	
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Metals - Ag (T04); Oil & Grease (G00); Phenolic Organics - Acids (G00); Total Phenols (single test) (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	05/01/2015	04/30/2020	1	Once/year	001
BOD & TSS; COD; Field - pH & Temperature; Oil & Grease; Phenolic Organics - Acids; Metals – Ag; Total Phenols (single test); Vol Orgs-not incl Acr & 2-chloro (group poll only)	07/01/2015	06/30/2020	1	Once/year	001
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Metals - Ag (T04); Oil & Grease (G00); Phenolic Organics - Acids (G00); Total Phenols (single test) (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	05/01/2015	04/30/2020	1	Once/year	004
BOD & TSS; COD; Field - pH & Temperature; Oil & Grease; Phenolic Organics - Acids; Metals – Ag; Total Phenols (single test); Vol Orgs-not incl Acr & 2-chloro (group poll only)	07/01/2015	06/30/2020	1	Once/year	004
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00); Phenolic Organics - Acids (G00); Total Phenols (single test) (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	05/01/2015	04/30/2020	1	Once/year	005
BOD & TSS; COD; Field - pH & Temperature; Oil & Grease; Phenolic Organics - Acids; Total Phenols (single test); Vol Orgs-not incl Acr & 2-chloro (group poll only)	07/01/2015	06/30/2020	1	Once/year	005

PRODUCTION/SERVICES INFORMATION

Operation Description: Pediatric hospital services

Industrial Data Report

Shift Information

Shift	Start Time	End Time	Average No. of Employees
1	08:00 AM	04:00 PM	600
2	04:00 PM	12:00 AM	400
3	12:00 PM	08:00 PM	350

SIC

SIC Code	SIC Name	SIC Description
8069	8069	Specialty hospitals exc. psychiatric

Raw Material List

Raw material list has not been entered, or does not exist, for the facility.

CHEMICAL INVENTORY INFORMATION

Industrial Data Report

Full Disclosure of Chemicals

Substance Name	Presence Ind	Categorically Related?
(cis & trans) 1,3-Dichloropropene	Known Absent	
1,1,1-Trichloroethane	Known Absent	
1,1,2,2-Tetrachloroethane	Known Absent	
1,1,2-Trichloroethane	Known Absent	
1,1-Dichloroethane	Known Absent	
1,1-Dichloroethene	Known Absent	
1,2,4-Trichlorobenzene	Known Absent	
1,2-Dichlorobenzene	Known Absent	
1,2-Dichloroethane	Known Absent	
1,2-Dichloropropane	Known Absent	
1,2-Diphenylhydrazine	Known Absent	
1,3-Dichlorobenzene	Known Absent	
1,4-Dichlorobenzene	Known Absent	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Known Absent	
2,4,6-Trichlorophenol	Known Absent	
2,4-Dichlorophenol	Known Absent	
2,4-Dimethylphenol	Known Absent	
2,4-Dinitrophenol	Known Present	
2,4-Dinitrotoluene	Known Absent	
2,6-Dinitrotoluene	Known Absent	
2-Chloroethyl vinyl ether	Known Absent	
2-Chloronaphthalene	Known Absent	
2-Chlorophenol	Known Absent	
2-Nitrophenol	Known Absent	
3,3-Dichlorobenzidine	Known Absent	
4,4'-DDD	Known Absent	
4,4'-DDE	Known Absent	
4,4'-DDT	Known Absent	
4,6-Dinitro-2-Methylphenol	Known Absent	
4-Bromophenyl phenyl ether	Known Absent	
4-Chloro-3-Methylphenol	Known Absent	
4-Chlorophenyl phenyl ether	Known Absent	
4-Nitrophenol	Known Absent	
Acenaphthene	Known Present	
Acenaphthylene	Known Present	
Acrolein	Suspected Absent	
Acrylonitrile	Known Absent	

Industrial Data Report

Aldrin	Known Absent
Alpha-BHC	Known Absent
Anthracene	Known Absent
Antimony (Total)	Suspected Absent
Arsenic (Total)	Suspected Absent
Asbestos (Fibrous)	Suspected Present
Benzene	Known Present
Benzidine	Known Absent
Benzo (A) Anthracene	Known Present
Benzo (A) Pyrene	Known Present
Benzo (B) Fluoranthene	Known Present
Benzo (G,H,I) Perylene	Known Present
Benzo (K) Fluoranthene	Known Present
Beryllium (Total)	Suspected Absent
Beta-BHC	Known Absent
Bis (2-Chloroethoxy) Methane	Known Absent
Bis (2-Chloroethyl) Ether	Known Absent
Bis (2-Chloroisopropyl) Ether	Known Absent
Bis (2-EthylHexyl) Phthalate	Known Absent
Bromodichloromethane	Known Absent
Bromoform	Known Absent
Bromomethane	Known Absent
Butylbenzyl Phthalate	Known Absent
Cadmium (Total)	Suspected Absent
Carbon Tetrachloride	Known Absent
Chlordane	Known Absent
Chlorobenzene	Known Absent
Chloroethane	Known Absent
Chloroform	Known Present
Chloromethane	Known Absent
Chromium (Total)	Suspected Absent
Chrysene	Known Present
Copper (Total)	Suspected Absent
Cyanide (Total)	Known Absent
Delta-BHC	Known Absent
Di-n-butyl Phthalate	Known Absent
Di-n-octyl Phthalate	Suspected Absent
Dibenzo (A,H) Anthracene	Known Present
Dibromochloromethane	Known Absent

Industrial Data Report

Dieldrin	Known Absent
Diethyl Phthalate	Known Absent
Dimethyl Phthalate	Known Absent
Endosulfan I	Known Absent
Endosulfan II	Known Absent
Endosulfan Sulfate	Known Absent
Endrin	Known Absent
Endrin Aldehyde	Known Absent
Ethylbenzene	Known Present
Fluoranthene	Known Present
Fluorene	Known Present
Gamma-BHC	Known Absent
Heptachlor	Known Absent
Heptachlor Epoxide	Known Absent
Hexachlorobenzene	Known Absent
Hexachlorobutadiene	Known Absent
Hexachlorocyclopentadiene	Known Absent
Hexachloroethane	Suspected Absent
Indeno (1,2,3-cd) pyrene	Known Present
Isophorone	Known Absent
Lead (Total)	Suspected Present
Mercury (Total)	Suspected Present
Methylene Chloride	Suspected Absent
N-Nitrosodi-n-Propylamine	Known Absent
N-Nitrosodimethylamine	Suspected Absent
N-Nitrosodiphenylamine	Known Absent
Naphthalene	Known Present
Nickel (Total)	Suspected Absent
Nitrobenzene	Suspected Absent
PCB - 1016	Known Absent
PCB - 1221	Known Absent
PCB - 1232	Known Absent
PCB - 1242	Known Absent
PCB - 1248	Known Absent
PCB - 1254	Known Absent
PCB - 1260	Known Absent
Pentachlorophenol	Known Present
Phenanthrene	Known Present
Phenol	Known Present

Industrial Data Report

Pyrene	Known Present
Selenium (Total)	Suspected Absent
Silver (Total)	Known Present
Tetrachloroethene	Suspected Absent
Thallium (Total)	Suspected Absent
Toluene	Known Present
Toxaphene	Known Absent
Trans-1,2-Dichloroethene	Known Absent
Trichloroethene	Known Absent
Vinyl Chloride	Known Absent
Zinc (Total)	Known Present

Process List

Process Name	Process Description	Seasonal?	Status	Process Detail
Non-Sewered: Off-Site Disposal			A	Acids and/or Alkalies, Equipment Oils and/or Grease, Infectious Waste, Kitchen/Food Service Grease, Organic Compounds, Other, Paints or Paint Sludges, Solvents/Thinners
Non-Sewered: On-Site Storage			A	Acids and/or Alkalies, Equipment Oils and/or Grease, Infectious Waste, Kitchen/Food Service Grease, Organic Compounds, Other, Paints or Paint Sludges, Solvents/Thinners
Product/Service	General hospital		A	

Control Plans

Name	Type	Approval Date	Status
001310	MDNR - Hazardous Waste Program	11/10/2000	Approved
24-00196-07	Nuclear Regulatory Commission	11/03/1997	Approved
MOD075904839	EPA - Hazardous Waste Program	09/29/1997	Approved
Slug Discharge/Spill Control Plan (start 7/1/2004)	Slug Discharge/Spill Control Plan	07/01/2004	Approved

PROCESS FLOW DETAILS

Industrial Data Report

Process Flow Details

Flow Stream Name	Flow Direction	Flow Type	Status
1020548900	Incoming	Water Supply	A

Flow Data List

Start Date	End Date	Reading Type	Flow Value
04/27/2017	07/26/2017	Total Volume	16324.0000 CCF
03/11/2017	04/27/2017	Total Volume	10218 CCF
10/26/2016	03/10/2017	Total Volume	10676 CCF

Average Daily Volume: 175.44 CCF

Total Average Daily Volume: 175.44 CCF

Facility Flow Methodology

Name	Formula	Flow Start Date	Return Factor
ImportedRF1020548900	(@1020548900 - @COOLING_TOWER - @IRRIGATION) / @1020548900	01/17/2018	0.51

PRETREATMENT INFORMATION

Pretreatment System(s)

Pretreatment Type:	Primary Purpose:	Effective Date:	Sample Location
Grease Trap		02/20/2003	001

SAMPLE LOCATION INFORMATION

Sample Locations

Location Name	Location Type	Sample Location Description	Status	Flow Stream Name (Fed Regulation)
001	SP - Ordinance Only	MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from S	A	Boiler Blowdown (), Hospital Waste (), Kitchen Waste (), Non Contact Cooling Water (), Sanitary (), Storm Water ()
004	SP - Ordinance Only	MH 3' W from SW corner of emergency bldg	A	Hospital Waste (), Sanitary (), Storm Water ()
005	SP - Ordinance Only	Manhole 12' N, 10' W from the NW inside corner of W bldg	A	Hospital Waste (), Non Contact Cooling Water (), Sanitary (), Storm Water ()

Industrial Data Report

L-01	LAT - Sanitary Or San+Storm (Combined)	LIne from building northwest to Vista Av.	A
L-03	LAT - Sanitary Or San+Storm (Combined)	8" line exiting NW from SW main hospital entrance into manhole	A
L-04	LAT - Sanitary Or San+Storm (Combined)	8" lateral exiting W from North side West building	A

Industrial Data Report

Sample Locations Flow Data by Sample Location and Flow Stream

Sample Location: 001 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Boiler Blowdown	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	1265 GPD

Hospital Waste	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	18742 GPD

Kitchen Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	5000 GPD

Non Contact Cooling Water	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	1710 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	22680 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/24/2009	04/30/2020	Average	0 GPD

Sample Location: 004 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Hospital Waste	Outgoing	Dilution	Continuous

Industrial Data Report

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	2199 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	3200 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	12/17/2010	04/30/2020	Average	0 GPD

Sample Location: 005 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Hospital Waste	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	4687 GPD

Non Contact Cooling Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	325 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	01/21/2015	04/30/2020	Average	1120 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/24/2009	04/30/2020	Average	0 GPD

Industrial Data Report

Sample Locations Flow Data by Meter Reads only

Sample Location: 001 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Boiler Blowdown		01/21/2015	04/30/2020	Average	1265 GPD
Hospital Waste		01/21/2015	04/30/2020	Average	18742 GPD
Kitchen Waste		01/21/2015	04/30/2020	Average	5000 GPD
Non Contact Cooling Water		01/21/2015	04/30/2020	Average	1710 GPD
Sanitary		01/21/2015	04/30/2020	Average	22680 GPD
Storm Water		11/24/2009	04/30/2020	Average	0 GPD

Sample Location: 004 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Hospital Waste		01/21/2015	04/30/2020	Average	2199 GPD
Sanitary		01/21/2015	04/30/2020	Average	3200 GPD
Storm Water		12/17/2010	04/30/2020	Average	0 GPD

Sample Location: 005 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Hospital Waste		01/21/2015	04/30/2020	Average	4687 GPD
Non Contact Cooling Water		01/21/2015	04/30/2020	Average	325 GPD
Sanitary		01/21/2015	04/30/2020	Average	1120 GPD
Storm Water		11/24/2009	04/30/2020	Average	0 GPD

Associated Sample Locations

Location Name	Associated Location Name	Associated Location Status
L-01	001	A
L-02	002	I
	003	I
L-03	004	A
L-04	005	A

ADDITIONAL COMMENTS

Industrial Data Report

Facility Comments

Comment Type	Comment
Facility Special Instructions	SP004 access is through gate entrance by the helipad.

7-12

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

PART I: IDENTIFYING INFORMATION

SSM

Company Name: **Cardinal Glennon Hospital**

1020548900

Permit No: -

Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 7/11/2018

RECEIVED
JUL 12 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
3/14/19

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Labs ; Larry Oliver

Analyses Performed By: PDC Labs

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004 (Grab)		005 (Grab)		(Grab)
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		6/11/18-6/12/18		6/11/18-6/12/18		6/11/18-6/12/18		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		11:00-11:00		12:00-12:00		11:30-11:30		
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	49000	E	5400	E	~~6400~~ 6100	gpd
BOD	—	C	180	C	130	C	120	mg/L
COD	—	C	730	C	410	C	370	mg/L
Oil & Grease	200	G	67	G	10	G	8.7	mg/L
Silver	0.5	C	<.002	C	<.002	C	<.0020	mg/L
Temperature	60	G	28.7	G	27.7	G	26.1	deg C
Phenol	21	G	<.050	G	.16	G	0.17	mg/L
Total Suspended Solids	—	C	110	C	44	C	140	mg/L
pH	5.5-11.5	G	7.93	G	8.43	C	8.45	SU
Total toxic organics	5.844	CG	—	CG	—	CG	—	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
JUN 26 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Leslie Thornburg

Title: ESSEP Specialist Telephone: 314-989-6134

Signature: Leslie Thornburg Date: 6/25/18

MSD 035280

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 4/4/2018

RECEIVED
APR 04 2018
DIVISION OF ENVIRONMENTAL COMPLIANCE

SR
3/6

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING Grab

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		02/06-07/2018		02/06-07/2018		02/06-07/2018		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		12:30-12:30		13:30-13:30		11:00-11:00		
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	49000	E	5400	E	6100	gpd
Biological Oxygen Demand	*****	C	160	C	130	C	75	mg/l
Chemical Oxygen Demand	******	C	340	C	400	C	360	mg/l
Oil and Grease	200	G	21	G	12	G	6.5	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	15.3	G	14.9	G	9.40	deg C
Phenol	21	G	<0.050	G	0.11	G	<0.050	mg/l
Total Suspended Solids	******	C	55	C	63	C	100	mg/l
pH	5.5-11.5	G	8.82	G	8.51	C	8.70	SU
Total Toxic Organics	5.844	C,G	0.100	C,G	0.1145	C,G	0.100	mg/l

You must complete and sign the certification statements on the second page.

RECEIVED

MAR 06 2018

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035282

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Leslie Thornburg

Title: ESSEP Specialist Telephone: 314-989-6134

Signature: Leslie Thornburg Date: 3-6-18

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-01
Name: MSD 001 Annual Comp.
Matrix: Waste Water

Sampled: 02/07/18 12:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Diethyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Fluorene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Hexachlorocyclopentadiene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Isophorone	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Naphthalene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*72 %*	*18.9-92.4*		*02/08/18 12:15*	*02/09/18 15:15*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Pentachlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Phenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Surrogate: Phenol- d5	*13 %*	*10-32.4*		*02/08/18 12:15*	*02/09/18 15:15*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*79 %*	*15.8-107*		*02/08/18 12:15*	*02/09/18 15:15*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Total Metals - STL							
Silver	< 0.0020	mg/L		02/12/18 10:00	02/13/18 10:56	KLM	EPA 200.7

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-01
Name: MSD 001 Annual Comp.
Matrix: Waste Water

Sampled: 02/07/18 12:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
General Chemistry - STL							
BOD	160	mg/L		02/08/18 08:11	02/09/18 08:11	TJA	SM 5210B
COD	340	mg/L		02/09/18 14:00	02/09/18 16:23	KMS	SM 5220D
Solids - total suspended solids (TSS)	55	mg/L		02/09/18 13:23	02/09/18 14:54	TJG	SM 2540D
Semivolatile Organics - STL							
1,2,4-Trichlorobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2,3,7,8-TCDD Screen	< 50.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*45 %*	*10-102*		*02/08/18 12:15*	*02/09/18 15:15*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2,4-Dinitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2,6-Dinitrotoluene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*71 %*	*12.2-95.2*		*02/08/18 12:15*	*02/09/18 15:15*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*19 %*	*10-48.3*		*02/08/18 12:15*	*02/09/18 15:15*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
3,3'-Dichlorobenzidine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
4-Nitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Azobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625*
Benzidine	< 10.0	ug/L	Q1, X	02/08/18 12:15	02/09/18 15:15	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Chrysene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:15	MAK	EPA 625

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-02
Name: MSD 001 Annual Grab
Matrix: Waste Water

Sampled: 02/07/18 12:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Field - STL							
pH	8.82	pH Units		02/07/18 12:30	02/07/18 12:30	LLO	SM*
Temperature, Field Measured	15.3	°C		02/07/18 12:30	02/07/18 12:30	LLO	SM*
General Chemistry - STL							
Field Flow	49000	GPD		02/07/18 12:30	02/07/18 12:30	LLO	varies*
Oil & Grease - total	21	mg/L		02/12/18 11:19	02/12/18 11:19	TJG	EPA 1664
Phenol	< 0.050	mg/L		02/12/18 10:14	02/12/18 10:29	SCI	EPA 420.1
Volatile Organics - STL							
1,1,1-Trichloroethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*102 %*	*59.6-134*		*02/08/18 16:49*	*02/08/18 16:49*	*KMM*	*EPA 624**
1,2-Dichloropropane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
1,3-Dichloropropene - Total	< 10	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624*
1,4-Dichlorobenzene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Acrolein	< 50	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Acrylonitrile	< 10	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Benzene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Bromodichloromethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Surrogate: Bromofluorobenzene	*103 %*	*59.3-148*		*02/08/18 16:49*	*02/08/18 16:49*	*KMM*	*EPA 624**
Surrogate: Bromofluorobenzene	*103 %*	*59.3-148*		*02/08/18 16:49*	*02/08/18 16:49*	*KMM*	*EPA 624**
Bromoform	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Bromomethane	< 10	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Carbon tetrachloride	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Chlorobenzene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Chloroethane	< 10	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Chloroform	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Chloromethane	< 10	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Dibromochloromethane	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Ethylbenzene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Methylene chloride	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Tetrachloroethene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Toluene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Surrogate: Toluene-d8	*102 %*	*64.4-132*		*02/08/18 16:49*	*02/08/18 16:49*	*KMM*	*EPA 624**
trans-1,2-Dichloroethene	< 10			02/08/18 16:49	02/08/18 16:49	KMM	EPA 624

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-02
Name: MSD 001 Annual Grab
Matrix: Waste Water

Sampled: 02/07/18 12:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Trichloroethene	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624
Vinyl chloride	< 5.0	ug/L		02/08/18 16:49	02/08/18 16:49	KMM	EPA 624

RECEIVED
MAR 01 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-03
Name: MSD 004 Annual Comp.
Matrix: Waste Water

Sampled: 02/07/18 13:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
General Chemistry - STL							
BOD	130	mg/L		02/08/18 08:11	02/09/18 08:11	TJA	SM 5210B
COD	400	mg/L		02/09/18 14:00	02/09/18 16:23	KMS	SM 5220D
Solids - total suspended solids (TSS)	63	mg/L		02/09/18 13:23	02/09/18 14:54	TJG	SM 2540D
Semivolatile Organics - STL							
1,2,4-Trichlorobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2,3,7,8-TCDD Screen	< 50.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*34 %*	*10-102*		*02/08/18 12:15*	*02/09/18 15:44*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2,4-Dinitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2,6-Dinitrotoluene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*73 %*	*12.2-95.2*		*02/08/18 12:15*	*02/09/18 15:44*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*16 %*	*10-48.3*		*02/08/18 12:15*	*02/09/18 15:44*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
3,3'-Dichlorobenzidine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
4-Nitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Azobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625*
Benzidine	< 10.0	ug/L	Q1, X	02/08/18 12:15	02/09/18 15:44	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	14.5	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Chrysene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-03
Name: MSD 004 Annual Comp.
Matrix: Waste Water

Sampled: 02/07/18 13:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Diethyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Fluorene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Hexachlorocyclopentadiene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Isophorone	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Naphthalene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*75 %*	*18.9-92.4*		*02/08/18 12:15*	*02/09/18 15:44*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Pentachlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Phenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Surrogate: Phenol- d5	*12 %*	*10-32.4*		*02/08/18 12:15*	*02/09/18 15:44*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*83 %*	*15.8-107*		*02/08/18 12:15*	*02/09/18 15:44*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 15:44	MAK	EPA 625
Total Metals - STL							
Silver	< 0.0020	mg/L		02/12/18 14:00	02/13/18 11:56	KLM	EPA 200.7

RECEIVED
MAR 06
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-04
Name: MSD 004 Annual Grab
Matrix: Waste Water

Sampled: 02/07/18 13:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Field - STL							
pH	8.51	pH Units		02/07/18 13:30	02/07/18 13:30	LLO	SM*
Temperature, Field Measured	14.9	°C		02/07/18 13:30	02/07/18 13:30	LLO	SM*
General Chemistry - STL							
Field Flow	5400	GPD		02/07/18 13:30	02/07/18 13:30	LLO	varies*
Oil & Grease - total	12	mg/L		02/12/18 11:19	02/12/18 11:19	TJG	EPA 1664
Phenol	0.11	mg/L		02/12/18 10:14	02/12/18 10:29	SCI	EPA 420.1
Volatile Organics - STL							
1,1,1-Trichloroethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*59.6-134*		*02/08/18 18:16*	*02/08/18 18:16*	*KMM*	*EPA 624**
1,2-Dichloropropane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
1,3-Dichloropropene - Total	< 10	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624*
1,4-Dichlorobenzene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Acrolein	< 50	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Acrylonitrile	< 10	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Benzene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Bromodichloromethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Surrogate: Bromofluorobenzene	*102 %*	*59.3-148*		*02/08/18 18:16*	*02/08/18 18:16*	*KMM*	*EPA 624**
Surrogate: Bromofluorobenzene	*102 %*	*59.3-148*		*02/08/18 18:16*	*02/08/18 18:16*	*KMM*	*EPA 624**
Bromoform	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Bromomethane	< 10	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Carbon tetrachloride	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Chlorobenzene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Chloroethane	< 10	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Chloroform	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Chloromethane	< 10	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Dibromochloromethane	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Ethylbenzene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Methylene chloride	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Tetrachloroethene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Toluene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Surrogate: Toluene-d8	*101 %*	*64.4-133*		*02/08/18 18:16*	*02/08/18 18:16*	*KMM*	*EPA 624**
trans-1,2-Dichloroethene	< 10	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-04
Name: MSD 004 Annual Grab
Matrix: Waste Water

Sampled: 02/07/18 13:30
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Trichloroethene	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624
Vinyl chloride	< 5.0	ug/L		02/08/18 18:16	02/08/18 18:16	KMM	EPA 624

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-05
Name: MSD 005 Annual Comp.
Matrix: Waste Water

Sampled: 02/07/18 11:00
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
General Chemistry - STL							
BOD	75	mg/L		02/08/18 08:11	02/09/18 08:11	TJA	SM 5210B
COD	360	mg/L		02/09/18 14:00	02/09/18 16:23	KMS	SM 5220D
Solids - total suspended solids (TSS)	100	mg/L		02/09/18 13:23	02/09/18 14:54	TJG	SM 2540D
Semivolatile Organics - STL							
1,2,4-Trichlorobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2,3,7,8-TCDD Screen	< 50.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*36 %*	*10-102*		*02/08/18 12:15*	*02/09/18 16:12*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2,4-Dinitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2,6-Dinitrotoluene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*75 %*	*12.2-95.2*		*02/08/18 12:15*	*02/09/18 16:12*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*19 %*	*10-48.3*		*02/08/18 12:15*	*02/09/18 16:12*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
3,3'-Dichlorobenzidine	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
4-Nitrophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Azobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625*
Benzidine	< 10.0	ug/L	Q1, X	02/08/18 12:15	02/09/18 16:12	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Chrysene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-05
Name: MSD 005 Annual Comp.
Matrix: Waste Water

Sampled: 02/07/18 11:00
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Diethyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Fluorene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Hexachlorocyclopentadiene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Isophorone	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Naphthalene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*73 %*	*18.9-92.4*		*02/08/18 12:15*	*02/09/18 16:12*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Pentachlorophenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Phenol	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Surrogate: Phenol- d5	*14 %*	*10-32.4*		*02/08/18 12:15*	*02/09/18 16:12*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*84 %*	*15.8-107*		*02/08/18 12:15*	*02/09/18 16:12*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		02/08/18 12:15	02/09/18 16:12	MAK	EPA 625
Total Metals - STL							
Silver	< 0.0020	mg/L		02/12/18 14:00	02/13/18 11:59	KLM	EPA 200.7

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-06
Name: MSD 005 Annual Grab
Matrix: Waste Water

Sampled: 02/07/18 11:00
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Field - STL							
pH	8.70	pH Units		02/07/18 11:00	02/07/18 11:00	LLO	SM*
Temperature, Field Measured	9.40	°C		02/07/18 11:00	02/07/18 11:00	LLO	SM*
General Chemistry - STL							
Field Flow	6100	GPD		02/07/18 11:00	02/07/18 11:00	LLO	varies*
Oil & Grease - total	6.5	mg/L		02/12/18 11:19	02/12/18 11:19	TJG	EPA 1664
Phenol	< 0.050	mg/L		02/12/18 10:14	02/12/18 10:29	SCI	EPA 420.1
Volatile Organics - STL							
1,1,1-Trichloroethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*101 %*	*59.6-134*		*02/08/18 18:45*	*02/08/18 18:45*	*KMM*	*EPA 624**
1,2-Dichloropropane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
1,3-Dichloropropene - Total	< 10	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624*
1,4-Dichlorobenzene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
2-Chloroethylvinyl ether	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Acrolein	< 50	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Acrylonitrile	< 10	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Benzene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Bromodichloromethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Surrogate: Bromofluorobenzene	*102 %*	*59.3-148*		*02/08/18 18:45*	*02/08/18 18:45*	*KMM*	*EPA 624**
Surrogate: Bromofluorobenzene	*102 %*	*59.3-148*		*02/08/18 18:45*	*02/08/18 18:45*	*KMM*	*EPA 624**
Bromoform	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Bromomethane	< 10	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Carbon tetrachloride	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Chlorobenzene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Chloroethane	< 10	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Chloroform	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Chloromethane	< 10	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Dibromochloromethane	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Ethylbenzene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Methylene chloride	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Tetrachloroethene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Toluene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Surrogate: Toluene-d8	*100 %*	*64.4-131*		*02/08/18 18:45*	*02/08/18 18:45*	*KMM*	*EPA 624**
trans-1,2-Dichloroethene	< 10	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 8021252-06
Name: MSD 005 Annual Grab
Matrix: Waste Water

Sampled: 02/07/18 11:00
Received: 02/07/18 15:47

Parameter	Result	Unit	Qualifier	Prepared	Analyzed	Analyst	Method
Trichloroethene	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624
Vinyl chloride	< 5.0	ug/L		02/08/18 18:45	02/08/18 18:45	KMM	EPA 624

RECEIVED
MAR 06 2018
DIVISION OF
ENVIRONMENTAL COMPLIANCE

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

PART I: IDENTIFYING INFORMATION

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 63104** 1020-5489-00
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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: RECEIVED Date: 1/12/18

JAN 17 2018

DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

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

Attn: Kevin Smith
Team Leader Plant Operations

INDUSTRIAL WASTEWATER DISCHARGE PERMIT NUMBER 1020548900.

ANNUAL PERMIT FEE NOTICE

For permits in effect as of **10/01/2017**.

Fee will be included in a separate bill from the Metropolitan St. Louis Sewer District.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2016 through September 30, 2017, issued in accordance with the Metropolitan St. Louis District Ordinance #12413 for the location at **1465 South Grand Blvd**.

Base charge @ $150.00 per permit			$150.00
Volume charge @$0.72 per average daily Ccf	71.30	Ccf(s)	51.34
Sample Point Charge @$100.00 per sample point	3	Point(s)	300.00
		Total Fee Due:	**$501.34**

For inquiries about the Annual Permit Fee, please call 314-436-8756. For inquiries about payment of the fee, which will appear on your upcoming monthly bill, please call 1-866-281-5737.

SR
12/12

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		11/20-21/2017		11/20-21/2017		11/20-21/2017		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		12:30-12:30 Grab		13:30-13:30 Grab		13:00-13:00 Grab		
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	49400	E	5400	E	6100	gpd
Biological Oxygen Demand	*****	C	180	C	110	C	210	mg/l
Chemical Oxygen Demand	******	C	370	C	330	C	710	mg/l
Oil and Grease	200	G	26	G	13	G	9.6	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	21.5	G	19.1	G	16.8	deg C
Phenol	21	G	<0.050	G	0.095	G	<0.050	mg/l
Total Suspended Solids	******	C	81	C	47	C	290	mg/l
pH	5.5-11.5	G	8.25	G	8.41	G	8.65	SU
Total Toxic Organics	5.844	C,G		C,G		C,G		mg/l

You must complete and sign the certification statements on the second page.

RECEIVED
DEC 12 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Leslie Thornburg
	Title: ESSEP Specialist Telephone: 814-989-6134
	Signature: Leslie Thornburg Date: 12/11/17

RECEIVED
DEC 12 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

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

PART I: IDENTIFYING INFORMATION

1020-5489-00

Company ~~Name~~ SSM: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 10/10/17

RECEIVED
OCT 10 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR 831

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		08/16-17/2017		08/16-17/2017		08/16-17/2017		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		12:00-12:00		13:00-13:00		12:30-12:30		
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	49400	E	5400	E	6100	gpd
Biological Oxygen Demand	*****	C	76	C	70	C	17	mg/l
Chemical Oxygen Demand	******	C	200	C	200	C	140	mg/l
Oil and Grease	200	G	19	G	6.3	G	<5.0	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	27.4	G	26.6	G	24.8	deg C
Phenol	21	G	0.060	G	0.060	G	0.053	mg/l
Total Suspended Solids	******	C	34	C	35	C	34	mg/l
pH	5.5-11.5	G	7.79	G	7.74	C	7.94	SU
Total Toxic Organics	5.844	C,G		C,G		C,G		mg/l

Grab Grab grab

You must complete and sign the certification statements on the second page.

RECEIVED

AUG 29 2017

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035301

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Leslie Thornburg
	Title: ESSEP Specialist Telephone: 314-989-6134
	Signature: Leslie Thornburg Date: 8/29/2017

RECEIVED
AUG 29 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

RA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 7/20/17

RECEIVED
JUL 20 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

8

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL Account #: 1020548900
Premise Address: 1465 S Grand Blvd Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Plant Ops Team Leader Phone#: 314.268.2768
Inspector: Scott Rehmer
Others Present: Mike Jones (Plant Ops Supervisor); Leslie Thornburg (Specialist - ESSEP)
Inspection Date: 7/7/17 Time: From 10:00 AM To 11:40 AM (Last Insp. 7/8/16)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: 3 meters at 1 premise address, therefore ONE account #
   B. Were any changes (including to the primary or changes only to suffixes) for acct no's with RFs? NA☐ Yes☐ No☒
   C. If yes to B, was Cost Recovery Unit informed of the change(s)? NA☒ Yes☐ No☐
   D. Did all acct no's have water usage on PIMS? Yes☒ No☐
   E. If no to D, explain: _____

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Hospital waste	Cont	Yes	Daily	001, 004, 005
NCCW - autoclaves	Batch	Yes	Daily	005
Kitchen waste - dietary, food prep	Cont	Yes	Daily	001
	(None)	N/A		
	(None)	N/A		
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
None (metallic replacement has been discontinued)	n/a

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
   If yes: A. List sample points: 001
   B. What is the frequency for cleaning & maintenance? ~ monthly
   C. Are any additives used in traps? Yes☐ No☒
   D. If yes to C, was company warned MSD will bill them for blockages they cause? Yes☒ No☐
   E. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
   If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes: A. List pollutants & process: _____

B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐

C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐

(MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)

D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐

(including those that are 'No PSES' and 'General Stds Only')

If yes: A. List regulation & describe operations (including any discharge):

40 CFR 460 Subpart A - n/a - hospital point source category

B. Explain why it is N/A: This subpart has not been promulgated, thus general standards apply.

8. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☐ No☒

If yes: A. List regulation & describe operations (including any discharge):

_____

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☐

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐

(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

9. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒

(New certification also is required for each permit renewal)

If yes: A. Certification date: _____

B. Pollutants accepted by MSD as absent: _____

C Were any requested "absent" pollutants rejected by MSD? Yes☐ No☐

If yes to C: D. List them and explain why: _____

E. Were all the accepted pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐

(If compared to intake water levels, explain details below)

If no to E: F. Explain: _____

G. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐

H. Comments: _____

10. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

11. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

12. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes: A. Describe operations & disposal: Radioactive isotopes for diagnostic purposes

B. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☐ Yes☒ No☐

(If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)

C. Amount discharged in most recent four complete calendar quarters: None (0 mCi)

D. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

13. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

14. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:
A walk-through tour showed no excessive water usage for hospital this size; most of their usage comes from hospital waste associated with patient care, employee sanitary use, kitchen waste, boilers, cooling towers, & lawn irrigation.

15. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Current RF=0.51, from cooling towers & boilers; addition of lawn watering may reduce the RF..

B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

16. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____

B. Latest approval date: _____

C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

17. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____

B. Date originally applied: _____, or as part of variance above? ☐

18. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

20. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____

B. Explain any marked: _____

21. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?
The fuel containers are double walled, all solvents and lab solvent waste are in appropriate containers and cabinets, all rendering containers are kept away from drains.

22. DOES COMPANY HAVE ANY NPDES PERMITS? Yes☐ No☒

If yes: A. Receiving stream:_____

B. Does it have a MDNR general permit for stormwater discharges from industrial activities? Yes☐ No☐
If yes to B: Permit #: MO-R_____

C. Does it have a MDNR general permit for wastewater discharges? Yes☐ No☐
If yes to C: Permit #: MO-G_____ Permitted activity:_____

D. Does it have a MDNR site specific permit for wastewater discharges? Yes☐ No☐
If yes to D: Permit #: MO0_____

Outfall	Description	Vol (GPD)	Components

E. Comments: _____

23. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____

B. What needs to be done? _____

C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

24. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control, & CounterMeasures Plan	November 2012
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? Yes☒ No☐
(must be done)

C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒

D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☒

E. Explain why/why not for C or D: Plans scheduled to be updated this Fall 2017; current plan is comprehensive & addresses prevention, spills, contacts, response, cleanup, storage containers, containments, inspections, plant physical layout, etc.

25. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____

B. Priority pollutants (or "none"): _____

C. How is spent solvent disposed? _____
(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

26. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A. Solvent name/ components

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Chloroform, phenols, etc.	Lab reagent	Yes☐ No☒	Consumed or hauled	Yes☒ No☐
BTEX, naphthalene	Diesel fuel, generators	Yes☐ No☒	Used for fuel	Yes☒ No☐
Acetone	Lab reagent	Yes☐ No☒	Consumed or hauled	Yes☐ No☒
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

27. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes:
- A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
- B. If no to A, date of last update for SMP: _____
- C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
- D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
  (If no to C or D, write company and require submittal and/or update)

28. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐
- A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
  (Must post if company generates process wastewater or stores chemicals of concern)

29. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. How frequently is sampling required? Quarterly
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

30. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☐ No☒

  If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
- F. If no to A,B,C, or E, _____ explain needed changes:

31. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
- A. At which SPs? _____
- B. Are discharge limits in PIMS "alert only"? (If not, change to that & make note: _____) Yes☐ No☐
- C. Does company submit quarterly summaries? Yes☐ No☐
- D. If no, explain: _____

32. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes: A. Is company having the samples analyzed Yes☐ No☐

B. How does company insure proper preservation, holding times & analytical methods?

_____

C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐

D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐

E. If no to C, or D, explain: _____

F. Does company still want to split samples? Yes☐ No☐

G. Comments: _____

33. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes: A. Is requirement contained in permit ☒ or other document ☐.

B. If other document, date & description: _____

C. What is required to be reported? Rad material discharge report

D. How frequently are reports required? Quarterly

E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐

F. If no, explain: _____

34. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes: A. Type and date: _____

B. Have the reports & actions been on-time & complete? Yes☐ No☐

C. If no, explain: _____

35. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐

[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no: A. Describe: _____

B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

36. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no: A. How long does company retain records? _____

B. Was company told to retain for at least 5 years, per ordinance? Yes☒ No☐

C. Where are they kept? Contact keeps all MSD records in main office. hard copies & electronic.

37. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:

☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____

☒ Process discharge => 25,000 GPD Total process volume: ~ 31,000 gpd

☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____

☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____

TP ADW organic capacity: _____. Percent: _____

☐ Reasonable potential for adverse effect on operations Why? _____

☐ Reasonable potential for violating PT std or req't Which ones & why? _____

B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no: C. What is Bldg owner name (use DBA if avail.)? _____
(check E-CIS CAPS Customer Info)

D: What is Bldg owner mailing address? _____
(check E-CIS CAPS Customer Info)

38. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:

SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐

Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

39. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes:
- A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐
- B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐
- C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐
- D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐
- E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
  (And explain why/why not: _____)
- F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
  Acceptance letter date: _____ Or write company with requirement ☐
- G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐
- H. Comments: _____

40. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes:
- A. Why? _____
- B. Are any changes needed to reasons/details? Yes☐ No☐
- C. If yes, explain: _____
- D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

41. SAMPLE POINTS

						Auto-sampler ready?	DJ (y/n)
SP #	001	Fed.Reg.		Components:	Hospital ww, Kitchen ww, Boiler blow; NCCW-cooling tower, Sanitary, Storm	Yes	No
SP #	004	Fed.Reg.		Components:	Hospital ww, Sanitary, Storm	Yes	No
SP #	005	Fed.Reg.		Components:	Hospital ww, Sanitary, NCCW-autoclaves, Storm	Yes	No
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A

42. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes:
- A. List SPs: _____
- B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

43. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes:
- A. List SPs and reasons: _____

44. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes:
- A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐
- B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐
- C. If No to B, explain:_____
  (Must also write company and require installation of SP)

45. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes:
- A. List Sample Points: 001, 004, 005

46. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐
- A. If any SPs cannot be located or opened, explain: _____
- B. If any SP descript's need to be changed, explain: _____
- C. Is it possible to use an auto-sampler to collect samples (regardless of volume or batches)? Yes☒ No☐
  Update PIMS indicator as needed.
- D. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒
  - E. If yes to C, list SPs & describe: _____
  - F. If yes to C, was company directed to take corrective actions? Yes☐ No☐

47. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/8/16

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

48. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

Updated facility contact list;

Discontinued "metallic replacement," or silver recovery, from PT at SP002 (contact says that these were removed several years ago);

Water usage consistent; from July 2016-June 2017 shows water in ~96 k-gpd, or ~48.9 k-gpd with RF, versus ~60.9 k-gpd out;

compare to July 2015-June 2016 shows water in ~88.5 k-gpd; and July 2014-June 2015 shows water in ~84.8 k-gpd;

Per Q.15, contact may be inquiring soon in regards to updating their RF, due to their lawn watering now being metered.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	TOX

WUNNENBERG INFO.

Base Map 20F3
Wun: St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

PR25 Process Disch => 25,000 GPD

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

Billing Address
1465 South Grand Blvd.
St Louis, MO. 63104

INSPECTION INFORMATION

Next Due	Insp Rslt	
07/07/2017	RIN	Scott Rehmer

PERMIT INFORMATION

Issue Date: 05/01/2015
Expire Date: 04/30/2020
Extended Date:
Writer Scott Rehmer

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke
IUQ Recvd Date: 11/03/2014
Reviewer: David Kupke
IUQ Recvd Date: 11/24/2009
Reviewer: David Kupke

CONTACTS

BILL	Kevin Smith	Team Leader Plant Operations	OFF	(314) 268-2768 Ext.
FLD1	Mike Jones	Plant Operations Supervisor	OFF	(314) 577-5327 Ext.
	Mike Jones	Plant Operations Supervisor	CELL	(314) 678-5123 Ext.
FLD2	Kevin Smith	Team Leader Plant Operations	CELL	(314) 678-2031 Ext.
	Kevin Smith	Team Leader Plant Operations	OFF	(314) 268-2768 Ext.
FLD3	Wanda Clark	Plant Operations Assistant	OFF	(314) 577-5600 Ext. 5307
OFF1	Kevin Smith	Team Leader Plant Operations	OFF	(314) 268-2768 Ext.
OFF3	Leslie Thornburg	MPH, Spec ESSEP	CELL	(816) 518-9214 Ext.
	Leslie Thornburg	MPH, Spec ESSEP	OFF	(314) 989-6134 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 **Hrs:** 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage Y **On-Site Disposal** N **Off-Site Disposal** Y

11/03/2014	Acids and/or Alkalies		22	LBS
11/03/2014	Equipment Oils and/o		250	GAL
11/03/2014	Infectious Waste	Medical waste	5500	LBS
11/03/2014	Kitchen/Food Service		30000	LBS
11/03/2014	Organic Compounds		16	LBS
11/03/2014	Paints or Paint Sludge:		800	LBS
11/03/2014	Solvents/Thinners		2098	LBS
11/03/2014	Other	medical and pharmaceutic	354	LBS
11/03/2014	Other	universal waste	356	LBS

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

PRODUCTS

EFF DATE	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	General hospital			

Report No. PIMS012A 07/10/2017 8:03:56 am
Data Date & Time: 07/10/2017 8:03:56 am

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

SEWER ACCOUNTS

Sewer Accounts
1020548900

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 06/01/2014 **End Date =** 12/31/2017 **Wdavs** **Cdavs**

Acct. No.			Consumption					Discharge	
1020548900			**CCF's**	**Gallons**				**Gal/ Wdav**	**Gal/ Cdav**
1020548900	05/07/2014	08/12/2014	13,290	13,290	A	98	98	98	
1020548900	08/13/2014	11/07/2014	15,649	28,939		87	87	185	
1020548900	11/08/2014	01/20/2015	6,666	35,605		74	74	259	
1020548900	01/21/2015	04/16/2015	6,703	42,308		86	86	345	
1020548900	04/17/2015	07/17/2015	13,944	56,252		92	92	437	
1020548900	07/18/2015	10/15/2015	13,683	69,935		90	90	527	
1020548900	10/16/2015	01/19/2016	8,730	78,665		96	96	623	
1020548900	01/20/2016	04/26/2016	10,276	88,941		98	98	721	
1020548900	04/27/2016	07/26/2016	13,691	102,632		91	91	812	
1020548900	07/27/2016	10/25/2016	16,445	119,077		91	91	903	
1020548900	10/26/2016	03/10/2017	10,676	129,753		136	136	1,039	
1020548900	03/11/2017	04/27/2017	10,218	139,971		48	48	1,087	
RF 0.51	**Acct. Total**		139,971	.04,705,586		1,087	1,087	49,126	49,126
	Facility Total		139,971						

Report No. PIMS012A 07/10/2017 8:03:56 am
Data Date & Time: 07/10/2017 8:03:56 am

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	351C	Trunk Sewer	46 - Rock Springs

Description LIne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from S

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	11/24/09
Boiler Blowdown		1,265	GPD		GPD	D	1/21/15
Non Contact Coolir		1,710	GPD		GPD	D	1/21/15
Sanitary		22,680	GPD		GPD	D	1/21/15
Hospital Waste		18,742	GPD		GPD	D	1/21/15
Kitchen Waste	Food prep	5,000	GPD		GPD	D	1/21/15
	Total Flow Avg =	**49,397**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	569C	Trunk Sewer	46 - Rock Springs

Description 8" line exiting NW from SW main hospita

Sewer Route N along Spring, W along Vista,to 39th St,

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency bldg

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	12/17/1(
Sanitary		3,200	GPD		GPD	D	1/21/15
Hospital Waste		2,199	GPD		GPD	D	1/21/15
	Total Flow Avg =	**5,399**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
04	Sanitary Or Combined	21F3	607C	Trunk Sewer	46 - Rock Springs

Description 8" lateral exiting W from North side West

Sewer Route N onto Vista Ave., West on Vista to 39th S

SAMPLE POINT NO. 005 Ordinance **NPDES Outfall No.**

Description Manhole 12' N, 10' W from the NW inside corner of W bldg

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	11/24/09
Non Contact Coolir	Autoclaves	325	GPD		GPD	D	1/21/15
Sanitary		1,120	GPD		GPD	D	1/21/15
Hospital Waste		4,687	GPD		GPD	D	1/21/15
	Total Flow Avg =	**6,132**		**Max =**			

PRETREATMENT TYPES

SP	EFF DATE	TYPE	DESCRIPTION
001	02/20/2003	DC28	Grease Trap

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSI**

PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Asbestos (Fibrous)	SP	Silver (Total)	KP	Zinc (Total)	KP
Mercury (Total)	SP	Lead (Total)	SP	Phenol	KP
Benzo (K) Fluoranthene	KP	2,4-Dinitrophenol	KP	Pyrene	KP
Pentachlorophenol	KP	Indeno (1,2,3-cd) pyrene	KP	Fluoranthene	KP
Benzo (A) Pyrene	KP	Toluene	KP	Chloroform	KP
Benzene	KP	Acenaphthylene	KP	Acenaphthene	KP
Phenanthrene	KP	Naphthalene	KP	Fluorene	KP
Dibenzo (A,H) Anthracene	KP	Chrysene	KP	Benzo (G,H,I) Perylene	KP
Benzo (B) Fluoranthene	KP	Benzo (A) Anthracene	KP	Ethylbenzene	KP

EXTRA STRENGTH SURCHARGE INFORMATION

PIMS FACILITY CONTACTS

For Account Number Selected **1020548900** **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITA**
Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type / Contact Type	Contact Name	Contact Title	Email	Signatory	Phone Type	Number	Ext.
Billing Address							
Billing Contact	Kevin Smith	Team Leader Plant Operations		Y	OFF	(314)268-2768	
Office Mailing Address							
Office Contact - Primary	Kevin Smith	Team Leader Plant Operations		Y	OFF	(314)268-2768	
Office Contact 2nd Alt	Leslie Thornburg	MPH, Spec ESSEP		Y	CELL	(816)518-9214	
Office Contact 2nd Alt	Leslie Thornburg	MPH, Spec ESSEP		Y	OFF	(314)989-6134	
Premise Address							
Field Contact - Primary	Mike Jones	Plant Operations Supervisor	Michael.Jones3@ssmhealth.com	Y	CELL	(314)678-5123	
Field Contact - Primary	Mike Jones	Plant Operations Supervisor	Michael.Jones3@ssmhealth.com	Y	OFF	(314)577-5327	
Field Contact 1st Alt	Kevin Smith	Team Leader Plant Operations	Kevin.Smith@ssmhealth.com	Y	CELL	(314)678-2031	
Field Contact 1st Alt	Kevin Smith	Team Leader Plant Operations	Kevin.Smith@ssmhealth.com	Y	OFF	(314)268-2768	
Field Contact 2nd Alt	Wanda Clark	Plant Operations Assistant		N	OFF	(314)577-5600	5307

MSD 035316

PIMS
REPORT OF FIELD SAMPLING REQUIREMENTS
HEALTH CARDINAL GLENNON CHILDREN'S HOSP

Account No Entered **1020548900**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2018
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2018
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2018
	T237000	pH	Once/year	Grab	06/30/2018
	T247000	Temperature	Once/year	Grab	06/30/2018
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2018
	T257000	Total Phenols	Once/year	Grab	06/30/2018
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2018
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2018
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-·	Once/year	Grab	06/30/2018

004 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2018
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2018
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2018
	T237000	pH	Once/year	Grab	06/30/2018
	T247000	Temperature	Once/year	Grab	06/30/2018
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2018
	T257000	Total Phenols	Once/year	Grab	06/30/2018
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2018
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2018
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-·	Once/year	Grab	06/30/2018

005 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2018
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2018
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2018
	T237000	pH	Once/year	Grab	06/30/2018
	T247000	Temperature	Once/year	Grab	06/30/2018
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2018
	T257000	Total Phenols	Once/year	Grab	06/30/2018
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2018
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-·	Once/year	Grab	06/30/2018

SR 6/23

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING / Grab: 6/2 11:00 6/2 12:15 6/2 11:30

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		06/01-02/2017		06/01-02/2017		06/01-02/2017		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		11:00-11:00		12:15-12:15		11:30-11:30		
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	49000	E	5300	E	6000	gpd
Biological Oxygen Demand	*****	C	160	C	150	C	90	mg/l
Chemical Oxygen Demand	******	C	340	C	340	C	270	mg/l
Oil and Grease	200	G	14	G	<7.0	G	8.6	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	27.8	G	26.5	G	24.5	deg C
Phenol	21	G	<0.050	G	0.082	G	<0.050	mg/l
Total Suspended Solids	******	C	42	C	50	C	40	mg/l
pH	5.5-11.5	G	7.68	G	7.85	G	8.06	SU
Total Toxic Organics	5.844	C,G		C,G		C,G		mg/l

You must complete and sign the certification statements on the second page.

RECEIVED
JUN 23 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035318

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Leslie Thornburg
	Title: Environmental Safety Specialist Telephone: 314-989-6134
	Signature: Leslie Thornburg Date: 6/19/2017

2

RECEIVED
JUN 23 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

a

Scott Rehmer

From: Scott Rehmer SR
Sent: Thursday, May 25, 2017 9:10 AM
To: Thornburg, Leslie (Leslie.Thornburg@ssmhealth.com)
Cc: Doug Mendoza
Subject: RE: Streamway Product Review - SSM HEALTH - Cardinal Glennon Children's Hospital

1020-5489-00

Hi Leslie,
Regarding the direct discharge of blood and bodily fluids from hospitals and health centers. MSD's Ordinance 12559, Article V, Section 1.A.12 reads:
"No person shall discharge or cause to be discharged into any sanitary or combined sewer any of the following substances: Any infectious wastes, except those wastes which are authorized for disposal into sanitary sewers under State regulations 10 CSR 80-7.010 and 19 CSR 30-20.011 or more stringent local regulations."
Should your facility wish to pursue the discharge of blood and bodily fluids, you must insure that this prohibition is not violated. In addition, wastewater which include chemicals may affect the nature of the discharge, and must continue to comply with all limitations, as listed in MSD's Ordinance 12559, Article V, Section 2.C. Let me know if you have any other questions.

Thank you,
Scott M. Rehmer
Assistant Engineer - Environmental Compliance - Department of Engineering
Metropolitan St. Louis Sewer District
10 East Grand Avenue - St. Louis, MO 63147
Phone: 314.436.8756 - Fax: 314.436.8753 - Customer Service: 314.768.6260
Email: srehmer@stlmsd.com

From: Thornburg, Leslie [mailto:Leslie.Thornburg@ssmhealth.com]
Sent: Wednesday, May 24, 2017 9:22 PM
To: Scott Rehmer
Subject: Streamway Product Review.. help!

Hi Scott!

Our imaging departments are trying to introduce a new waste solution (Streamway; http://www.skylinemedical.com/streamway-system/overview/). The video will explain more, but the product will essentially replace suction canisters during procedures and channel body fluids (in this case abdominal and lung fluid) from the body during procedures directly into the sewer system. My department thinks this is a horrible/repulsive idea as it is introducing large amounts of blood and other body fluids (potentially infectious) directly into our wastewater discharges. I've looked at the MSD Ordinance as well as the referenced DNR regulations, and perhaps I'm missing something because it seems like this is an approved treatment method... Is this product/process ok!?!? If you have a couple minutes please give me a call tomorrow. I'm available 9-9:30 or anytime after 10:30.

Leslie Thornburg | Specialist—Environmental Safety, Security, & Emergency Preparedness
SSM Health | St. Louis 1015 Corporate Square Dr #110 St. Louis MO 63132
Phone: 314-989-6134 Cell: 816-518-9214
Leslie.thornburg@ssmhealth.com ssmhealth.com

SR

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

PART I: IDENTIFYING INFORMATION

SSM 1020-5489-00

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 4/13/17

RECEIVED
APR 13 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
3/7/17

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001 Grab 2/7 11:00		004 Grab 2/7 10:30		005 Grab 2/7 12:00		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		02/06-07/2017		02/06-07/2017		02/06-07/2017		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		11:00-11:00		10:30-10:30		12:00-12:00		
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	49000	E	5400	E	6100	gpd
Biological Oxygen Demand	*****	C	79	C	88	C	270	mg/l
Chemical Oxygen Demand	******	C	250	C	320	C	630	mg/l
Oil and Grease	200	G	28	G	11	G	9.9	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	19.5	G	17.1	G	15.4	deg C
Phenol	21	G	<0.050	G	0.075	G	0.075	mg/l
Total Suspended Solids	******	C	60	C	48	C	600	mg/l
pH	5.5-11.5	G	8.09	G	8.29	C	8.43	SU
Total Toxic Organics	5.844	C,G	0.623	C,G	0.050	C,G	0.0683	mg/l

You must complete and sign the certification statements on the second page.

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035322

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Leslie Thornburg

Title: Specialist, ESSEP Telephone: 314-989-6134

Signature: Leslie Thornburg Date: 2/24/2017

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-01
Name: MSD 001 Comp.
Matrix: Waste Water

Sampled: 02/07/17 11:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
General Chemistry - STL						
BOD	79	mg/L		02/08/17 08:12	MEG	SM 5210B
COD	250	mg/L		02/08/17 16:05	MEG	SM 5220D
Solids - total suspended solids (TSS)	60	mg/L		02/08/17 16:00	KLA	SM 2540D
Semivolatile Organics - STL						
1,2,4-Trichlorobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
1,2-Dichlorobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625*
1,3-Dichlorobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625*
1,4-Dichlorobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625*
2,4,5-Trichlorophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*49 %*	*10-102*	*Xa*	*02/10/17 15:13*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2,4-Dinitrophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2,6-Dimethylaniline	< 5.00	ug/L	Q1	02/10/17 15:13	MAK	EPA 625*
2,6-Dinitrotoluene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L	Q1	02/10/17 15:13	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*44 %*	*12.2-95.2*		*02/10/17 15:13*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*15 %*	*10-48.3*	*Xa*	*02/10/17 15:13*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
3,3'-Dichlorobenzidine	< 10.0	ug/L	Q1	02/10/17 15:13	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L	Q1	02/10/17 15:13	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
4-Nitrophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Anthracene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Azobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625*
Benzidine	< 10.0	ug/L	X	02/10/17 15:13	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-01
Name: MSD 001 Comp.
Matrix: Waste Water

Sampled: 02/07/17 11:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Butyl benzyl phthalate	12.3	ug/L		02/10/17 15:13	MAK	EPA 625
Chrysene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Diethyl phthalate	< 10.0	ug/L	Q1	02/10/17 15:13	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Fluorene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Hexachlorocyclopentadiene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Isophorone	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Naphthalene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*46 %*	*18.9-92.4*		*02/10/17 15:13*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Pentachlorophenol	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Phenol	< 10.0	ug/L	Q1	02/10/17 15:13	MAK	EPA 625
Surrogate: Phenol- d5	*10 %*	*10-32.4*	*Xa*	*02/10/17 15:13*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*51 %*	*15.8-107*		*02/10/17 15:13*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		02/10/17 15:13	MAK	EPA 625
Total Metals - STL						
Silver	< 0.0020	mg/L		02/13/17 16:53	KLA	EPA 200.7

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-02
Name: MSD 001 Grab
Matrix: Waste Water

Sampled: 02/07/17 11:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Field - STL						
pH	8.09	pH Units		02/07/17 11:00	LLO	SM*
Temperature, Field Measured	19.5	°C		02/07/17 11:00	LLO	SM*
General Chemistry - STL						
Field Flow	49000	GPD		02/07/17 11:00	LLO	varies*
Oil & Grease - total	28	mg/L		02/09/17 07:30	JS	EPA 1664
Phenol	< 0.050	mg/L		02/14/17 11:01	RMD	EPA 420.1
Volatile Organics - PIA						
2-Chloroethylvinyl ether	< 5.0	ug/L		02/10/17 11:47	JJI	EPA 624
Volatile Organics - STL						
1,1,1-Trichloroethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*90 %*	*55.3-123*		*02/13/17 18:13*	*KMM*	*EPA 624**
1,2-Dichloropropane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
1,4-Dichlorobenzene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Acrolein	< 50	ug/L		02/13/17 18:13	KMM	EPA 624
Acrylonitrile	< 10	ug/L		02/13/17 18:13	KMM	EPA 624
Benzene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Bromodichloromethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Surrogate: Bromofluorobenzene	*109 %*	*69.4-134*		*02/13/17 18:13*	*KMM*	*EPA 624**
Bromoform	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Bromomethane	< 10	ug/L		02/13/17 18:13	KMM	EPA 624
Carbon tetrachloride	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Chlorobenzene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Chloroethane	< 10	ug/L		02/13/17 18:13	KMM	EPA 624
Chloroform	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Chloromethane	< 10	ug/L		02/13/17 18:13	KMM	EPA 624
cis-1,3-Dichloropropene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Dibromochloromethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Ethylbenzene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
m,p-Xylene	< 10	ug/L		02/13/17 18:13	KMM	EPA 624*
Methylene chloride	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
o-Xylene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624*
Tetrachloroethene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-02
Name: MSD 001 Grab
Matrix: Waste Water

Sampled: 02/07/17 11:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Toluene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Surrogate: Toluene-d8	*95 %*	*67.9-117*		*02/13/17 18:13*	*KMM*	*EPA 624**
trans-1,2-Dichloroethene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
trans-1,3-Dichloropropene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Trichloroethene	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Trichlorofluoromethane	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624
Vinyl chloride	< 5.0	ug/L		02/13/17 18:13	KMM	EPA 624

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Customer #: 277898

www.pdclab.com

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-03
Name: MSD 004 Comp.
Matrix: Waste Water

Sampled: 02/07/17 10:30
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
General Chemistry - STL						
BOD	88	mg/L		02/08/17 08:12	MEG	SM 5210B
COD	320	mg/L		02/08/17 16:05	MEG	SM 5220D
Solids - total suspended solids (TSS)	48	mg/L		02/08/17 16:00	KLA	SM 2540D
Semivolatile Organics - STL						
1,2,4-Trichlorobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
1,2-Dichlorobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625*
1,3-Dichlorobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625*
1,4-Dichlorobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625*
2,4,5-Trichlorophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*9 %*	*10-102*	*Xb*	*02/10/17 15:43*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2,4-Dinitrophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2,6-Dimethylaniline	< 5.00	ug/L	Q1	02/10/17 15:43	MAK	EPA 625*
2,6-Dinitrotoluene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L	Q1	02/10/17 15:43	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*29 %*	*12.2-95.2*		*02/10/17 15:43*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*7 %*	*10-48.3*	*Xb*	*02/10/17 15:43*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
3,3'-Dichlorobenzidine	< 10.0	ug/L	Q1	02/10/17 15:43	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L	Q1	02/10/17 15:43	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
4-Nitrophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Anthracene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Azobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625*
Benzidine	< 10.0	ug/L	X	02/10/17 15:43	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-03
Name: MSD 004 Comp.
Matrix: Waste Water

Sampled: 02/07/17 10:30
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Chrysene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Diethyl phthalate	< 10.0	ug/L	Q1	02/10/17 15:43	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Fluorene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Hexachlorocyclopentadiene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Isophorone	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Naphthalene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*34 %*	*18.9-92.4*		*02/10/17 15:43*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Pentachlorophenol	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Phenol	< 10.0	ug/L	Q1	02/10/17 15:43	MAK	EPA 625
Surrogate: Phenol- d5	*7 %*	*10-32.4*	*Xb*	*02/10/17 15:43*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*42 %*	*15.8-107*		*02/10/17 15:43*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		02/10/17 15:43	MAK	EPA 625
Total Metals - STL						
Silver	< 0.0020	mg/L		02/13/17 17:02	KLA	EPA 200.7

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-04
Name: MSD 004 Grab
Matrix: Waste Water

Sampled: 02/07/17 10:30
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Field - STL						
pH	8.29	pH Units		02/07/17 10:30	LLO	SM*
Temperature, Field Measured	17.1	°C		02/07/17 10:30	LLO	SM*
General Chemistry - STL						
Field Flow	5400	GPD		02/07/17 10:30	LLO	varies*
Oil & Grease - total	11	mg/L		02/09/17 07:30	JS	EPA 1664
Phenol	0.075	mg/L		02/14/17 11:01	RMD	EPA 420.1
Volatile Organics - PIA						
2-Chloroethylvinyl ether	< 5.0	ug/L		02/10/17 12:12	JJI	EPA 624
Volatile Organics - STL						
1,1,1-Trichloroethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*91 %*	*55.3-123*		*02/13/17 18:39*	*KMM*	*EPA 624**
1,2-Dichloropropane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
1,4-Dichlorobenzene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Acrolein	< 50	ug/L		02/13/17 18:39	KMM	EPA 624
Acrylonitrile	< 10	ug/L		02/13/17 18:39	KMM	EPA 624
Benzene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Bromodichloromethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Surrogate: Bromofluorobenzene	*111 %*	*69.4-134*		*02/13/17 18:39*	*KMM*	*EPA 624**
Bromoform	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Bromomethane	< 10	ug/L		02/13/17 18:39	KMM	EPA 624
Carbon tetrachloride	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Chlorobenzene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Chloroethane	< 10	ug/L		02/13/17 18:39	KMM	EPA 624
Chloroform	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Chloromethane	< 10	ug/L		02/13/17 18:39	KMM	EPA 624
cis-1,3-Dichloropropene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Dibromochloromethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Ethylbenzene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
m,p-Xylene	< 10	ug/L		02/13/17 18:39	KMM	EPA 624
Methylene chloride	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
o-Xylene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Tetrachloroethene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-04
Name: MSD 004 Grab
Matrix: Waste Water

Sampled: 02/07/17 10:30
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Toluene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Surrogate: Toluene-d8	*96 %*	*67.9-117*		*02/13/17 18:39*	*KMM*	*EPA 624**
trans-1,2-Dichloroethene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
trans-1,3-Dichloropropene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Trichloroethene	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Trichlorofluoromethane	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624
Vinyl chloride	< 5.0	ug/L		02/13/17 18:39	KMM	EPA 624

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-05
Name: MSD 005 Comp.
Matrix: Waste Water

Sampled: 02/07/17 12:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
General Chemistry - STL						
BOD	270	mg/L		02/08/17 08:12	MEG	SM 5210B
COD	630	mg/L		02/08/17 16:05	MEG	SM 5220D
Solids - total suspended solids (TSS)	600	mg/L		02/08/17 16:00	KLA	SM 2540D
Semivolatile Organics - STL						
1,2,4-Trichlorobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
1,2-Dichlorobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625*
1,3-Dichlorobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625*
1,4-Dichlorobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625*
2,4,5-Trichlorophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625*
Surrogate: 2,4,6-Tribromophenol	*47 %*	*10-102*	*Xa*	*02/10/17 16:14*	*MAK*	*EPA 625**
2,4,6-Trichlorophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2,4-Dichlorophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2,4-Dimethylphenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2,4-Dinitrophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2,4-Dinitrotoluene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2,6-Dimethylaniline	< 5.00	ug/L	Q1	02/10/17 16:14	MAK	EPA 625*
2,6-Dinitrotoluene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2-Chloronaphthalene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
2-Chlorophenol	< 10.0	ug/L	Q1	02/10/17 16:14	MAK	EPA 625
Surrogate: 2-Fluorobiphenyl	*44 %*	*12.2-95.2*		*02/10/17 16:14*	*MAK*	*EPA 625**
Surrogate: 2-Fluorophenol	*20 %*	*10-48.3*	*Xa*	*02/10/17 16:14*	*MAK*	*EPA 625**
2-Nitrophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
3,3'-Dichlorobenzidine	< 10.0	ug/L	Q1	02/10/17 16:14	MAK	EPA 625
4,6-Dinitro-2-methylphenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625*
4-Bromophenyl phenyl ether	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
4-Chloro-3-methylphenol	< 10.0	ug/L	Q1	02/10/17 16:14	MAK	EPA 625
4-Chlorophenylphenyl ether	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
4-Nitrophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Acenaphthene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Acenaphthylene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Anthracene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Azobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625*
Benzidine	< 10.0	ug/L	X	02/10/17 16:14	MAK	EPA 625*
Benzo(a)anthracene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Benzo(a)pyrene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Benzo(b)fluoranthene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Benzo(g,h,i)perylene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Benzo(k)fluoranthene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Bis(2-chloroethoxy) methane	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Bis(2-chloroethyl) ether	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-05
Name: MSD 005 Comp.
Matrix: Waste Water

Sampled: 02/07/17 12:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Bis(2-chloroisopropyl) ether	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Bis(2-ethylhexyl) phthalate	18.3	ug/L		02/10/17 16:14	MAK	EPA 625
Butyl benzyl phthalate	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Chrysene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Dibenzo(a,h)anthracene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Diethyl phthalate	< 10.0	ug/L	Q1	02/10/17 16:14	MAK	EPA 625
Dimethyl phthalate	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Di-n-butyl phthalate	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Di-n-octyl phthalate	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Diphenylamine	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Fluoranthene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Fluorene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Hexachlorobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Hexachlorobutadiene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Hexachlorocyclopentadiene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Hexachloroethane	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Indeno(1,2,3-cd)pyrene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Isophorone	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Naphthalene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Nitrobenzene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Surrogate: Nitrobenzene-d5	*46 %*	*18.9-92.4*		*02/10/17 16:14*	*MAK*	*EPA 625**
N-Nitrosodimethylamine	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
N-Nitrosodi-n-propylamine	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Pentachlorophenol	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Phenanthrene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Phenol	< 10.0	ug/L	Q1	02/10/17 16:14	MAK	EPA 625
Surrogate: Phenol- d5	*15 %*	*10-32.4*	*Xa*	*02/10/17 16:14*	*MAK*	*EPA 625**
Surrogate: p-Terphenyl-d14	*51 %*	*15.8-107*		*02/10/17 16:14*	*MAK*	*EPA 625**
Pyrene	< 10.0	ug/L		02/10/17 16:14	MAK	EPA 625
Total Metals - STL						
Silver	< 0.0020	mg/L		02/13/17 17:04	KLA	EPA 200.7

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Customer #: 277898

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-06
Name: MSD 005 Grab
Matrix: Waste Water

Sampled: 02/07/17 12:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Field - STL						
pH	8.43	pH Units		02/07/17 12:00	LLO	SM*
Temperature, Field Measured	15.4	°C		02/07/17 12:00	LLO	SM*
General Chemistry - STL						
Field Flow	6100	GPD		02/07/17 12:00	LLO	varies*
Oil & Grease - total	9.9	mg/L		02/09/17 07:30	JS	EPA 1664
Phenol	0.075	mg/L		02/14/17 11:01	RMD	EPA 420.1
Volatile Organics - PIA						
2-Chloroethylvinyl ether	< 5.0	ug/L		02/10/17 12:37	JJI	EPA 624
Volatile Organics - STL						
1,1,1-Trichloroethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,1,2,2-Tetrachloroethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,1,2-Trichloroethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,1-Dichloroethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,1-Dichloroethene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,2-Dichlorobenzene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,2-Dichloroethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Surrogate: 1,2-Dichloroethane-d4	*90 %*	*55.3-123*		*02/13/17 19:05*	*KMM*	*EPA 624**
1,2-Dichloropropane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,3-Dichlorobenzene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
1,4-Dichlorobenzene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Acrolein	< 50	ug/L		02/13/17 19:05	KMM	EPA 624
Acrylonitrile	< 10	ug/L		02/13/17 19:05	KMM	EPA 624
Benzene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Bromodichloromethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Surrogate: Bromofluorobenzene	*112 %*	*69.4-134*		*02/13/17 19:05*	*KMM*	*EPA 624**
Bromoform	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Bromomethane	< 10	ug/L		02/13/17 19:05	KMM	EPA 624
Carbon tetrachloride	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Chlorobenzene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Chloroethane	< 10	ug/L		02/13/17 19:05	KMM	EPA 624
Chloroform	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Chloromethane	< 10	ug/L		02/13/17 19:05	KMM	EPA 624
cis-1,3-Dichloropropene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Dibromochloromethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Ethylbenzene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
m,p-Xylene	< 10	ug/L		02/13/17 19:05	KMM	EPA 624*
Methylene chloride	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
o-Xylene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624*
Tetrachloroethene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PDC Laboratories, Inc.
3278 North Highway 67
Florissant, MO 63033
(800) 333-3278

ANALYTICAL RESULTS

Sample: 7020988-06
Name: MSD 005 Grab
Matrix: Waste Water

Sampled: 02/07/17 12:00
Received: 02/07/17 14:30

Parameter	Result	Unit	Qualifier	Analyzed	Analyst	Method
Toluene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Surrogate: Toluene-d8	*97 %*	*67.9-117*		*02/13/17 19:05*	*KMM*	*EPA 624**
trans-1,2-Dichloroethene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
trans-1,3-Dichloropropene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Trichloroethene	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Trichlorofluoromethane	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624
Vinyl chloride	< 5.0	ug/L		02/13/17 19:05	KMM	EPA 624

RECEIVED
MAR 06 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Customer #: 277898

www.pdclab.com

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No:
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 1/4/17

RECEIVED
JAN 04 2017
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
12/16

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		11/22-23/2016		11/22-23/2016		11/22-23/2016		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		13:00-13:00		14:00-14:00		13:30-13:30		
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	49400	E	5400	E	6000	gpd
Biological Oxygen Demand	*****	C	270	C	99	C	<60	mg/l
Chemical Oxygen Demand	******	C	430	C	190	C	140	mg/l
Oil and Grease	200	G	<11	G	48	G	<5.0	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	23.9	G	18.4	G	18.7	deg C
Phenol	21	G	0.053	G	0.067	G	0.12	mg/l
Total Suspended Solids	******	C	64	C	34	C	140	mg/l
pH	5.5-11.5	G	8.76	G	8.69	G	8.33	SU
Total Toxic Organics	5.844	C,G		C,G		C,G		mg/l

You must complete and sign the certification statements on the second page.

RECEIVED
DEC 16 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035337

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Rodger Glaus

Title: Administrative Director, ESSEP Telephone: 314-989-2155

Signature: Rodger Glaus Date: 12-13-16

RECEIVED

DEC 16 2016

DIVISION OF ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

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

Attn: Kevin Smith
Team Leader Plant Operations

INDUSTRIAL WASTEWATER DISCHARGE PERMIT NUMBER 1020548900

ANNUAL PERMIT FEE NOTICE

For permits in effect as of 10/01/2016.

Fee will be included on the next regular monthly bill from the Metropolitan St. Louis Sewer District.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2016 through September 30, 2017 issued in accordance with the Metropolitan St. Louis District Ordinance #8660 for the location at **1465 South Grand Blvd.**

Base charge @ $150.00 per permit			$150.00
Volume charge @$0.72 per average daily Ccf	65.16	Ccfs	$ 46.92
Sample Point Charge @$100.00 per sample point	3	points	$300.00
		Total Fee Due:	**$496.92**

For inquiries about the Annual Permit Fee, please call 314-436-8756. For inquiries about payment of the fee, which will appear on your upcoming monthly bill, please call 1-866-281-5737.

THIS IS NOT A BILL
DO NOT PAY NOW
FEE WILL BE INCLUDED ON MONTHLY BILL

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

SR

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 10/19/16

RECEIVED
OCT 19 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR 9/19

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 1020548900-1 Effective Date: 05/01/2015 Expiration Date: 04/30/2020

Premise Address: 1465 South Grand Blvd, 63104

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

Samples Collected By: PDC Laboratories, Inc. Larry Oliver

Analyses Performed By: PDC Laboratories, Inc.

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		08/18-19/2016		08/18-19/2016		08/18-19/2016		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		11:00-11:00		12:00-12:00		11:30-11:30		
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	49000	E	5000	E	6000	gpd
Biological Oxygen Demand	*****	C	120	C	110	C	150	mg/l
Chemical Oxygen Demand	******	C	250	C	310	C	470	mg/l
Oil and Grease	200	G	31	G	5.2	G	<5.0	mg/l
Silver	0.5	C	<0.0020	C	<0.0020	C	<0.0020	mg/l
Temperature	60	G	28.3	G	27.4	G	23.3	deg C
Phenol	21	G	0.058	G	<0.050	G	0.058	mg/l
Total Suspended Solids	******	C	48	C	58	C	270	mg/l
pH	5.5-11.5	G	8.38	G	8.22	C	7.67	SU
Total Toxic Organics	5.844	C,G		C,G		C,G		mg/l

You must complete and sign the certification statements on the second page.

RECEIVED

SEP 19 2016

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035341

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Rodger Glaus

Title: Administrative Director Telephone: 314-989-2155

Signature: Rodger Glaus Date: 9-7-16

RECEIVED

SEP 19 2016

DIVISION OF ENVIRONMENTAL COMPLIANCE

4

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

Company Name: SSM **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A. .
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 7/18/16

RECEIVED
JUL 18 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITAL Account #: 1020548900
Premise Address: 1465 S. Grand Blvd. Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Team Leader, Plant Operations Phone#: 314.678.2031
Inspector: Scott Rehmer
Others Present: Mike Jones, Plant Ops Supervisor
Inspection Date: **7/8/16** Time: From 10:00 am To 11:25 am (Last Insp. 11/2/15)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: _____
   B. Were any changes (including to the primary or changes only to suffixes) for acct no's with RFs? NA☐ Yes☐ No☒
   C. If yes to B, was Cost Recovery Unit informed of the change(s)? NA☐ Yes☐ No☐
   D. Did all acct no's have water usage on PIMS? Yes☒ No☐
   E. If no to D, explain: _____

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Hospital waste	Cont	Yes	Daily	001, 004, 005
NCCW - autoclaves	Batch	Yes	Daily	005
Kitchen waste - dietary	Cont	Yes	Daily	001
	(None)	N/A		
	(None)	N/A		
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
Metallic replacement (dental offices)	004

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
   If yes: A. List sample points: 001
   B. What is the frequency for cleaning & maintenance? monthly
   C. Are any additives used in traps? Yes☐ No☒
   D. If yes to C, was company warned MSD will bill them for blockages they cause? Yes☒ No☐
   E. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
   If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes: A. List pollutants & process: _____

B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐

C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐

(MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)

D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐

(including those that are 'No PSES' and 'General Stds Only')

If yes: A. List regulation & describe operations (including any discharge):

40 CFR 460 Subpart A - n/a

B. Explain why it is N/A: This subpart has not been promulgated, thus general standards apply.

8. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☐ No☒

If yes: A. List regulation & describe operations (including any discharge):

_____

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☐

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐

(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

9. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒

(New certification also is required for each permit renewal)

If yes: A. Certification date: _____

B. Pollutants accepted by MSD as absent: _____

C Were any requested "absent" pollutants rejected by MSD? Yes☐ No☐

If yes to C: D. List them and explain why: _____

E. Were all the accepted pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐

(If compared to intake water levels, explain details below)

If no to E: F. Explain: _____

G. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐

H. Comments: _____

10. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

11. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

12. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes: A. Describe operations & disposal: Radioactive isotopes for diagnostic purposes

B. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☐ Yes☒ No☐

(If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)

C. Amount discharged in most recent four complete calendar quarters: None (0 mCi)

D. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

13. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

14. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:
Tour of facility showed no excessive water usage; most of their usage comes from hospital waste associated with patient care, employee sanitary use, kitchen waste, boilers, cooling towers, and lawn irrigation.

15. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Currently RF=0.51, from cooling towers & boilers; addition of lawn watering may increase the RF..

B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

16. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____

B. Latest approval date: _____

C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

17. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____

B. Date originally applied: _____, or as part of variance above? ☐

18. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

20. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____

B. Explain any marked: _____

21. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?
Fuel containers are double walled, all solvents and lab solvent waste are in appropriate containers and cabinets, all rendering containers are kept away from drains.

22. DOES COMPANY HAVE ANY NPDES PERMITS? Yes☐ No☒

If yes: A. Receiving stream:_____

B. Does it have a MDNR general permit for stormwater discharges from industrial activities? Yes☐ No☐
If yes to B: Permit #: MO-R_____

C. Does it have a MDNR general permit for wastewater discharges? Yes☐ No☐
If yes to C: Permit #: MO-G_____ Permitted activity:_____

D. Does it have a MDNR site specific permit for wastewater discharges? Yes☐ No☐
If yes to D: Permit #: MO0_____

Outfall	Description	Vol (GPD)	Components

E. Comments: _____

23. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____

B. What needs to be done? _____

C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☐ No☐
(regardless of whether there are any problem areas)

24. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control, & CounterMeasures Plan	November 2012
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? Yes☒ No☐
(must be done)

C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒

D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☒

E. Explain why/why not for C or D: Plan comprehensively addresses prevention, spills, contacts, response, cleanup, storage containers, containments, inspections, plant physical layout, etc.

25. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____

B. Priority pollutants (or "none"): _____

C. How is spent solvent disposed? _____
(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

26. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A. Solvent name/ components

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
BTEX, naphthalene	Diesel fuel	Yes☐ No☒	Used for fuel	Yes☒ No☐
Chloroform, phenols	Lab reagent	Yes☐ No☒	Consumed or hauled	Yes☒ No☐
Acetone	Lab reagent	Yes☐ No☒	Consumed or hauled	Yes☐ No☒
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

27. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes:
- A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
- B. If no to A, date of last update for SMP: _____
- C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
- D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
  (If no to C or D, write company and require submittal and/or update)

28. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☐ No☒
- A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
  (Must post if company generates process wastewater or stores chemicals of concern)

29. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. How frequently is sampling required? Quarterly
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

30. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☐ No☒
  - If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
- F. If no to A,B,C, or E, explain needed changes: _____

31. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
- A. At which SPs? _____
- B. Are discharge limits in PIMS "alert only"? (If not, change to that & make note: _____) Yes☐ No☐
- C. Does company submit quarterly summaries? Yes☐ No☐
- D. If no, explain: _____

32. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes: A. Is company having the samples analyzed Yes☐ No☐

B. How does company insure proper preservation, holding times & analytical methods?

_____

C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐

D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐

E. If no to C, or D, explain: _____

F. Does company still want to split samples? Yes☐ No☐

G. Comments: _____

33. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes: A. Is requirement contained in permit ☒ or other document ☐.

B. If other document, date & description: _____

C. What is required to be reported? Rad material discharge report

D. How frequently are reports required? Quarterly

E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐

F. If no, explain: _____

34. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes: A. Type and date: _____

B. Have the reports & actions been on-time & complete? Yes☐ No☐

C. If no, explain: _____

35. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐

[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no: A. Describe: _____

B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

36. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no: A. How long does company retain records? _____

B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐

C. Where are they kept? Contact keeps all MSD records in main office.

37. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:

☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____

☒ Process discharge => 25,000 GPD Total process volume: ~ 31,000 gpd.

☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____

☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____

TP ADW organic capacity: _____. Percent: _____

☐ Reasonable potential for adverse effect on operations Why? _____

☐ Reasonable potential for violating PT std or req't Which ones & why? _____

B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no: C. What is Bldg owner name (use DBA if avail.)? _____
(check E-CIS CAPS Customer Info)

D: What is Bldg owner mailing address? _____
(check E-CIS CAPS Customer Info)

38. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:

SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐

Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

39. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes:
- A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐
- B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐
- C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐
- D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐
- E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
  (And explain why/why not: _____)
- F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
  Acceptance letter date: _____ Or write company with requirement ☐
- G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐
- H. Comments: _____

40. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes:
- A. Why? _____
- B. Are any changes needed to reasons/details? Yes☐ No☐
- C. If yes, explain: _____
- D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

41. SAMPLE POINTS

						Auto-sampler ready?	DJ (y/n)
SP #	001	Fed.Reg.		Components:	Hospital ww, kitchen ww, NCCW-cooling tower, Boiler, Sanitary, storm	Yes	No
SP #	004	Fed.Reg.		Components:	Hospital ww, Sanitary, storm	Yes	No
SP #	005	Fed.Reg.		Components:	Hospital ww, NCCW-autoclaves, Sanitary, storm	Yes	No
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A

42. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes:
- A. List SPs: _____
- B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

43. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes:
- A. List SPs and reasons: _____

44. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes:
- A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐
- B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐
- C. If No to B, explain:_____
  (Must also write company and require installation of SP)

45. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes:
- A. List Sample Points: 001, 004, 005

46. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐
- A. If any SPs cannot be located or opened, explain: _____
- B. If any SP descript's need to be changed, explain: _____
- C. Is it possible to use an auto-sampler to collect samples (regardless of volume or batches)? Yes☒ No☐
  Update PIMS indicator as needed.
- D. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒
  - E. If yes to C, list SPs & describe: _____
  - F. If yes to C, was company directed to take corrective actions? Yes☐ No☐

47. REVIEW THE SAMPLE POINT MAP! Last map revision date: 11/2/15

A. Is the map correct and accurate in all its details? Yes☐ No☒

B If no, what changes are needed: Moved SP001 east to its proper location (as shown on map 7/5/12), updated downstream manholes; added map details such as helipad, parking garage, main entrance, and AST enclosures for diesel fuel and liquid oxygen.

48. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

Updated facility contacts;
Updated SP map (see Q.46);
Per Q.15, contact will be inquiring in regards to updating their RF, due to their lawn watering now being metered.

MSD 035351

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	TOX

WUNNENBERG INFO.

Base Map 20F3
Wun:St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

PR25 Process Disch => 25,000 GPD

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

Billing Address
1465 South Grand Blvd.
St Louis, MO. 63104

INSPECTION INFORMATION

Next Due	Insp Rslt	
07/08/2016	RIN	Scott Rehmer

PERMIT INFORMATION

Issue Date: 05/01/2015
Expire Date: 04/30/2020
Extended Date:
Writer Scott Rehmer

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke
IUQ Recvd Date: 11/03/2014
Reviewer: David Kupke
IUQ Recvd Date: 11/24/2009
Reviewer: David Kupke

CONTACTS

BILL	Kevin Smith	Team Leader Plant Operations	OFF	(314) 268-2768 Ext.
FLD1	Mike Jones	Plant Operations Supervisor	CELL	(314) 678-5123 Ext.
	Mike Jones	Plant Operations Supervisor	OFF	(314) 577-5327 Ext.
FLD2	Kevin Smith	Team Leader Plant Operations	OFF	(314) 268-2768 Ext.
	Kevin Smith	Team Leader Plant Operations	CELL	(314) 678-2031 Ext.
FLD3	Wanda Clark	Plant Operations Assistant	OFF	(314) 577-5600 Ext. 5307
OFF1	Kevin Smith	Team Leader Plant Operations	OFF	(314) 268-2768 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 Hrs: 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage Y On-Site Disposal N Off-Site Disposal Y

11/03/2014	Acids and/or Alkalies		22	LBS
11/03/2014	Equipment Oils and/o		250	GAL
11/03/2014	Infectious Waste	Medical waste	5500	LBS
11/03/2014	Kitchen/Food Service		30000	LBS
11/03/2014	Organic Compounds		16	LBS
11/03/2014	Paints or Paint Sludge:		800	LBS
11/03/2014	Solvents/Thinners		2098	LBS
11/03/2014	Other	medical and pharmaceutic	354	LBS
11/03/2014	Other	universal waste	356	LBS

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

PRODUCTS

EFF DATE	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	General hospital			

Report No. PIMS012A 07/11/2016 9:34:54 am
Data Date & Time: 07/11/2016 9:34:54 am

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

SEWER ACCOUNTS

Sewer Accounts
1020548900

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 06/01/2014 **End Date =** 12/31/2016

Acct. No.			Consumption			Wdays	Cdays	Discharge	
1020548900			**CCF's**	**Gallons**				**Gal/ Wday**	**Gal/ Cday**
1020548900	05/07/2014	08/12/2014	13,290	13,290	A	98	98	98	
1020548900	08/13/2014	11/07/2014	15,649	28,939		87	87	185	
1020548900	11/08/2014	01/20/2015	6,666	35,605		74	74	259	
1020548900	01/21/2015	04/16/2015	6,703	42,308		86	86	345	
1020548900	04/17/2015	07/17/2015	13,944	56,252		92	92	437	
1020548900	07/18/2015	10/15/2015	13,683	69,935		90	90	527	
1020548900	10/16/2015	01/19/2016	8,730	78,665		96	96	623	
1020548900	01/20/2016	04/26/2016	10,276	88,941		98	98	721	
RF	0.51	**Acct. Total**	88,941	66,532,493		721	721	47,062	47,062
		Facility Total	88,941						

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	351C	Trunk Sewer	46 - Rock Springs

Description LIne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from S

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	11/24/0
Boiler Blowdown		1,265	GPD		GPD	D	1/21/15
Non Contact Coolir		1,710	GPD		GPD	D	1/21/15
Sanitary		22,680	GPD		GPD	D	1/21/15
Hospital Waste		18,742	GPD		GPD	D	1/21/15
Kitchen Waste	Food prep	5,000	GPD		GPD	D	1/21/15
	Total Flow Avg =	**49,397**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	569C	Trunk Sewer	46 - Rock Springs

Description 8" line exiting NW from SW main hospital

Sewer Route N along Spring, W along Vista,to 39th St,

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency bldg

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	12/17/1
Sanitary		3,200	GPD		GPD	D	1/21/15
Hospital Waste		2,199	GPD		GPD	D	1/21/15
	Total Flow Avg =	**5,399**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
04	Sanitary Or Combined	21F3	607C	Trunk Sewer	46 - Rock Springs

Description 8" lateral exiting W from North side West

Sewer Route N onto Vista Ave., West on Vista to 39th S

SAMPLE POINT NO. 005 Ordinance **NPDES Outfall No.**

Description Manhole 12' N, 10' W from the NW inside corner of W bldg

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	11/24/0
Non Contact Coolir	Autoclaves	325	GPD		GPD	D	1/21/15
Sanitary		1,120	GPD		GPD	D	1/21/15
Hospital Waste		4,687	GPD		GPD	D	1/21/15
	Total Flow Avg =	**6,132**		**Max =**			

PRETREATMENT TYPES

SP	EFF_DATE	TYPE	DESCRIPTION
001	02/20/2003	DC28	Grease Trap
004	03/03/2004	DC32	Metallic Replacement

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address
1465 South Grand Blvd.
St. Louis MO. 63104

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Asbestos (Fibrous)	SP	Silver (Total)	KP	Zinc (Total)	KP
Mercury (Total)	SP	Lead (Total)	SP	Phenol	KP
Benzo (K) Fluoranthene	KP	2,4-Dinitrophenol	KP	Pyrene	KP
Pentachlorophenol	KP	Indeno (1,2,3-cd) pyrene	KP	Fluoranthene	KP
Benzo (A) Pyrene	KP	Toluene	KP	Chloroform	KP
Benzene	KP	Acenaphthylene	KP	Acenaphthene	KP
Phenanthrene	KP	Naphthalene	KP	Fluorene	KP
Dibenzo (A,H) Anthracene	KP	Chrysene	KP	Benzo (G,H,I) Perylene	KP
Benzo (B) Fluoranthene	KP	Benzo (A) Anthracene	KP	Ethylbenzene	KP

EXTRA STRENGTH SURCHARGE INFORMATION

PIMS FACILITY CONTACTS

For Account Number Selected **1020548900** **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITA**
Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type / Contact Type	Contact Name	Contact Title	Email	Signatory	Phone Type	Number	Ext.
Billing Address							
Billing Contact	Kevin Smith	Team Leader Plant Operations		Y	OFF	(314)268-2768	
Office Mailing Address							
Office Contact - Primary	Kevin Smith	Team Leader Plant Operations		N	OFF	(314)268-2768	
Premise Address							
Field Contact - Primary	Mike Jones	Team Leader Plant Operations	Michael_Jones3@ssmhc.com	Y	CELL	(314)678-5123	
Field Contact - Primary	Mike Jones	Team Leader Plant Operations	Michael_Jones3@ssmhc.com	Y	OFF	(314)577-5327	
Field Contact 1st Alt	Kevin Smith	Plant Operations Supervisor	Kevin_Smith@ssmhc.com	N	CELL	(314)678-2031	
Field Contact 1st Alt	Kevin Smith	Plant Operations Supervisor	Kevin_Smith@ssmhc.com	N	OFF	(314)268-2768	
Field Contact 2nd Alt	Wanda Clark	Plant Operations Assistant		N	OFF	(314)577-5600	5307

MSD 035356

PIMS
REPORT OF FIELD SAMPLING REQUIREMENTS
HEALTH CARDINAL GLENNON CHILDREN'S HOSP

Account No Entered **1020548900**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2017
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2017
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2017
	T237000	pH	Once/year	Grab	06/30/2017
	T247000	Temperature	Once/year	Grab	06/30/2017
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2017
	T257000	Total Phenols	Once/year	Grab	06/30/2017
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2017
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2017
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-	Once/year	Grab	06/30/2017

004 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2017
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2017
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2017
	T237000	pH	Once/year	Grab	06/30/2017
	T247000	Temperature	Once/year	Grab	06/30/2017
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2017
	T257000	Total Phenols	Once/year	Grab	06/30/2017
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2017
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2017
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-	Once/year	Grab	06/30/2017

005 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2017
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2017
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2017
	T237000	pH	Once/year	Grab	06/30/2017
	T247000	Temperature	Once/year	Grab	06/30/2017
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2017
	T257000	Total Phenols	Once/year	Grab	06/30/2017
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2017
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-	Once/year	Grab	06/30/2017

SR
6/3/16

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION 1003-7836-00

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		5-10/5-11-16	5-10/5-11-16	5-12/5-13-16	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		10:35 am	10:50 am	10:40 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 *		78K	8K	10K	
OIL & GREASE	200	12	5	9	mg/L
BOD	200	240	109	83	mg/L
COD	****	378	186	129	mg/L
TOTAL SUSPENDED SOLIDS	****	95	174	19	mg/L
TEMPERATURE (Degrees C)	60	22.4	21.9	23.1	
pH (Std. Units)	5.5-11	8.86	7.64	8.33	
SILVER	.5	0.01	< 0.01	< 0.01	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L

*per phone call with K. Smith, use flow estimates in previous QUARTER. SR 6-3-16

You must complete and sign the certification statements on the second page.

RECEIVED
JUN 03 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS**.

NONE

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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 Smith
	Title: Plant Operations Team Leader Telephone: 314-268-2768
	Signature: Kevin Smith Date: 5-31-16

RECEIVED
JUN 03 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: May 24, 2016
Lab. No.: 2016MT0231
Invoice No.: 216196
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Kevin Smith

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 10:35 a.m. / 5-10-16 to to: 10:35 a.m. / 5-11-16
Grab Sample 10:35 a.m. / 5-10-16
Sample Point Ref. Number: 004
Waste Water Composite: 10:50 a.m. / 5-10-16 to 10:50 a.m. / 5-11-16
Grab Sample 10:50 a.m. / 5-10-16
Sample Point Ref. Number: 005
Waste Water Composite: 10:40 a.m. / 5-12-16 to 10:40 a.m. / 5-13-16
Grab Sample: 10:40 a.m. / 5-12-16

DATE ANALYZED: 5-10-16 to 5-24-16

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	12	5	9	5	413.1
BOD	240	109	83	10	405.1
COD	378	186	129	10	410.1
TSS	95	174	19	5	160.2
Temperature (Degrees C)	22.4	21.9	23.1	.1	170.1
pH (Std Units)	8.86	7.64	8.33	.02	150.1
Silver	0.01	< 0.01	< 0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory

Manager

RECEIVED
JUN 03 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: [signature] Date: 4/20/16

RECEIVED
APR 20 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
4-19-16

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		1-28/1-29-16		1-28/1-29-16		2-1/2-2-16		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:50 am		10:05 am		10:15 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								
OIL & GREASE	200		13		9		12	mg/L
BOD	200		143		293		96	mg/L
COD	****		195		538		183	mg/L
TOTAL SUSPENDED SOLIDS	****		116		360		89	mg/L
TEMPERATURE (Degrees C)	60		20.3		18.8		18.1	
pH (Std. Units)	5.5-11		7.69		8.82		7.78	
SILVER	.5		0.02		0.01		0.01	mg/L
PHENOL			<0.05		<0.05		<0.05	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
APR 18 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: February 15, 2016
Lab. No.: 2016MT0171
Invoice No.: 216129
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:50 a.m. / 1-28-16 to to: 09:50 a.m. / 1-29-16
Grab Sample 09:50 a.m. / 1-28-16
Sample Point Ref. Number: 004
Waste Water Composite: 10:05 a.m. / 1-28-16 to 10:05 a.m. / 1-29-16
Grab Sample 10:05 a.m. / 1-28-16
Sample Point Ref. Number: 005
Waste Water Composite: 10:15 a.m. / 2-1-16 to 10:15 a.m. / 2-2-16
Grab Sample: 10:45 a.m. / ~~10-27-15~~ 2-1-16

DATE ANALYZED: 1-28-16 to 2-15-16

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	13	9	12	5	413.1
BOD	143	293	96	10	405.1
COD	195	538	183	10	410.1
TSS	116	360	89	5	160.2
Temperature (Degrees C)	20.3	18.8	18.1	.1	170.1
pH (Std Units)	7.69	8.82	7.78	.02	150.1
Silver	0.02	0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

RECEIVED
APR 18 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

DINESH N. SHAH
Laboratory

Manager

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

NONE

PART IV: GENERAL CERTIFICATION STATEMENTS

B DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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 Smith

Title: Plant Operations - Team Leader Telephone: 314-268-2768

Signature: Kevin Smith Date: 4-14-16

Flow Rates

1) 78,000
2) 8,000
3) 10,000

RECEIVED
APR 18 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

Company Name: SSM HEALTH **Cardinal Glennon Hospital**
Permit No:
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 1/13/16

RECEIVED
JAN 14 2016
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SSMHealth

1015 Corporate Square Drive
St. Louis, MO 63132
phone: 314-989-2000
ssmhealth.com

November 30, 2015

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147
Attn: Scott Rehmer, Assistant Engineer
Environmental Compliance

Re: Name Change Notification – SSM Cardinal Glennon Children's Hospital
Industrial Wastewater Discharge Permit 1020548900

Dear Mr. Rehmer,

This letter is to notify you of a facility name change for SSM Cardinal Glennon Children's Hospital. The facility name has changed to:

- SSM Health Cardinal Glennon Children's Hospital

Please make this change in MSD's records. We understand that the Industrial Wastewater Discharge Permit will not be reissued with the name change until such time as the permit is renewed.

Please contact me at (314) 989-2155, or by email at Rodger_Glaus@ssmhc.com if you have any questions.

Sincerely,

Rodger Glaus

Rodger Glaus, CHFM
Administrative Director
Environmental Safety, Security & Emergency Preparedness
SSM Health – St. Louis Network

RG/bk

cc: Chuck Bryant
John Ingrassia
Greg Hrbacek

RECEIVED
DEC 07 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

J:\DPHCCommon\ESSEP-Network\Regulatory\Sewer\CGCMC\ChngofOwnrshp_WastewaterDischargePermit_CG_2015.docx

Through our exceptional health care services, we reveal the healing presence of God.

SR
11-23-15

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION 1020-5489-00

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		10-22/10-23		10-22/10-23		10-27/10-28		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		10:20am		10:35am		10:45am		
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								
OIL & GREASE	200	G	16		7		15	mg/L
BOD	200		104		416		80	mg/L
COD	****		176		689		174	mg/L
TOTAL SUSPENDED SOLIDS	****		72		258		45	mg/L
TEMPERATURE (Degrees C)	60	G	23.3		22.9		20.2	
pH (Std. Units)	5.5-11	G	7.62		7.80		7.84	
SILVER	.5		0.02		< 0.01		0.02	mg/L
PHENOL		G	<0.05		<0.05		<0.05	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
NOV 23 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader, Plant Operations Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 11/23/15

Flow rate #1 78,000

Flow rate #2 8,000

Flow rate #3 10,000

MIDWEST TESTING LABORATORIES

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

Date: November 9, 2015
Lab. No.: 2015MT0492
Invoice No.: 215368
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 10:20 a.m. / 10-22-15 to 10: 20 a.m. / 10-23-15
Grab Sample 10:20 a.m. / 10-22-15
Sample Point Ref. Number: 004
Waste Water Composite: 10:35 a.m. / 10-22-15 to 10:35 a.m. / 10-23-15
Grab Sample 10:35 a.m. / 10-22-15
Sample Point Ref. Number: 005
Waste Water Composite: 10:45 a.m. / 10-27-15 to 10:45 a.m. / 10-28-15
Grab Sample: 10:45 a.m. / 10-27-15

DATE ANALYZED: 10-22-15 to 11-09-15

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	16	7	15	5	413.1
BOD	104	416	80	10	405.1
COD	176	689	174	10	410.1
TSS	72	258	45	5	160.2
Temperature (Degrees C)	23.3	22.9	20.2	.1	170.1
pH (Std Units)	7.62	7.80	7.84	.02	150.1
Silver	0.02	< 0.01	0.02	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
NOV 23 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

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

Attn: Greg Hrbacek
Team Leader Plant Operations

INDUSTRIAL WASTEWATER DISCHARGE PERMIT NUMBER 1020548900.

ANNUAL PERMIT FEE NOTICE

For permits in effect as of **10/01/2015**.

Fee will be included in a separate bill from the Metropolitan St. Louis Sewer District.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2015 through September 30, 2016, issued in accordance with the Metropolitan St. Louis District Ordinance #12413 for the location at **1465 South Grand Blvd.**

Base charge @ $150.00 per permit			$150.00
Volume charge @$0.72 per average daily Ccf	59.12	Ccf(s)	42.57
Sample Point Charge @$100.00 per sample point	3	Point(s)	300.00
		Total Fee Due:	**492.57**

For inquiries about the Annual Permit Fee, please call 314-436-8756. For inquiries about payment of the fee, which appears on your monthly bill, please call 1-866-281-5737.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM Health Cardinal Glennon Childrens Hospital Account #: 1020548900
Premise Address: 1465 South Grand Boulevard Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Facilities Supervisor Phone#: 314-258-2768
Inspector: Dave Kupke
Others Present: None
Inspection Date: 11/2/15 Time: From 12:50 PM To 02:08 PM (Last Insp. 10/20/14)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: _____
   B. Were any changes (including to the primary or changes only to suffixes) for acct no's with RFs? NA☐ Yes☐ No☒
   C. If yes to B, was Cost Recovery Unit informed of the change(s)? NA☐ Yes☐ No☐
   D. Did all acct no's have water usage on PIMS? Yes☒ No☐
   E. If no to D, explain: _____

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Hospital Waste -(X-ray in dental Office at SP004)	Cont	Yes	daily	SP001, SP004, SP005
Kitchen waste-Dietary	Cont	Yes	daily	SP001
Boiler and Cooling tower blowdown	Batch	Yes	daily	SP001
NCCW-Autoclaves	Batch	Yes	daily	SP001, SP005
	(None)	N/A		
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
Metallic Replacement-Dental Office	SP004

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
   If yes: A. List sample points: SP001
   B. What is the frequency for cleaning & maintenance? quarterly
   C. Are any additives used in traps? Yes☐ No☒
   D. If yes to C, was company warned MSD will bill them for blockages they cause? Yes☒ No☐
   E. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
   If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes: A. List pollutants & process: _____

B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐

C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐

(MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)

D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐

(including those that are 'No PSES' and 'General Stds Only')

If yes: A. List regulation & describe operations (including any discharge):

40 CFR 460 Sub A- N/A

B. Explain why it is N/A: This subpart has not been promugated, so general Standards apply..

8. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☐ No☒

If yes: A. List regulation & describe operations (including any discharge):

_____

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☐

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐

(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

9. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒

(New certification also is required for each permit renewal)

If yes: A. Certification date: _____

B. Pollutants accepted by MSD as absent: _____

C Were any requested "absent" pollutants rejected by MSD? Yes☐ No☐

If no to C: D. List them and explain why: _____

E. Were all the accepted pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐

(If compared to intake water levels, explain details below)

If no to E: F. Explain: _____

G. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐

H. Comments: _____

10. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

11. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

12. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes: A. Describe operations & disposal: Radioactive Isotopes for diagnostic purposes

B. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☐ Yes☒ No☐

(If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)

C. Amount discharged in most recent four complete calendar quarters: 0

D. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

13. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

14. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:
Tour of the facility revealed no excessive water usages. The predominat commercial usages comes from its boiler and cooling tower operations, kitchen waste and hospital waste associated with patient care.

15. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Evaporative loss through its cooling tower and boiler system

B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

16. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____

B. Latest approval date: _____

C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

17. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____

B. Date originally applied: _____, or as part of variance above? ☐

18. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

20. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____

B. Explain any marked: _____

21. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?
All rendering containers are kept away from sewers, fuel containers behind the hospital are double walled, and all solvents and lab solvent waste are container in the appropriate cabinets.

22. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____
B. What needs to be done? _____
C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

23. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control and Countermeasure Plan	12/6/12
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? Yes☒ No☐
(must be done)
C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒
D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☒
E. Explain why/why not for C or D: The above plan meets the facilitys need for containment, no revisions are necessary at this time.

24. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____
B. Priority pollutants (or "none"): _____
C. How is spent solvent disposed? _____
(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

25. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A.

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Acetone	lab reagent	Yes☐ No☒	lab reagent	Yes☐ No☒
Metylene Chloride, Chloroform, Phenol	lab reagent	Yes☐ No☒	lab reagent	Yes☒ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

26. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes: A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
B. If no to A, date of last update for SMP: _____
C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
(If no to C or D, write company and require submittal and/or update)

27. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐
A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
(Must post if company generates process wastewater or stores chemicals of concern)

28. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. How frequently is sampling required? quarterly
- D. How frequently are reports required? quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

29. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☐ No☒

If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐

- F. If no to A,B,C, or E, explain needed changes: _____

30. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
- A. At which SPs? _____
- B. Are discharge limits in PIMS "alert only"? (If not, change to that & make note: _____) Yes☐ No☐
- C. Does company submit quarterly summaries? Yes☐ No☐
- D. If no, explain: _____

31. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
- A. Is company having the samples analyzed Yes☐ No☐
- B. How does company insure proper preservation, holding times & analytical methods? _____
- C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
- D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
- E. If no to C, or D, explain: _____
- F. Does company still want to split samples? Yes☐ No☐
- G. Comments: _____

32. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☐ No☒

If yes:
- A. Is requirement contained in permit ☐ or other document ☐.
- B. If other document, date & description: _____
- C. What is required to be reported? _____
- D. How frequently are reports required? _____
- E. Have reports been on-time, complete & signed by proper person? Yes☐ No☐
- F. If no, explain: _____

33. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes:
- A. Type and date: _____
- B. Have the reports & actions been on-time & complete? Yes☐ No☐
- C. If no, explain: _____

34. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐

[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no:
- A. Describe: _____
- B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

35. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no: A. How long does company retain records? _____

B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐

C. Where are they kept? Greg Hrbacek keeps all MSD related records in there main office.

36. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:

- ☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____
- ☒ Process discharge => 25,000 GPD Total process volume: 30,628 gpd
- ☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____
- ☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____ TP ADW organic capacity: _____. Percent: _____
- ☐ Reasonable potential for adverse effect on operations Why? _____
- ☐ Reasonable potential for violating PT std or req't Which ones & why? _____

B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no: C. What is Bldg owner name (use DBA if avail.)? _____ (check E-CIS CAPS Customer Info)

D: What is Bldg owner mailing address? _____ (check E-CIS CAPS Customer Info)

37. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:

SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

38. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes: A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐

B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐

C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐

D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐

E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
(And explain why/why not: _____)

F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
Acceptance letter date: _____ Or write company with requirement ☐

G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐

H. Comments: _____

39. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes: A. Why? _____

B. Are any changes needed to reasons/details? Yes☐ No☐

C. If yes, explain: _____

D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

40. SAMPLE POINTS

						Auto-sampler ready?	DJ (y/n)
SP #	001	Fed.Reg.		Components:	Hospital Waste, Kitchen Waste, NCCW, Boiler blowdown, Sanitary, Storm water	Yes	No
SP #	004	Fed.Reg.		Components:	Hospital Waste, Sanitary, Storm water	Yes	No
SP #	005	Fed.Reg.		Components:	Hospital Waste, Sanitary, NCCW-Autoclaves, Storm water	Yes	No
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A

41. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes: A. List SPs: _____

B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

42. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes: A. List SPs and reasons: _____

43. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes: A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐

B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐

C. If No to B, explain:_____

(Must also write company and require installation of SP)

44. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes: A. List Sample Points: SP001, SP004, and SP005

45. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

C. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒

D. If yes to C, list SPs & describe: _____

E. If yes to C, was company directed to take corrective actions? Yes☐ No☐

46. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/5/12

A. Is the map correct and accurate in all its details? Yes☐ No☒

B If no, what changes are needed: Change Name

47. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

_____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	TOX

WUNNENBERG INFO.

Base Map 20F3
Wun:St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

PR25 Process Disch => 25,000 GPD

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

Billing Address
1465 South Grand Blvd.
St Louis, MO. 63104

INSPECTION INFORMATION

Next Due	Insp Rslt	
11/02/2015	RIN	David Kupke

PERMIT INFORMATION

Issue Date: 05/01/2015
Expire Date: 04/30/2020
Extended Date:
Writer Scott Rehmer

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke
IUQ Recvd Date: 11/03/2014
Reviewer: David Kupke
IUQ Recvd Date: 11/24/2009
Reviewer: David Kupke

CONTACTS

BILL	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD2	Kevin Smith	Facilities Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facilities Supervisor	CELL	(314) 678-2031 Ext.
FLD3	Jack Mitchell	Maintenance Mechanic	OFF	(314) 577-5600 Ext.
OFF1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
OFF2	Kevin Smith	Facility Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facility Supervisor	SWR	(314) 577-5600 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 Hrs: 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage Y On-Site Disposal N Off-Site Disposal Y

11/03/2014	Acids and/or Alkalies		22	LBS
11/03/2014	Equipment Oils and/o		250	GAL
11/03/2014	Infectious Waste	Medical waste	5500	LBS
11/03/2014	Kitchen/Food Service		30000	LBS
11/03/2014	Organic Compounds		16	LBS
11/03/2014	Paints or Paint Sludge:		800	LBS
11/03/2014	Solvents/Thinners		2098	LBS
11/03/2014	Other	medical and pharmaceutic	354	LBS
11/03/2014	Other	universal waste	356	LBS

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

Report No. PIMS012A 12/24/2015 8:17:44 am
Data Date & Time: 12/24/2015 8:17:44 am

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSI**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

PRODUCTS

EFF DATE	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	General hospital			

SEWER ACCOUNTS

Sewer Accounts
1020548900

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 01/01/2014 End Date = 12/31/2015 Wdays Cdays

Acct. No.			Consumption					Discharge	
1020548900			**CCF's**	**Gallons**				**Gal/ Wday**	**Gal/ Cday**
1020548900	11/05/2013	02/19/2014	6,841	6,841	A	107	107	107	
1020548900	02/20/2014	05/06/2014	7,052	13,893		76	76	183	
1020548900	05/07/2014	08/12/2014	13,290	27,183		98	98	281	
1020548900	08/13/2014	11/07/2014	15,649	42,832		87	87	368	
1020548900	11/08/2014	01/20/2015	6,666	49,498		74	74	442	
1020548900	01/21/2015	04/16/2015	6,703	56,201		86	86	528	
1020548900	04/17/2015	07/17/2015	13,944	70,145		92	92	620	
1020548900	07/18/2015	10/15/2015	13,683	83,828		90	90	710	
RF	~~0.01~~ 51	**Acct. Total**	83,828	62,707,703		710	710	450	450
		Facility Total	83,828						

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOS**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address: 1465 South Grand Blvd. St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description LIne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	11/24/09
Boiler Blowdown		1,265	GPD		GPD	D	1/21/15
Non Contact Coolir		1,710	GPD		GPD	D	1/21/15
Sanitary		22,680	GPD		GPD	D	1/21/15
Hospital Waste		18,742	GPD		GPD	D	1/21/15
Kitchen Waste	Food prep	5,000	GPD		GPD	D	1/21/15
	Total Flow Avg =	49,397		Max =			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	360C	Trunk Sewer	46 - Rock Springs

Description 8" line exiting NW from SW main hospita

Sewer Route N along Spring, W along Vista,to 39th St,

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	12/17/1(
Sanitary		3,200	GPD		GPD	D	1/21/15
Hospital Waste		2,199	GPD		GPD	D	1/21/15
	Total Flow Avg =	5,399		Max =			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
04	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description 8" lateral exiting W from North side West

Sewer Route N onto Vista Ave., West on Vista to 39th S

SAMPLE POINT NO. 005 Ordinance **NPDES Outfall No.**

Description Manhole 12' N, 10' E from the NW corner of the west building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Storm Water		0	GPD		GPD	D	11/24/09
Non Contact Coolir	Autoclaves	325	GPD		GPD	D	1/21/15
Sanitary		1,120	GPD		GPD	D	1/21/15
Hospital Waste		4,687	GPD		GPD	D	1/21/15
	Total Flow Avg =	6,132		Max =			

PRETREATMENT TYPES

SP	EFF DATE	TYPE	DESCRIPTION
001	02/20/2003	DC28	Grease Trap
004	03/03/2004	DC32	Metallic Replacement

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSI**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Asbestos (Fibrous)	SP	Silver (Total)	KP	Zinc (Total)	KP
Mercury (Total)	SP	Lead (Total)	SP	Phenol	KP
Benzo (K) Fluoranthene	KP	2,4-Dinitrophenol	KP	Pyrene	KP
Pentachlorophenol	KP	Indeno (1,2,3-cd) pyrene	KP	Fluoranthene	KP
Benzo (A) Pyrene	KP	Toluene	KP	Chloroform	KP
Benzene	KP	Acenaphthylene	KP	Acenaphthene	KP
Phenanthrene	KP	Naphthalene	KP	Fluorene	KP
Dibenzo (A,H) Anthracene	KP	Chrysene	KP	Benzo (G,H,I) Perylene	KP
Benzo (B) Fluoranthene	KP	Benzo (A) Anthracene	KP	Ethylbenzene	KP

EXTRA STRENGTH SURCHARGE INFORMATION

PIMS FACILITY CONTACTS

For Account Number Selected **1020548900** **SSM HEALTH CARDINAL GLENNON CHILDREN'S HOSPITA**

Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type / Contact Type	Contact Name	Contact Title	Email	Signatory	Phone Type	Number	Ext.
Billing Address							
Billing Contact	Greg Hrbacek	Team Leader Plant Operations		Y	CELL	(314)795-1386	
Billing Contact	Greg Hrbacek	Team Leader Plant Operations		Y	OFF	(314)577-5327	
Office Mailing Address							
Office Contact - Primary	Greg Hrbacek	Team Leader Plant Operations		N	CELL	(314)795-1386	
Office Contact - Primary	Greg Hrbacek	Team Leader Plant Operations		N	OFF	(314)577-5327	
Office Contact 1st Alt	Kevin Smith	Facility Supervisor		N	OFF	(314)268-2768	
Office Contact 1st Alt	Kevin Smith	Facility Supervisor		N	SWR	(314)577-5600	
Premise Address							
Field Contact - Primary	Greg Hrbacek	Team Leader Plant Operations	Gregory_Hrbacek@ssmhc.com	Y	CELL	(314)795-1386	
Field Contact - Primary	Greg Hrbacek	Team Leader Plant Operations	Gregory_Hrbacek@ssmhc.com	Y	OFF	(314)577-5327	
Field Contact 1st Alt	Kevin Smith	Facilities Supervisor	Kevin_Smith@ssmhc.com	N	CELL	(314)678-2031	
Field Contact 1st Alt	Kevin Smith	Facilities Supervisor	Kevin_Smith@ssmhc.com	N	OFF	(314)268-2768	
Field Contact 2nd Alt	Jack Mitchell	Maintenance Mechanic		N	OFF	(314)577-5600	

MSD 035382

PIMS
REPORT OF FIELD SAMPLING REQUIREMENTS
HEALTH CARDINAL GLENNON CHILDREN'S HOSP

Account No Entered **1020548900**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2016
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2016
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2016
	T237000	pH	Once/year	Grab	06/30/2016
	T247000	Temperature	Once/year	Grab	06/30/2016
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2016
	T257000	Total Phenols	Once/year	Grab	06/30/2016
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2016
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2016
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-	Once/year	Grab	06/30/2016

004 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2016
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2016
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2016
	T237000	pH	Once/year	Grab	06/30/2016
	T247000	Temperature	Once/year	Grab	06/30/2016
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2016
	T257000	Total Phenols	Once/year	Grab	06/30/2016
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2016
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2016
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-	Once/year	Grab	06/30/2016

005 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2016
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2016
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2016
	T237000	pH	Once/year	Grab	06/30/2016
	T247000	Temperature	Once/year	Grab	06/30/2016
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2016
	T257000	Total Phenols	Once/year	Grab	06/30/2016
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2016
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-	Once/year	Grab	06/30/2016

SR
11-2-15

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		7-22 & 7-23		7-22 & 7-23		7-23 & 7-24		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:10 am		09:25 am		09:45 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								
OIL & GREASE	200		20		9		17	mg/L
BOD	200		102		194		63	mg/L
COD	****		246		421		123	mg/L
TOTAL SUSPENDED SOLIDS	****		39		112		46	mg/L
TEMPERATURE (Degrees C)	60		27.4		26.9		26.6	
pH (Std. Units)	5.5-11		7.45		8.05		7.98	
SILVER	.5		0.02		0.01		0.01	mg/L
PHENOL			<0.05		<0.05		<0.05	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
OCT 29 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Greg Hrbacek

Title: Team Leader Plant Ops Telephone: 314-577-5327

Signature: Greg Hrbacek Date: 10/29/15

Point ① 78,000

Point ~~2~~ ④ 8,000

Point ~~3~~ ⑤ 10,000

RECEIVED

OCT 29 2015

DIVISION OF ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: August 5, 2015
Lab. No.: 2015MT0413
Invoice No.: 215280
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:10 a.m. / 07-22-15 to 09: 10 a.m. / 07-23-15
Grab Sample 9:10 a.m. / 07-22-15
Sample Point Ref. Number: 004
Waste Water Composite: 09:25 a.m. / 07-22-15 to 09:25 a.m. / 07-23-15
Grab Sample 09:25 a.m. / 07-22-15
Sample Point Ref. Number: 005
Waste Water Composite: 09:45 a.m. / 07-23-15 to 09:45 a.m. / 07-24-15
Grab Sample: 09:45 a.m. / 07-23-15

DATE ANALYZED: 07-22-15 to 08-05-15

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	20	9	17	5	413.1
BOD	102	194	63	10	405.1
COD	246	421	123	10	410.1
TSS	39	112	46	5	160.2
Temperature (Degrees C)	27.4	26.9	26.6	.1	170.1
pH (Std Units)	7.45	8.05	7.98	.02	150.1
Silver	0.02	0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
OCT 29 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 10/12/15

RECEIVED
OCT 12 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 7/6/15

RECEIVED
JUL 06 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
6-5-15

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		5-12/5-13-1	5-12/5-13-1	5-14/5-15-1	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:45 am	10:00am	09:50 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 *		49K	5K	6K	GPD
OIL & GREASE	200	23	5	16	mg/L
BOD	200	107	78	45	mg/L
COD	****	193	540	74	mg/L
TOTAL SUSPENDED SOLIDS	****	~~338~~	~~210~~	~~159~~	mg/L
TEMPERATURE (Degrees C)	60	~~21.6~~	~~21.0~~	~~23.0~~	
pH (Std. Units)	5.5-11	7.97	8.62	8.92	
SILVER	.5	0.01	<0.01	0.01	mg/L
PHENOL		<0.05	<0.05	<0.05	mg/L

*provided per pc w/ G. Hrbacek on 6/5/15. SR

You must complete and sign the certification statements on the second page.

RECEIVED
JUN 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: May 27, 2015
Lab. No.: 2015MT0349
Invoice No.: 215221
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:45 a.m. / 05-12-15 to 09: 45 a.m. / 05-13-15
Grab Sample 9:45 a.m. / 05-12-15
Sample Point Ref. Number: 004
Waste Water Composite: 10:00 a.m. / 05-12-15 to 10:00 a.m. / 05-13-15
Grab Sample 10:00 a.m. / 05-12-15
Sample Point Ref. Number: 005
Waste Water Composite: 09:50 a.m. / 05-14-15 to 09:50 a.m. / 05-15-15
Grab Sample: 09:50 a.m. / 05-14-15

DATE ANALYZED: 05-12-15 to 05-27-15

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	23	5	16	5	413.1
BOD	107	78	45	10	405.1
COD	193	540	74	10	410.1
TSS	338	210	159	5	160.2
Temperature (Degrees C)	21.6	21.0	23.0	.1	170.1
pH (Std Units)	7.97	8.62	8.91	.02	150.1
Silver	0.01	< 0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

MSD 035390

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Greg Hrbacek

Title: Team Leader Plant Ops Telephone: 314-577-5327

Signature: Greg Hrbacek Date:

RECEIVED
JUN 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
5/5/15

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION 1020-5489-00

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		1-21&1-22-15		1-21& 1-22		1-22 & 1-23		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:40am		09:55 am		10:15 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 (on Reverse)								
OIL & GREASE	200		19		12		22	mg/L
BOD	200		156		208		265	mg/L
COD	****		369		432		527	mg/L
TOTAL SUSPENDED SOLIDS	****		286		280		58	mg/L
TEMPERATURE (Degrees C)	60		17.6		15.7		20.4	
pH (Std. Units)	5.5-11		8.48		8.72		8.59	
SILVER	.5		0.02		<0.01		0.02	mg/L
PHENOL			<0.005		<0.005		<0.005	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
MAY 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

--- NONE ---

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Greg Hvbacek

Title: Team Leader, Plant Operation Telephone: 314-577-5327

Signature: Greg Hvbacek Date: 5/4/15

Flow Rate

#1	21,000	SP001
#2	7,500	SP005
#3	10,000	SP004

MIDWEST TESTING LABORATORIES

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

Date: February 5, 2015
Lab. No.: 2015MT0265
Invoice No.: 215126
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:40 a.m. / 01-21-15 to 09: 40 a.m. / 01-22-15
Grab Sample 9:40 a.m. / 01-21-15
Sample Point Ref. Number: 004
Waste Water Composite: 09:55 a.m. / 01-21-14 to 09:55 a.m. / 01-22-15
Grab Sample 09:55 a.m. / 01-21-15
Sample Point Ref. Number: 005
Waste Water Composite: 10:15 a.m. / 01-22-15 to 10:15 a.m. / 01-23-15
Grab Sample: 10:15 a.m. / 01-22-15

DATE ANALYZED: 01-21-15 to 02-05-15

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	19	12	22	5	413.1
BOD	156	208	265	10	405.1
COD	369	432	527	10	410.1
TSS	286	280	58	5	160.2
Temperature (Degrees C)	17.6	15.7	20.4	.1	170.1
pH (Std Units)	8.48	8.72	8.59	.02	150.1
Silver	0.02	< 0.01	0.02	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAY 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES, INC.

2645 GRAVOIS AVENUE
ST LOUIS, MO 63118
Phone: 314-773-3035
Fax: 314-773-3519

INVOICE

Invoice Number	215126
Invoice Date	2/5/2015
P.O. Number	4502062264

BILL TO:
SSM CARDINAL GLENNON CHILDREN HOSPITAL Attn: Accounts Payable 1465 S. Grand Blvd. St. Louis, Missouri 63104-1095

REPORT TO
Mr. Greg Hrbacek

ORDER DATE	DUE DATE	TERMS	PO NUMBER	LAB NUMBER
1/21/2015	3/5/2015	Net 30 Days	4502062264	2015MT0265

DESCRIPTION		AMOUNT
WATER QUALITY TESTING		
SAMPLE ID:	Waste Water: SP #001, SP #004, & #005: Grab & Composite	
TEST FOR :	Waste Water: discharge monitoring - 1st Qtr. 2015 @ $498.00 / sample Total samples: Three	$1,494.00
SAMPLE ID:	Waste Water: SP #001 and SP #004, & #005: Grab	
TEST FOR:	Total Toxic Organics including Volatile, Semi-volatile, Pesticides, and PCB's - once a year @ $875.00 / sample Total samples: Three	$2,625.00
Thank you for your business.	**TOTAL**	$4,119.00

MIDWEST TESTING LABORATORIES

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

Date: February 5, 2015
Lab. No.: 2015MT0265
Invoice No.: 215126

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Water
SAMPLE I.D. : Waste Water
Sampling Point Ref. Number: 001 Grab: 09:40 a.m., 1-21-15
Sampling Point Ref. Number: 004 Grab: 09:55 a.m., 1-21-15
Sampling Point Ref. Number: 005 Grab: 10:15 a.m., 1-22-15
DATE ANALYZED : 1-27-15
RESULTS: ug/L OR PARTS PER BILLION (PPB)
VOLATILE ORGANICS EPA 600 METHOD 624

ANALYTE	SP# 001	SP# 004	SP# 005	MDL
1,1,1-Trichloroethane	ND	ND	ND	5.0
1,1,2,2-Tetrachloroethane	ND	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	ND	5.0
1,1-Dichloroethane	ND	ND	ND	5.0
1,1-Dichloroethene	ND	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	ND	5.0
1,2-Dichloroethane	ND	ND	ND	5.0
1,2-Dichloropropane	ND	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	ND	5.0
2-Chloroethyl Vinyl ether	ND	ND	ND	20.0
Acrolein	ND	ND	ND	100
Acrylonitrile	ND	ND	ND	5.0
Benzene	ND	ND	ND	2.0
Bromodichloromethane	ND	ND	ND	5.0
Bromoform	ND	ND	ND	5.0
Bromomethane	ND	ND	ND	10.0
Carbon tetrachloride	ND	ND	ND	5.0
Chlorobenzene	ND	ND	ND	5.0
Chloroethane	ND	ND	ND	10.0
Chloroform	ND	ND	ND	5.0
Chloromethane	ND	ND	ND	10.0
Cis-1,3-Dichloropropene	ND	ND	ND	5.0
Dibromochloromethane	ND	ND	ND	5.0
Ethylbenzene	ND	ND	ND	5.0
m,p-Xylene	ND	ND	ND	5.0
Methylene chloride	ND	ND	ND	5.0
o-Xylene	ND	ND	ND	5.0
Tetrachloroethene	ND	ND	ND	5.0

RECEIVED
MAY 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP # 001	SP# 004	SP# 005	MDL
Toluene	ND	ND	ND	5.0
Trans-1,2-Dichloroethene	ND	ND	ND	5.0
Trans-1,3-Dichloropropene	ND	ND	ND	5.0
Trichloroethene	ND	ND	ND	5.0
Trichlorofluoromethane	ND	ND	ND	5.0
Vinyl Chloride	ND	ND	ND	2.0
Xylenes, Total	ND	ND	ND	5.0

ND: Not Detected / MDL: Method Detection Limit
Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

MIDWEST TESTING LABORATORIES

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

Date: February 5, 2015
Lab No.: 2015MT0265
Invoice: 215126

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095
ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Water
SAMPLE I.D. : Waste Water
Sample Point ref. Number: 001: Grab @ 09:40 a.m., 1-21-15
Sample Point ref. Number: 004: Grab @ 09:55 a.m., 1-21-15
Sample Point ref. Number: 005: Grab @ 10:15 a.m., 1-22-15
DATE ANALYZED : 01-29-15
METHOD REF. : EPA 600 METHOD 625 / Semi volatile organic compounds
RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	SP# 001	SP# 004	SP#005	MDL
bis- (Chloromethyl) – ether	ND	ND	ND	0.010
Pyridine	ND	ND	ND	0.010
Aniline	ND	ND	ND	0.010
Benzyl alcohol	ND	ND	ND	0.010
Phenol	ND	ND	ND	0.010
2-Chlorophenol	ND	ND	ND	0.010
bis-(2-Chloroethyl) ether	ND	ND	ND	0.010
N-nitrosodimethylamine	ND	ND	ND	0.010
bis- (2-Chloroisopropyl) ether	ND	ND	ND	0.010
N-Nitroso-di-n-propylamine	ND	ND	ND	0.020
1,3-Dichlorobenzene	ND	ND	ND	0.010
1,4-Dichlorobenzene	ND	ND	ND	0.010
1,2-Dichlorobenzene	ND	ND	ND	0.010
o-Cresol	ND	ND	ND	0.010
m,p-Cresol	ND	ND	ND	0.010
Hexachloroethane	ND	ND	ND	0.010
Nitrobenzene	ND	ND	ND	0.010
2,4-Dimethylphenol	ND	ND	ND	0.010
4-Chloroaniline	ND	ND	ND	0.010
2-Nitrophenol	ND	ND	ND	0.010
2,4-Dichlorophenol	ND	ND	ND	0.010
Benzoic acid	ND	ND	ND	0.050
4-Chloro-3-methylphenol	ND	ND	ND	0.010
bis (2-Chloroethoxy) methane	ND	ND	ND	0.010

RECEIVED
MAY 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP# 001	SP# 004	SP#005	MDL
Isophorone	ND	ND	ND	0.010
1,2,4-Trichlorobenzene	ND	ND	ND	0.010
2-Methylnaphtalene	ND	ND	ND	0.010
Hexachlorocyclopentadiene	ND	ND	ND	0.010
Naphthalene	ND	ND	ND	0.010
Hexachlorobutadiene	ND	ND	ND	0.010
2,4,6-Trichlorophenol	ND	ND	ND	0.010
2,4,5-Trichlorophenol	ND	ND	ND	0.010
2-Nitroaniline	ND	ND	ND	0.010
3-Nitroaniline	ND	ND	ND	0.010
4-Nitroaniline	ND	ND	ND	0.010
2,4- Dinitrophenol	ND	ND	ND	0.010
4-Nitrophenol	ND	ND	ND	0.010
4,6-Dinitro-2-methylphenol	ND	ND	ND	0.010
2-Chloronaphthalene	ND	ND	ND	0.010
4-Chlorophenyl phenyl ether	ND	ND	ND	0.010
Dimethyl phthalate	ND	ND	ND	0.010
2,6-Dinitrotoluene	ND	ND	ND	0.010
Acenaphthylene	ND	ND	ND	0.010
Dibenzofuran	ND	ND	ND	0.010
Diethyl phthalate	ND	ND	ND	0.010
Acenaphthene	ND	ND	ND	0.010
Benzo(g,h,i)perylene	ND	ND	ND	0.010
Fluorene	ND	ND	ND	0.010
Azobenzene	ND	ND	ND	0.010
2,4-Dinitrontoluene	ND	ND	ND	0.010
Hexachlorobenzene	ND	ND	ND	0.010
Pentachlorophenol	ND	ND	ND	0.010
N-Nitrosodiphenylamine	ND	ND	ND	0.010
4-Bromophenyl phenyl ether	ND	ND	ND	0.010
Carbazole	ND	ND	ND	0.010
Di-n-butyl phthalate	ND	ND	ND	0.010
Phenanthrene	ND	ND	ND	0.010
Anthracene	ND	ND	ND	0.010
Fluoranthene	ND	ND	ND	0.050
Butyl benzyl phthalate	ND	ND	ND	0.010
bis (2-ethylhexyl) phthalate	ND	ND	ND	0.010
Pyrene	ND	ND	ND	0.010
Benzo(a)anthracene	ND	ND	ND	0.010
Chrysene	ND	ND	ND	0.010
3,3'-Dichlorobenzidine	ND	ND	ND	0.010
Di-n-octyl phthalate	ND	ND	ND	0.010
Benzidine	ND	ND	ND	0.010

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP# 001	SP# 004	SP#005	MDL
Benzo(b)fluoranthene	ND	ND	ND	0.010
Benzo(k)fluoranthene	ND	ND	ND	0.010
Benzo(a) pyrene	ND	ND	ND	0.010
Dibenzo(a,h)anthracene	ND	ND	ND	0.010
Indeno(1,2,3-cd)pyrene	ND	ND	ND	0.010

ND: Not Detected / MDL: Method Dection Limit

Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAY 05 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: February 5, 2015
Lab. No.: 2015MT0265
Invoice No: 215126

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095
ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Waste Water
SAMPLE I.D. : Sample Point ref. Number 001: Grab @ 09:40 a.m., 1-21-15
Sample Point ref. Number 004: Grab @ 09:55 a.m., 1-21-15
Sample Point ref. Number 005: Grab @ 10:15 a.m., 1-22-15
DATE ANALYZED : 02-03-15
RESULTS: ug/L 0R PARTS PER BILLION
ORGANOCHLORINE PESTICIDE ANALYSIS / SW-846 METHOD 8081

ANALYTE	SP# 001	SP#004	SP#005	MDL
Aldrin	ND	ND	ND	0.05
alpha-BHC	ND	ND	ND	0.05
beta-BHC	ND	ND	ND	0.05
gamma-BHC (Lindane)	ND	ND	ND	0.04
delta- BHC	ND	ND	ND	0.05
Chlordane	ND	ND	ND	0.14
4,4'-DDD	ND	ND	ND	0.05
4,4'-DDE	ND	ND	ND	0.05
4,4'-DDT	ND	ND	ND	0.05
Dieldrin	ND	ND	ND	0.05
Endosulfan I	ND	ND	ND	0.05
Endosulfan II	ND	ND	ND	0.05
Endosulfan Sulfate	ND	ND	ND	0.05
Endrin	ND	ND	ND	0.06
Endrin Aldehyde	ND	ND	ND	0.05
Heptachlor	ND	ND	ND	0.04
Heptachlor Epoxide	ND	ND	ND	0.20
Methoxychlor	ND	ND	ND	0.06
Toxaphene	ND	ND	ND	0.50
AROCHLOR-1016	ND	ND	ND	0.50
AROCHLOR-1221	ND	ND	ND	0.50
AROCHLOR-1232	ND	ND	ND	0.50
AROCHLOR-1242	ND	ND	ND	0.50
AROCHLOR-1248	ND	ND	ND	0.50
AROCHLOR-1254	ND	ND	ND	0.50
AROCHLOR-1260	ND	ND	ND	0.50

ND: Not detected / MDL: Method Detection Limit

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

Company Name: SSM **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 4/13/15

RECEIVED
APR 13 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

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

PART I: IDENTIFYING INFORMATION 1020548900

55M

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 1/12/15

RECEIVED
JAN 13 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

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

Attn: Greg Hrbacek
Team Leader Plant Operations

INDUSTRIAL WASTEWATER DISCHARGE PERMIT NUMBER 1020548900.

ANNUAL PERMIT FEE NOTICE

For permits in effect as of **10/01/2014.**

Fee will be included on the next regular monthly bill from the Metropolitan St. Louis Sewer District.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2014 through September 30, 2015, issued in accordance with the Metropolitan St. Louis District Ordinance #12413 for the location at **1465 South Grand Blvd.**

Base charge @ $150.00 per permit			$150.00
Volume charge @$0.72 per average daily Ccf	47.03	Ccf(s)	$33.86
Sample Point Charge @$100.00 per sample point	3	Point(s)	$300.00
		Total Fee Due:	**$483.86**

For inquiries about the Annual Permit Fee, please call 314-436-8756. For inquiries about payment of the fee, which will appear on your upcoming monthly bill, please call 1-866-281-5737.

THIS IS NOT A BILL

DO NOT PAY NOW

FEE WILL BE INCLUDED ON MONTHLY BILL

Doug Mendoza SSM Cardinal Glennon

From: Doug Mendoza
Sent: Tuesday, November 25, 2014 9:28 AM
To: Doug Mendoza
Subject: Clarification for MSD Ebola virus disinfection requirements letter, and policy re. CDC's interim guidance for untreated sewage

On November 20, the Metropolitan St. Louis Sewer District issued a letter to the hospitals in its service area that included requirements for treatment of wastewater generated and discharged to the sewer system from facilities that are treating or caring for patients infected with the Ebola virus. We understand that there has been some confusion over a portion of item three in the requirements. Therefore, MSD is providing the following clarification through rewording of the item:

3. For any wastes such as feces, urine and vomit, and liquid waste from washing that are produced by the Ebola-infected patient, <u>and for liquid waste by those in direct contact with the patient that is produced immediately afterward from washing</u>: all such wastes must be placed into a toilet or other vessel to hold the wastes, and then disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus, with a contact time of at least 2.5 times the prescribed contact time for the particular disinfectant.

MSD recognizes that those in direct contact, but not infected, will not be contagious for the Ebola virus. However, as a cautionary measure, they still must disinfect liquid wastes from washing after having had direct contact with an Ebola-infected patient.

This past Friday, November 21, 2014, the Centers for Disease Control and Prevention also issued Interim Guidance for Managers and Workers Handling Untreated Sewage from Individuals with Ebola in the United States. Please understand that this is only interim guidance. MSD has determined that its requirements, contained in the November 20, 2014 letter and clarified above, will remain in effect in addition to the CDC's interim procedures. Once a final guidance has been released by the CDC, then MSD will revisit the issue.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT
Douglas M. Mendoza, P.E.
Industrial Pretreatment Manager

Re: MSD Ebola virus disinfection requirements letter

As you are likely aware, concerns over public health and exposure to the Ebola virus have recently become an issue in the United States. One of these concerns involves the Ebola virus in wastewater and its impact on workers in the sewers, workers at wastewater treatment plants, personnel working on plumbing systems in buildings, and the public that may come into contact with wastewater from sewer blockages or other overflows.

While the Centers for Disease Control and Prevention (CDC) has stated that sewage handling processes in the United States are designed to inactivate infectious agents, these processes do not occur until after potential exposure to all the above-listed parties. Therefore, MSD has developed requirements for treatment of wastewater generated and discharged to the sewer system from facilities that are treating or caring for patients infected with the Ebola virus. Such facilities must treat their wastewater prior to discharge to the sewer system. These requirements have been developed based on Water Environment Federation (WEF) meetings and consultations, and discussions with other sewage agencies located in cities that have treated patients infected with the Ebola virus. WEF is a not-for-profit technical and educational organization of 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world.

1. When a facility receives an Ebola virus-infected patient, the facility must immediately notify the Metropolitan St. Louis Sewer District via telephone at 314.768.6260. This number is MSD's 24-hour line.

2. If any liquids or other materials generated from treatment and care of an Ebola-virus infected patient are to be discharged to sewer, all such liquids and other materials must be disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus. The list is available at http://www.epa.gov/oppad001/list-l-ebola-virus.html.

3. For any wastes such as feces, urine and vomit, and liquid waste from washing that are produced by the Ebola-infected patient or those in direct contact with the patient: all such wastes must be placed into a toilet or other vessel to hold the wastes, and then disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus, with a contact time of at least 2.5 times the prescribed contact time for the particular disinfectant. This will help to address aerosolization concerns for wastewater as toilets are flushed, along with differences in disinfection of bulk volumes as compared to surfaces.

We trust you share our concern for protection of workers and the public. If you have any questions, please contact me at 314.436.8717.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Manager of Industrial Pretreatment

cc: Brian Hoelscher – MSD Executive Director
Jonathon Sprague, Bret Berthold, Rich Unverferth, John Lodderhose, Susan Myers
Vicki Edwards, Mike Grace, Lance LeComb

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

November 20, 2014

Kevin Smith
Facilities Supervisor
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 South Grand Blvd.
St. Louis, MO 63104-1095

Dear Mr. Smith:

Re: MSD Ebola virus disinfection requirements letter

As you are likely aware, concerns over public health and exposure to the Ebola virus have recently become an issue in the United States. One of these concerns involves the Ebola virus in wastewater and its impact on workers in the sewers, workers at wastewater treatment plants, personnel working on plumbing systems in buildings, and the public that may come into contact with wastewater from sewer blockages or other overflows.

While the Centers for Disease Control and Prevention (CDC) has stated that sewage handling processes in the United States are designed to inactivate infectious agents, these processes do not occur until after potential exposure to all the above-listed parties. Therefore, MSD has developed requirements for treatment of wastewater generated and discharged to the sewer system from facilities that are treating or caring for patients infected with the Ebola virus. Such facilities must treat their wastewater prior to discharge to the sewer system. These requirements have been developed based on Water Environment Federation (WEF) meetings and consultations, and discussions with other sewage agencies located in cities that have treated patients infected with the Ebola virus. WEF is a not-for-profit technical and educational organization of 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world.

1. When a facility receives an Ebola virus-infected patient, the facility must immediately notify the Metropolitan St. Louis Sewer District via telephone at 314.768.6260. This number is MSD's 24-hour line.

2. If any liquids or other materials generated from treatment and care of an Ebola-virus infected patient are to be discharged to sewer, all such liquids and other materials must be disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus. The list is available at http://www.epa.gov/oppad001/list-l-ebola-virus.html.

3. For any wastes such as feces, urine and vomit, and liquid waste from washing that are produced by the Ebola-infected patient or those in direct contact with the patient: all such wastes must be placed into a toilet or other vessel to hold the wastes, and then disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus, with a contact time of at least 2.5 times the prescribed contact time for the particular disinfectant. This will help to address aerosolization concerns for wastewater as toilets are flushed, along with differences in disinfection of bulk volumes as compared to surfaces.

We trust you share our concern for protection of workers and the public. If you have any questions, please contact me at 314.436.8717.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Manager of Industrial Pretreatment

cc: Brian Hoelscher – MSD Executive Director
Jonathon Sprague, Bret Berthold, Rich Unverferth, John Lodderhose, Susan Myers
Vicki Edwards, Mike Grace, Lance LeComb

OK
pm

Dave Kupke ACCT # 1020148900

From: Dave Kupke
Sent: Wednesday, November 19, 2014 12:59 PM
To: 'Kevin_Smith@ssmhc.com'
Subject: MSD Ebola virus disinfection requirements letter

November 20, 2014

Kevin Smith
Facilities Supervisor
SSM-CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 South Grand Blvd.
St. Louis, MO 63104-1095

Dear Mr. Smith:

Re: MSD Ebola virus disinfection requirements letter

As you are likely aware, concerns over public health and exposure to the Ebola virus have recently become an issue in the United States. One of these concerns involves the Ebola virus in wastewater and its impact on workers in the sewers, workers at wastewater treatment plants, personnel working on plumbing systems in buildings, and the public that may come into contact with wastewater from sewer blockages or other overflows.

While the Centers for Disease Control and Prevention (CDC) has stated that sewage handling processes in the United States are designed to inactivate infectious agents, these processes do not occur until after potential exposure to all the above-listed parties. Therefore, MSD has developed requirements for treatment of wastewater generated and discharged to the sewer system from facilities that are treating or caring for patients infected with the Ebola virus. Such facilities must treat their wastewater prior to discharge to the sewer system. These requirements have been developed based on Water Environment Federation (WEF) meetings and consultations, and discussions with other sewage agencies located in cities that have treated patients infected with the Ebola virus. WEF is a not-for-profit technical and educational organization of 36,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world.

1. When a facility receives an Ebola virus-infected patient, the facility must immediately notify the Metropolitan St. Louis Sewer District via telephone at 314.768.6260. This number is MSD's 24-hour line.

2. If any liquids or other materials generated from treatment and care of an Ebola-virus infected patient are to be discharged to sewer, all such liquids and other materials must be disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus. The list is available at http://www.epa.gov/oppad001/list-l-ebola-virus.html.

3. For any wastes such as feces, urine and vomit, and liquid waste from washing that are produced by the Ebola-infected patient or those in direct contact with the patient: all such wastes must be placed into a toilet or other vessel to hold the wastes, and then disinfected using disinfectants known to meet CDC's criteria for use against the Ebola virus, with a contact time of at least 2.5 times the prescribed contact time for the particular disinfectant. This will help to address aerosolization concerns for wastewater as toilets are flushed, along with differences in disinfection of bulk volumes as compared to surfaces.

We trust you share our concern for protection of workers and the public. If you have any questions, please contact me at 314.436.8717.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Manager of Industrial Pretreatment

cc: Brian Hoelscher – MSD Executive Director
Jonathon Sprague, Bret Berthold, Rich Unverferth, John Lodderhose, Susan Myers
Vicki Edwards, Mike Grace, Lance LeComb

SR
11/12

1020-5489-00

SSM CARDINAL GLENNON CHILDRENS MEDICAL CENTER

1465 SOUTH GRAND BOULEVARD

ST. LOUIS MO, 63104

FAX

DATE: 11/6/14 NUMBER OF PAGES 3

TO: Scott Riemers FROM: Greg Hrbacek

FAX: 314-436-8753 FAX:

PH: 314-436-8756 PH: 314-577-5327

RE: Quarterly Sewer Rates

Flow rates:

78,000 gpd #1

8,000 gpd #2

10,000 gpd #3

MIDWEST TESTING LABORATORIES

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

Date: November 5, 2014
Lab. No.: 2014MT0396
Invoice No.: 214351
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:30 a.m. / 10-21-14 to 09: 30 a.m. / 10-22-14
Grab Sample 9:30 a.m. / 10-21-14
Sample Point Ref. Number: 004
Waste Water Composite: 09:40 a.m. / 10-23-14 to 09:40 a.m. / 10-24-14
Grab Sample 09:40 a.m. / 10-23-14
Sample Point Ref. Number: 005
Waste Water Composite: 09:50 a.m. / 10-23-14 to 09:50 a.m. / 10-24-14
Grab Sample: 09:50 a.m. / 10-23-14

DATE ANALYZED: 10-21-14 to 11-5-14

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	18	15	20	5	413.1
BOD	161	174	153	10	405.1
COD	225	251	240	10	410.1
TSS	96	220	196	5	160.2
Temperature (Degrees C)	21.6	20.5	20.0	.1	170.1
pH (Std Units)	8.41	8.79	9.22	.02	150.1
Silver	0.02	< 0.01	< 0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		10-21/10-22	10-23/10-24	10-23/10-24	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		~~09:30am~~	09:40 am	09:50 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					
OIL & GREASE	200	18	15	20	mg/L
BOD	200	161	174	153	mg/L
COD	****	225	251	240	mg/L
TOTAL SUSPENDED SOLIDS	****	96	220	196	mg/L
TEMPERATURE (Degrees C)	60	21.6	20.5	20.0	
pH (Std. Units)	5.5-11	8.41	8.79	9.22	
SILVER	.5	0.02	< 0.01	< 0.01	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader Plant Ops Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 11/6/14

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM Cardinal Glennon Children's Hospital Account #: 1020548900
Premise Address: 1465 South Grand Boulevard Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Facilities Supervisor Phone#: 314-268-2768
Inspector: Dave Kupke
Others Present: None
Inspection Date: **10/20/14** Time: From 09:44 AM To 11:49 AM (Last Insp. 10/9/13)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: _____
   B. Did all acct no's have water usage on PIMS? Yes☒ No☐
   C. If no to B, explain: _____

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Hospital Waste-(SP004 Hospital waste comprises of some X-ray development in Dental Office)	Batch	Yes	daily	SP001, SP004, SP005
Cooling tower and boiler blowdown	Batch	Yes	daily	SP001
Kitchen waste	Batch	Yes	daily	SP001
NCCW-Autoclaves	Batch	Yes	daily	SP001, SP005
	(None)	N/A		
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
Metalic Replacement-Dental Office	SP004

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
   If yes: A. List sample points: SP001
   B. What is the frequency for cleaning & maintenance? quarterly
   C. Are any additives used in traps? Yes☐ No☒
   D. If yes to C, was company warned MSD will bill them for blockages they cause? Yes☒ No☐
   E. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
   If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes: A. List pollutants & process: _____

B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐

C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐

(MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)

D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐

(including those that are 'No PSES' and 'General Stds Only')

If yes: A. List regulation & describe operations (including any discharge):

40 CFR 460 (N/A)-Hospital waste generated from patient care services.

B. Explain why it is N/A: There is no promulgation date for this type of operation general standards only.

8. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☐ No☒

If yes: A. List regulation & describe operations (including any discharge):

_____

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☐

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐

(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

9. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒

If yes: A. Certification date: _____

B. List absent pollutants: _____

C. Were all these pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐

(If compared to intake water levels, explain details below)

If no to C: D. Explain: _____

E. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐

F. Comments: _____

10. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

11. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

12. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes: A. Describe operations & disposal: radioactive isotopes used for diagnostic purposes

B. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☐ Yes☒ No☐

(If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)

C. Amount discharged in most recent four complete calendar quarters: 0

D. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

13. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

14. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)
A. Explain how use was verified & any needed changes:
There is no excessive water usage observed during my tour of the facility. Note that significant amounts of water is used for its plant operations (boiler and cooling tower), kitchen waste,

15. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐
If yes: A. Describe: evaporative loss from cooling tower and boiler 0.51 RF credited for this facility
B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

16. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒
If yes: A. Pollutant(s) and variance limit: _____
B. Latest approval date: _____
C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

17. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒
If yes: A. Pollutant(s) and discharge limit: _____
B. Date originally applied: _____, or as part of variance above? ☐

18. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒
If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐
If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

20. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒
If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____
B. Explain any marked: _____

MSD 035417

21. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?
Water treatment chemicals are contained using catch basins. the labs used laboratory cabinets to contain lab reagents and lab waste.

22. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____
B. What needs to be done? _____
C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

23. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control, and Countermeasures Plan	12/6/12
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? Yes☒ No☐
(must be done)
C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒
D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☒
E. Explain why/why not for C or D: The current plan obtained through a 3rd party consultant meets the needs of the facility. Also there has not been any changes to the site that require additional containment.

24. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____
B. Priority pollutants (or "none"): _____
C. How is spent solvent disposed? _____
(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

25. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A.

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Acetone	lab reagent	Yes☐ No☒	evaporates	Yes☐ No☒
Methylene Chloride, Phenol, Chloroform	lab reagent	Yes☐ No☒	hauled offsite	Yes☒ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

26. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes: A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
B. If no to A, date of last update for SMP: _____
C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
(If no to C or D, write company and require submittal and/or update)

27. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐

A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
(Must post if company generates process wastewater or stores chemicals of concern)

28. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes:
A. Is requirement contained in permit ☒ or other document ☐.
B. If other document, date & description: _____
C. How frequently is sampling required? quarterly
D. How frequently are reports required? quarterly
E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
F. If no, explain: _____

29. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
A. Does sample collection time period match co's production shifts? Yes☒ No☐
B. Are representative grab/comp samples collected? Yes☒ No☐
C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
D. Does company measure pH and/or temperature itself? Yes☐ No☒
If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
F. If no to A,B,C, or E, _____ explain needed changes:

30. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
A. At which SPs? _____
B. Does company submit quarterly summaries? Yes☐ No☐
C. If no, explain: _____

31. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
A. Is company having the samples analyzed Yes☐ No☐
B. How does company insure proper preservation, holding times & analytical methods? _____
C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
E. If no to C, or D, explain: _____
F. Does company still want to split samples? Yes☐ No☐
G. Comments: _____

32. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes:
A. Is requirement contained in permit ☒ or other document ☐.
B. If other document, date & description: Radiation Discharge Report
C. What is required to be reported? quarterly
D. How frequently are reports required? quarterly
E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
F. If no, explain: _____

33. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes:
A. Type and date: _____
B. Have the reports & actions been on-time & complete? Yes☐ No☐
C. If no, explain: _____

34. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐
[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no: A. Describe: _____
B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

35. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no: A. How long does company retain records? _____
B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐
C. Where are they kept? Contact keeps records in a filing cabinet in Mr. Hrbacek' office.

36. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:
☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____
☒ Process discharge => 25,000 GPD Total process volume: 54,648 gpd
☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____
☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____
TP ADW organic capacity: _____. Percent: _____
☐ Reasonable potential for adverse effect on operations Why? _____
☐ Reasonable potential for violating PT std or req't Which ones & why? _____
B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no: C. What is Bldg owner name (use DBA if avail.)? _____
(check E-CIS CAPS Customer Info)
D: What is Bldg owner mailing address? _____
(check E-CIS CAPS Customer Info)

37. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:
SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
B. Explain changes: _____

38. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes: A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐
B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐
C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐
D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐
E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
(And explain why/why not: _____)
F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
Acceptance letter date: _____ Or write company with requirement ☐
G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐
H. Comments: _____

39. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes: A. Why? _____
B. Are any changes needed to reasons/details? Yes☐ No☐
C. If yes, explain: _____
D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

40. SAMPLE POINTS

						DJ(y/n)
SP #	001	Fed.Reg.		Components:	Hospital waste, Cooling tower Blowdown, Boiler Blowdown,Kitchen waste, NCCW-Autoclaves, Sanitary, Storm water	No
SP #	004	Fed.Reg.		Components:	Hospital Waste, Sanitary, Storm water	No
SP #	005	Fed.Reg.		Components:	Hospital waste, NCCW-Autoclaves, Sanitary, Storm water	No
SP #		Fed.Reg.		Components:		N/A
SP #		Fed.Reg.		Components:		N/A

41. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes: A. List SPs: _____

B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

42. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes: A. List SPs and reasons: _____

43. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes: A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐

B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐

C. If No to B, explain:_____

(Must also write company and require installation of SP)

44. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes: A. List Sample Points: SP001, SP004, and SP005

45. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

C. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒

D. If yes to C, list SPs & describe: _____

E. If yes to C, was company directed to take corrective actions? Yes☐ No☐

46. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/5/12

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

47. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

During the walking tour of the facility, I found 1 processor for x-rays in a dental office (SP004). Silver remains as a priority pollutant to monitor.

MSD 035421

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	TOX

WUNNENBERG INFO.

Base Map 20F3
Wun:St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

PR25 Process Disch => 25,000 GPD

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

Billing Address
1465 South Grand Blvd.
St Louis, MO. 63104

INSPECTION INFORMATION

Next Due	Insp Rslt	
	10/20/2014 RIN	David Kupke

PERMIT INFORMATION

Issue Date: 05/01/2010
Expire Date: 04/30/2015
Extended Date:
Writer Scott Rehmer

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke
IUQ Recvd Date: 11/03/2014
Reviewer: David Kupke
IUQ Recvd Date: 11/24/2009
Reviewer: David Kupke

CONTACTS

BILL	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD2	Kevin Smith	Facilities Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facilities Supervisor	CELL	(314) 678-2031 Ext.
FLD3	Jack Mitchell	Maintenance Mechanic	OFF	(314) 577-5600 Ext.
OFF1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
OFF2	Kevin Smith	Facility Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facility Supervisor	SWR	(314) 577-5600 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 Hrs: 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage Y On-Site Disposal N Off-Site Disposal Y

11/24/2009	Equipment Oils and/or Grease		30	GAL
12/04/2009	Infectious Waste	Medical waste	35314	LB/YR
12/04/2009	Other	Chemical waste	556	LB/YR

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

PRODUCTS

EFF DATE	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	General hospital			

Report No. PIMS012A 11/20/2014 1:21:25 pm
Data Date & Time: 11/20/2014 1:21:25 pm

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

SEWER ACCOUNTS

Sewer Accounts
1020548900

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 01/01/2013 12:00:00AM **End Date =** 12/31/2014 12:59:59PM **Wdays** **Cdays**

Acct. No.			Consumption					Discharge	
1020548900			**CCF's**	**Gallons**				**Gal/ Wday**	**Gal/ Cday**
1020548900	11/07/2012	01/16/2013	5,700	5,700	A	71	71	71	
1020548900	01/17/2013	04/16/2013	-30,195	-24,495		90	90	161	
1020548900	04/17/2013	08/05/2013	12,079	-12,416		111	111	272	
1020548900	08/06/2013	11/04/2013	14,737	2,321		91	91	363	
1020548900	11/05/2013	02/19/2014	6,841	9,162		107	107	470	
RF 0.51	**Acct. Total**		9,162	6,853,652		470	470	7,437	7,437
	Facility Total		9,162						

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description Llne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Boiler Blowdown		3,600	GPD		GPD	D	11/24/09
Non Contact Cooling Water Autoclaves		220	GPD		GPD	D	11/24/09
Sanitary		28,350	GPD		GPD	D	11/24/09
Storm Water		0	GPD		GPD	D	11/24/09
Hospital Waste		34,648	GPD		GPD	D	11/24/09
Kitchen Waste		8,000	GPD		GPD	D	11/24/09
Cooling Tower Blowdown		2,930	GPD		GPD	D	11/24/09
	Total Flow Avg =	**77,748**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	360C	Trunk Sewer	46 - Rock Springs

Description 8" line exiting NW from SW main hospital entrance into manhole

Sewer Route N along Spring, W along Vista,to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Sanitary		4,000	GPD		GPD	D	12/17/10
Storm Water		0	GPD		GPD	D	12/17/10
Hospital Waste	X-ray dentist and Laboratory services	4,000	GPD		GPD	D	12/17/10
	Total Flow Avg =	**8,000**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
04	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description 8" lateral exiting W from North side West building

Sewer Route N onto Vista Ave., West on Vista to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 005 Ordinance **NPDES Outfall No.**

Description Manhole 12' N, 10' E from the NW corner of the west building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Non Contact Cooling Water Autoclaves		600	GPD		GPD	D	11/24/09
Sanitary		1,400	GPD		GPD	D	11/24/09
Storm Water		0	GPD		GPD	D	11/24/09
Hospital Waste		8,000	GPD		GPD	D	11/24/09
	Total Flow Avg =	**10,000**		**Max =**			

PRETREATMENT TYPES

SP	EFF DATE	TYPE	DESCRIPTION
001	02/20/2003	DC28	Grease Trap
004	03/03/2004	DC32	Metallic Replacement

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Silver (Total)	KP	Mercury (Total)	KP	Phenol	KP
2,4-Dinitrophenol	KP	Methylene Chloride	KP	Chloroform	KP

EXTRA STRENGTH SURCHARGE INFORMATION

PIMS FACILITY CONTACTS

For Account Number Selected **1020548900** **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type / Contact Type	Contact Name	Contact Title	Email	Signatory	Phone Type	Number	Ext.
Billing Address							
Billing Contact	Greg Hrbacek	Team Leader Plant Operations		Y	CELL	(314)795-1386	
Billing Contact	Greg Hrbacek	Team Leader Plant Operations		Y	OFF	(314)577-5327	
Office Mailing Address							
Office Contact - Primary	Greg Hrbacek	Team Leader Plant Operations		N	CELL	(314)795-1386	
Office Contact - Primary	Greg Hrbacek	Team Leader Plant Operations		N	OFF	(314)577-5327	
Office Contact 1st Alt	Kevin Smith	Facility Supervisor		N	OFF	(314)268-2768	
Office Contact 1st Alt	Kevin Smith	Facility Supervisor		N	SWR	(314)577-5600	
Premise Address							
Field Contact - Primary	Greg Hrbacek	Team Leader Plant Operations		Y	CELL	(314)795-1386	
Field Contact - Primary	Greg Hrbacek	Team Leader Plant Operations		Y	OFF	(314)577-5327	
Field Contact 1st Alt	Kevin Smith	Facilities Supervisor	Kevin_Smith@ssmhc.com	N	CELL	(314)678-2031	
Field Contact 1st Alt	Kevin Smith	Facilities Supervisor	Kevin_Smith@ssmhc.com	N	OFF	(314)268-2768	
Field Contact 2nd Alt	Jack Mitchell	Maintenance Mechanic		N	OFF	(314)577-5600	

MSD 035426

PIMS
REPORT OF FIELD SAMPLING REQUIREMENTS
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Account No Entered **1020548900**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2015
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2015
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2015
	T237000	pH	Once/year	Grab	06/30/2015
	T247000	Temperature	Once/year	Grab	06/30/2015
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2015
	T257000	Total Phenols	Once/year	Grab	06/30/2015
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2015
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2015
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2015

004 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2015
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2015
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2015
	T237000	pH	Once/year	Grab	06/30/2015
	T247000	Temperature	Once/year	Grab	06/30/2015
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2015
	T257000	Total Phenols	Once/year	Grab	06/30/2015
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2015
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2015
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2015

005 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2015
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2015
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2015
	T237000	pH	Once/year	Grab	06/30/2015
	T247000	Temperature	Once/year	Grab	06/30/2015
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2015
	T257000	Total Phenols	Once/year	Grab	06/30/2015
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2015
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2015

SR ✓

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

PART I: IDENTIFYING INFORMATION

SSM 1020-5489-00

Company Name: Cardinal Glennon Hospital
Permit No: -
Premise No: 1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Associate Radiation Safety Officer Telephone: 977-6896

Signature: Date: 10/14/14

RECEIVED
OCT 14 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

September 8, 2014

Greg Hrbacek
Team Leader Plant Operations
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 South Grand Blvd.
St. Louis, MO 63104

Re: Discharge Permit No: 1020548900-1
For premise at: 1465 South Grand Blvd.
St. Louis, MO 63104

Dear Mr. Hrbacek:

The Metropolitan St. Louis Sewer District Wastewater Discharge permit for the above premise expires on April 30, 2015. Under the terms of the permit, you must apply for renewal at least 180 days prior to the expiration date.

We have enclosed an Industrial User Questionnaire form and instructions. You also may download an electronic version from MSD's website at www.stlmsd.com. This questionnaire serves as your permit application. Please complete and return the questionnaire to us no later than **November 1, 2014**. You may skip Section G of the questionnaire. Please retain a copy for your files.

We will use the questionnaire and our records on your facility to prepare a draft permit. The draft permit will be sent to you for comment, prior to sending a final permit.

We appreciate your cooperation and support in helping us to comply with the federal regulations. If you have any questions or need assistance in completing the questionnaire, please contact me at 314.436.8756.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SM Rehmer

Scott Rehmer
Assistant Engineer

Enclosures: IUQ form, instructions

cc: Doug Mendoza
Dave Kupke

SR
8-21

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL** 10205-4890.0

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		7-8/7-9-14	7-8/7-9-14	7-10/7-11-14	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:40 am	09:55 am	09:25 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 *		78K	8K	10K	GPD
OIL & GREASE	200	24	12	21	mg/L
BOD	200	86	187	54	mg/L
COD	****	229	415	110	mg/L
TOTAL SUSPENDED SOLIDS	****	25	112	35	mg/L
TEMPERATURE (Degrees C)	60	27.6	27.1	26.8	
pH (Std. Units)	5.5-11	7.49	8.12	8.05	
SILVER	.5	0.03	<0.01	0.01	mg/L
PHENOL		<0.05	<0.05	<0.05	mg/L

*provided per pc w/ G. Hrbacek on 8-20-14. SR

You must complete and sign the certification statements on the second page.

RECEIVED
JUL 3 1 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Greg Hrbacek

Title: Team Leader Plant Ops Telephone: 314-577-5327

Signature: Greg Hrbacek Date: 7-28-14

RECEIVED
JUL 3 1 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: July 23, 2014
Lab. No.: 2014MT0301
Invoice No.: 214265
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:40 a.m. / 7-8-14 to 09: 40 a.m. / 7-9-14
Grab Sample 9:40 a.m. / 7-8-14
Sample Point Ref. Number: 004
Waste Water Composite: 09:55 a.m. / 7-8-14 to 09:55 a.m. / 7-9-14
Grab Sample 09:55 a.m. / 7-8-14
Sample Point Ref. Number: 005
Waste Water Composite: 09:25 a.m. / 7-10-14 to 09:25 a.m. / 7-11-14
Grab Sample: 09:25 a.m. / 7-10-14

DATE ANALYZED: 7-8-14 to 7-23-14

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	24	12	21	5	413.1
BOD	86	187	54	10	405.1
COD	229	415	110	10	410.1
TSS	25	112	35	5	160.2
Temperature (Degrees C)	27.6	27.1	26.8	.1	170.1
pH (Std Units)	7.49	8.12	8.05	.02	150.1
Silver	0.03	< 0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
JUL 3 1 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR.

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

Company Name: ~~Cardinal Glennon Hospital~~ SSM
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A:
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 7/16/14

RECEIVED
JUL 16 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
5-27

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION 1020-5489-00

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		5-6 & 5-7-1		45-6/7-14		5-8/9-14		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:15 am		09:30 am		09:20 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								
OIL & GREASE	200		12		9		5	mg/L
BOD	200		145		169		134	mg/L
COD	****		171		229		156	mg/L
TOTAL SUSPENDED SOLIDS	****		32		184		43	mg/L
TEMPERATURE (Degrees C)	60		24.6		23.1		25.5	
pH (Std. Units)	5.5-11		8.34		8.36		7.45	
SILVER	.5		0.01		<0.01		0.02	mg/L
PHENOL			< 0.05		< 0.05		< 0.05	mg/L

You must complete and sign the certification statements on the second page.

1

Flow Rates
#1 78,000 (1)
#2 8,000 (4)
#3 10,000 (5)

RECEIVED
MAY 27 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035434

MIDWEST TESTING LABORATORIES

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

Date: May 22, 2014
Lab. No.: 2014MT0245
Invoice No.: 214210
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:15 a.m. / 5-6-14 to 09: 15 a.m. / 5-7-14
Grab Sample 9:15 a.m. / 5-6-14
Sample Point Ref. Number: 004
Waste Water Composite: 09:30 a.m. / 5-6-14 to 09:30 a.m. / 5-7-14
Grab Sample 09:30 a.m. / 5-6-14
Sample Point Ref. Number: 005
Waste Water Composite: 09:20 a.m. / 5-8-14 to 09:20 a.m. / 5-9-14
Grab Sample: 09:20 a.m. / 5-8-14

DATE ANALYZED: 5-6-14 to 5-22-14

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	12	9	5	5	413.1
BOD	145	169	134	10	405.1
COD	171	229	156	10	410.1
TSS	32	184	43	5	160.2
Temperature (Degrees C)	24.6	23.1	25.5	.1	170.1
pH (Std Units)	8.34	8.36	7.45	.02	150.1
Silver	0.01	< 0.01	0.02	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAY 27 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader Plant Ops Telephone: 314-577-5327
	Signature: Greg Hrbacek Date:

RECEIVED
MAY 27 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR
S-S

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

1020-5489-00

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		1-30/31-14	1-30/31-14	1-30/31-14	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:50 am	10:05 am	10:20 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					
OIL & GREASE	200	9	7	11	mg/L
BOD	200	187	238	168	mg/L
COD	****	323	383	294	mg/L
TOTAL SUSPENDED SOLIDS	****	75	232	178	mg/L
TEMPERATURE (Degrees C)	60	12.1	15.9	16.5	
pH (Std. Units)	5.5-11	8.11	8.39	8.24	
SILVER	.5	0.02	< 0.01	0.01	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: February 14, 2014
Lab. No.: 2014MT0168
Invoice No: 214128

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095
ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Waste Water
SAMPLE I.D. : Sample Point ref. Number 001: Grab @ 09:25 a.m., 1-30-14
Sample Point ref. Number 004: Grab @ 09:40 a.m., 1-30-14
Sample Point ref. Number 005: Grab @ 09:30 a.m., 1-30-14
DATE ANALYZED : 02-12-14
RESULTS: ug/L OR PARTS PER BILLION
ORGANOCHLORINE PESTICIDE ANALYSIS / SW-846 METHOD 8081

ANALYTE	SP# 001	SP#004	SP#005	MDL
Aldrin	ND	ND	ND	0.05
alpha-BHC	ND	ND	ND	0.05
beta-BHC	ND	ND	ND	0.05
gamma-BHC (Lindane)	ND	ND	ND	0.04
delta- BHC	ND	ND	ND	0.05
Chlordane	ND	ND	ND	0.14
4,4'-DDD	ND	ND	ND	0.05
4,4'-DDE	ND	ND	ND	0.05
4,4'-DDT	ND	ND	ND	0.05
Dieldrin	ND	ND	ND	0.05
Endosulfan I	ND	ND	ND	0.05
Endosulfan II	ND	ND	ND	0.05
Endosulfan Sulfate	ND	ND	ND	0.05
Endrin	ND	ND	ND	0.06
Endrin Aldehyde	ND	ND	ND	0.05
Heptachlor	ND	ND	ND	0.04
Heptachlor Epoxide	ND	ND	ND	0.20
Methoxychlor	ND	ND	ND	0.06
Toxaphene	ND	ND	ND	0.50
AROCHLOR-1016	ND	ND	ND	0.50
AROCHLOR-1221	ND	ND	ND	0.50
AROCHLOR-1232	ND	ND	ND	0.50
AROCHLOR-1242	ND	ND	ND	0.50
AROCHLOR-1248	ND	ND	ND	0.50
AROCHLOR-1254	ND	ND	ND	0.50
AROCHLOR-1260	ND	ND	ND	0.50

ND: Not detected / MDL: Method Detection Limit

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: February 14, 2014
Lab No.: 2014MT0168
Invoice: 214128

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095
ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Water
SAMPLE I.D. : Waste Water
Sample Point ref. Number: 001: Grab @ 09:50 a.m., 1-30-14
Sample Point ref. Number: 004: Grab @ 10:05 a.m., 1-30-14
Sample Point ref. Number: 005: Grab @ 10:20 a.m., 1-30-14
DATE ANALYZED : 02-10-14
METHOD REF. : EPA 600 METHOD 625 / Semi volatile organic compounds
RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	SP# 001	SP# 004	SP#005	MDL
bis- (Chloromethyl) – ether	ND	ND	ND	0.010
Pyridine	ND	ND	ND	0.010
Aniline	ND	ND	ND	0.010
Benzyl alcohol	ND	ND	ND	0.010
Phenol	ND	ND	ND	0.010
2-Chlorophenol	ND	ND	ND	0.010
bis-(2-Chloroethyl) ether	ND	ND	ND	0.010
N-nitrosodimethylamine	ND	ND	ND	0.010
bis- (2-Chloroisopropyl) ether	ND	ND	ND	0.010
N-Nitroso-di-n-propylamine	ND	ND	ND	0.020
1,3-Dichlorobenzene	ND	ND	ND	0.010
1,4-Dichlorobenzene	ND	ND	ND	0.010
1,2-Dichlorobenzene	ND	ND	ND	0.010
o-Cresol	ND	ND	ND	0.010
m,p-Cresol	ND	ND	ND	0.010
Hexachloroethane	ND	ND	ND	0.010
Nitrobenzene	ND	ND	ND	0.010
2,4-Dimethylphenol	ND	ND	ND	0.010
4-Chloroaniline	ND	ND	ND	0.010
2-Nitrophenol	ND	ND	ND	0.010
2,4-Dichlorophenol	ND	ND	ND	0.010
Benzoic acid	ND	ND	ND	0.050
4-Chloro-3-methylphenol	ND	ND	ND	0.010
bis (2-Chloroethoxy) methane	ND	ND	ND	0.010

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: February 14, 2014
Lab. No.: 2014MT0168
Invoice No.: 214128
P. O. No.: 4502062264

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:50 a.m. / 1-30-14 to 09: 50 a.m. / 1-31-14
Grab Sample 9:50 a.m. / 1-30-14
Sample Point Ref. Number: 004
Waste Water Composite: 10:05 a.m. / 1-30-14 to 10:05 a.m. / 1-31-14
Grab Sample 10:05 a.m. / 1-30-14
Sample Point Ref. Number: 005
Waste Water Composite: 10:20 a.m. / 1-30-14 to 10:20 a.m. / 1-31-14
Grab Sample: 10:20 a.m. / 1-30-14

DATE ANALYZED: 1-30-14 to 2-14-14

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	9	7	11	5	413.1
BOD	187	238	168	10	405.1
COD	323	383	294	10	410.1
TSS	75	232	178	5	160.2
Temperature (Degrees C)	12.1	15.9	16.5	.1	170.1
pH (Std Units)	8.11	8.39	8.24	.02	150.1
Silver	0.02	< 0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP# 001	SP# 004	SP#005	MDL
Isophorone	ND	ND	ND	0.010
1,2,4-Trichlorobenzene	ND	ND	ND	0.010
2-Methylnaphtalene	ND	ND	ND	0.010
Hexachlorocyclopentadiene	ND	ND	ND	0.010
Naphthalene	ND	ND	ND	0.010
Hexachlorobutadiene	ND	ND	ND	0.010
2,4,6-Trichlorophenol	ND	ND	ND	0.010
2,4,5-Trichlorophenol	ND	ND	ND	0.010
2-Nitroaniline	ND	ND	ND	0.010
3-Nitroaniline	ND	ND	ND	0.010
4-Nitroaniline	ND	ND	ND	0.010
2,4- Dinitrophenol	ND	ND	ND	0.010
4-Nitrophenol	ND	ND	ND	0.010
4,6-Dinitro-2-methylphenol	ND	ND	ND	0.010
2-Chloronaphthalene	ND	ND	ND	0.010
4-Chlorophenyl phenyl ether	ND	ND	ND	0.010
Dimethyl phthalate	ND	ND	ND	0.010
2,6-Dinitrotoluene	ND	ND	ND	0.010
Acenaphthylene	ND	ND	ND	0.010
Dibenzofuran	ND	ND	ND	0.010
Diethyl phthalate	ND	ND	ND	0.010
Acenaphthene	ND	ND	ND	0.010
Benzo(g,h,i)perylene	ND	ND	ND	0.010
Fluorene	ND	ND	ND	0.010
Azobenzene	ND	ND	ND	0.010
2,4-Dinitrontoluene	ND	ND	ND	0.010
Hexachlorobenzene	ND	ND	ND	0.010
Pentachlorophenol	ND	ND	ND	0.010
N-Nitrosodiphenylamine	ND	ND	ND	0.010
4-Bromophenyl phenyl ether	ND	ND	ND	0.010
Carbazole	ND	ND	ND	0.010
Di-n-butyl phthalate	ND	ND	ND	0.010
Phenanthrene	ND	ND	ND	0.010
Anthracene	ND	ND	ND	0.010
Fluoranthene	ND	ND	ND	0.050
Butyl benzyl phthalate	ND	ND	ND	0.010
bis (2-ethylhexyl) phthalate	ND	ND	ND	0.010
Pyrene	ND	ND	ND	0.010
Benzo(a)anthracene	ND	ND	ND	0.010
Chrysene	ND	ND	ND	0.010
3,3'-Dichlorobenzidine	ND	ND	ND	0.010
Di-n-octyl phthalate	ND	ND	ND	0.010
Benzidine	ND	ND	ND	0.010

RECEIVED

MAY 05 2014

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP# 001	SP# 004	SP#005	MDL
Benzo(b)fluoranthene	ND	ND	ND	0.010
Benzo(k)fluoranthene	ND	ND	ND	0.010
Benzo(a) pyrene	ND	ND	ND	0.010
Dibenzo(a,h)anthracene	ND	ND	ND	0.010
Indeno(1,2,3-cd)pyrene	ND	ND	ND	0.010

ND: Not Detected / MDL: Method Dection Limit

Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: February 14, 2014
Lab. No.: 2014MT0168
Invoice No.: 214128

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Water
SAMPLE I.D. : Waste Water
Sampling Point Ref. Number: 001 Grab: 09:50 a.m., 1-30-14
Sampling Point Ref. Number: 004 Grab: 10:05 a.m., 1-30-14
Sampling Point Ref. Number: 005 Grab: 10:20 a.m., 1-30-14
DATE ANALYZED : 2-5-14
RESULTS: ug/L OR PARTS PER BILLION (PPB)
VOLATILE ORGANICS EPA 600 METHOD 624

ANALYTE	SP# 001	SP# 004	SP# 005	MDL
1,1,1-Trichloroethane	ND	ND	ND	5.0
1,1,2,2-Tetrachloroethane	ND	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	ND	5.0
1,1-Dichloroethane	ND	ND	ND	5.0
1,1-Dichloroethene	ND	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	ND	5.0
1,2-Dichloroethane	ND	ND	ND	5.0
1,2-Dichloropropane	ND	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	ND	5.0
2-Chloroethyl Vinyl ether	ND	ND	ND	20.0
Acrolein	ND	ND	ND	100
Acrylonitrile	ND	ND	ND	5.0
Benzene	ND	ND	ND	2.0
Bromodichloromethane	ND	ND	ND	5.0
Bromoform	ND	ND	ND	5.0
Bromomethane	ND	ND	ND	10.0
Carbon tetrachloride	ND	ND	ND	5.0
Chlorobenzene	ND	ND	ND	5.0
Chloroethane	ND	ND	ND	10.0
Chloroform	ND	ND	ND	5.0
Chloromethane	ND	ND	ND	10.0
Cis-1,3-Dichloropropene	ND	ND	ND	5.0
Dibromochloromethane	ND	ND	ND	5.0
Ethylbenzene	ND	ND	ND	5.0
m,p-Xylene	ND	ND	ND	5.0
Methylene chloride	ND	ND	ND	5.0
o-Xylene	ND	ND	ND	5.0
Tetrachloroethene	ND	ND	ND	5.0

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP # 001	SP# 004	SP# 005	MDL
Toluene	ND	ND	ND	5.0
Trans-1,2-Dichloroethene	ND	ND	ND	5.0
Trans-1,3-Dichloropropene	ND	ND	ND	5.0
Trichloroethene	ND	ND	ND	5.0
Trichlorofluoromethane	ND	ND	ND	5.0
Vinyl Chloride	ND	ND	ND	2.0
Xylenes, Total	ND	ND	ND	5.0

ND: Not Detected / MDL: Method Detection Limit
Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAY 05 2004
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader Plant Operations Telephone: 314-527-5327
	Signature: Greg Hrbacek Date: 5-5-14

RECEIVED
MAY 05 2014
DIVISION OF
ENVIRONMENTAL COMPL

Flow Rates

1) 78,000

2) 8,000

3) 10,000

RECEIVED

MAY 05 2014

DIVISION OF
ENVIRONMENTAL COMPLIANCE

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 4/16/14

SR

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

PART I: IDENTIFYING INFORMATION

Company Name: SSM **Cardinal Glennon Hospital**
Permit No: - 1020-5489-00
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 1/14/14

RECEIVED
JAN 14 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Metropolitan Saint Louis Sewer District
2350 Market Street
Saint Louis, Missouri 63103-2555

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

Attn: Greg Hrbacek
Team Leader Plant Operations

INDUSTRIAL WASTEWATER DISCHARGE PERMIT NUMBER 1020548900.

ANNUAL PERMIT FEE NOTICE

For permits in effect as of 10/01/2013.

Fee will be included on the **next regular monthly bill** from the Metropolitan St. Louis Sewer District.

Explanation of Charges

Fee for Pretreatment Program Discharge Permit covering the period October 1, 2013 through September 30, 2014 issued in accordance with the Metropolitan St. Louis District Ordinance #12413 for the location at **1465 South Grand Blvd.**

Base charge @ $150.00 per permit			$150.00
Volume charge @ $0.72 per average daily Ccf	60.31	Ccf(s)	$43.42
Sample Point Charge @ $100.00 per sample point	3	Point(s)	$300.00
		Total Fee Due:	**$493.42**

For inquiries about the Annual Permit Fee, please call 314-436-8756. For inquiries about payment of the fee, which will appear on your upcoming monthly bill, please call 1-866-281-5737.

THIS IS NOT A BILL

DO NOT PAY NOW

FEE WILL BE INCLUDED ON MONTHLY BILL

SR
12/3

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		10-29/10-30	10-31/11-1	10-31/11-1	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:30 am	09:40 am	09:50 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*		78,000	8,000	10,000	GPD
OIL AND GREASE	300	21	< 5	17	mg/L
BOD	200	136	240	73	mg/L
COD	****	224	467	122	mg/L
TOTAL SUSPENDED SOLIDS	****	29	112	17	mg/L
TEMPERATURE (Degrees C)	60	17.0	20.4	19.4	
pH (Std. Units)	5.5-11	7.73	8.25	7.99	
SILVER	.5	0.03	0.01	< 0.01	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L
*provided by Greg Hrbocek on fax cover page 1. 12-3-13. SR					

You must complete and sign the certification statements on the second page.

RECEIVED
DEC 02 2013
DIVISION OF ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

NONE

PART IV: GENERAL CERTIFICATION STATEMENTS

B DISCHARGE MONITORING REPORT CERTIFICATION

All permittees must sign and complete the information below:

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: Greg Hrbacek

Title: Plant Operations - Team Leader Telephone: 314-577-5327

Signature: Greg Hrbacek Date: 12/2/13

RECEIVED
DEC 0 2 2013
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES

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

Date: November 12, 2013
Lab. No.: 2013MT0403
Invoice No.: 213691
P. O. No.: 4501823882

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:30 a.m. / 10-29-13 to 09: 30 a.m. / 10-30-13
Grab Sample 9:30 a.m. / 10-29-13
Sample Point Ref. Number: 004
Waste Water Composite: 09:40 a.m. / 10-31-13 to 09:40 a.m. / 11-01 -13
Grab Sample 09:40 a.m. / 10-31-13
Sample Point Ref. Number: 005
Waste Water Composite: 09:50 a.m. / 10-31-13 to 09:50 a.m. / 11-01-13
Grab Sample: 09:50 a.m. / 10-31-13

DATE ANALYZED: 10-29-13 to 11-12-13

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	21	< 5	17	5	413.1
BOD	136	240	73	10	405.1
COD	224	467	122	10	410.1
TSS	29	112	17	5	160.2
Temperature (Degrees C)	17.0	20.4	19.9	.1	170.1
pH (Std Units)	7.73	8.25	7.99	.02	150.1
Silver	0.03	0.01	< 0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

RECEIVED
DEC 0 2 2013
DIVISION OF
ENVIRONMENTAL COMPLIANCE

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

PART I: IDENTIFYING INFORMATION

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 63104** 1020-5489-00
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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☒ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 10/11/13

RECEIVED
OCT 14 2013
DIVISION OF
ENVIRONMENTAL COMPLIANCE

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM Cardinal Glennon Childrens Hospital Account #: 1020548900
Premise Address: 1465 South Grand Boulevard Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Facilities Supervisor Phone#: 314-577-5327
Inspector: Dave Kupke
Others Present: None
Inspection Date: 10/9/13 Time: From 12:35 PM To 01:39 PM (Last Insp. 12/6/12)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: _____
   B. Did all acct no's have water usage on PIMS? Yes☒ No☐
   C. If no to B, explain: _____

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	Frequency of DISCHARGE	Sample pt.
Hospital Waste-patient care services	Cont	Yes	daily	SP001, SP004, SP005
Kitchen waste	Batch	Yes	daily	SP001
Boiler and cooling tower blowdown	Cont	Yes	daily	SP001
NCCW-Autoclaves	Batch	Yes	daily	SP001, SP005
	(None)	N/A		
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
Metallic Replacement	SP004

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
   If yes: A. List sample points: SP001
   B. What is the frequency for cleaning & maintenance? quarterly
   C. Are any additives used in traps? Yes☐ No☒
   D. If yes to C, was company warned MSD will bill them for blockages they cause? Yes☒ No☐
   E. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
   If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒
   If yes: A. List pollutants & process: _____
   B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐
   C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐
   (MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)
   D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS? Yes☒ No☐

If yes: A. List regulation & describe (including any discharge):
40 CFR 460 Subpart A, n/a (no general standards) Hospital; waste from patient care services

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☒ No☐

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐
(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

8. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒

If yes: A. Certification date: _____

B. List absent pollutants: _____

C. Were all these pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐
(If compared to intake water levels, explain details below)

If no to C: D. Explain: _____

E. Comments: _____

9. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

10. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

11. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes: A. Describe operations & disposal: Radioisotopes injectable used for diagnostic purposes

B. Does company have MSD authorization for disposal to sewer? NA☐ Yes☒ No☐

C. Most recent authorization date: 7/8/94

D. Amount discharged in most recent complete calendar year: 0

12. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

13. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:
Tour of the facility revealed no excessive wate usages. Note the significant portion of their commercial usages comes from hospital waste or hospital services. Note that Cardinals Glennons power plant comprises of their boiler and cooling towers for a major portion of their usage. The other commercial usages are a results of hospital service Kitchen waste, X-ray development (Surgical area), and Lab (NCCW-Autoclaves, glassware washing).

14. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Cooling tower, boiler, and some lawn irrigation. Current RF is 0.51

B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

15. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____
B. Latest approval date: _____
C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

16. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____
B. Date originally applied: _____, or as part of variance above? ☐

17. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

18. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____
B. Explain any marked: _____

20. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?
_____

If no: B. How are they controlled?
All solvents in the lab and waste are stored in the appropriate flammable cabinets. All water treatment chemcials are stored in catch basins.

21. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____
B. What needs to be done? _____
C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

22. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes: A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	SPCCP	11/1/12
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? (must be done) Yes☒ No☐

C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒

D. Are any Plans needed (in addition to those listed in Part A)? (If yes, write company & require) Yes☐ No☒

E. Explain why/why not for C or D: The current Spill plan addresses all issues with the current state of this facility.

23. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____

B. Priority pollutants (or "none"): _____

C. How is spent solvent disposed? _____

(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

24. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A.

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Acetone	lab reagents	Yes☐ No☐	evaporates	Yes☐ No☒
Phenol, Methylene Chloride, Chlorform	lab reagents	Yes☐ No☐	hauled offsite	Yes☒ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

25. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒

(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes: A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐

B. If no to A, date of last update for SMP: _____

C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐

D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐

(If no to C or D, write company and require submittal and/or update)

26. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐

A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐

(Must post if company generates process wastewater or stores chemicals of concern)

27. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes: A. Is requirement contained in permit ☒ or other document ☐.

B. If other document, date & description: _____

C. How frequently is sampling required? quarterly

D. How frequently are reports required? quarterly

E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐

F. If no, explain: _____

28. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☐ No☒
- If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
- F. If no to A,B,C, or E, explain needed changes: _____

29. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
- A. At which SPs? _____
- B. Does company submit quarterly summaries? Yes☐ No☐
- C. If no, explain: _____

30. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
- A. Is company having the samples analyzed Yes☐ No☐
- B. How does company insure proper preservation, holding times & analytical methods? _____
- C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
- D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
- E. If no to C, or D, explain: _____
- F. Does company still want to split samples? Yes☐ No☐
- G. Comments: _____

31. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. What is required to be reported? Radiation Discharge
- D. How frequently are reports required? quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

32. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes:
- A. Type and date: _____
- B. Have the reports & actions been on-time & complete? Yes☐ No☐
- C. If no, explain: _____

33. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐
[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no:
- A. Describe: _____
- B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

34. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no:
- A. How long does company retain records? _____
- B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐
- C. Where are they kept? All records kept on file with primary contact's office.

35. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:

- ☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____
- ☒ Process discharge => 25,000 GPD Total process volume: 54,600 gpd
- ☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____
- ☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____ TP ADW organic capacity: _____. Percent: _____
- ☐ Reasonable potential for adverse effect on operations Why? _____
- ☐ Reasonable potential for violating PT std or req't Which ones & why? _____

B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no: C. What is Bldg owner name (use DBA if avail.)? _____ (check E-CIS CAPS Customer Info)

D: What is Bldg owner mailing address? _____ (check E-CIS CAPS Customer Info)

36. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:

SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

37. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes: A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐

B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐

C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐

D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐

E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
(And explain why/why not: _____)

F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
Acceptance letter date: _____ Or write company with requirement ☐

G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐

H. Comments: _____

38. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes: A. Why? _____

B. Are any changes needed to reasons/details? Yes☐ No☐

C. If yes, explain: _____

D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

39. SAMPLE POINTS

						DJ(y/n)
SP #	001	Fed.Reg.		Components:	Hospital waste, Kitchen waste, Cooling tower blowdown, Boiler blowdown, NCCW-Autoclaves, Sanitary, Storm water	No
SP #	004	Fed.Reg.		Components:	Hospital waste, Sanitary, Storm water	No
SP #	005	Fed.Reg.		Components:	Hospital waste, NCCW-Autoclaves, Sanitary, Storm water	No
SP #		Fed.Reg.		Components:		N/A
SP #		Fed.Reg.		Components:		N/A

40. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes: A. List SPs: _____

B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

41. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes: A. List SPs and reasons: _____

42. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

43. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes: A. List Sample Points: SP001, SP004, and SP005

44. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

C. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒

D. If yes to C, list SPs & describe: _____

E. If yes to C, was company directed to take corrective actions? Yes☐ No☐

45. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/5/12

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

46. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

_____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**
Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	TOX

WUNNENBERG INFO.

Base Map 20F3
Wun:St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

PR25 Process Disch => 25,000 GPD

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

Billing Address
1465 South Grand Blvd.
St Louis, MO. 63104

INSPECTION INFORMATION

Next Due	Insp Rslt	
10/09/2013	RIN	David Kupke

PERMIT INFORMATION

Issue Date: 05/01/2010
Expire Date: 04/30/2015
Extended Date:
Writer Scott Rehmer

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke
IUQ Recvd Date: 11/24/2009
Reviewer: David Kupke

CONTACTS

BILL	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD2	Kevin Smith	Facilities Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facilities Supervisor	CELL	(314) 678-2031 Ext.
FLD3	Jack Mitchell	Maintenance Mechanic	OFF	(314) 577-5600 Ext.
OFF1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
OFF2	Kevin Smith	Facility Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facility Supervisor	SWR	(314) 577-5600 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 Hrs: 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage Y On-Site Disposal N Off-Site Disposal Y

11/24/2009	Equipment Oils and/or Grease		30	GAL
12/04/2009	Infectious Waste	Medical waste	35314	LB/YR
12/04/2009	Other	Chemical waste	556	LB/YR

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

PRODUCTS

EFF DATE	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	General hospital			

Report No. PIMS012A 11/26/2013 7:34:55 am
Data Date & Time: 11/26/2013 7:34:55 am

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

SEWER ACCOUNTS

Sewer Accounts
1020548900

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 01/01/2012 12:00:00AM **End Date =** 12/31/2013 12:59:59PM **Wdays** **Cdays**

Acct. No.			Consumption					Discharge	
1020548900			**CCF's**	**Gallons**				**Gal/ Wday**	**Gal/ Cday**
1020548900	11/05/2011	02/01/2012	4,763	4,763	A	89	89	89	
1020548900	02/02/2012	04/17/2012	5,534	10,297		76	76	165	
1020548900	04/18/2012	07/27/2012	17,239	27,536		101	101	266	
1020548900	07/28/2012	11/06/2012	14,688	42,224		102	102	368	
1020548900	11/07/2012	01/16/2013	5,700	47,924		71	71	439	
1020548900	01/17/2013	04/16/2013	-30,195	17,729		90	90	529	
1020548900	04/17/2013	08/05/2013	12,079	29,808		111	111	640	
RF	0.51	**Acct. Total**	29,808	22,297,934		640	640	17,769	17,769
		Facility Total	29,808						

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**
Premise Address 1465 South Grand Blvd. St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description LIne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Boiler Blowdown		3,600	GPD		GPD	D	11/24/09
Non Contact Cooling Water	Autoclaves	220	GPD		GPD	D	11/24/09
Sanitary		28,350	GPD		GPD	D	11/24/09
Storm Water		0	GPD		GPD	D	11/24/09
Hospital Waste		34,648	GPD		GPD	D	11/24/09
Kitchen Waste		8,000	GPD		GPD	D	11/24/09
Cooling Tower Blowdown		2,930	GPD		GPD	D	11/24/09
	Total Flow Avg =	**77,748**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	360C	Trunk Sewer	46 - Rock Springs

Description 8" line exiting NW from SW main hospital entrance into manhole

Sewer Route N along Spring, W along Vista,to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Sanitary		4,000	GPD		GPD	D	12/17/10
Storm Water		0	GPD		GPD	D	12/17/10
Hospital Waste	X-ray dentist and Laboratory services	4,000	GPD		GPD	D	12/17/10
	Total Flow Avg =	**8,000**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
04	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description 8" lateral exiting W from North side West building

Sewer Route N onto Vista Ave., West on Vista to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 005 Ordinance **NPDES Outfall No.**

Description Manhole 12' N, 10' E from the NW corner of the west building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Non Contact Cooling Water	Autoclaves	600	GPD		GPD	D	11/24/09
Sanitary		1,400	GPD		GPD	D	11/24/09
Storm Water		0	GPD		GPD	D	11/24/09
Hospital Waste		8,000	GPD		GPD	D	11/24/09
	Total Flow Avg =	**10,000**		**Max =**			

PRETREATMENT TYPES

SP	EFF DATE	TYPE	DESCRIPTION
001	02/20/2003	DC28	Grease Trap
004	03/03/2004	DC32	Metallic Replacement

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**

PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Silver (Total)	KP	Mercury (Total)	KP	Phenol	KP
2,4-Dinitrophenol	KP	Methylene Chloride	KP	Chloroform	KP

EXTRA STRENGTH SURCHARGE INFORMATION

PIMS FACILITY CONTACTS

For Account Number Selected **1020548900** **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**

Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type

Contact Type	Contact Name		Contact Title	Phone Type	Number	Ext.
Billing Address						
Billing Contact	Greg	Hrbacek	Team Leader Plant Operations	CELL	(314)795-1386	
Billing Contact	Greg	Hrbacek	Team Leader Plant Operations	OFF	(314)577-5327	
Office Mailing Address						
Office Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	CELL	(314)795-1386	
Office Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	OFF	(314)577-5327	
Office Contact 1st Alt	Kevin	Smith	Facility Supervisor	OFF	(314)268-2768	
Office Contact 1st Alt	Kevin	Smith	Facility Supervisor	SWR	(314)577-5600	
Premise Address						
Field Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	CELL	(314)795-1386	
Field Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	OFF	(314)577-5327	
Field Contact 1st Alt	Kevin	Smith	Facilities Supervisor	CELL	(314)678-2031	
Field Contact 1st Alt	Kevin	Smith	Facilities Supervisor	OFF	(314)268-2768	
Field Contact 2nd Alt	Jack	Mitchell	Maintenance Mechanic	OFF	(314)577-5600	

PIMS
REPORT OF FIELD SAMPLING REQUIREMENTS
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Account No Entered **1020548900**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM= IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2014
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2014
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2014
	T237000	pH	Once/year	Grab	06/30/2014
	T247000	Temperature	Once/year	Grab	06/30/2014
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2014
	T257000	Total Phenols	Once/year	Grab	06/30/2014
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2014
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2014
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2014

004 Project Code: IM= IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2014
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2014
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2014
	T237000	pH	Once/year	Grab	06/30/2014
	T247000	Temperature	Once/year	Grab	06/30/2014
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2014
	T257000	Total Phenols	Once/year	Grab	06/30/2014
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2014
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2014
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2014

005 Project Code: IM= IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2014
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2014
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2014
	T237000	pH	Once/year	Grab	06/30/2014
	T247000	Temperature	Once/year	Grab	06/30/2014
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2014
	T257000	Total Phenols	Once/year	Grab	06/30/2014
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2014
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2014

SR
8/14

1020-5489-00

SSM CARDINAL GLENNON CHILDRENS MEDICAL CENTER

1465 SOUTH GRAND BOULEVARD

ST. LOUIS MO, 63104

FAX

DATE: 8/12/13 **NUMBER OF PAGES** 2

TO: David Kupke **FROM:** Greg Hrbacek

FAX: 314-436-8756 **FAX:**

PH: **PH:**

RE: Quarterly test results
Flowrates
78,000
8,000
10,000

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		7-23/7-24-1	7-23/7-24-1	7-25/7-26-1	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		9:20 am	9:30 am	9:25 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 *		78K	8K	10K	GPD
OIL AND GREASE	200	10	6	8	mg/L
BOD	200	56	128	149	mg/L
COD	****	154	265	296	mg/L
TOTAL SUSPENDED SOLIDS	****	46	102	84	mg/L
TEMPERATURE (Degrees C)	60	18.5	18.9	17.8	
pH (Std. Units)	5.5-11	7.48	7.59	7.06	
SILVER	.5	0.02	0.01	0.01	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L

*from cover page

You must complete and sign the certification statements on the second page.

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader Plant Ops Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 8/12/13

MIDWEST TESTING LABORATORIES

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

Date: August 8, 2013
Lab. No.: 2013MT0316
Invoice No.: 213604
P. O. No.: 4501823882

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:20 a.m. / 7-23-13 to 09: 20 a.m. / 7-24-13
Grab Sample 9:20 a.m. / 7-23-13
Sample Point Ref. Number: 004
Waste Water Composite: 09:30 a.m. / 7-23-13 to 09:30 a.m. / 7-24 -13
Grab Sample 09:30 a.m. / 7-23-13
Sample Point Ref. Number: 005
Waste Water Composite: 09:25 a.m. / 7-25-13 to 09:25 a.m. / 7-26-13
Grab Sample: 09:25 a.m. / 7-25-13

DATE ANALYZED: 7-23-13 to 8-6-13

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	10	6	8	5	413.1
BOD	56	128	149	10	405.1
COD	154	265	296	10	410.1
TSS	46	102	84	5	160.2
Temperature (Degrees C)	18.5	18.9	17.8	.1	170.1
pH (Std Units)	7.48	7.59	7.06	.02	150.1
Silver	0.02	0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

SR

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

Company Name: SSM **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 7/23/13

RECEIVED
JUL 23 2013
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD SR 6/12

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

1020-5489-00

PART I: IDENTIFYING INFORMATION

Company Name: SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Permit No: 4112185400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1485 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		4/23-4/24/13	4/25-4/26	4/23-4/24/1	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		9:30 am	9:40 am	9:45 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*		78,000	8,000	10,000	GPD
OIL AND GREASE	300	14	5	11	mg/L
BOD	200	295	233	164	mg/L
COD	****	521	424	341	mg/L
TOTAL SUSPENDED SOLIDS	****	242	172	52	mg/L
TEMPERATURE (Degrees C)	60	18.5	18.9	17.8	
pH (Std. Units)	5.5-11	7.48	7.59	7.06	
SILVER	.5	0.03	< 0.01	0.02	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L

*flows provided per G. Hrbacek on fax cover sheet. 6/12, SR

You must complete and sign the certification statements on the second page.

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

NONE

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Plant Operations - Team Leader Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 6/12/13

MIDWEST TESTING LABORATORIES

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

Date: May 8, 2013
Lab. No.: 2013MT0222
Invoice No.: 213504
P. O. No.: 4501823882

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:30 a.m. / 4-23-13 to 09: 30 a.m. / 4-24-13
Grab Sample 9:30 a.m. / 4-23-13
Sample Point Ref. Number: 004
Waste Water Composite: 09:40 a.m. / 4-25-13 to 09:40 a.m. / 4-26-13
Grab Sample 09:40 a.m. / 4-25-13
Sample Point Ref. Number: 005
Waste Water Composite: 09:45 a.m. / 4-23-13 to 09:45 a.m. / 4-24-13
Grab Sample: 09:45 a.m. / 4-23-13

DATE ANALYZED: 4-23-13 to 5-8-13

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	14	5	11	5	413.1
BOD	295	233	164	10	405.1
COD	521	424	341	10	410.1
TSS	242	172	52	5	160.2
Temperature (Degrees C)	18.5	18.9	17.8	.1	170.1
pH (Std Units)	7.48	7.59	7.06	.02	150.1
Silver	0.03	< 0.01	0.02	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

SR

MSD

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

PART I: IDENTIFYING INFORMATION

Company Name: SSM **Cardinal Glennon Hospital** 1020-5489-00
Permit No:
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 4/16/13

RECEIVED
APR 16 2013
DIVISION OF
ENVIRONMENTAL COMPLIANCE

*Flow rates MSD SR 2/28

#1	78,000	01
#2	8,000	04
#3	10,000	05

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS	⇨	001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED	⇨	1-28	1-29-13	1-28	1-29-13	1-30	1-31-13	
TIMES AT WHICH SAMPLES WERE COLLECTED	⇨	09:25 am		09:40 am		09:30 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*								
OIL AND GREASE	100		12		6		10	mg/L
BOD	200		211		140		184	mg/L
COD	****		410		206		353	mg/L
TOTAL SUSPENDED SOLIDS	****		66		81		74	mg/L
TEMPERATURE (Degrees C)	60		18.4		17.9		17.6	
pH (Std. Units)	5.5-11		8.28		8.59		8.52	
SILVER	.5		0.01		<0.01		0.01	mg/L
PHENOL			<0.05		<0.05		<0.05	mg/L

You must complete and sign the certification statements on the second page.

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Plant Operations - Team Leader Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 2/28/13

MIDWEST TESTING LABORATORIES

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

Date: February 15, 2013
Lab. No.: 2013MT0130
Invoice No.: 213420
P. O. No.: 4501823882

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:25 a.m. / 1-28-13 to 09: 25 a.m. / 1-29-13
Grab Sample 9:25 a.m. / 1-28-13
Sample Point Ref. Number: 004
Waste Water Composite: 09:40 a.m. / 1-28-13 to 09:40 a.m. / 1-29-13
Grab Sample 09:40 a.m. / 1-28-13
Sample Point Ref. Number: 005
Waste Water Composite: 09:30 a.m. / 1-30-13 to 09:30 a.m. / 1-31-13
Grab Sample: 09:30 a.m. / 1-30-13

DATE ANALYZED: 1-28-13 to 2-15-13

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	12	6	10	5	413.1
BOD	211	140	184	10	405.1
COD	410	206	353	10	410.1
TSS	66	81	74	5	160.2
Temperature (Degrees C)	18.4	17.9	17.6	.1	170.1
pH (Std Units)	8.28	8.59	8.52	.02	150.1
Silver	0.01	< 0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

MIDWEST TESTING LABORATORIES

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

Date: February 15, 2013
Lab. No.: 2013MT0130
Invoice No.: 213420

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Water
SAMPLE I.D. : Waste Water
Sampling Point Ref. Number: 001 Grab: 09:25 a.m., 1-28-13
Sampling Point Ref. Number: 004 Grab: 09:40 a.m., 1-28-13
Sampling Point Ref. Number: 005 Grab: 09:30 a.m., 1-30-13
DATE ANALYZED : 2-5-13
RESULTS: ug/L OR PARTS PER BILLION (PPB)
VOLATILE ORGANICS EPA 600 METHOD 624

ANALYTE	SP# 001	SP# 004	SP# 005	MDL
1,1,1-Trichloroethane	ND	ND	ND	5.0
1,1,2,2-Tetrachloroethane	ND	ND	ND	5.0
1,1,2-Trichloroethane	ND	ND	ND	5.0
1,1-Dichloroethane	ND	ND	ND	5.0
1,1-Dichloroethene	ND	ND	ND	5.0
1,2-Dichlorobenzene	ND	ND	ND	5.0
1,2-Dichloroethane	ND	ND	ND	5.0
1,2-Dichloropropane	ND	ND	ND	5.0
1,3-Dichlorobenzene	ND	ND	ND	5.0
1,4-Dichlorobenzene	ND	ND	ND	5.0
2-Chloroethyl Vinyl ether	ND	ND	ND	20.0
Acrolein	ND	ND	ND	100
Acrylonitrile	ND	ND	ND	5.0
Benzene	ND	ND	ND	2.0
Bromodichloromethane	ND	ND	ND	5.0
Bromoform	ND	ND	ND	5.0
Bromomethane	ND	ND	ND	10.0
Carbon tetrachloride	ND	ND	ND	5.0
Chlorobenzene	ND	ND	ND	5.0
Chloroethane	ND	ND	ND	10.0
Chloroform	ND	ND	ND	5.0
Chloromethane	ND	ND	ND	10.0
Cis-1,3-Dichloropropene	ND	ND	ND	5.0
Dibromochloromethane	ND	ND	ND	5.0
Ethylbenzene	ND	ND	ND	5.0
m,p-Xylene	ND	ND	ND	5.0
Methylene chloride	ND	ND	ND	5.0
o-Xylene	ND	ND	ND	5.0
Tetrachloroethene	ND	ND	ND	5.0

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP # 001	SP# 004	SP# 005	MDL
Toluene	ND	ND	ND	5.0
Trans-1,2-Dichloroethene	ND	ND	ND	5.0
Trans-1,3-Dichloropropene	ND	ND	ND	5.0
Trichloroethene	ND	ND	ND	5.0
Trichlorofluoromethane	ND	ND	ND	5.0
Vinyl Chloride	ND	ND	ND	2.0
Xylenes, Total	ND	ND	ND	5.0

ND: Not Detected / MDL: Method Detection Limit
Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

MIDWEST TESTING LABORATORIES

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

Date: February 15, 2013
Lab No.: 2013MT0130
Invoice: 213420

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095
ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Water
SAMPLE I.D. : Waste Water
Sample Point ref. Number: 001: Grab @ 09:25 a.m., 1-28-13
Sample Point ref. Number: 004: Grab @ 09:40 a.m., 1-28-13
Sample Point ref. Number: 005: Grab @ 09:30 a.m., 1-30-13
DATE ANALYZED : 02-8-13
METHOD REF. : EPA 600 METHOD 625 / Semi volatile organic compounds
RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	SP# 001	SP# 004	SP#005	MDL
bis- (Chloromethyl) – ether	ND	ND	ND	0.010
Pyridine	ND	ND	ND	0.010
Aniline	ND	ND	ND	0.010
Benzyl alcohol	ND	ND	ND	0.010
Phenol	ND	ND	ND	0.010
2-Chlorophenol	ND	ND	ND	0.010
bis-(2-Chloroethyl) ether	ND	ND	ND	0.010
N-nitrosodimethylamine	ND	ND	ND	0.010
bis- (2-Chloroisopropyl) ether	ND	ND	ND	0.010
N-Nitroso-di-n-propylamine	ND	ND	ND	0.020
1,3-Dichlorobenzene	ND	ND	ND	0.010
1,4-Dichlorobenzene	ND	ND	ND	0.010
1,2-Dichlorobenzene	ND	ND	ND	0.010
o-Cresol	ND	ND	ND	0.010
m,p-Cresol	ND	ND	ND	0.010
Hexachloroethane	ND	ND	ND	0.010
Nitrobenzene	ND	ND	ND	0.010
2,4-Dimethylphenol	ND	ND	ND	0.010
4-Chloroaniline	ND	ND	ND	0.010
2-Nitrophenol	ND	ND	ND	0.010
2,4-Dichlorophenol	ND	ND	ND	0.010
Benzoic acid	ND	ND	ND	0.050
4-Chloro-3-methylphenol	ND	ND	ND	0.010
bis (2-Chloroethoxy) methane	ND	ND	ND	0.010

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP# 001	SP# 004	SP#005	MDL
Isophorone	ND	ND	ND	0.010
1,2,4-Trichlorobenzene	ND	ND	ND	0.010
2-Methylnaphtalene	ND	ND	ND	0.010
Hexachlorocyclopentadiene	ND	ND	ND	0.010
Naphthalene	ND	ND	ND	0.010
Hexachlorobutadiene	ND	ND	ND	0.010
2,4,6-Trichlorophenol	ND	ND	ND	0.010
2,4,5-Trichlorophenol	ND	ND	ND	0.010
2-Nitroaniline	ND	ND	ND	0.010
3-Nitroaniline	ND	ND	ND	0.010
4-Nitroaniline	ND	ND	ND	0.010
2,4- Dinitrophenol	ND	ND	ND	0.010
4-Nitrophenol	ND	ND	ND	0.010
4,6-Dinitro-2-methylphenol	ND	ND	ND	0.010
2-Chloronaphthalene	ND	ND	ND	0.010
4-Chlorophenyl phenyl ether	ND	ND	ND	0.010
Dimethyl phthalate	ND	ND	ND	0.010
2,6-Dinitrotolucne	ND	ND	ND	0.010
Acenaphthylene	ND	ND	ND	0.010
Dibenzofuran	ND	ND	ND	0.010
Diethyl phthalate	ND	ND	ND	0.010
Acenaphthene	ND	ND	ND	0.010
Benzo(g,h,i)perylene	ND	ND	ND	0.010
Fluorene	ND	ND	ND	0.010
Azobenzene	ND	ND	ND	0.010
2,4-Dinitrontoluene	ND	ND	ND	0.010
Hexachlorobenzene	ND	ND	ND	0.010
Pentachlorophenol	ND	ND	ND	0.010
N-Nitrosodiphenylamine	ND	ND	ND	0.010
4-Bromophenyl phenyl ether	ND	ND	ND	0.010
Carbazole	ND	ND	ND	0.010
Di-n-butyl phthalate	ND	ND	ND	0.010
Phenanthrene	ND	ND	ND	0.010
Anthracene	ND	ND	ND	0.010
Fluoranthene	ND	ND	ND	0.050
Butyl benzyl phthalate	ND	ND	ND	0.010
bis (2-ethylhexyl) phthalate	ND	ND	ND	0.010
Pyrene	ND	ND	ND	0.010
Benzo(a)anthracene	ND	ND	ND	0.010
Chrysene	ND	ND	ND	0.010
3,3'-Dichlorobenzidine	ND	ND	ND	0.010
Di-n-octyl phthalate	ND	ND	ND	0.010
Benzidine	ND	ND	ND	0.010

MIDWEST TESTING LABORATORIES

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

ANALYTE	SP# 001	SP# 004	SP#005	MDL
Benzo(b)fluoranthene	ND	ND	ND	0.010
Benzo(k)fluoranthene	ND	ND	ND	0.010
Benzo(a) pyrene	ND	ND	ND	0.010
Dibenzo(a,h)anthracene	ND	ND	ND	0.010
Indeno(1,2,3-cd)pyrene	ND	ND	ND	0.010

ND: Not Detected / MDL: Method Dection Limit

Identification of tested specimens provided by the client.

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

MIDWEST TESTING LABORATORIES

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

Date: February 15, 2013
Lab. No.: 2013MT0130
Invoice No: 213420

SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63104-1095
ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX : Waste Water
SAMPLE I.D. : Sample Point ref. Number 001: Grab @ 09:25 a.m., 1-28-13
Sample Point ref. Number 004: Grab @ 09:40 a.m., 1-28-13
Sample Point ref. Number 005: Grab @ 09:30 a.m., 1-30-13
DATE ANALYZED : 2-12-13
RESULTS: ug/L OR PARTS PER BILLION
ORGANOCHLORINE PESTICIDE ANALYSIS / SW-846 METHOD 8081

ANALYTE	SP# 001	SP#004	SP#005	MDL
Aldrin	ND	ND	ND	0.05
alpha-BHC	ND	ND	ND	0.05
beta-BHC	ND	ND	ND	0.05
gamma-BHC (Lindane)	ND	ND	ND	0.04
delta- BHC	ND	ND	ND	0.05
Chlordane	ND	ND	ND	0.14
4,4'-DDD	ND	ND	ND	0.05
4,4'-DDE	ND	ND	ND	0.05
4,4'-DDT	ND	ND	ND	0.05
Dieldrin	ND	ND	ND	0.05
Endosulfan I	ND	ND	ND	0.05
Endosulfan II	ND	ND	ND	0.05
Endosulfan Sulfate	ND	ND	ND	0.05
Endrin	ND	ND	ND	0.06
Endrin Aldehyde	ND	ND	ND	0.05
Heptachlor	ND	ND	ND	0.04
Heptachlor Epoxide	ND	ND	ND	0.20
Methoxychlor	ND	ND	ND	0.06
Toxaphene	ND	ND	ND	0.50
AROCHLOR-1016	ND	ND	ND	0.50
AROCHLOR-1221	ND	ND	ND	0.50
AROCHLOR-1232	ND	ND	ND	0.50
AROCHLOR-1242	ND	ND	ND	0.50
AROCHLOR-1248	ND	ND	ND	0.50
AROCHLOR-1254	ND	ND	ND	0.50
AROCHLOR-1260	ND	ND	ND	0.50

ND: Not detected / MDL: Method Detection Limit

MSD

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

PART I: IDENTIFYING INFORMATION 1020-5489-00

SSM
Company Name: **Cardinal Glennon Hospital**
Permit No: -
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 1/25/13

RECEIVED
JAN 25 2013
DIVISION OF
ENVIRONMENTAL CONTROL

MSD SR 12/19

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		10/23-10/24	10/23-10/24	10/25-10/26	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:30 am	09:45 am	09:20 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					
OIL AND GREASE	100	14	5	16	mg/L
BOD	200	158	118	172	mg/L
COD	****	313	175	344	mg/L
TOTAL SUSPENDED SOLIDS	****	60	70	52	mg/L
TEMPERATURE (Degrees C)	60	21.7	21.5	24.1	
pH (Std. Units)	5.5-11	7.45	8.47	9.28	
SILVER	.5	0.02	<0.01	0.02	mg/L
PHENOL		<0.05	<0.05	<0.05	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
DEC 18 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

NONE

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader Plant Operation Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 12/19/12

MIDWEST TESTING LABORATORIES

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

Date: November 5, 2012
Lab. No.: 2012MT0395
Invoice No.: 212310
P. O. No.: 4501823882

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:30 a.m. / 10-23-12 to 09:30 a.m. / 10-24-12
Grab Sample 9:30 a.m. / 10-23-12
Sample Point Ref. Number: 004
Waste Water Composite: 09:45 a.m. / 10-23-12 to 09:45 a.m. / 10-24-12
Grab Sample 09:45 a.m. / 10-23-12
Sample Point Ref. Number: 005
Waste Water Composite: 09:20 a.m. / 10-25-12 to 09:20 a.m. / 10-26-12
Grab Sample: 09:20 a.m. / 10-25-12

DATE ANALYZED: 10-23-12 to 11-5-12

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	14	5	16	5	413.1
BOD	158	118	172	10	405.1
COD	313	175	344	10	410.1
TSS	60	70	52	5	160.2
Temperature (Degrees C)	21.7	21.5	24.1	.1	170.1
pH (Std Units)	7.45	8.47	9.28	.02	150.1
Silver	0.02	< 0.01	0.02	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

Flowrate:
78,000
8,000
10,000

Greg Hrbacek 577-5327

MIDWEST TESTING LABORATORIES

DINESH N. SHAH
Laboratory Manager

Wanda - 577-5307

RECEIVED
DEC 18 2012
DIVISION OF ENVIRONMENTAL COMPLIANCE

MSD

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SSM Cardinal Glennon Childrens Hospital Account #: 1020548900
Premise Address: 1465 South Grand Boulevard Zip Code: 63104
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Kevin Smith
Title: Facilities Manager Phone#: 314-768-8025
Inspector: Dave Kupke
Others Present: None
Inspection Date: **12/6/12** Time: From 12:25 PM To 01:45 PM (Last Insp. 12/13/11)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL NON-STORMWATER ACCOUNT NUMBERS? Yes☐ No☒
   List them, note any changes: _____
   B. Did all acct no's have water usage on PIMS? Yes☒ No☐
   C. If no to B, explain: _____

2. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	Frequency of DISCHARGE	Sample pt.
Hospital waste	Cont	Yes	daily	SP001, SP004, SP005
Kitchen Waste	Batch	Yes	daily	SP001
Cooling tower blowdown	Batch	Yes	daily	SP001
Boiler blowdown	Batch	Yes	daily	SP001
NCCW-autoclaves	Batch	Yes	daily	SP001, SP005
	(None)	N/A		

3. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
Metallic Replacement	SP004

4. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☒ No☐
   If yes: A. List sample points: SP001
   B. What is the frequency for cleaning & maintenance? 1-quarterly
   C. Are any additives used in traps? Yes☐ No☒
   D. If yes to C, was company warned MSD will bill them for blockages they cause? Yes☐ No☐
   E. Was company informed that MSD performs separate grease trap inspections? Yes☒ No☐

5. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒
   If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐
   B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐
   C. Comments: _____

6. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒
   If yes: A. List pollutants & process: _____
   B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐
   C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐
   (MSD must notify MDNR if B or C is yes and discharge will continue.)
   D. Comments: _____

7. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS? Yes☒ No☐

If yes: A. List regulation & describe (including any discharge):
40 CFR 460 no general standards-the discharge is from hospital waste associated with patient care services, lab x-ray services.

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☒ No☐

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐
(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

8. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☐ No☒

If yes: A. Certification date: _____

B. List absent pollutants: _____

C. Were all these pollutants non-detect in all monitoring since certification was approved? Yes☐ No☐
(If compared to intake water levels, explain details below)

If no to C: D. Explain: _____

E. Comments: _____

9. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

10. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☐ BASED STANDARDS? Yes☐ No☒

If yes: A. At which points? _____

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☐

C. If yes to B, explain: _____

11. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☒ No☐

If yes: A. Describe operations & disposal: Radioisotopes for diagnostic purposes

B. Does company have MSD authorization for disposal to sewer? NA☐ Yes☒ No☐

C. Most recent authorization date: 7/8/94

D. Amount discharged in most recent complete calendar year: 0

12. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

13. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒
(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:
Tour of the facility revealed no excessive water usages. SSM Cardinal Glennon Hospital usages comprise of Hospital waste associated with patient care service lab, x-ray, Boiler and Cooling tower operation in the plant, NCCW-autoclaves.

14. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: evaporative loss for the cooling tower and boiler room.

B. Was "Return Factor Program" brochure given to company? Yes☒ No☐
(regardless of whether some water is not discharged to sewer)

MSD 035490

15. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____
B. Latest approval date: _____
C. Is the approved variance more than 5 years old? Yes☐ No☐
(If yes to C, a new variance must be requested – write company)

16. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____
B. Date originally applied: _____, or as part of variance above? ☐

17. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

18. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☒ Yes☐ No☐

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

19. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
Spills? ☐ Slug discharges? ☐ Other? _____
B. Explain any marked: _____

20. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?
_____

If no: B. How are they controlled?
Boiler and colling tower water treatment chemicals are contained using catch basins. The laboroatyr solvents are kept in the appropriate flammable cabinets. Cardinal Gleenon has added bermed containment for its rendered dumpsters since last inspection.

21. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes: A. Describe: _____
B. What needs to be done? _____
C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

22. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS? Yes☒ No☐

If yes: A. Title (actual title, NOT "SPCCP")

	Title (actual title, NOT "SPCCP")	Last Update
1.	Spill Prevention, Control and Countermeasures Plan	11/1/12
2.		

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.17 & 18? (must be done) Yes☒ No☐

C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒

D. Are any Plans needed (in addition to those listed in Part A)? (If yes, write company & require) Yes☐ No☒

E. Explain why/why not for C or D: Newly submitted SPCCP addresses all of the facility's Spill issues.

23. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☐ No☒

If yes: A. Parts washer solvent name: _____

B. Priority pollutants (or "none"): _____

C. How is spent solvent disposed? _____

(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

24. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes: A.

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Acetone	lab reagents	Yes☐ No☒	evaporates	Yes☐ No☒
Phenol, Methylene Chloride, Chloroform	lab reagents	Yes☐ No☒	hauled offsite	Yes☒ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

25. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒

(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes: A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐

B. If no to A, date of last update for SMP: _____

C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐

D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐

(If no to C or D, write company and require submittal and/or update)

26. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐

A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐

(Must post if company generates process wastewater or stores chemicals of concern)

27. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes: A. Is requirement contained in permit ☒ or other document ☐.

B. If other document, date & description: _____

C. How frequently is sampling required? quarterly

D. How frequently are reports required? quarterly

E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐

F. If no, explain: _____

28. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☐ No☒
- If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). Is measurement performed properly? Yes☐ No☐
- F. If no to A,B,C, or E, _____ explain needed changes:

29. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☐, TEMP ☐, LEL ☐? Yes☐ No☒

If yes:
- A. At which SPs? _____
- B. Does company submit quarterly summaries? Yes☐ No☐
- C. If no, explain: _____

30. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
- A. Is company having the samples analyzed Yes☐ No☐
- B. How does company insure proper preservation, holding times & analytical methods? _____
- C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
- D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
- E. If no to C, or D, explain: _____
- F. Does company still want to split samples? Yes☐ No☐
- G. Comments: _____

31. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. What is required to be reported? radiation discharge report
- D. How frequently are reports required? quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☐ No☒
- F. If no, explain: late radiation reports: 4th Quarter 2011 was 4 days late; 2nd Quarter 2012 was 2 days late; and 3rd Quarter 2012 was 4 days late.

32. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes:
- A. Type and date: _____
- B. Have the reports & actions been on-time & complete? Yes☐ No☐
- C. If no, explain: _____

33. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐
[Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge.]
[City/County-issued air permits are not NESHAP permits.]

If no:
- A. Describe: _____
- B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

34. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no:
- A. How long does company retain records? _____
- B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐
- C. Where are they kept? All MSD related records are kept on file on-site with facilities manager.

35. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes: A. Check & explain applicable criteria:

- ☐ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? _____
- ☒ Process discharge => 25,000 GPD Total process volume: 54,600 gpd
- ☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____
- ☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____ TP ADW organic capacity: _____. Percent: _____
- ☐ Reasonable potential for adverse effect on operations Why? _____
- ☐ Reasonable potential for violating PT std or req't Which ones & why? _____

36. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes: A. Indicate correct classifications:

SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

37. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes:
- A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐
- B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐
- C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐
- D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐
- E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
  (And explain why/why not: _____)
- F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
  Acceptance letter date: _____ Or write company with requirement ☐
- G. If no to D or yes to E, are limits "alert only" on PIMS? Yes☐ No☐
- H. Comments: _____

38. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes:
- A. Why? _____
- B. Are any changes needed to reasons/details? Yes☐ No☐
- C. If yes, explain: _____
- D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐

39. SAMPLE POINTS

						DJ(y/n)
SP #	001	Fed.Reg.		Components:	Hospital Waste, Kitchen Waste, Cooling Tower blowdown, Boiler blowdown, NCCW-Autoclaves, ,Sanitary, Stormwater	No
SP #	004	Fed.Reg.		Components:	Hospital Waste, Sanitary, Stormwater	No
SP #	005	Fed.Reg.		Components:	Hospital Waste, NCCW-Autoclaves, Sanitary, Stormwater	No
SP #		Fed.Reg.		Components:		N/A
SP #		Fed.Reg.		Components:		N/A

40. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes:
- A. List SPs: _____
- B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

41. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☐ No☒

If yes: A. List SPs and reasons: _____

42. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

43. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes: A. List Sample Points: SP001, SP004, SP005

44. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

C. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒

D. If yes to C, list SPs & describe: _____

E. If yes to C, was company directed to take corrective actions? Yes☐ No☐

45. REVIEW THE SAMPLE POINT MAP! Last map revision date: 7/5/12

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

46. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

SSM Cardinal Glennon Hospital submitted their newly revised SPCCP plan during my inspection.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	TOX

WUNNENBERG INFO.

Base Map 20F3
Wun: St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

PR25 Process Disch => 25,000 GPD

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

Billing Address
1465 South Grand Blvd.
St Louis, MO. 63104

INSPECTION INFORMATION

Next Due	Insp Rslt	
12/06/2012	RIN	David Kupke

PERMIT INFORMATION

Issue Date: 05/01/2010
Expire Date: 04/30/2015
Extended Date:
Writer Scott Rehmer

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke
IUQ Recvd Date: 11/24/2009
Reviewer: David Kupke

CONTACTS

BILL	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
FLD2	Kevin Smith	Facilities Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facilities Supervisor	CELL	(314) 678-2031 Ext.
FLD3	Jack Mitchell	Maintenance Mechanic	OFF	(314) 577-5600 Ext.
OFF1	Greg Hrbacek	Team Leader Plant Operations	OFF	(314) 577-5327 Ext.
	Greg Hrbacek	Team Leader Plant Operations	CELL	(314) 795-1386 Ext.
OFF2	Kevin Smith	Facility Supervisor	OFF	(314) 268-2768 Ext.
	Kevin Smith	Facility Supervisor	SWR	(314) 577-5600 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 **Hrs:** 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage Y **On-Site Disposal** N **Off-Site Disposal** Y

11/24/2009	Equipment Oils and/or Grease		30	GAL
12/04/2009	Infectious Waste	Medical waste	35314	LB/YR
12/04/2009	Other	Chemical waste	556	LB/YR

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

PRODUCTS

EFF DATE	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	General hospital			

Report No. PIMS012A 01/10/2013 1:22:20 pm
Data Date & Time: 01/10/2013 1:22:20 pm

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**

PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

SEWER ACCOUNTS

Sewer Accounts
1020548900

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 01/01/2011 12:00:00AM **End Date =** 12/31/2012 12:59:59PM

Acct. No.			Consumption			Wdays	Cdays	Discharge	
1020548900			**CCF's**	**Gallons**				**Gal/ Wday**	**Gal/ Cday**
1020548900	11/03/2010	02/07/2011	6,322	6,322	A	97	97	97	
1020548900	02/08/2011	05/03/2011	4,143	10,465		85	85	182	
1020548900	05/04/2011	07/29/2011	10,404	20,869		87	87	269	
1020548900	07/30/2011	11/04/2011	13,407	34,276		98	98	367	
1020548900	11/05/2011	02/01/2012	4,763	39,039		89	89	456	
1020548900	02/02/2012	04/17/2012	5,534	44,573		76	76	532	
1020548900	04/18/2012	07/27/2012	17,239	61,812		101	101	633	
RF 0.51	**Acct. Total**		61,812	46,238,590		633	633	37,254	37,254
	Facility Total		61,812						

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description LIne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Boiler Blowdown		3,600	GPD		GPD	D	11/24/09
Non Contact Cooling Water	Autoclaves	220	GPD		GPD	D	11/24/09
Sanitary		28,350	GPD		GPD	D	11/24/09
Storm Water		0	GPD		GPD	D	11/24/09
Hospital Waste		34,648	GPD		GPD	D	11/24/09
Kitchen Waste		8,000	GPD		GPD	D	11/24/09
Cooling Tower Blowdown		2,930	GPD		GPD	D	11/24/09
	Total Flow Avg =	**77,748**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	360C	Trunk Sewer	46 - Rock Springs

Description 8" line exiting NW from SW main hospital entrance into manhole

Sewer Route N along Spring, W along Vista,to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Sanitary		4,000	GPD		GPD	D	12/17/10
Storm Water		0	GPD		GPD	D	12/17/10
Hospital Waste	X-ray dentist and Laboratory services	4,000	GPD		GPD	D	12/17/10
	Total Flow Avg =	**8,000**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
04	Sanitary Or Combined	20F3	350C	Trunk Sewer	46 - Rock Springs

Description 8" lateral exiting W from North side West building

Sewer Route N onto Vista Ave., West on Vista to 39th St, continuing West to 9' relief sewer then North to trunk.

SAMPLE POINT NO. 005 Ordinance **NPDES Outfall No.**

Description Manhole 12' N, 10' E from the NW corner of the west building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Non Contact Cooling Water	Autoclaves	600	GPD		GPD	D	11/24/09
Sanitary		1,400	GPD		GPD	D	11/24/09
Storm Water		0	GPD		GPD	D	11/24/09
Hospital Waste		8,000	GPD		GPD	D	11/24/09
	Total Flow Avg =	**10,000**		**Max =**			

PRETREATMENT TYPES

SP	EFF DATE	TYPE	DESCRIPTION
001	02/20/2003	DC28	Grease Trap
004	03/03/2004	DC32	Metallic Replacement

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **1020548900**

Premise Address
1465 South Grand Blvd.
St. Louis MO. 63104

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Silver (Total)	KP	Mercury (Total)	KP	Phenol	KP
2,4-Dinitrophenol	KP	Methylene Chloride	KP	Chloroform	KP

EXTRA STRENGTH SURCHARGE INFORMATION

PIMS FACILITY CONTACTS

For Account Number Selected **1020548900 SSM CARDINAL GLENNON CHILDREN HOSPITAL**
Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type

Contact Type	Contact Name		Contact Title	Phone Type	Number	Ext.
Billing Address						
Billing Contact	Greg	Hrbacek	Team Leader Plant Operations	CELL	(314)795-1386	
Billing Contact	Greg	Hrbacek	Team Leader Plant Operations	OFF	(314)577-5327	
Office Mailing Address						
Office Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	CELL	(314)795-1386	
Office Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	OFF	(314)577-5327	
Office Contact 1st Alt	Kevin	Smith	Facility Supervisor	OFF	(314)268-2768	
Office Contact 1st Alt	Kevin	Smith	Facility Supervisor	SWR	(314)577-5600	
Premise Address						
Field Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	CELL	(314)795-1386	
Field Contact - Primary	Greg	Hrbacek	Team Leader Plant Operations	OFF	(314)577-5327	
Field Contact 1st Alt	Kevin	Smith	Facilities Supervisor	CELL	(314)678-2031	
Field Contact 1st Alt	Kevin	Smith	Facilities Supervisor	OFF	(314)268-2768	
Field Contact 2nd Alt	Jack	Mitchell	Maintenance Mechanic	OFF	(314)577-5600	

PIMS
REPORT OF FIELD SAMPLING REQUIREMENTS
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Account No Entered **1020548900**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2013
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2013
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2013
	T237000	pH	Once/year	Grab	06/30/2013
	T247000	Temperature	Once/year	Grab	06/30/2013
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2013
	T257000	Total Phenols	Once/year	Grab	06/30/2013
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2013
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2013
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2013

004 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2013
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2013
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2013
	T237000	pH	Once/year	Grab	06/30/2013
	T247000	Temperature	Once/year	Grab	06/30/2013
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2013
	T257000	Total Phenols	Once/year	Grab	06/30/2013
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2013
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2013
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2013

005 Project Code: IM = IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2013
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2013
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2013
	T237000	pH	Once/year	Grab	06/30/2013
	T247000	Temperature	Once/year	Grab	06/30/2013
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2013
	T257000	Total Phenols	Once/year	Grab	06/30/2013
Phenolic Organics - Acids	T991000	Phenolic Organics - Acids	Once/year	Grab	06/30/2013
Volatile Organics	T996000	Volatile Orgs-not incl Acro/Acryl & 2-chloroethyl	Once/year	Grab	06/30/2013

MSD

Environmental Operations, Inc.
CLEARING THE WAY

SPILL PREVENTION, CONTROL AND COUNTERMEASURES PLAN

for

1020548900

ACCT# 1020548900

SSM Health Care
Cardinal Glennon Children's Medical Center
1465 South Grand Boulevard
Saint Louis, Missouri

Prepared by:

Environmental Operations, Inc.
1530 S. Second St.
St. Louis, Missouri

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

November 2012

Environmental Consulting & Remediation, Demolition, & Geotechnical Engineering
1530 South Second Street St. Louis, Missouri 63104-4500 314.241.0900
www.environmentalops.com

INSERT I - Emergency Contact Information

Facility Address: SSM Cardinal Glennon Children's Medical Center
1465 South Grand Boulevard
Saint Louis, Missouri 63104-1095

The Spill Coordinator shall be notified at the earliest practical opportunity when a spill is discovered.

Spill Coordinator:

Name:	Greg Hrbacek
Title:	Team Leader, Plant Operations
Office:	(314) 678-513
Cell Phone:	(314) 795-1386

Alternate Spill Coordinator:

Name:	Kevin Smith
Title:	Maintenance Supervisor
Office:	(314) 269-2768
Cell Phone:	(314) 678-2031

Emergency Response Agencies:

MDNR EER 24-Hour Hotline	(573) 634-2436
USEPA Regional Office	(800) 223-0425
St. Louis Fire and Rescue	**911** or (314) 289-1900
Police Department	**911** or (314) 231-1212
City of St. Louis Sheriff's Office	**911** or (314) 622-4851
Cardinal Glennon Children's Medical Center	(314) 577-5600

Emergency Spill Response Contractor:
Kiesel Company
4801 Fyler Ave
St. Louis, MO 63116
(314) 351-5500
(314) 421-0328

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

INSERT II
Record of Plan Changes

Change No.	Date	Action	Page(s) Revised	Approval	Title
1	November 2012	Initial Plan Certification			

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

INSERT III - Certification by Professional Engineer (40 CFR 112.3(d))

By means of this certification the Professional Engineer attests:

1. That I am familiar with the requirements of 40 CFR 112.
2. That I have visited and examined the facility.
3. That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR 112.
4. That procedures for required inspections have been established.
5. That the Plan is adequate for the facility.

This Plan was prepared in order to comply with the current amendments to 40 CFR 112 as of November 2012.

Mary M. Juan

Signature Registered Professional Engineer
Mary M. Juan

STATE OF MISSOURI
MARY M. JUAN
NUMBER PE-026292
PROFESSIONAL ENGINEER

Date: 11-14-12

Registered Professional Engineer
State of Registration: Missouri
Registration No.: E26292
Exp. 12/31/14

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

INSERT IV - Management Approval & Commitment of Resources (40 CFR 112.7(d)(2))

The SPCC Plan shall be reviewed and evaluated at least once every five years and amended as needed. The SPCC Plan will be maintained on site, available to all employees and inspectors for review.

The manpower, equipment, materials and other resources needed to implement the SPCC Plan and its associated Contingency Plan, as described within, are approved for implementation as required to expeditiously contain, recover, and dispose of any harmful quantity of oil discharged.

SSM Cardinal Glennon Children's Medical Center

Signature: _____ Date: _____

Name: Rodger Glaus

Title: Administrative Director Environmental Safety, Security & Emergency Preparedness

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Cardinal Glennon Children's Medical Center
Spill Prevention, Control, and Countermeasures Plan

TABLE OF CONTENTS

INSERTS
I – EMERGENCY CONTACT INFORMATION
II – RECORD OF PLAN CHANGES
III – CERTIFICATION BY PROFESSIONAL ENGINEER
IV – MANAGEMENT APPROVAL & COMMITMENT OF RESOURCES

1.0 INTRODUCTION 1

2.0 GENERAL REQUIRMENTS 1

2.1 PHYSICAL LAYOUT OF THE FACILITY 1
2.2 OIL CONTAINERS 2
2.3 DISCHARGE PREVENTION MEASURES 3
2.4 DISCHARGE AND DRAINAGE CONTROLS 4
2.5 DISCHARGE DISCOVERY, RESPONSE AND CLEANUP 4
2.6 DISPOSAL OF RECOVERED MATERIALS 4
2.7 EMERGENCY CONTACTS 5
2.8 INFORMATION PROVIDED TO EMERGENCY CONTACTS 5
2.9 SPILL RESPONSE PROCEDURES 6
2.10 FACILITY DRAINAGE AND POTENTIAL DIRECTION OF FLOW 6
2.11 CONTAINMENT AND DIVERSIONARY STRUCTURES 7
2.12 PRACTICABILITY OF MEASURES 8
2.13 INSPECTIONS 9
2.14 PERSONNEL, TRAINING AND PREVENTION PROCEDURES 9
2.15 SECURITY 9
2.16 TANK CAR AND TRUCK LOADING/UNLOADING 9
2.17 FIELD-CONSTRUCTED ABOVEGROUND CONTAINERS 10
2.18 CONFORMANCE WITH OTHER APPLICABLE REQUIREMENTS 10

3.0 SPECIFIC REQUIREMENTS FOR ON-SHORE FACILITIES 10

3.1 FACILITY DRAINAGE 10
3.2 BULK STORAGE CONTAINERS 10
3.3 TRANSFER FACILITY OPERATIONS 11

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035507

TABLE OF CONTENTS
(cont'd)

ATTACHMENTS

ATTACHMENT A OIL SOURCE TABLE
ATTACHMENT B FIGURES
ATTACHMENT C PHOTOGRAPHS
ATTACHMENT D SPILL REPORT FORM
ATTACHMENT E SPCC TRAINING LOG
ATTACHMENT F EXAMPLE INSPECTION SHEETS
ATTACHMENT G SUBSTANTIAL HARM FORM

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

1.0 INTRODUCTION

In compliance with 40 CFR Part 112, this Spill Prevention, Control and Countermeasures Plan (Plan) has been prepared for the SSM Cardinal Glennon Children's Medical Center in St. Louis, Missouri (Facility). The purpose of this Plan is to implement and maintain procedures, methods and equipment which will reduce the possibility of spills of oil stored and used at the Facility, and prepare site personnel to respond effectively in the event of a spill. This Plan, all amendments, attachments, and associated documents shall be available for on-site inspection and review by appropriate agencies and authorities.

In compliance with 40 CFR Part 112.4(d) and 112.5(b), this plan is to be reviewed and evaluated once every five (5) years or immediately after a reportable spill event at the Facility. The plan will be amended after each review if it is determined more efficient methods will significantly reduce the likelihood of a spill event. It will also be amended whenever there is a change to facility design, construction, operation, and/or maintenance which materially affects the potential for discharging oil into a navigable waterway. A record of amendments should be documented in the Record of Plan Changes, Insert II, and should include a statement similar to the following:

> "I have competed review and evaluation of the SPCC Plan for the Cardinal Glennon Children's Medical Center on ___, 2017, and will (will not) amend the Plan as a result."

2.0 GENERAL REQUIREMENTS
(40 CFR 112.7)

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

SSM Healthcare has taken all reasonable steps to comply with 40 CFR 112.

2.1 Physical Layout of the Facility
40 CFR 112.7(a)(3)

The Cardinal Glennon Children's Medical Center is a pediatric health care facility located at 1465 South Grand Boulevard, St. Louis, Missouri, 63104-1095. The surrounding land is zoned for commercial use. A Site Location Map and Facility Site Plans are provided in **Attachment B**.

The Facility is a not-for-profit inpatient and outpatient pediatric medical center, and includes the Pediatric Research Institute, located on Facility property to the southwest of the main medical center building. The Facility operates and is staffed twenty-four hours a day, 365 days per year.

MSD 035509

2.2 Oil Containers
40 CFR 112.7(a)(3)(i)

Oil storage containers and oil-filled operating equipment at the Facility are identified in **Table 1** in **Attachment A**. This table shows the type of oil stored, the number of tanks, drums or equipment involved in the storage, the types of containment and estimated containment volumes. Photographs of containers and equipment are provided in **Attachment C**. Oil storage and oil-containing equipment are described below.

Cardinal Glennon Medical Center

Aboveground Diesel fuel Storage Tanks
Two 20,000 gallon aboveground storage tanks (ASTs) are used to store #2 diesel fuel for the backup generator system located in the Boiler House. The ASTs are located in a fenced area north of the Boiler House. The tanks are of double wall vertical steel construction, installed on concrete pads and surrounded by a chain link fence and locking gate.

Day Tanks – No. 2 Diesel fuel
Three diesel fuel day tanks of varying capacities are used to supply fuel to three backup generators. The day tanks are supplied from the aboveground storage tanks described above. Capacities of the day tanks are 240, 460 and 500 gallons.

Elevators
Two hydraulic elevators are located at different locations within the Medical Center: the Emergency Room (ER) elevator and the freight elevator. Hydraulic oil for each elevator is stored in tanks in nearby equipment rooms and pumped through high pressure pipes to the elevator equipment. Total fluid capacities for these systems are 140 gallons (freight) and 230 gallons (ER elevator).

Used Grease Bin
A used dietary grease bin is located outside the Medical Center on the edge of the paved roadway beside the Boiler House. The grease bin is stored on a concrete drive and is used for dumping used cooking grease from dietary activities. The used grease bin has a storage capacity of 250 gallons.

Used Oil Drum
A 55-gallon drum is used to collect used oil from equipment at the Medical Center. The drum is kept in the Compressor Room in the basement of the Main Tower.

Outdoor Electrical Transformer
Two electrical transformers are located in a substation outside the northwest corner of the building. These transformers are owned and operated by Ameren Corporation and are not included in this SPCC Plan.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035510

Pediatric Research Institute (PRI)

Elevators
Two hydraulic elevators are located at the PRI, one on the ground floor of the building, and one in the parking garage. Hydraulic oil for each elevator is stored in tanks in nearby equipment rooms and pumped through high pressure pipes to the elevator equipment. Total fluid capacities for these systems are 80 and 150 gallons.

Aboveground Diesel Fuel Storage Tanks
Two backup generators and attached fuel storage tanks are located outside the PRI building. The generators rest on top of the steel storage tanks (refer to Attachment C). The generator systems are located in a fenced area with locking gate between the PRI building and parking garage.

2.3 Discharge Prevention Measures 40 CFR 112.7(a)(3)(ii)

Discharge prevention measures are implemented to minimize the potential for a discharge of oil from the Facility. These include inspections and routine maintenance of all oil storage containers and oil-filled operating equipment.

Aboveground diesel fuel ASTs
The 20,000 gallon diesel fuel ASTs are double wall steel tanks, installed in the year 2000. The tanks are equipped with a check valve on the fill port pipe to prevent overfilling, and power plant and fuel supply contractor personnel remain present for the entire tank loading operation, providing further protection against overfilling. The tanks are never filled to greater than 80% capacity.

The tank system is inspected monthly and annually to check for tank integrity. In addition, spill containment booms and absorbent materials are stored in the containment bin located nearby for use in responding to potential spills or leaks from these tanks.

Tank loading areas
Number 2 diesel fuel is loaded into the diesel fuel ASTs from trucks parked on the paved roadway beside the Medical Center ASTs, and from trucks parked on the concrete drive leading to the PRI ASTs. The diesel fuel distributor, Kiesel Company, conducts the following procedures to prevent a spill or release during fueling operations:

- All fueling vehicles have air brake systems that automatically lock the brakes into place during fueling operations.
- All vehicles are equipped with a spill kit containing absorbent pads, absorbent booms and oil dry.
- All Kiesel Company drivers are trained in spill response, containment and cleanup procedures.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

- Kiesel Company drivers are required to stay with the tank during the entire process of fueling. They are to visually monitor the fueling operation until the desired amount is received.
- In the event of a spill from the truck during tank loading, the driver will contain the spill as soon as possible using materials from the truck spill kit, and boom off the immediate area and nearby sewers to prevent entry to the sewer system.

Used dietary grease bin

Used dietary grease stored in the used grease bin is collected by an outside contractor using an automated dumping system similar to a residential garbage collector. The grease bin area is checked and, if necessary, cleaned of any spilled grease after each collection. A concrete containment berm surrounds the bin to provide secondary containment for potential releases, and the nearest down gradient storm sewer inlet is located approximately 150 feet away. The grease bin is inspected weekly and after precipitation events to check the integrity of the bin and containment area and to drain stormwater. In addition, the round-the- clock presence of hospital staff, contractors and visitors ensures that any potential release from the bin and containment area would be observed and contained before it could reach the nearest inlet.

2.4 Discharge and Drainage Controls
40 CFR 112.7(a)(3)(iii)

Discharge and drainage controls are provided by structural secondary containment all bulk oil containers at the Medical Center. Discharge controls are discussed in more detail in Section 2.11 of this Plan.

2.5 Discharge Discovery, Response and Cleanup
40 CFR 112.7(a)(3)(iv)

Section 2.9 below provides detailed information in regard to spill response protocols and responsibilities.

2.6 Disposal of Recovered Materials
40 CFR 112.7(a)(3)(v)

All oil and oil-impacted materials (such as absorbent materials, personal protective equipment, rags, and soil or other media), will be properly characterized and disposed of in accordance with all applicable and appropriate local, state, and federal solid waste disposal regulations.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035512

2.7 Emergency Contacts
40 CFR 112.7(a)(3)(vi)

Contact information for responsible SSM personnel, as well as local, state and federal agencies, is provided in **Insert I** at the front of this Plan.

2.8 Information Provided to Emergency Contacts
40 CFR 112.7(a)(4)

The MDNR Environmental Emergency Response (EER) office must be notified in the event of a release that meets any of the following criteria:

- A release of more than 50 gallons of oil;
- Any petroleum product to the waters of the State of Missouri;
- Impacts to utilities;
- Impacts to third party property;
- Free product present in the environment;
- Unknown source/amount;
- Ongoing/uncontrolled release; or,
- Suspicion of criminal act.

The EER 24-hour Spill Line number is (573) 634-2436 and is included on the Emergency Notification Contact List is provided as **Insert I** at the front of this Plan.

If the Spill is reportable, appropriate Emergency Response Agencies shall be notified. The person making the report shall be prepared to provide the following information:

- The exact location of the Facility;
- The date and time of the release;
- The type of material released;
- Estimates of the total quantity released;
- The source of the discharge;
- A description of all affected media;
- The cause of the discharge;
- Any related property damage or injuries;
- Response actions being taken;
- Whether an evacuation may be needed; and
- The names of other individuals and organization who have also been contacted.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

In addition to the standard notifications of MDNR EER during a spill event or release, other notifications may also be required if there are threats of fire, impacts to traffic, or personal injury. Phone numbers for local police and fire department are included in the Emergency Notification Contact List is provided as **Insert I.**

Additionally, a written notification is required to be submitted to the US EPA Region 7 Administrator and the MDNR within 60 days whenever a reportable discharge of more than 1,000 gallons of oil in a single event has occurred, or two reportable discharges of more than 42 gallons (1 barrel) of oil has occurred within any 12-month period. This requirement is in addition to other Federal and State reporting requirements.

2.9 Spill Response Procedures
40 CFR 112.7(a)(5)

In the event of a discharge, the Spill Coordinator will be immediately notified. Responsible employees on duty will be trained to take actions necessary to stop the release, contain and collect the released material, contact outside emergency contractors if the release is beyond the capabilities of the Facility staff to contain and collect, and report the necessary information to the Spill Coordinator to allow for the necessary reporting to government agencies.

The Spill Coordinator or Alternate shall contact the appropriate agencies as defined in **Section 2.8** of this Plan.

2.10 Facility Drainage and Potential Direction of Flow
40 CFR 112.7(b)

There is no history of leaks or releases of oil from containers or equipment at the Facility. The city of St. Louis municipal sanitary and storm sewers are a combined system, and are connected to the City of St. Louis Lower Mississippi River Wastewater Treatment Plant (publicly owned treatment works, or POTW). Spills to the storm or sanitary sewer system would be discharged via sewer piping directly to the POTW, which discharges treated water to the Mississippi River.

Figures 1 and 2 in **Attachment B** show the layout for the facility and identify the locations of oil containing equipment and containment. **Figure 3** in **Attachment B** depicts the site location and topography.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

MSD 035514

2.11 Containment and Diversionary Structures 40 CFR 112.7(c)

This section describes the containment areas or basins that are used to contain and prevent oil spills from reaching surface waters.

Cardinal Glennon Medical Center

Diesel Fuel Storage Tanks (ASTs)
The 20,000 gallon diesel fuel ASTs are double wall steel tanks, installed in the year 2000. The double wall design constitutes secondary containment. In addition, the tanks are equipped with leak detection floats that will set off an audible alarm should any leakage be detected in the interstitial space. The tanks are located in a highly trafficked area adjacent to the drive along the western wall of the Medical Center, and the tank area is inspected monthly for tank integrity.

Day Tanks and Backup Generators – No. 2 Diesel fuel
The three diesel day tanks are contained within steel rupture tanks which provide secondary containment, and the tanks, generators and fuel lines supplying the generators are all located within a fully enclosed concrete block building with concrete floors. There are no floor drains in the vicinity.

ER Elevator – Hydraulic Oil
The hydraulic oil tank for the ER elevator is located on the ground floor of the Medical Center in Equipment Room G095. The capacity of this tank is 230 gallons. The integrity of the building walls and concrete floor and the absence of any nearby floor drains enable the building to serve as adequate secondary containment for this tank.

Freight Elevator -- Hydraulic Oil
The hydraulic oil tank for the freight elevator is located in Room B-322 in the basement of the Main Tower. The capacity of this tank is 140 gallons. The tank is located inside an equipment room with concrete walls and floor, and is further contained behind a 32-inch high concrete wall to prevent potential spills or leaks from reaching floor drains (refer to Attachment C).

Used Dietary Grease Bin
The used dietary grease bin is located outside and adjacent to the southern wall of the Boiler House, on a paved area. The bin is stored inside a 1 foot high concrete containment berm to prevent potential spills or leaks from reaching the storm sewer system (refer to Attachment C). The containment berm is sized to provide 195 gallons secondary containment, and is therefore not sufficient to contain the entire contents of the grease bin if full, plus freeboard. However, the bin is emptied frequently and is rarely full, and is located in a high traffic area. This, along with weekly inspections and prompt stormwater drainage from the containment berm,

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035515

should serve to prevent potential discharges from reaching the storm sewer system (refer to Section 2.3, Discharge Prevention Measures).

Used Oil Drum
The 55-gallon used oil storage drum is kept indoors, in the Compressor Room in the basement of the Main Tower. The integrity of the concrete floor and concrete block walls of this room provide secondary containment for the drum. In addition, it is stored on a containment pallet to prevent potential spills or releases from reaching nearby floor drains.

Pediatric Research Institute (PRI)

PRI Building Elevator -- Hydraulic Oil
The hydraulic oil tank for the PRI building elevator is located in an equipment room on the ground floor of the PRI building. The capacity of this tank is 150 gallons. The integrity of the building walls and concrete floor and the absence of any nearby floor drains enable the building to serve as adequate secondary containment for this tank.

Parking Garage Elevator -- Hydraulic Oil
The hydraulic oil tank for the PRI parking garage elevator is located in an equipment room on the ground floor of the parking garage. The capacity of this tank is 80 gallons. The tank is located inside an equipment room with concrete walls and floor, and is further contained behind a one foot high concrete containment wall to prevent potential spills or leaks from reaching nearby floor drains (refer to Attachment C).

Backup Generator Diesel Fuel Storage Tanks
The backup generator and fuel storage tank systems are installed on concrete pads in an asphalt-paved area between the PRI building and the parking garage. The diesel fuel storage capacities for these tanks are calculated at 1,256 gallons for the tank next to the PRI building, and 838 gallons for the tank next to the parking garage. Secondary containment for the tanks is provided by a 22' x 27' x 2' high concrete berm surrounding the generator systems. This berm provides 7,400 gallons of secondary containment, sufficient to contain the contents of the both tanks plus freeboard (refer to Attachment C).

2.12 Practicability of Measures
40 CFR 112.7(d)

All bulk storage containers and oil-filled operating equipment are provided with adequate secondary containment.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

MSD 035516

2.13 Inspections
40 CFR 112.7(e)

Routine visual inspections of all storage containers and oil-filled operating equipment are conducted as part of the facility operating procedures. Inspections are performed at various intervals as listed below. The inspector is to note any action taken or any action needed, then sign the form and submit for management review. Inspections are to be recorded on forms similar to that provided in **Attachment F** and are to be filed with SSM facility records for a minimum of three years. Intervals for inspection are as follows:

1. Monthly inspections include all oil storage containers, containment systems, elevator rooms, and spill response equipment and materials.
2. Weekly inspections of the used dietary grease bin.
3. Inspections performed as necessary: unloading operations each time fuel or oil is delivered to or removed from the Facility.

2.14 Personnel, Training and Prevention Procedures
40 CFR 112.7(f)

Training sessions on spill prevention and response shall be held annually with personnel who handle oil or other potential spill materials to ensure that they adequately understand their roles and responsibilities as described in this Plan. Training shall include education in applicable pollution control laws and regulations for the cleanup of discharges of oil. During training sessions the SPCC Plan will be reviewed, any spill events at the facility will be analyzed, and the significance of appropriate federal regulations, reporting requirements and company procedures will be discussed.

Training will be recorded on forms similar to those provided in **Attachment E**. Training records are to be maintained at the SSM Cardinal Glennon Children's Medical Center for a minimum of five years.

2.15 Security
40 CFR 112.7(g)

The Facility is open to the public 24-hours a day. The Facility is well lit at all times with street lights and motion sensor night lights. In addition, SSM employs security staff to perform periodic security checks of the property.

2.16 Tank Car and Truck Loading/Unloading
40 CFR 112.7(h)

The Facility does not have a loading rack, therefore this section does not apply.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

MSD 035517

2.17 Field-Constructed Aboveground Containers
40 CFR 112.7(i)

There are no field constructed aboveground containers at the facility.

2.18 Conformance with Other Applicable Requirements
40 CFR 112.7(j)

This Plan does not incorporate any additional state or federal requirements or regulations.

3.0 SPECIFIC REQUIREMENTS FOR ON-SHORE FACILITIES
40 CFR 112.8

The following requirements apply specifically to on-shore, non-production facilities.

3.1 Facility Drainage
40 CFR 112.8(b)

Facility drainage is discussed in **Section 2.10** of this Plan. The following bulk storage containers are located in outdoor diked containment structures: the PRI backup generator diesel fuel storage tanks and the used dietary grease bin. These containment berms are equipped with manual, locking drainage valves of open-and-close design, to allow for drainage of uncontaminated stormwater as necessary. Drainage of accumulated stormwater into the storm sewer system will not be allowed unless the following steps are taken:

- Drainage valve normally kept closed and locked to discourage tampering;
- Accumulated stormwater inspected to ensure no fuel contamination;
- The valve is opened under responsible supervision; and
- Adequate records are kept to note the condition of the stormwater that is discharged (see sample "Visual Observation Log" in Attachment F).

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

3.2 Bulk Storage Containers
40 CFR 112.8(c)

Bulk storage containers at the Medical Center consist of the 20,000 gallon diesel fuel ASTs, three diesel fuel day tanks, the used oil drum, and the used dietary grease bin. The only bulk storage containers at the PRI are the backup generator system diesel fuel tanks.

All bulk storage containers are equipped with structural secondary containment, as described in **Section 2.11** of this Plan.

Periodic, documented inspections are conducted on all bulk storage containers as described in **Section 2.13**. An evaluation of the requirement for integrity testing was performed on all aboveground storage containers with a capacity of 55 gallons or over. Using the industry standard, Steel Tank Institute (STI) SP001 as a guide, it was determined that periodic inspections are sufficient for the portable containers (55 gallon drums and used grease bin), and for the elevator reservoirs, which are less than 1000 gallon capacity each and have spill control provided by the concrete building walls and floors.

The Boiler House diesel fuel storage tanks are considered Category 1 tanks as per SP001, based on the spill control and continuous release detection provided by the double wall tank construction, automated leak detection systems, and concrete pad underneath. Given the storage capacity of these tanks (20,000 gallons each), formal inspections of the tank exteriors by an outside, certified tank inspector are required every 20 years, in addition to the monthly and annual tank inspections performed by health center personnel.

The diesel fuel day tanks located inside the Boiler House are considered Category 1 tanks as per SP001, based on the spill control and continuous release detection provided by the rupture tank design and concrete floors and concrete block walls of the building. Given the storage capacities of 500 gallons or less each, periodic inspections are sufficient and formal tank inspections and integrity testing are not required unless a leak is detected (refer to the Monthly Inspection Checklist in Appendix F).

The PRI backup generator diesel storage tanks are considered Category 1 tanks as per SP001, based on the spill control and continuous release detection provided by the concrete secondary containment system. Given the storage capacities of 1,256 and 838 gallons, and the ease of visual observation due to the lack of insulation, monthly documented inspections by facility personnel are sufficient and formal tank inspection and integrity testing are not required unless a leak is detected (refer to the Monthly Inspection Checklist in Appendix F).

Personnel performing the inspections must be knowledgeable of Boiler House operations, characteristics of the liquids stored, and the types of storage containers and associated components inspected.

3.3 Transfer Facility Operations 40 CFR 112.8(d)

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

There are no underground storage tanks at the Facility.

MSD 035519

ATTACHMENT A

OIL SOURCE TABLE

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

TABLE 1
Sources of Potential Spills
Cardinal Glennon Children's Medical Center

Source No.	Source Description	Source Location	Source Container Classification	Type of Material	Total Quantity of Material Stored (gallons)	Type of Secondary Containment Provided	Volume of Secondary Containment Provided (gal)
Cardinal Glennon Children's Medical Center							
1	Freight Elevator	Main Tower Basement, Room B-322	Oil-filled Equipment	Hydraulic Oil	140	Building walls and floor with concrete containment curb	370
2	ER Elevator	Ground floor, Main Tower	Oil-filled Equipment	Hydraulic Oil	230	Building walls and floor	>230
3	Used Oil Drum	Main Tower Basement, Compressor Room	Portable Bulk	Used Oil	55	Containment pallet	61
4	Diesel fuel Storage Tanks (2)	Outside Boiler House (west of Medical Center)	Aboveground Bulk	#2 Diesel fuel	20,000 each	Double wall tanks	20,000 gallons each
5	Diesel fuel Day Tank	Boiler House, second floor	Aboveground Bulk	#2 Diesel fuel	240	Rupture Tank	330
6	Diesel fuel Day Tank	Boiler House, second floor	Aboveground Bulk	#2 Diesel fuel	460	Rupture Tank	567

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Source No.	Source Description	Source Location	Source Container Classification	Type of Material	Total Quantity of Material Stored (gallons)	Type of Secondary Containment Provided	Volume of Secondary Containment Provided (gal)
7	Diesel fuel Day Tank	Boiler House, second floor	Aboveground Bulk	#2 Diesel fuel	500	Rupture Tank	567
8	Used Grease Bin	Outside west wall of Medical Center	Portable Bulk	Used Cooking Grease	250	Containment curb	195 gallons
Pediatric Research Institute							
9	Elevator	Ground floor, PRI Building	Oil-filled Equipment	Hydraulic Oil	150	Building walls and floor	>150
10	Garage Elevator	Parking garage	Oil-filled Equipment	Hydraulic Oil	80	Building walls and floor with concrete containment curb	196
11	Backup Generator diesel Storage Tank	South of PRI Building	Aboveground Bulk	#2 Diesel fuel	1,256	Concrete secondary containment berm	7,400
12	Backup Generator diesel Storage Tank	North of parking garage	Aboveground Bulk	#2 Diesel fuel	838	Concrete secondary containment berm	7,400

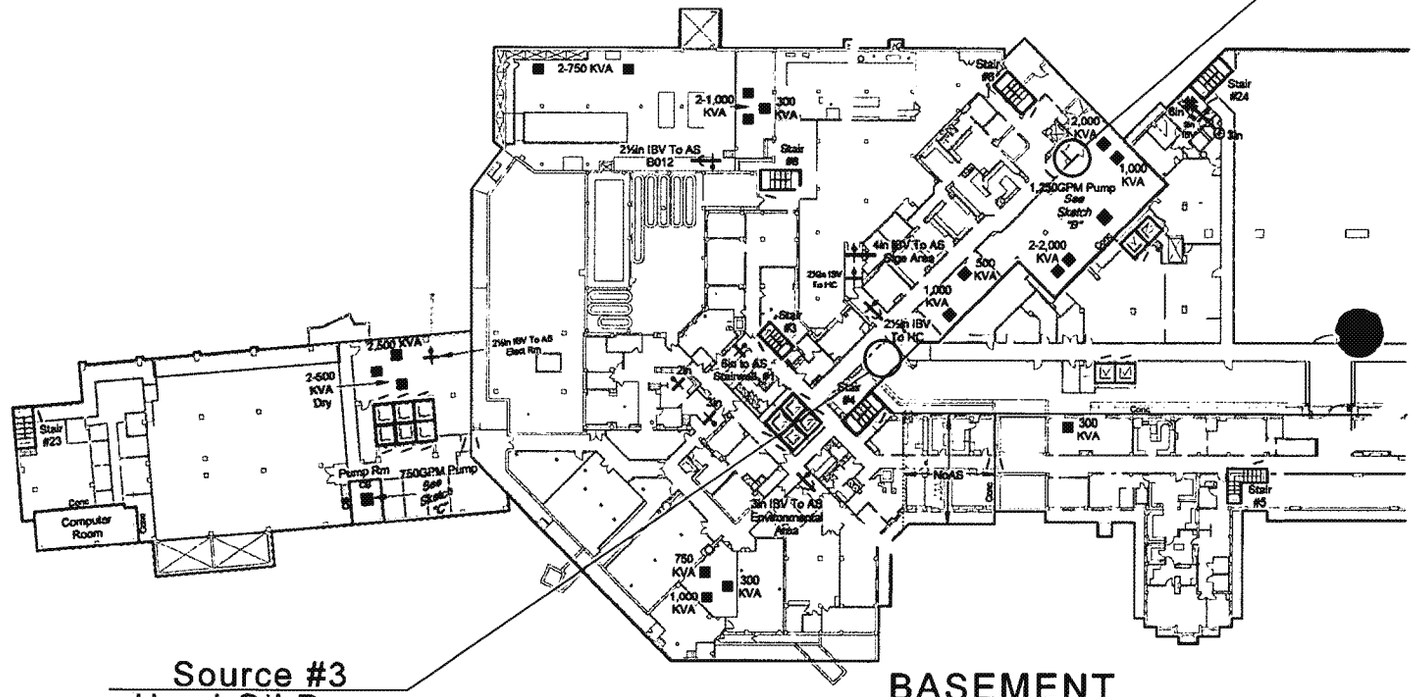
RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

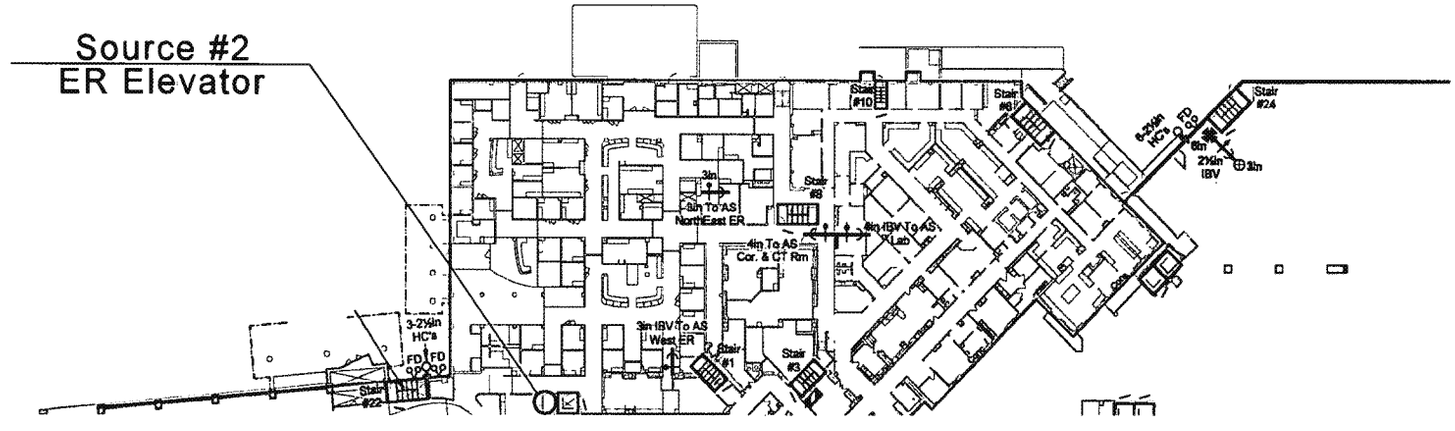
ATTACHMENT B

FIGURES

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

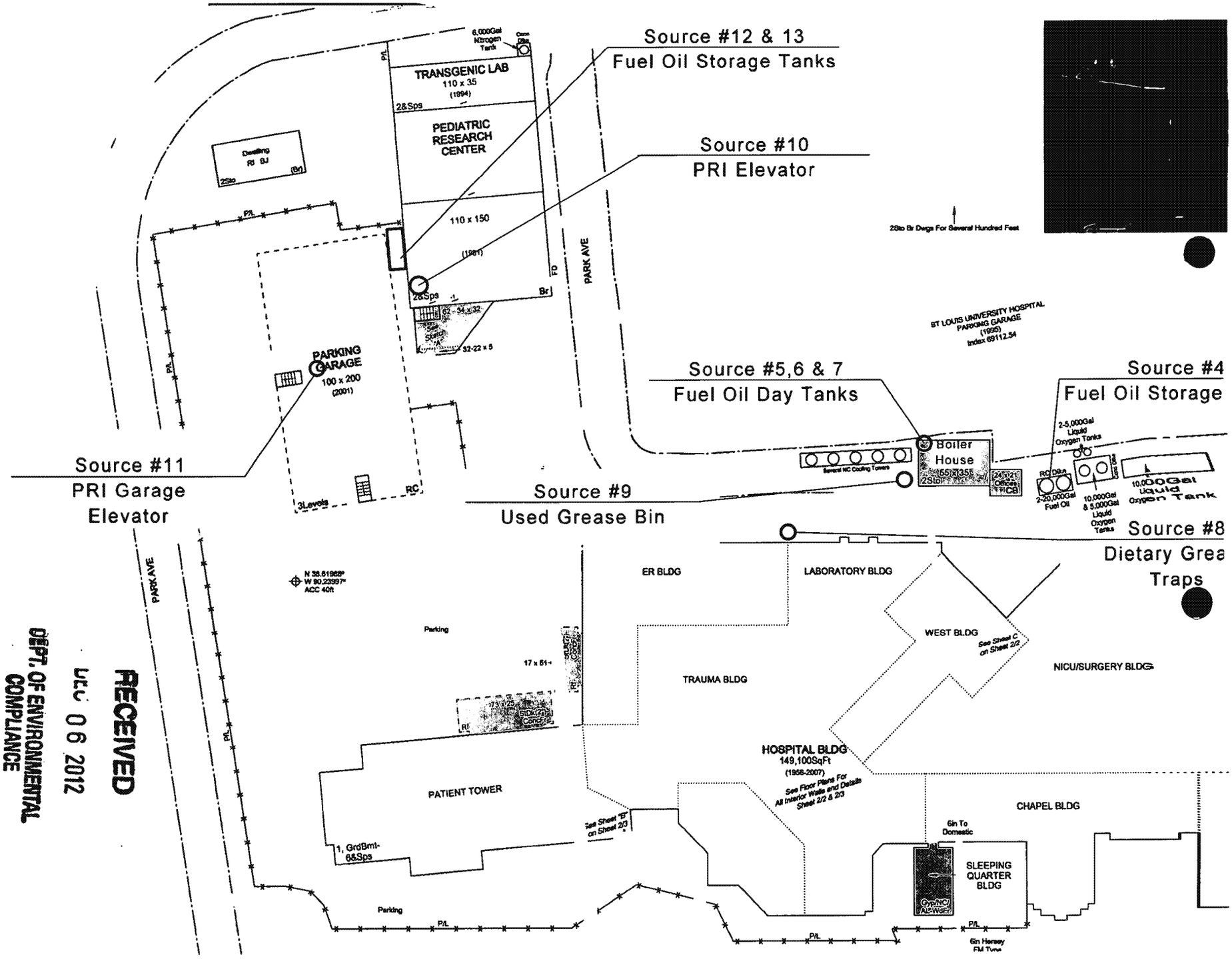
RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE





13_Eng4109 Cardinal Glennon Childrens Medical Center4109 Figure 01 Medical Center Floor Plans.dgn

Project #4109



RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

M:\3_Eng\4109 Cardinal Glennon Childrens Medical Center\4109 Figure 02 Site Plan.dgn

Environmental Operations, Inc.

North

0 250 500

Approximate Scale, feet

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Site Location Map

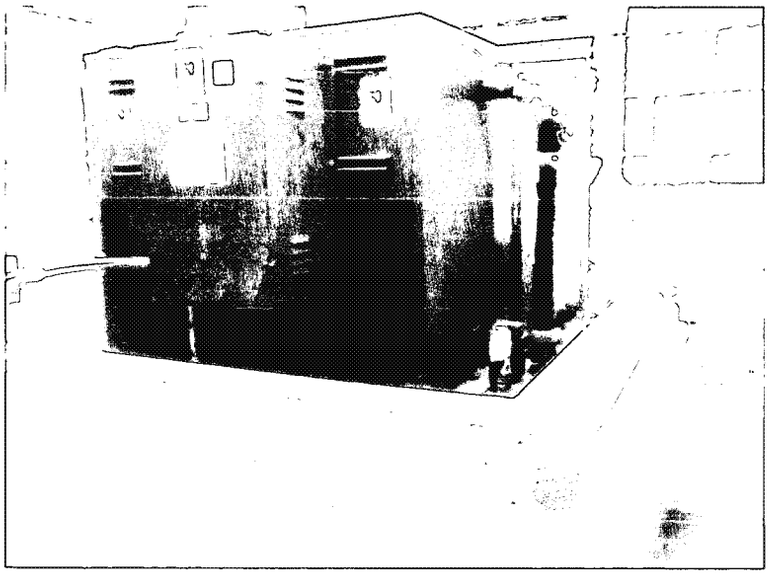
SSM Cardinal Glennon Children's Medical Center
SPCC Plan
1465 South Grand Blvd.
Saint Louis, Missouri
Figure 3

ATTACHMENT C

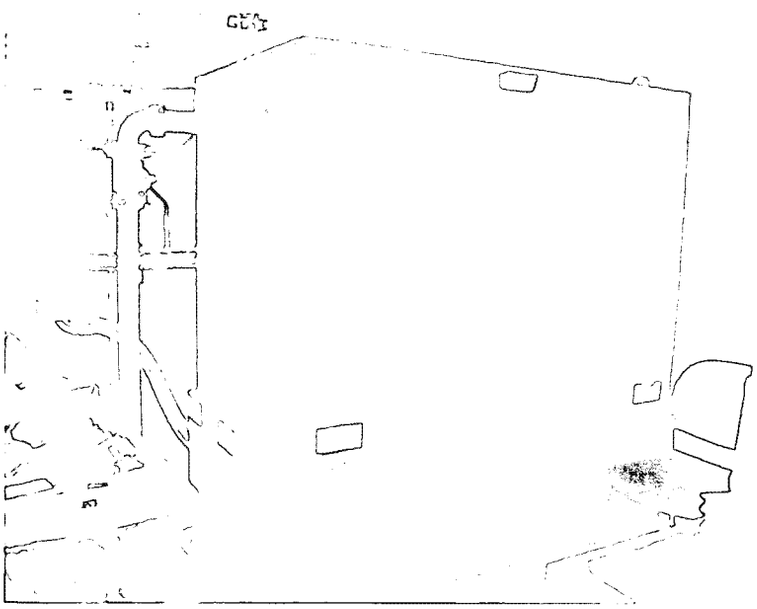
PHOTOGRAPHS

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

DEPT. OF ENVIRONMENTAL
COMPLIANCE



1. Freight Elevator system and containment wall (Source #1)



2. Emergency Room (ER) Elevator system (Source #2)

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

3. 55-gallon used oil drum (now stored in containment pallet) (source #3)

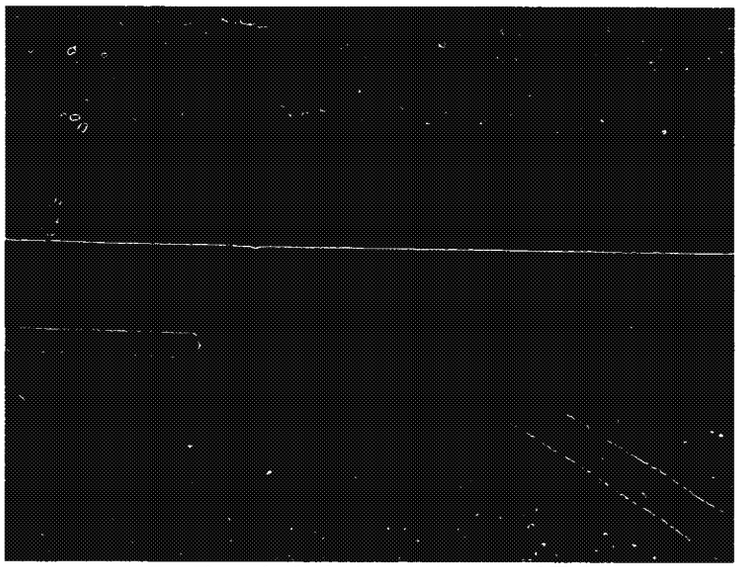
RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

4. Two 20,000-gallon #2 Diesel fuel ASTs (Source #4)

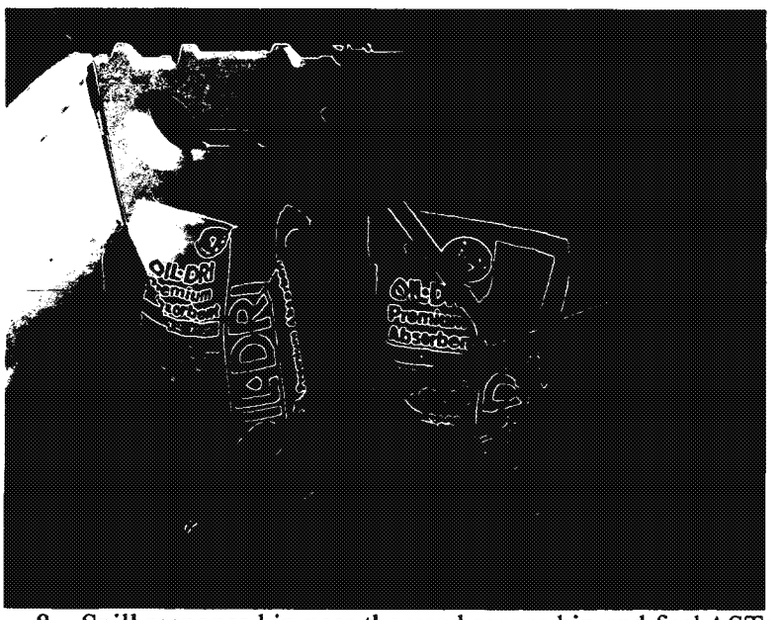
5. Leak detection float on AST systems

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

6. Diesel fuel shut off valve for AST systems



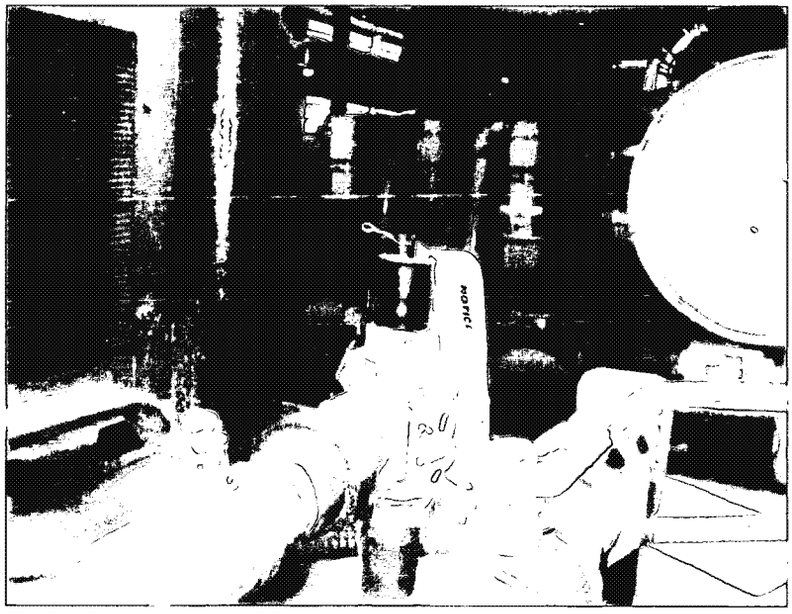
7. Trench drain located near AST farm



8. Spill response bin near the used grease bin and fuel ASTs

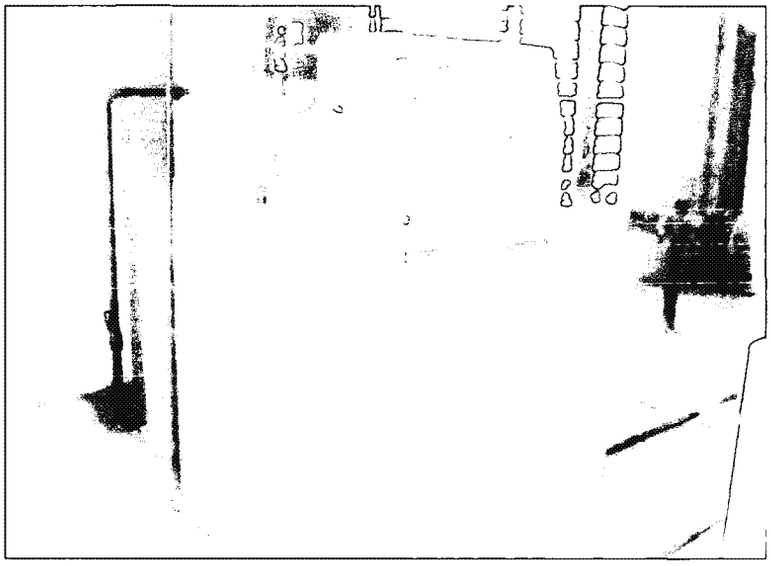
RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

9. Diesel fuel day tank 1 located in boiler house (Source #5)

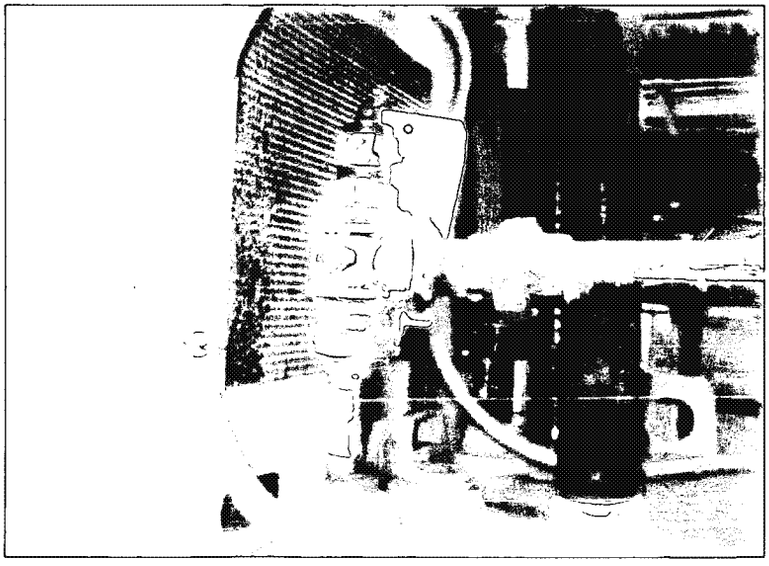


10. Siphon valve for day tank 1

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

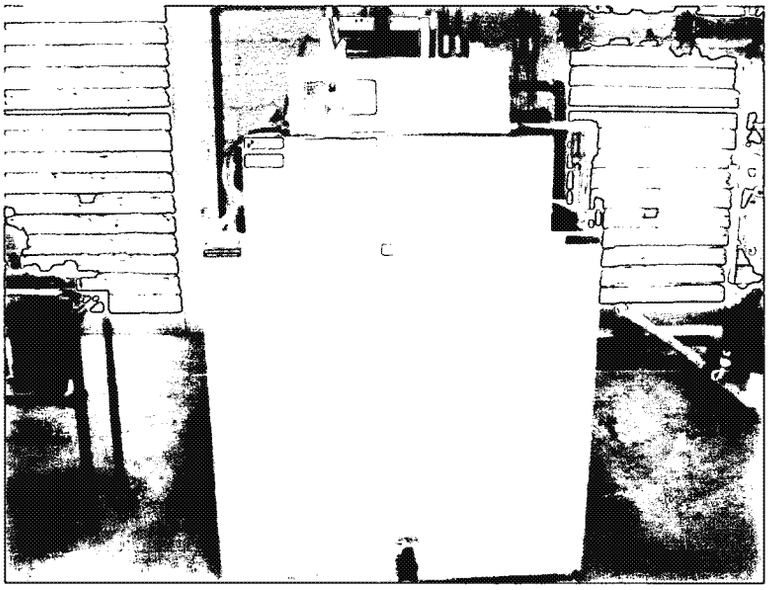


11. Diesel fuel day tank 2 located in boiler house (Source #6)



12. Siphon for day tank 2

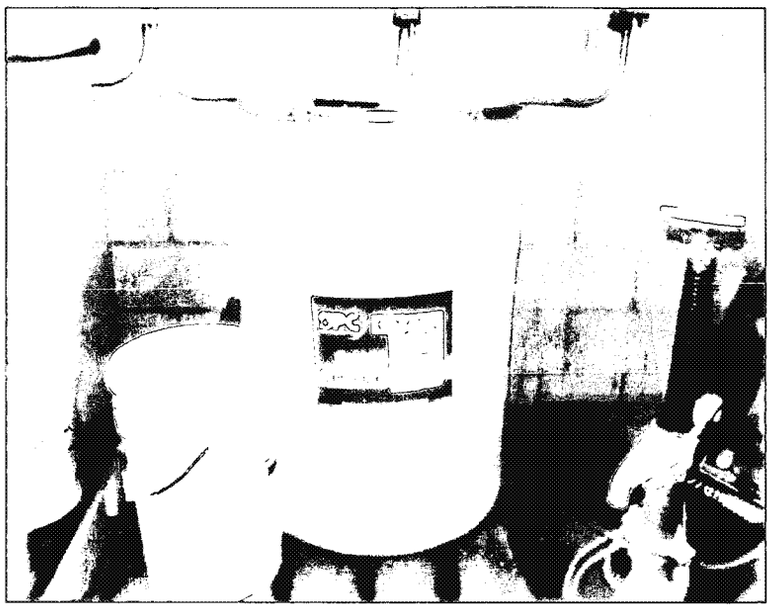
RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE



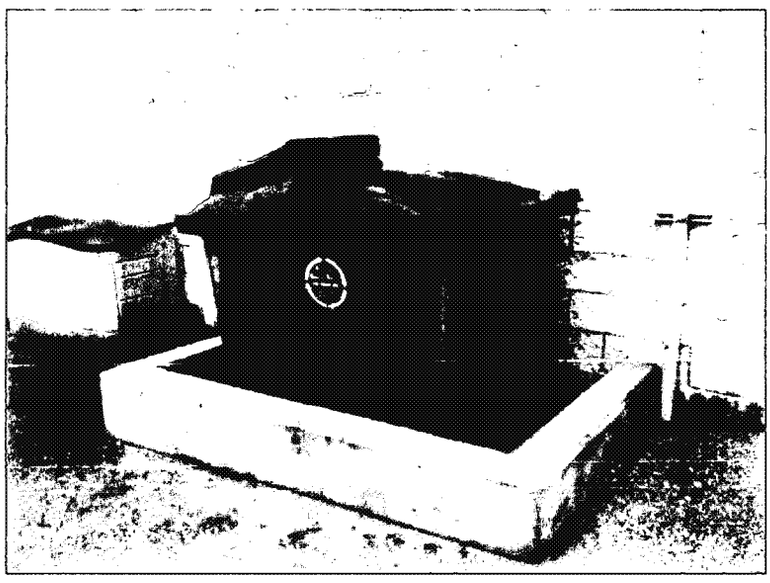
13. Diesel fuel day tank 3 located in boiler room (Source #7)

14. Siphon valve for day tank 3

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE



15. Spill response kit located in boiler room



16. Used Grease Bin in containment berm (source #8)

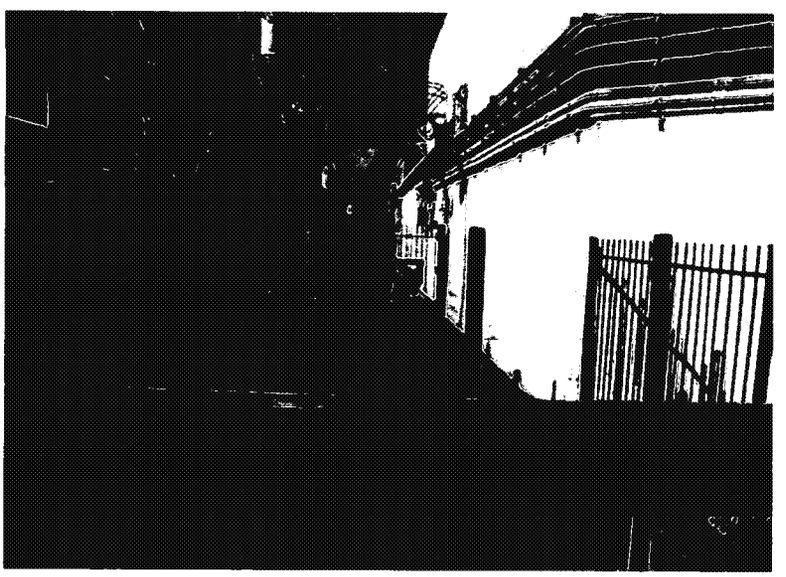
RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

17. Hydraulic oil tank for the PRI building elevator (Source #9)

18. Hydraulic oil tank for the PRI parking garage elevator (Source #10)

RECEIVED
OCT 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

19. Back-up generators with diesel fuel tanks, inside containment berm, located outside of the Pediatric Research Institute (PRI) (Sources #11 and #12)



20. Kiesel Co. tank loading location for back-up generator systems at PRI

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

ATTACHMENT D

SPILL REPORT FORM

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

Spill Report Form

Description of Spill

Date of Spill: _____ Time of Spill: _____

Source of Spill: _____ Material Released: _____

Quantity of Release: _____

Did spill travel off-site? Yes ___ No ___

If yes, describe: _____

_____

_____

_____

Did spill reach storm sewers, open water, or tributaries to open water?
Yes __ No __

If yes, describer: _____

_____

_____

_____

Internal Reporting

Person who discovered spill: Name: _____

Title: _____

Initially reported to: Name: _____

Title: _____

External Reporting

Agencies Notified: _____

_____

_____

_____

_____

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Date Reported: _____ Time Reported: _____

Reported by: Name: _____

Title: _____

Spill Report Form
Page 2

Detailed description of Spill Response: _____

Name: _____ Title: _____

Signature: _____

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

ATTACHMENT E

SPCC TRAINING LOG

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Individual SPCC Training Form

Employee Name: _____

Training Topic/Issue	Date	No. of Hours

Trainer: _____

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

ATTACHMENT F

EXAMPLE INSPECTION SHEETS

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL
COMPLIANCE

USED DIETARY GREASE BIN INSPECTION CHECKLIST

INSPECT WEEKLY AND AFTER PRECIPITATION EVENTS

DATE	Any leakage present?		Bin and containment wall in good condition?		*Stormwater present inside containment area?		Inspected by:
	Yes	No	Yes	No	Yes	No	

Remarks/Action Taken: (for every "Yes" answer, a response is necessary.)

_____

_____

_____

_____

_____

_____

_____

*If stormwater is observed inside containment area, inspect and drain using the "Visual Observation Log".

RECEIVED

DEC 06 2012

DEPT. OF ENVIRONMENTAL COMPLIANCE

MONTHLY FACILITY INSPECTION CHECKLIST

Date: _____ Inspected By: _____

Medical Center

ITEM	OK	NEEDS ATTENTION	COMMENTS
1. *Diesel day tanks	_____	_____	_____
2. Freight elevator oil tank	_____	_____	_____
3. ER elevator oil tank	_____	_____	_____
4. Used oil drum	_____	_____	_____
5. Outdoor spill response materials bin	_____	_____	_____

Remarks/Action Taken: (for every "Needs Attention" answer, a response is necessary.)

_____

_____

_____

Pediatric Research Institute

ITEM	OK	NEEDS ATTENTION	COMMENTS
1. PRI elevator oil tank	_____	_____	_____
2. Parking garage elevator oil tank	_____	_____	_____

Remarks/Action Taken: (for every "Needs Attention" answer, a response is necessary.)

_____

_____

_____

*Note: If signs of leakage or deterioration are observed in any diesel fuel storage tank, contact a tank inspector certified by the American Petroleum Institute or Steel Tank Institute to assess its suitability for continued service.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Monthly Inspection Checklist for the Boiler House Diesel Fuel Storage Tanks

Tank Information:
The Boiler House diesel fuel storage tanks are cylindrical, double wall steel tanks, with storage capacity of 20,000 gallons each. The tanks are installed on a concrete pad and equipped with interstitial leak detection.

General Inspection Information:	
Inspection Date:	Inspector's Name:
Prior inspection date:	Retain this record until (36 months from inspection date):

DEPT. OF ENVIRONMENTAL COMPLIANCE
DEC 06 2012
RECEIVED

Inspection Guidance:

- Should water be discovered in the tank interstice, remove promptly or take other corrective action. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- If signs of leakage or deterioration are observed in the tank system, contact a tank inspector certified by the American Petroleum Institute or Steel Tank Institute to assess its suitability for continued service.
- **In the event of severe weather or maintenance that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required immediately following the event.**

	Tank 1		**Tank 2**		Corrective action, if any:
1. Debris or fire hazard in tank area?	*Yes	No	*Yes	No	
2. Visible signs of leakage around the tanks or concrete pad?					
3. Water in tank interstices?					
4. Tank liquid level gauges readable and in good condition?					
5. Check that all tank openings are properly sealed.					
6. Are there other conditions that should be addressed for continued safe operation?					

Monthly Inspection Checklist for the PRI Backup Generator Systems

Tank Information:
The diesel fuel storage tanks attached to the backup generators are rectangular steel tanks installed on concrete pads, with the generators above the fuel storage tanks inside steel housing. The north generator system tank has a storage capacity of approximately 1,256 gallons, and the south generator tank has a storage capacity of approximately 838 gallons.

General Inspection Information:	
Inspection Date:	Inspector's Name:
Prior inspection date:	Retain this record until (36 months from inspection date):

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Inspection Guidance:

- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- If signs of leakage or deterioration are observed in the generator systems, contact a tank inspector certified by the American Petroleum Institute or Steel Tank Institute to assess its suitability for continued service.
- **In the event of severe weather or maintenance that could affect the operation of critical components, an inspection of these components is required immediately following the event.**

	North Generator		**South Generator**		Corrective action, if any:
1. Debris or fire hazard in generator area?	*Yes	No	*Yes	No	
2. Visible signs of leakage around the tanks or concrete pad?					
3. Tank liquid level gauges readable and in good condition?					
4. Evidence of paint failure, rust or tank corrosion?					
5. Noticeable tank bulging or denting?					
6. Check that all tank openings are properly sealed.					
7. Are there other conditions that should be addressed for continued safe operation?					

ANNUAL BOILER HOUSE DIESEL FUEL STORAGE TANK INSPECTION CHECKLIST

Inspection Guidance:

- For equipment not included in this checklist, follow the manufacturer recommended inspection/testing schedules and procedures.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by a certified steel tank inspector. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.

Item	Status				Comments
	Tank 1		Tank 2		
Evidence of tank settlement or foundation washout?	Yes*	No	Yes*	No	
Cracking or spalling of concrete pad?	Yes*	No	Yes*	No	
Tank supports in satisfactory condition?	Yes	No*	Yes	No*	
Water able to drain away from tank?	Yes	No*	Yes	No*	
Grounding strap secured and in good condition?	Yes	No*	Yes	No*	
Evidence of paint failure, rust, or tank corrosion?	Yes*	No	Yes*	No	
Noticeable tank distortions, buckling, denting or bulging?	Yes*	No	Yes*	No	
Vents free of obstructions?	Yes	No*	Yes	No*	
+ Has the interstitial monitoring device been test to ensure proper working order?	Yes	No*	Yes	No*	
Are overfill prevention devices in proper working condition?	Yes	No*	Yes	No*	

+ In order to comply with EPA SPCC rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).

Note: If a change has occurred to the tank system that may affect the SPCC plan, the condition should be evaluated against the current plan by a Professional Engineer knowledgeable in SPCC Plan development and implementation.

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

STORMWATER DISCHARGE FROM OUTDOOR SECONDARY CONTAINMENT

VISUAL OBSERVATION LOG

USED GREASE BIN CONTAINMENT BERM

Date	Visual Observation Is there a sheen present?		If yes, note actions taken
	Yes	No	

PRI BACKUP GENERATOR CONTAINMENT BERM

Date	Visual Observation Is there a sheen present?		If yes, note actions taken
	Yes	No	

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

ATTACHMENT G

SUBSTANTIAL HARM CRITERIA FORM

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

Applicability of (No) Substantial Harm Criteria Form

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   Yes _____ No __X__

2. Does the facility have a total oil storage capacity greater than or equal to 1,000,000 gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

   Yes _____ No __X__

3. Does the facility have a total oil storage capacity greater than or equal to 1,000,000 gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of 40 CFR 112, Appendix C or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

   Yes ____ No ___X__

4. Does the facility have a total oil storage capacity greater than or equal to 1,000,000 gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III of 40 CFR 112, Appendix C or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

   Yes _____ No __X__

5. Does the facility have a total oil storage capacity greater than or equal to 1,000,000 gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

   Yes _____ No __X__

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature: Mary M. Juan Date: 11-14-12

Name (please type or print): Mary M. Juan, P.E.
Environmental Operations, Inc.
1530 South Second Street
St. Louis, MO 63104-4500

RECEIVED
DEC 06 2012
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD SR

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

PART I: IDENTIFYING INFORMATION

Company Name: **Cardinal Glennon Hospital** SSM
Permit No: - 1020-5489-00
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KA I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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.

RECEIVED
NOV 01 2012
DIVISION OF ENVIRONMENTAL COMPLIANCE

Print/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 10/30/12

SR

1402 South Grand Blvd.
St. Louis, MO 63104-1085
Fax: 314-977-5560
www.slu.edu

SAINT LOUIS
UNIVERSITY

Office of Environmental Safety & Services
Environmental Safety Office (C307)
314-977-8608

Radiation Safety Office (RB5)
314-977-8609

October 30, 2012

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 July - Sept. 2012

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. Todd Stirewalt (Anheuser Busch Institute, Saint Louis University Hospital).

In order to avoid confusion, any discharges from the laboratories in Cardinal Glennon Hospital's basement (which had at one time been reported to you by Cardinal Glennon) will be incorporated into this report.

If you have any questions regarding these reports, please contact me at 977-6896.

Sincerely,

Kevin Ferguson
Health Physicist

RECEIVED
NOV 0 1 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD SR 9-11

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL** 1020548900

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		7-31/8-1-12		8-2/8-3-12		8-2/8-3-12	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		9:20 am		9:15 am		9:30 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*			78K		8K		10K	GPD
OIL AND GREASE	200		11		7		9	mg/L
BOD	200		116		186		101	mg/L
COD	****		184		293		173	mg/L
TOTAL SUSPENDED SOLIDS	****		23		193		18	mg/L
TEMPERATURE (Degrees C)	60		30.4		28.8		29.9	
pH (Std. Units)	5.5-11		7.90		7.80		8.39	
SILVER	.5		0.01		< 0.01		0.01	mg/L
PHENOL			< 0.05		< 0.05		< 0.05	mg/L

*provided per pc w/ G. Hrbacek on 9-11-2012. SR

You must complete and sign the certification statements on the second page.

RECEIVED
SEP 07 2012
DIVISION OF ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Gregory O. Hrbacek
	Title: Plant ops - Team Leader Telephone: 314-577-5327
	Signature: Gregory O. Hrbacek Date: 9/4/12

RECEIVED
SEP 07 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES
INCORPORATED

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

Date: August 14, 2012
Lab. No.: 2012MT0313
Invoice No.: 212232
P. O. No.: 4501823882

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:20 a.m. / 7-31-12 to 09:20 a.m. / 8-1-12
Grab Sample 9:20 a.m. / 7-31-12
Sample Point Ref. Number: 004
Waste Water Composite: 09:15 a.m. / 8-2-12 to 09:15 a.m. / 8-3-12
Grab Sample 09:15 a.m. / 8-2-12
Sample Point Ref. Number: 005
Waste Water Composite: 09:30 a.m. / 8-2-12 to 09:30 a.m. / 8-3-12
Grab Sample: 09:30 a.m. / 8-2-12

DATE ANALYZED: 7-31-12 to 8-14-12

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	11	7	9	5	413.1
BOD	116	186	101	10	405.1
COD	184	293	173	10	410.1
TSS	23	193	18	5	160.2
Temperature (Degrees C)	30.4	28.8	29.9	.1	170.1
pH (Std Units)	7.90	7.80	8.39	.02	150.1
Silver	0.01	< 0.01	0.01	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

Dinesh N Shah

DINESH N. SHAH
Laboratory Manager

RECEIVED
SEP 07 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

MSD

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

PART I: IDENTIFYING INFORMATION

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: - 1020548900
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

KF I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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.

RECEIVED
JUL 30 2012
DIVISION OF ENVIRONMENTAL COMPLIANCE

Print/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 7/24/12

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

MSD

July 16, 2012

Tom Brinkmann
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 South Grand Blvd.
St. Louis, MO 63104

Re: Change in compliance charge rate
For premise at: **1465 South Grand Blvd.**
St. Louis, MO 63104

Dear Tom Brinkmann:

As you probably are aware, citizens in the Metropolitan St. Louis Sewer District's boundaries voted on June 5, 2012 to revise the rate structure for MSD customers. This revised rate structure affects more than the charge for volume. It also changes the compliance charge that is assessed for commercial accounts. This charge is a separate line item on your monthly bill.

Previously, the compliance charge was a flat rate for all non-residential accounts. It is now a tiered rate, more accurately reflecting the actual costs involved for federal regulatory requirements to inspect and sample companies. In addition to changing to a more equitable tiered rate, MSD has also re-evaluated the costs involved and program requirements, and has been able to make changes to greatly reduce the overall impact of the compliance charge.

For the vast majority of non-residential accounts, the compliance charge will decrease. However, certain companies that federal regulations require to be inspected or have their wastewater sampled will see their compliance charge increase, due to the costs involved in conducting the inspections and sampling. Your facility is one of the companies that these federal regulations encompass.

Barring any recent changes at your facility, the new compliance charge for your MSD sewer account will be **$163.75** per month. Please note also that the tier, and associated compliance charge, can change as conditions change at your facility.

Please note that MSD recognizes that many companies receive more than one MSD bill, because they have more than one incoming water account. The above compliance charge will apply to only one MSD account for each premise, with any other accounts receiving the minimum compliance charge of $23.00 per month. In addition, the minimum compliance charge for those additional accounts will further reduce to $2.15 per month by July 1, 2015.

An insert explaining the compliance charge in more detail will be included with the August bill for all non-residential accounts. This will help insure that the person or department actually paying the bill will also be aware of the changes.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Douglas M. Mendoza, P.E.
Manager of Industrial Pretreatment

Industry: SSM CARDINAL GLENNON CHILDREN'S HOSPITAL [1020548900]

From: S. REHMER SR

Date: 07/05/12

Re: Change in Account Number

The account number for this company has been changed from: 4112195400

to: 1020548900

The change is due to the need to have all industry account numbers conform to the billing premise # - based system, so that the correct "compliance fee tier" charge can be automatically added to the sewer bill each month.

03

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

MSD

SR 6-5

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001		004		005		
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		5-1/2-12		5-3/4-12		5-3/4-12		
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:55 am		09:30 am		09:40 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 *			78K		8K		10K	
OIL AND GREASE	200		13		8		11	mg/L
BOD	200		174		308		148	mg/L
COD	****		336		471		282	mg/L
TOTAL SUSPENDED SOLIDS	****		212		96		130	mg/L
TEMPERATURE (Degrees C)	60		23.9		24.4		25.1	
pH (Std. Units)	5.5-11		8.29		7.82		7.69	
SILVER	.5		0.03		0.01		0.02	mg/L
PHENOL			< 0.05		< 0.05		< 0.05	mg/L

*flows provided per pc with G.Hrbacek on 6-5-12. SR

You must complete and sign the certification statements on the second page.

RECEIVED
JUN 04 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES
INCORPORATED

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

Date: May 16, 2012
Lab. No.: 2012MT0207
Invoice No.: 212131
P. O. No.: 4501567522

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:55 a.m. / 5-1-12 to 09:55 a.m. / 5-2-12
Grab Sample 9:55 a.m. / 5-1-12
Sample Point Ref. Number: 004
Waste Water Composite: 09:30 a.m. / 5-3-12 to 09:30 a.m. / 5-4-12
Grab Sample 09:30 a.m. / 5-3-12
Sample Point Ref. Number: 005
Waste Water Composite: 09:40 a.m. / 5-3-12 to 09:40 a.m. / 5-4-12
Grab Sample: 09:40 a.m. / 5-3-12

DATE ANALYZED: 5-1-12 to 5-16-12

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	13	8	11	5	413.1
BOD	174	308	148	10	405.1
COD	336	471	282	10	410.1
TSS	212	96	130	5	160.2
Temperature (Degrees C)	23.9	24.4	25.1	.1	170.1
pH (Std Units)	8.29	7.82	7.69	.02	150.1
Silver	0.03	0.01	0.02	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

Dinesh n Shah

DINESH N. SHAH
Laboratory Manager

RECEIVED
JUN 04 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Team Leader Plant Ops Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 6/1/12

RECEIVED
JUN 04 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

M[illegible]ROPOLITAN ST. LOUIS SEWER DISTI[illegible]T
INDUSTRIAL USER RADIOACTIVE MATERIALS DISCHARGE REPORT

MSD

03 4-30

PART I: IDENTIFYING INFORMATION

SSM

Company Name: **Cardinal Glennon Hospital**
Permit No: - 411219 5400
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

[X] I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

RECEIVED
APR 27 2012
DIVISION OF ENVIRONMENTAL COMPLIANCE

Title: Health Physicist Telephone: 977-6896

Signature: Date: 4/24/12

MSD

SR 4-16

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

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

Permit No: 4112195400-3 Effective Date: 5-1-2010 Expiration Date: 4-30-2015

Premise Address: 1465 S Grand Blvd, 63104

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

Samples Collected By: MIDWEST TESTING LABORATORIES

Analyses Performed By: MIDWEST TESTING LABORATORIES

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨		001	004	005	
DATES ON WHICH SAMPLES WERE COLLECTED ⇨		2-7&8-12	2-7&8-12	2-9&10-12	
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨		09:35 am	09:50 am	09:25 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		78,000	8,000	10,000	
OIL AND GREASE	200	16	7	14	mg/L
BOD	200	196	518	246	mg/L
COD	****	407	916	431	mg/L
TOTAL SUSPENDED SOLIDS	****	176	530	145	mg/L
TEMPERATURE (Degrees C)	60	17.2	16.1	16.9	
pH (Std. Units)	5.5-11	8.71	8.64	7.67	
SILVER	.5	0.02	0.01	0.03	mg/L
PHENOL		< 0.05	< 0.05	< 0.05	mg/L

You must complete and sign the certification statements on the second page.

RECEIVED
MAR 12 2012
DIVISION OF ENVIRONMENTAL COMPLIANCE

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

— NONE —

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below:
	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: Greg Hrbacek
	Title: Plant Ops- Team Leader Telephone: 314-577-5327
	Signature: Greg Hrbacek Date: 3/8/2012

RECEIVED

MAR 12 2012

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MIDWEST TESTING LABORATORIES
INCORPORATED

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

Date: February 24, 2012
Lab. No.: 2012MT0127
Invoice No.: 212049
P. O. No.: 4501567522

SSM CARDINAL GLENNONS CHILDREN'S HOSPITAL
1465 S. Grand Boulevard
St. Louis, Missouri 63103-1095

ATTENTION: Mr. Greg Hrbacek

REPORT OF TESTS

SAMPLE MATRIX: Waste Water
SAMPLE I.D.: Sample Point Ref. Number: 001
24 hrs. Waste Water Composite: 09:35 a.m. / 2-7-12 to 09:35 a.m. / 2-8-12
Grab Sample 9:35 a.m. / 2-7-12
Sample Point Ref. Number: 004
Waste Water Composite: 09:50 a.m. / 2-7-12 to 09:50 a.m. / 2-8-12
Grab Sample 09:50 a.m. / 2-7-12
Sample Point Ref. Number: 005
Waste Water Composite: 09:25 a.m. / 2-9-12 to 09:25 a.m. / 2-10-12
Grab Sample: 09:25 a.m. / 2-9-12

DATE ANALYZED: 2-7-12 to 2-24-12

RESULTS: mg/L OR PARTS PER MILLION (PPM)

ANALYTE	# 001	# 004	#005	MDL	METHOD NUMBER
Oil & Grease	16	7	14	5	413.1
BOD	196	518	246	10	405.1
COD	407	916	431	10	410.1
TSS	176	530	145	5	160.2
Temperature (Degrees C)	17.2	16.1	16.9	.1	170.1
pH (Std Units)	8.71	8.64	7.67	.02	150.1
Silver	0.02	0.01	0.03	.01	272.1
Phenol	< 0.05	< 0.05	< 0.05	.05	420.1

MDL: Method Detection Limit
Identification of tested specimens provided by the client

MIDWEST TESTING LABORATORIES

Dinesh N Shah

DINESH N. SHAH
Laboratory Manager

RECEIVED
MAR 12 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

CB

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

MSD

PART I: IDENTIFYING INFORMATION

SSM

CB 2-13

Company Name: **Cardinal Glennon Hospital**
Permit No: - 411 219 5400
Premise No: **1465 S. Grand, 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	0
TOTAL ACTIVITY DISCHARGED:	0

PART III: CERTIFICATION STATEMENTS

Place your initials in the box under item A.
Everyone must complete the information under items A & B and sign this report.

A. CERTIFICATION OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

☑ I certify that to the best of my knowledge & belief, all requirements of 10 CFR Part 20.2003 and 19 CSR Part 20-10.090 governing disposal by release into sanitary sewage for material regulated by the Nuclear Regulatory Commission and the Missouri Department of Health, respectively, 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/type name of signing official: Kevin Ferguson

Title: Health Physicist Telephone: 977-6896

Signature: Date: 1/27/12

RECEIVED
FEB 01 2012
DIVISION OF
ENVIRONMENTAL COMPLIANCE

ACCOUNT NUMBER: **10205489-00**

COMPANY NAME: **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**

CORRESPONDENCE

FROM **01-27-2000** THRU **12-13-2011**

X	CORRESPONDANCE LOCATED IN OVERFLOW FILE

MSD

Co. Name: SSM Cardinal Glennon

Acct #: 4112954-00

OLDER

CORRESPONDENCE

FROM

96 - 99

AND EARLIER

IS LOCATED

IN THE

OVERFLOW FILES

Moved to ARCHIVED IU files.

FOR MSD USE ONLY		
Account Number:	1020596900	Category
TA:	BISSELL BEAT	IU
TS:	BP96-Rich Sandy	NDISU
Reviewer:	C. Beat	CIU
Date:	01/13/2020	NONTOX
		(CIUC)
		SDT
		NONRCC
		MULTI

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION 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 develop the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: SSM Cardinal Glennon Children's Hospital
2. Mailing Address: 1015 Corporate Square Drive, Suite 110
   City: St. Louis State Missouri Zip Code 63132
3. Premise Address: 1465 South Grand Blvd
   City: St. Louis State Missouri Zip Code 63104
4. Person Authorized to Sign Reporting Documents (see note after Section H):
   Name: John O'Brien
   Title: Administrative Director Phone Number 3149892895
5. Check One: (•) 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 591 2nd 485 3rd 397 Total: 1,473
   c. Shift start times: 1st 8:00AM (HH:MM AM/PM) 2nd 4:00AM (HH:MM AM/PM) 3rd 12:00AM (HH:MM AM/PM)

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 ACTIVITY	SIC NUMBER
a.	Children's hospital / health care, including general offices	8069
b.		
c.		
d.		
e.		
f.		

RECEIVED
JAN 13 2020
DIVISION OF ENVIRONMENTAL COMPLIANCE

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 S. Grand Blvd, St. Louis, MO

SECTION B - PRODUCT OR SERVICE INFORMATION (Continued)

2. Are primary activities generally batch or continuous processes ? ○ batch ◉ continuous

3. Principal raw materials used: N/A

4. Principal products produced: General Hospital Wastes

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.

ACTIVITY (with related 40 CFR Part)	SIC NO.	ACTIVITY (with related 40 CFR Part)	SIC NO.
☐ a. Adhesive and Sealants Mfg.		☐ nn. Nonferrous Metals Mfg. (421)	
☐ b. Aluminum Forming (467)		☐ oo. Oil and Gas Extraction (435)	
☐ c. Asbestos Mfg. (427)		☐ pp. Ore Mining and Dressing (440)	
☐ d. Battery Mfg. (461)		☐ qq. Organic Chem/Plastics/Synthetic Fibers Mfg (414)	
☐ e. Carbon Black Mfg. (458)		☐ rr. Paint Formulating (446)	
☐ f. Cement Mfg. (411)		☐ ss. Painting, Finishing or Paint Stripping	
☐ g. Centralized (non-Haz.) Waste Treatment (437)		☐ tt. Parts Washing	
☐ h. Coal Mining (434)		☐ uu. Paving and Roofing Mat'ls (Tars & Asphalt) (443)	
☐ i. Coil Coating (465)		☐ vv. Pesticide Chem Mfg/Formulating/Packaging (456)	
☐ j. Concentrated Animal Feeding Operations (412)		☐ ww. Petroleum Refining (419)	
☐ k. Concentrated Aquatic Animal Production (451)		☐ xx. Pharmaceutical Mfg. (439)	
☐ l. Copper Forming (468)		☐ yy. Phosphate Mfg. (422)	
☐ m. Dairy Products Processing (405)		☐ zz. Photographic Processing (459)	
☐ n. Drum Reconditioning		☐ aaa. Plastic Molding and Forming (453)	
☐ o. Electrical and Electronic Components (469)		☐ bbb. Porcelain Enameling (466)	
☐ p. Electroplating (413)		☐ ccc. Printing and Publishing	
☐ q. Explosives Mfg. (457)		☐ ddd. Pulp, Paper and Paperboard Mfg. (430)	
☐ r. Ferroalloy Mfg. (424)		☐ eee. Q.C. Laboratory	
☐ s. Fertilizer Mfg. (418)		☒ fff. R & D Laboratory	8071
☒ t. Food Preparation	5812	☐ ggg. Radioactive Materials Processing	
☐ u. Fruit and Vegetable Processing (407)		☐ hhh. Repair Shop, Garage	
☒ v. General Offices	8011	☐ iii. Rubber and Rubber Products Mfg. (428)	
☐ w. Glass Mfg. (426)		☐ jjj. Seafood Processing (408)	
☐ x. Grain Milling (406)		☐ kkk. Soap and Detergent Mfg. (417)	
☐ y. Gum and Wood Chemical Mfg. (454)		☐ lll. Solvent Recycling	
☐ z. Haz. Waste Treatment, Storage or Disposal		☐ mmm. Steam Electric Power Generation (423)	
☐ aa. Health Care or Hospital (460)		☐ nnn. Sugar Processing (409)	
☐ bb. Industrial Laundry		☐ ooo. Textile Mills (410)	
☐ cc. Ink Formulating (447)		☐ ppp. Timber Products Mfg. (429)	
☐ dd. Inorganic Chemicals Mfg. (415)		☐ qqq. Transportation Equipment Cleaning (442)	
☐ ee. Iron and Steel Mfg. (420)		☐ rrr. Transportation Services	
☐ ff. Leather Tanning and Finishing (425)		☐ sss. Used Oil Reclamation	
☐ gg. Machine Shop		☐ ttt. Vehicle/Equipment Washing	
☐ hh. Machinery Mfg. or Rebuilding (438)		☐ uuu. Warehousing	
☐ ii. Meat Processing (432)		☐ vvv. Waste Combustors (444)	
☐ jj. Metal Finishing (433)		☐ www. Waste Recycling	
☐ kk. Metal Molding and Casting (464)		☐ xxx. Others (Describe)	
☐ ll. Mineral Mining and Processing (436)		☐ yyy. Others (Describe)	
☐ mm. Nonferrous Metals Forming/Metal Powders (471)		☐ zzz. Others (Describe)	

6. Are your activities subject to seasonal variation? If "Yes," explain and indicate the month(s) of peak activity:

○ Yes ◉ No

RECEIVED

JAN 13 2020

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035572

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 S. Grand Blvd, St. Louis, MO

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s):
   - [x] City of St. Louis Water Div.
   - [ ] Missouri American Water Co.
   - [ ] Other municipal source _____
   - [ ] Hauled by contractor
   - [ ] Surface water
   - [ ] Private well
   - [ ] Other (describe) _____

2. Water Bill Addressee: SSM Cardinal Glennon Children's Hospital

3. Water Service Account Numbers: 405153-226370

4. List past twelve months water usage from:

				Water Bills	Other Sources
1st 3 mo period	11/2018	through	02/2019	8765 Ccf	Ccf
2nd 3 mo period	02/2019	through	04/2019	16334 Ccf	Ccf
3rd 3 mo period	04/2019	through	08/2019	14334 Ccf	Ccf
4th 3 mo period	08/2019	through	10/2019	17641 Ccf	Ccf

Water Bills and Other Sources Total: 57,074 Ccf = 116,963 GPD-calendar = 116,963 GPD-work

5. Describe any treatment or conditioning process performed on the raw water before use (list regeneration/reject water volume in 6h below):
   Water softening

6. Identify all water uses within your facility:

Water Uses	Estimated Average Daily Use (Gal per workday)
a. Sanitary	39402
b. Irrigation & lawn watering	13462
c. Non-contact cooling water	2970
d. Contact cooling water	-
e. Process water	37400
f. Plant & equipment washdown	-
g. Boiler	16432
h. Regeneration/reject water	-
i. Other uses	7297
j. Total of USES (6a through 6h):	116,963

(6a through 6i must equal total at item 4)

7. Identify all water losses and wastewater discharges from your facility:

Water Uses	Estimated Average Daily Loss/Discharge (Gal per workday)
a. Municipal sewer	88915
b. Watercourse, storm drain, surface	13462
c. Haulers	
d. Evaporation	14586
e. Contained in product	
f. Total of LOSSES & DISCHARGES:	116,963

(7a through 7e must equal total at 6j)

8. For each activity you listed in Sections B.1 and B.5, list the average water usage and average wastewater discharge per workday. Attach additional sheets, if needed. (Total Avg. Water Use must equal total for 6a)

Item No	Activity	Type of Discharge: Cont	Batch	None	Avg. Water Use (GPD)	Avg. Discharge to Mun Sewer (GPD)	Date when activity first commenced at this facility
1	Hospital Wastes	●	○	○	37400	37400	1/1/1960
2	Kitchen Wastes	○	●	○	7297	7297	1/1/1960
3	Sanitary Wastes	●	○	○	39402	39402	1/1/1960
4	Non Contact Cooling Water Boiler	●	○	○	19402	4816	1/1/1960
5	Lawn Irrigation	○	○	●	13462	0	
		○	○	○			
		○	○	○			
		○	○	○			
				Total:	116,963	88915	

RECEIVED
JAN 13 2020
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Company Name: Cardinal Glennon Children's Hospital

Premise Address: 1465 S. Grand Blvd, St. Louis, MO

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise, which shows (for permit renewals, highlight any changes since last application):
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or watercourse.

2. List each sampling point identified in 1c, d and e above and each connection for which there is no sampling point. Assign a sequential reference number to each location, starting with No. 1. Attach additional sheets, if needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection. (Vent, manhole, valve, other appurtenance. Indicate size & location)	Upstream to other point? Yes	/ No	List Ref. No.	Total avg flow per workday(GPD)
1	30 (MH)	Manhole Vista Ave E of Overhead Walkway	○	●	1	72715
004 2	30 (MH)	Manhole Southwest Emergency Building	●	○	4	7879
005 3	30 (MH)	Manhole NW Corner of West Buiding	●	○	5	8861
4			○	○		
5			○	○		
6			○	○		
7			○	○		

Grand Total Average Flow per Workday: 0

SECTION E - WASTEWATER INFORMATION

1. For each point listed in Section D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets, if needed.

Type of Wastewater	Discharge Quantity (GPD-workday) for each sampling point or connection listed in D.2: 1 (upstream to ___)	2 (upstream to ___)	3 (upstream to ___)	4 (upstream to ___)	5 (upstream to ___)	6 (upstream to ___)	7 (upstream to ___)	Facility Total (See Instr.)
a. Sanitary	33098			4670	1634			39402
c. Non-contact cooling water	2037				387			2424
d. Contact cooling water								0
e. Process (From C.8)								0
Food Preparation ☒	7297							7297
Hospital ☒	27351			3209	6840			37400
☒								0
☒								0
☒								0
☒								0
☒								0
☒								0
f. Plant & equipment washdown								0
g. Boiler blowdown	2392							2392
h. Regeneration/reject water								0
i. Other								0
Totals (Same as D.2):	72175			7879	8861			88915

2. If any of the above points discharge to a watercourse or to a separate storm sewer, complete the following:

NPDES Outfall Number							
NPDES Permit Number							

3. Do any of the above sampling points also convey stormwater from your premise ?

Yes ☒	☒	☒	Yes ☒	Yes ☒	☒	☒

4. Do you pretreat any of the wastes discharged through any of the above points ?

Yes ☒	☒	☒	No ☒	Yes ☒	☒	☒

RECEIVED
JAN 13 2020
DIVISION OF ENVIRONMENTAL COMPLIANCE

Company Name: Cardinal Glennon Childrens Hospital

Premise Address: 1465 S. Grand Blvd, St. Louis, MO

SECTION E - WASTEWATER INFORMATION (Continued)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in E.4

Ref. No.	Pretreatment System Description
1	Kitchen Sinks, dishwater and garbage disposal drain to three grease traps.
	One grease trap above ground in kitchen and two underground in rear of hospital
5	Lime neutralization pit for laboratory waste prior to disposal Added in IPACS #

6. Does your facility have a written:

a. Spill control plan ? (●) Yes ( ) No

b. Waste minimization plan ? (●) Yes ( ) No

c. Solvent management plan ? (●) Yes ( ) No

d. Slug discharge control plan ? ( ) Yes (●) No

7. If any wastewater analyses have been performed on the wastewater discharges from your facility attach copies of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary. Permit renewal applications, only, may skip this item.

8. Priority Pollutant Information: Check one of the four boxes by each listed chemical to indicate whether it is: "Suspected Absent", "Known Absent", "Suspected Present" or "Known Present" ON YOUR PREMISE. Any chemical which is used in your manufacturing or service activity or is generated as a product or as a by-product should be marked "Known Present." Some pollutants are known by other names. Refer to the instruction booklet for synonyms 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 *	( )	(●)	( )	( )

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
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.	chloroethane *	( )	(●)	( )	( )
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 *	( )	(●)	( )	( )

RECEIVED
JAN 14 2008
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Company Name: Cardinal Glennon Childrens Hospital

Premise Address: 1465 S. Grand Blvd, St. Louis, MO

SECTION E - WASTEWATER INFORMATION (Continued)

Priority Pollutant Information (Continued)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
71.	(cis and trans) 1, 3-dichloropropene *	○	●	○	○
72.	dieldrin	○	●	○	○
73.	diethylphthalate *	○	●	○	○
74.	2, 4-dimethylphenol *	○	●	○	○
75.	dimethyl phthalate	○	●	○	○
76.	di-n-butyl phthalate	○	●	○	○
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.	hexachloroethene *	●	○	○	○
97.	indeno (1, 2, 3-cd) pyrene *	○	○	○	●
98.	isophorone *	○	●	○	○
99.	methylene chloride *	●	○	○	○

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
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" or "Suspected Present", list and provide the following information for each: (Attach additional sheets, if needed.)

Item No.	PRIORITY POLLUTANT	HOW USED (for KP) or WHY SUSPECTED (for SP)	ANNUAL USAGE for KP(lbs)	LOSS TO SEWER for KP(lbs)
1. asbestos (fibrous)	☒	Building Materials	0	0
9. lead (total)	☒	Building Paint	0	0
10. mercury (total)	☒	Building Components (thermometers)	0	0
15. zinc (total)	☒	Materials for Diagnostics / care	5	0
16. acenaphthene	☒	Diesel Fuel Component	0	0
17. acenaphthylene	☒	Diesel Fuel Component	10	0
21. anthracene	☒	Diesel Fuel Component	10	0
22. benzene	☒	Diesel Fuel Component	10	0
24. benzo (a) anthracene*	☒	Diesel Fuel Component	10	0
25. benzo (a) pyrene	☒	Diesel Fuel Component	10	0
26. benzo (b) fluoranthene	☒	Diesel Fuel Component	10	0
27. benzo (g, h, i) perylene	☒	Diesel Fuel Component	10	0
28. benzo (k) fluoranthene*	☒	Diesel Fuel Component	10	0
54. chrysene*	☒	Diesel Fuel Component	10	0
	☒			

RECEIVED
APR 13 2020
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Company Name: Cardinal Glennon Children's Hospital
Premise Address: 1465 S. Grand Blvd, St. Louis, MO

SECTION F - NON-SEWERED WASTES

1. Do you generate any liquid wastes or sludges, as described in item 2 below, which are not disposed in the sewer system?

   (●) Yes ( ) No

   If "Yes" complete items 2 and 3 below. Note: Be sure to include wastewaters listed in Section C.7.c.
   If "No" skip remainder of this section.

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	22	lbs	☐	☐	☒
☒ Equipment Oils and/or Grease	250	gal	☐	☐	☒
☒ Infectious Waste	5500	lbs	☐	☐	☒
☐ Inks/ Dyes			☐	☐	☐
☒ Kitchen/Food Service Grease	30000	lbs	☐	☐	☒
☒ Organic Compounds	16	lbs	☐	☐	☒
☒ Paints or Paint Sludges	800	lbs	☐	☐	☒
☐ Pesticides			☐	☐	☐
☐ Pretreatment Sludges			☐	☐	☐
☐ Radioactive Waste			☐	☐	☐
☒ Solvents/Thinners	2098	lbs	☐	☐	☒
☒ Other medical and pharmaceutical waste	350	lbs	☐	☐	☒
☒ Other Universal Wastes	350	lbs	☐	☐	☒
☐ Other			☐	☐	☐

3. List your USEPA and/or MDNR Hazardous Waste generator numbers:

   USEPA MOD075904839 MDNR 001310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. Provide the following analytical information for each sampling point or each connection to the public sewer only if your water usage exceeds 80 Ccf per month (1,995 Gal per calendar day). Representative samples of the wastewater in each sewer must be collected and analyzed for the listed parameters. Report the daily average concentrations in mg/l for each point. Permit renewal applications, only, may skip Section G regardless of water usage volume.

Parameter	Sewer Reference Numbers (Refer to Section D.2) If more than 7, attach additional sheets						
	1	2	3	4	5	6	7
Date Sampled							
Sample Start Time (eg. HH:MM PM)							
Sample End Time (eg. HH:MM PM)							
Type of Sample							
Flow (GPD)							
Biochemical Oxygen Demand (5 day)							
Chemical Oxygen Demand							
Total Suspended Solids							

Collected By (Name of organization):

Analyzed By (Name of organization):

RECEIVED
JAN 13 2020
DIVISION OF ENVIRONMENTAL COMPLIANCE

Company Name: Cardinal Glennon Children's Hospital

Premise Address: 1465 S. Grand Blvd. St. Louis, MO

SECTION H - CERTIFICATION AND SIGNATURE

1. The following individual may be contacted regarding the information contained in this questionnaire:

   Name of Contact Person: John O'Brien

   Title: Administrative Director Phone Number 3149892895

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 of Signing Official: John O'Brien

   Title: Administrative Director Phone Number 3149892895

   Signature: _____ Date: _____

This certification, along with any other reporting documents, must be signed by an individual described as follows: a responsible corporate officer if the user is a corporation; a general partner if the user is a partnership; the proprietor if the user is a sole proprietorship; a duly authorized representative of the individual just described, if that individual submits a written authorization which specifies a person or position within the company, having responsibility for the overall operation of the facility from which the discharge originates, such as a plant manager, or overall responsibility for environmental matters at the company.

List attachments included with this questionnaire:

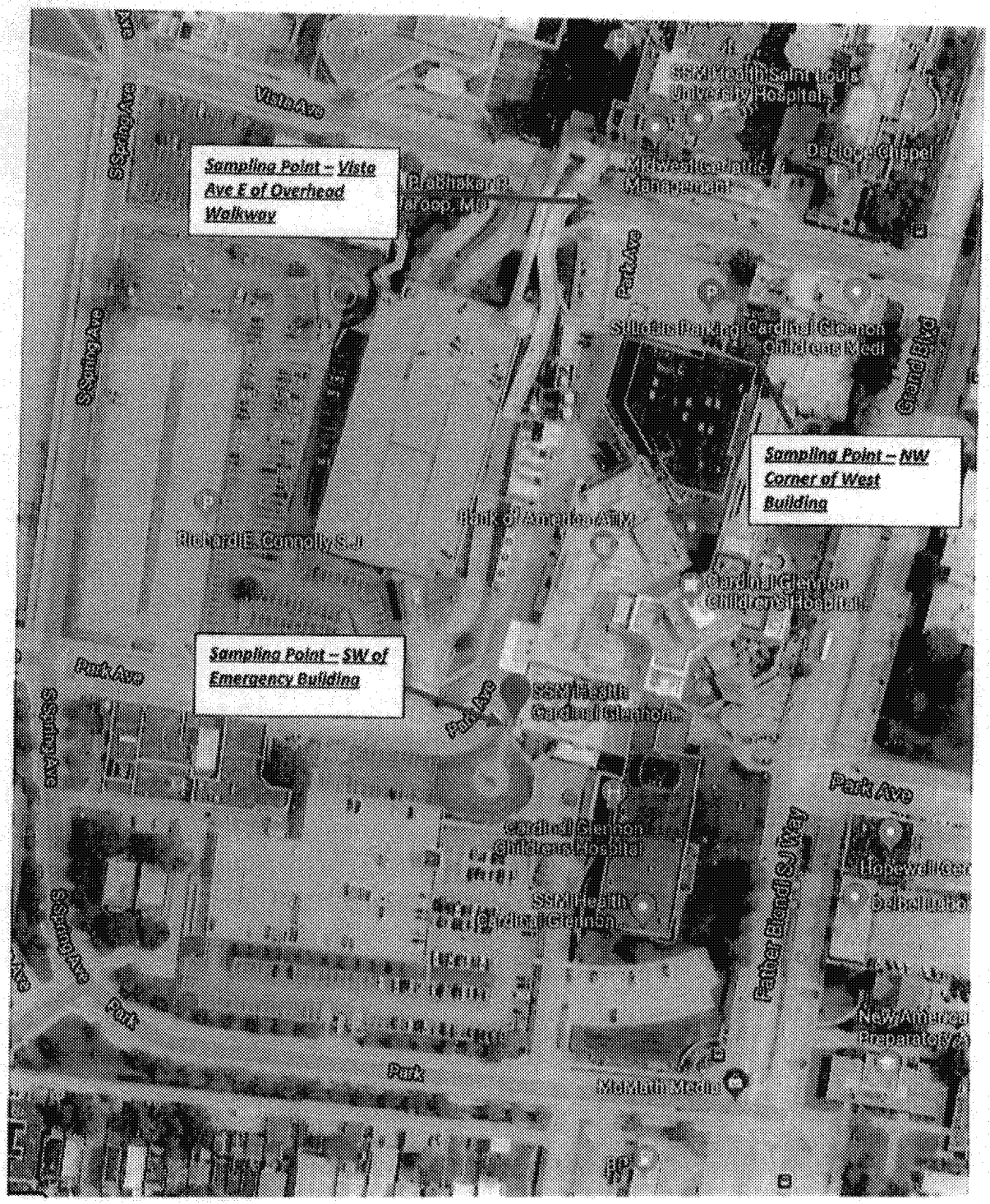
Site Map

Pollutant Continuation (#9, E.8)

RECEIVED

JAN 13 2020

DIVISION OF ENVIRONMENTAL COMPLIANCE



PLEASE NOTE: Per Cardinal Glennon Facilities Management, these testing locations will be painted with high visibility paint to allow water sampling professionals to identify these areas.

RECEIVED

JAN 13 2020

DIVISION OF
ENVIRONMENTAL COMPLIANCE

9. For priority pollutants in E.8, which are indicated "Known Present" or "Suspected Present", list and provide the following information for each (continued from original on Page 6)

Item No	Priority Pollutant	How Used (KP) or Why Suspected (SP)	Annual Usage for KP (lbs)	Loss to Sewer for KP (lbs)
58	Dibenzo (a,h) anthracene	Component of Diesel Fuel	10	0
79	2, 4-dinitrophenal	Component of Diesel Fuel	10	0
88	Ethylbenzene	Component of Diesel Fuel	10	0
89	Fluoranthene	Component of Diesel Fuel	10	0
90	Fluorene	Component of Diesel Fuel	10	0
93	Hexachlorobenzene	Component of Diesel Fuel	10	0
97	Indeno (1,2,3-cd) pyrene	Component of Diesel Fuel	10	0
100	Naphthalene	Component of Diesel Fuel	10	0
114	Pentachlorophenol	Component of Diesel Fuel	10	0
115	Phenanthrene	Component of Diesel Fuel	10	0
116	Phenol	Component of Diesel Fuel	10	0
117	Pyrene	Component of Diesel Fuel	10	0
121	Toluene	Component of Diesel Fuel	10	0

RECEIVED

JAN 13 2020

DIVISION OF
ENVIRONMENTAL COMPLIANCE

SSM Health Care
ST. LOUIS

SR ✓

October 29, 2014

Scott Rehmer
Assistant Engineer
Environmental Compliance
Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147

1020-5489-00

RE: SSM Cardinal Glennon Children's Hospital Industrial Wastewater Discharge Permit 4112195400-3 Renewal Application

Mr. Rehmer:

Enclosed please find the completed User Questionnaire submitted for renewal of the SSM Cardinal Glennon Children's Hospital Industrial Wastewater Discharge Permit 4112195400-3. The current permit expires April 20, 2015.

The User Questionnaire includes updated information related to industrial wastewater discharges from the hospital and Pediatric Research Institute, both of which are identified on the site map included with the application.

As allowed by you, Section D and G of the User Questionnaire were not completed. For water bill information provided in Section C, the City of St. Louis water usage bills include more than a 12 month period because the three meters that represent the hospital water usage were read on different dates, but billed during the same billing cycles. Because of the way the invoices are issued, the dates in Section C for water usage overlap and exceed a 12-month period. However, the water usage does reflect a 12-month period and combines the water usage measured by all three meters.

Please note that the facility no longer performs X-ray development; all X-rays are produced in digital format.

This letter also serves as notification under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), which requires the facility to notify the POTW of pesticides that may be entrained in the wastewater discharge. The facility utilizes various cleaning and water conditioning/treatment chemicals that contain registered pesticides. The facility can provide a list of these materials at your request.

Please contact me at (314) 989-2155 or by email at Rodger Glaus@ssmhc.com if you have any questions.

Sincerely,
SSM HEALTH CARE

Rodger Glaus

Rodger Glaus
Administrative Director
Environmental Safety, Security & Emergency Preparedness

RECEIVED
NOV 0 3 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Encl.

Dave Kupke

From: Glaus, Rodger <Rodger_Glaus@ssmhc.com>
Sent: Wednesday, January 21, 2015 9:35 AM
To: Dave Kupke
Cc: Hrbacek, Gregory; PE CPEA Heather Stork (heather.stork@vbacompliance.com)
Subject: Wastewater Discharge Permit 4112195400-3 CGMC
Attachments: WasteWaterDischPermitApplRev_MSD_CGMC_1-21-15.pdf

David
Attached please find the approved revisions to the wastewater permit application for SSM Cardinal Glennon Children's Hospital. Gregg Hrbacek forwarded the proposed revisions to me yesterday for review and approval. We have recently centralized our regulatory permit process for SSM Health to my office, so please forward any future correspondence regarding waste water to my attention. My contact information is below. Thanks for all your help.

RODGER GLAUS, CHFM
Administrative Director
Environmental Safety, Security & Emergency Preparedness
SSMSTL – Network

1015 Corporate Square
Suite 110
St. Louis, MO 63132
Phone (314) 989-2155
Rodger_Glaus@ssmhc.com
SSM HEALTH CARE

Confidentiality Notice: This email message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply email and destroy all copies of the original message.

FOR MSD USE ONLY		Category
Account Number:	1020548900	SIU
TA:	Bissell Point	NONSIU
TS:	Rock Springs	CIU
Reviewer:	D. Kupke	NONTOX
Date:	1-21-15	TOXIC
		SUR
		NOPROC
		MULTI

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION 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 develop the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: SSM Cardinal Glennon Children's Hospital
2. Mailing Address: 1015 Corporate Square Drive, Suite 110
   City: St. Louis State Missouri Zip Code 63132
3. Premise Address: 1465 South Grand Blvd
   City: St. Louis State Missouri Zip Code 63104
4. Person Authorized to Sign Reporting Documents (see note after Section H):
   Name: Rodger Glaus
   Title: Administrative Director Phone Number (314) 989-2155
5. Check One: (●) 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: 1,350
   c. Shift start times: 1st 8:00 AM (HH:MM AM/PM) 2nd 4:00 PM (HH:MM AM/PM) 3rd 12:00 AM (HH:MM AM/PM)

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 ACTIVITY	SIC NUMBER
a.	Children's hospital/health care, including general offices	8069
b.		
c.		
d.		
e.		
f.		

RECEIVED
NOV 0 3 2014
DIVISION OF ENVIRONMENTAL COMPLIANCE

MSD 035583

Company Name: SSM Cardinal Glennon
Premise Address: 1465 So Grand Blvd.

SECTION B - PRODUCT OR SERVICE INFORMATION (Continued)

2. Are primary activities generally batch or continuous processes ? ○ batch ● continuous

3. Principal raw materials used: _____

4. Principal products produced: General Hospital

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.

ACTIVITY (with related 40 CFR Part)	SIC NO.	ACTIVITY (with related 40 CFR Part)	SIC NO.
☐ a. Adhesive and Sealants Mfg.		☐ nn. Nonferrous Metals Mfg. (421)	
☐ b. Aluminum Forming (467)		☐ oo. Oil and Gas Extraction (435)	
☐ c. Asbestos Mfg. (427)		☐ pp. Ore Mining and Dressing (440)	
☐ d. Battery Mfg. (461)		☐ qq. Organic Chem/Plastics/Synthetic Fibers Mfg (414)	
☐ e. Carbon Black Mfg. (458)		☐ rr. Paint Formulating (446)	
☐ f. Cement Mfg. (411)		☐ ss. Painting, Finishing or Paint Stripping	
☐ g. Centralized (non-Haz.) Waste Treatment (437)		☐ tt. Parts Washing	
☐ h. Coal Mining (434)		☐ uu. Paving and Roofing Mat'ls (Tars & Asphalt) (443)	
☐ i. Coil Coating (465)		☐ vv. Pesticide Chem Mfg/Formulating/Packaging (455)	
☐ j. Concentrated Animal Feeding Operations (412)		☐ ww. Petroleum Refining (419)	
☐ k. Concentrated Aquatic Animal Production (451)		☐ xx. Pharmaceutical Mfg. (439)	
☐ l. Copper Forming (468)		☐ yy. Phosphate Mfg. (422)	
☐ m. Dairy Products Processing (405)		☐ zz. Photographic Processing (459)	
☐ n. Drum Reconditioning		☐ aaa. Plastic Molding and Forming (463)	
☐ o. Electrical and Electronic Components (469)		☐ bbb. Porcelain Enameling (466)	
☐ p. Electroplating (413)		☐ ccc. Printing and Publishing	
☐ q. Explosives Mfg. (457)		☐ ddd. Pulp, Paper and Paperboard Mfg. (430)	
☐ r. Ferroalloy Mfg. (424)		☐ eee. Q.C. Laboratory	
☐ s. Fertilizer Mfg. (418)		☐ fff. R & D Laboratory	
☒ t. Food Preparation	5812	☐ ggg. Radioactive Materials Processing	
☐ u. Fruit and Vegetable Processing (407)		☐ hhh. Repair Shop, Garage	
☐ v. General Offices		☐ iii. Rubber and Rubber Products Mfg. (428)	
☐ w. Glass Mfg. (426)		☐ jjj. Seafood Processing (408)	
☐ x. Grain Milling (406)		☐ kkk. Soap and Detergent Mfg. (417)	
☐ y. Gum and Wood Chemical Mfg. (454)		☐ lll. Solvent Recycling	
☐ z. Haz. Waste Treatment, Storage or Disposal		☐ mmm. Steam Electric Power Generation (423)	
☐ aa. Health Care or Hospital (460)		☐ nnn. Sugar Processing (409)	
☐ bb. Industrial Laundry		☐ ooo. Textile Mills (410)	
☐ cc. Ink Formulating (447)		☐ ppp. Timber Products Mfg. (429)	
☐ dd. Inorganic Chemicals Mfg. (415)		☐ qqq. Transportation Equipment Cleaning (442)	
☐ ee. Iron and Steel Mfg. (420)		☐ rrr. Transportation Services	
☐ ff. Leather Tanning and Finishing (425)		☐ sss. Used Oil Reclamation	
☐ gg. Machine Shop		☐ ttt. Vehicle/Equipment Washing	
☐ hh. Machinery Mfg. or Rebuilding (438)		☐ uuu. Warehousing	
☐ ii. Meat Processing (432)		☐ vvv. Waste Combustors (444)	
☐ jj. Metal Finishing (433)		☐ www. Waste Recycling	
☐ kk. Metal Molding and Casting (464)		☐ xxx. Others (Describe) _____	
☐ ll. Mineral Mining and Processing (436)		☐ yyy. Others (Describe) _____	
☐ mm. Nonferrous Metals Forming/Metal Powders (471)		☐ zzz. Others (Describe) _____	

6. Are your activities subject to seasonal variation? If "Yes," explain and indicate the month(s) of peak activity:

○ Yes ● No _____

Approved: Roger Glass 1-21-15
Administrative Director
SSM Health

Company Name: _____

Premise Address: _____

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s):
   - [x] City of St. Louis Water Div.
   - [ ] Missouri American Water Co.
   - [ ] Other municipal source _____
   - [ ] Hauled by contractor
   - [ ] Surface water
   - [ ] Private well
   - [ ] Other (describe) _____

2. Water Bill Addressee: SSM Cardinal Glennon Children's Hospital

3. Water Service Account Numbers: 905153-226370

4. List past twelve months water usage from:

			[x] Water Bills	[ ] Other Sources
1st 3 mo period	2/14	through 5/14	8,792 Ccf	_____ Ccf
2nd 3 mo period	5/14	through 8/14	2,578 Ccf	_____ Ccf
3rd 3 mo period	8/14	through 11/14	8,554 Ccf	_____ Ccf
4th 3 mo period	11/14	through 1/15	13,448 Ccf	_____ Ccf

Water Bills and Other Sources Total: 38,374 Ccf = 0 80,148 GPD-calendar = 0 _____ GPD-work

5. Describe any treatment or conditioning process performed on the raw water before use (list regeneration/reject water volume in 6h below): Water Softening

6. Identify all water uses within your facility:

Water Uses	Estimated Average Daily Use (Gal per workday)
a. Sanitary	27,000
b. Irrigation & lawn watering	9,225
c. Non-contact cooling water	2,035
d. Contact cooling water	
e. Process water	25,628
f. Plant & equipment washdown	
g. Boiler	11,260
h. Regeneration/reject water	
i. Other uses Kitchen	5,000
j. Total of USES (6a through 6i):	80,148

(6a through 6i must equal total at item 4)

7. Identify all water losses and wastewater discharges from your facility:

Water Uses	Estimated Average Daily Loss/Discharge (Gal per workday)
a. Municipal sewer	60,928
b. Watercourse, storm drain, surface	9,225
c. Haulers	
d. Evaporation	9,995
e. Contained in product	
f. Total of LOSSES & DISCHARGES:	80,148

(7a through 7e must equal total at 6j)

8. For each activity you listed in Sections B.1 and B.5, list the average water usage and average wastewater discharge per workday. Attach additional sheets, if needed. (Total Avg. Water Use must equal total for 6e)

Item No	Activity	Type of Discharge: Cont	Batch	None	Avg. Water Use (GPD)	Avg. Discharge to Mun Sewer (GPD)	Date when activity first commenced at this facility
	Hospital Water	●	○	○	25,628	25,628	1/1/60
	Kitchen Water	○	●	○	5,000	5,000	"
	Sanitary	●	○	○	27,000	27,000	"
	Boiler	●	○	○	11,260	3,300	"
	Lawn Irrigation	○	○	●	9,225	0	
		○	○	○			
				Total:	80,148	60,928	

Approved: [signature] 1-27-15

MSD 035585

Company Name: _____

Premise Address: _____

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise, which shows (for permit renewals, highlight any changes since last application):
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or watercourse.

2. List each sampling point identified in 1c, d and e above and each connection for which there is no sampling point. Assign a sequential reference number to each location, starting with No. 1. Attach additional sheets, if needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection. (Vent, manhole, valve, other appurtenance. Indicate size & location)	Upstream to other point? Yes / No	List Ref. No.	Total avg flow per workday(GPD)
1	MH	[illegible]	○ ○		49,397
2	MH	3'W from SW corner of Emergency Bldg	○ ○		5,399
3	MH	12'N, 10'E from NW corner of West Bldg	○ ○		6,132
4			○ ○		
5			○ ○		
6			○ ○		
7			○ ○		

Grand Total Average Flow per Workday: 0

SECTION E - WASTEWATER INFORMATION

1. For each point listed in Section D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets, if needed.

Type of Wastewater	Discharge Quantity (GPD-workday) for each sampling point or connection listed in D.2: 1 upstream to	2 upstream to	3 upstream to	4 upstream to	5 upstream to	6 upstream to	7 upstream to	Facility Total (See instr.)
a. Sanitary	22,680			3200	1120			0 27,000
c. Non-contact cooling water	1,710				325			0 2,000
d. Contact cooling water								0
e. Process (From C.8)								0
Food Prep	5,000							0 5,000
Hospital	18,742			2199	4687			0 25,628
								0
								0
								0
								0
f. Plant & equipment washdown								0
g. Boiler blowdown	1265							0 1,265
h. Regeneration/reject water								0
i. Other								0
								0
								0
Totals (Same as D.2):	49,397			5399	6132			0 60,928

2. If any of the above points discharge to a watercourse or to a separate storm sewer, complete the following:

NPDES Outfall Number							
NPDES Permit Number							

3. Do any of the above sampling points also convey stormwater from your premise ?

	Yes			Yes	Yes		

4. Do you pretreat any of the wastes discharged through any of the above points ?

	Yes			No	Yes		

Approved: Roger Klaus 1-21-15

Company Name: SSM Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd

SECTION E - WASTEWATER INFORMATION (Continued)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in E.4

Ref. No.	Pretreatment System Description
1	Kitchen sink, dishwasher, garbage disposal drain to three grease traps (one above-ground in kitchen and two underground at rear of hospital)
5	Lime neutralization pit for laboratory waste prior to disposal

6. Does your facility have a written:

a.	Spill control plan ?	◉ Yes	○ No	c.	Solvent management plan ?	◉ Yes	○ No
b.	Waste minimization plan ?	◉ Yes	○ No	d.	Slug discharge control plan ?	○ Yes	◉ No

7. If any wastewater analyses have been performed on the wastewater discharges from your facility attach copies of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary. Permit renewal applications, only, may skip this item.

8. Priority Pollutant Information: Check one of the four boxes by each listed chemical to indicate whether it is: "Suspected Absent", "Known Absent", "Suspected Present" or "Known Present" ON YOUR PREMISE. Any chemical which is used in your manufacturing or service activity or is generated as a product or as a by-product should be marked "Known Present." Some pollutants are known by other names. Refer to the instruction booklet for synonyms 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 *	○	◉	○	○

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
36.	Reserved				
37.	bis (2-ethylhexyl) phthalate	○	◉	○	○
38.	bromodichloromethane *	○	◉	○	○
39.	bromoform *	○	◉	○	○
40.	bromomethane *	○	◉	○	○
41.	4-bromophenylphenyl ether	○	◉	○	○
42.	butylbenzyl phthalate	○	◉	○	○
43.	carbon tetrachlroride *	○	◉	○	○
44.	chlordane	○	◉	○	○
45.	4-chloro-3-methylphenol *	○	◉	○	○
46.	chlorobenzene	○	◉	○	○
47.	chloroethane *	○	◉	○	○
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	○	◉	○	○

RECEIVED
NOV 0 3 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Company Name: SSM Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd

SECTION E - WASTEWATER INFORMATION (Continued)

Priority Pollutant Information (Continued)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
71.	(cis and trans) 1, 3-dichloropropene *	○	●	○	○
72.	dieldrin	○	●	○	○
73.	diethylphthalate *	○	●	○	○
74.	2, 4-dimethylphenol *	○	●	○	○
75.	dimethyl phthalate	○	●	○	○
76.	di-n-butyl phthalate	○	●	○	○
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 *	●	○	○	○

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
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" or "Suspected Present", list and provide the following information for each: (Attach additional sheets, if needed.)

Item No.	PRIORITY POLLUTANT	HOW USED (for KP) or WHY SUSPECTED (for SP)	ANNUAL USAGE for KP(lbs)	LOSS TO SEWER for KP(lbs)
1.	asbestos (fibrous)	Building materials		
9.	lead (total)	Lead paint		
10.	mercury (total)	Equipment such as thermometers	0	0
13.	silver (total)	Silver nitrate in cytogenics	15	0
15.	zinc (total)	In materials used for diagnostics/care	5	0
16.	acenaphthene	Component of diesel fuel	10	0
17.	acenaphthylene	Component of diesel fuel	10	0
21.	anthracene	Component of diesel fuel	10	0
22.	benzene	Component of diesel fuel	10	0
24.	benzo (a) anthracene*	Component of diesel fuel	10	0
25.	benzo (a) pyrene	Component of diesel fuel	10	0
26.	benzo (b) fluoranthene	Component of diesel fuel	10	0
27.	benzo (g, h, i) perylene*	Component of diesel fuel	10	0
28.	benzo (k) fluoranthene*	Component of diesel fuel	10	0
54.	chrysene*	Component of diesel fuel	10	0

RECEIVED
NOV 03 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

Company Name: SSM Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd

SECTION F - NON-SEWERED WASTES

1. Do you generate any liquid wastes or sludges, as described in item 2 below, which are not disposed in the sewer system?

   (●) Yes ( ) No

   If "Yes" complete items 2 and 3 below. Note: Be sure to include wastewaters listed in Section C.7.c.
   If "No" skip remainder of this section.

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	22	lbs	☐	☐	☒
☒ Equipment Oils and/or Grease	250	gal	☐	☐	☒
☒ Infectious Waste	5500	lbs	☐	☐	☒
☐ Inks/ Dyes			☐	☐	☐
☒ Kitchen/Food Service Grease	30000	lbs	☐	☐	☒
☒ Organic Compounds	16	lbs	☐	☐	☒
☒ Paints or Paint Sludges	800	lbs	☐	☐	☒
☐ Pesticides			☐	☐	☐
☐ Pretreatment Sludges			☐	☐	☐
☐ Radioactive Waste			☐	☐	☐
☒ Solvents/Thinners	2098	lbs	☐	☐	☒
☒ Other medical and pharmaceutical waste	354	lbs	☐	☐	☒
☒ Other universal waste	356	lbs	☐	☐	☒
☐ Other			☐	☐	☐

3. List your USEPA and/or MDNR Hazardous Waste generator numbers:

   USEPA MOD075904839 MDNR 001310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. Provide the following analytical information for each sampling point or each connection to the public sewer only if your water usage exceeds 80 Ccf per month (1,995 Gal per calendar day). Representative samples of the wastewater in each sewer must be collected and analyzed for the listed parameters. Report the daily average concentrations in mg/l for each point. Permit renewal applications, only, may skip Section G regardless of water usage volume.

Parameter	Sewer Reference Numbers (Refer to Section D.2) If more than 7, attach additional sheets						
	1	2	3	4	5	6	7
Date Sampled							
Sample Start Time (eg. HH:MM PM)							
Sample End Time (eg. HH:MM PM)							
Type of Sample							
Flow (GPD)							
Biochemical Oxygen Demand (5 day)							
Chemical Oxygen Demand							
Total Suspended Solids							

Collected By (Name of organization):

Analyzed By (Name of organization):

RECEIVED
NOV 0 3 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MSD 035589

Company Name: SSM Cardinal Glennon Children's Hospital
Premise Address: 1465 South Grand Blvd

SECTION H - CERTIFICATION AND SIGNATURE

1. The following individual may be contacted regarding the information contained in this questionnaire:

   Name of Contact Person: Rodger Glaus

   Title: Administrative Director Phone Number (314) 989-2155

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 of Signing Official: Rodger Glaus

   Title: Administrative Director Phone Number (314) 989-2155

   Signature: Rodger Glaus Date: October 29, 2014

This certification, along with any other reporting documents, must be signed by an individual described as follows: a responsible corporate officer if the user is a corporation; a general partner if the user is a partnership; the proprietor if the user is a sole proprietorship; a duly authorized representative of the individual just described, if that individual submits a written authorization which specifies a person or position within the company, having responsibility for the overall operation of the facility from which the discharge originates, such as a plant manager, or overall responsibility for environmental matters at the company.

List attachments included with this questionnaire:

Permit Section E.9 Continuation

Site Map

RECEIVED
NOV 0 3 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

VBA COMPLIANCE ASSURANCE
PO BOX 437
ST. ALBANS, MISSOURI 63073
(636) 458-3382

Site Map
SSM Cardinal Glennon Children's Hospital
St. Louis, Missouri

RECEIVED
NOV 0 3 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

9. For priority pollutants in E.8, which are indicated "Known Present" or "Suspected Present", list and provide the following information for each: (cont.)

Item No.	PRIORITY POLLUTANT	HOW USED (for KP) or WHY SUSPECTED (for SP)	ANNUAL USAGE for (KP) lbs	LOSS TO SEWER for KP (lbs)
58.	dibenzo (a,h) anthracene*	Component of diesel fuel	10	0
79.	2, 4-dinitrophenol	Component of diesel fuel	10	0
88.	ethylbenzene	Component of diesel fuel	10	0
89.	fluoranthene	Component of diesel fuel	10	0
90.	fluorene*	Component of diesel fuel	10	0
93.	hexachlorobenzene*	Component of diesel fuel	10	0
97.	indeno (1, 2, 3-cd) pyrene*	Component of diesel fuel	10	0
100.	naphthalene	Component of diesel fuel	10	0
114.	pentachlorophenol	Component of diesel fuel	10	0
115.	phenanthrene	Component of diesel fuel	10	0
116.	phenol	Component of diesel fuel	10	0
117.	pyrene	Component of diesel fuel	10	0
121.	toluene*	Component of diesel fuel	10	0

RECEIVED
NOV 0 3 2014
DIVISION OF
ENVIRONMENTAL COMPLIANCE

SR

MSD

RECEIVED

NOV 24 2009

DEPT. OF ENVIRONMENTAL COMPLIANCE

FOR MSD USE ONLY		Category
Account Number:	4112904-00	SIU
TA:	Bissell Point	NONSIU
TS:	Rock Springs	CIU
Reviewer:	[illegible]	NONTOX
Date:	11/24/09	TOXIC
		SUR
		NOPROC
		MULTI

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION 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 develop the permit.

SECTION A - GENERAL INFORMATION SSM

1. Company Name: Cardinal Glennon Children's Medical Center.
2. Mailing Address: 1465 S. Grand Blvd.
   City: St. Louis State Missouri MO Zip Code 63104
3. Premise Address: 1465 S Grand & 1505 South Grand.
   City: St. Louis State Missouri MO Zip Code 63104
4. Person Authorized to Sign Reporting Documents (see note after Section H):
   Name: Bud Fredrich
   Title: Plant Leader Phone Number 314) 577-5327
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: 5 7
   b. Average number of employees per shift: 1st 600 2nd 400 3rd 350 Total: 1350
   c. Shift start times: 1st 0800 (HH:MM AM/PM) 2nd 1600 (HH:MM AM/PM) 3rd 2400 (HH:MM AM/PM)

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 ACTIVITY	SIC NUMBER
a.		
b.	Health Care (Hospital	~~8062~~ 8069
c.		
d.		
e.		
f.		

11/24/09

MSD 035593

Company Name: JJ M Cardin Glennon Child Hosp
Premise Address: 1465 S. Grand Boulevard

SECTION B - PRODUCT OR SERVICE INFORMATION (Continued)

2. Are primary activities generally batch or continuous processes ? ◯ batch ◯ continuous

3. Principal raw materials used: _____

4. Principal products produced: General Hospital

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.

ACTIVITY (with related 40 CFR Part)	SIC NO.	ACTIVITY (with related 40 CFR Part)	SIC NO.
☐ a. Adhesive and Sealants Mfg.		☐ nn. Nonferrous Metals Mfg. (421)	
☐ b. Aluminum Forming (467)		☐ oo. Oil and Gas Extraction (435)	
☐ c. Asbestos Mfg. (427)		☐ pp. Ore Mining and Dressing (440)	
☐ d. Battery Mfg. (461)		☐ qq. Organic Chem/Plastics/Synthetic Fibers Mfg (414)	
☐ e. Carbon Black Mfg. (458)		☐ rr. Paint Formulating (446)	
☐ f. Cement Mfg. (411)		☐ ss. Painting, Finishing or Paint Stripping	
☐ g. Centralized (non-Haz.) Waste Treatment (437)		☐ tt. Parts Washing	
☐ h. Coal Mining (434)		☐ uu. Paving and Roofing Mat'ls (Tars & Asphalt) (443)	
☐ i. Coil Coating (465)		☐ vv. Pesticide Chem Mfg/Formulating/Packaging (455)	
☐ j. Concentrated Animal Feeding Operations (412)		☐ ww. Petroleum Refining (419)	
☐ k. Concentrated Aquatic Animal Production (451)		☐ xx. Pharmaceutical Mfg. (439)	
☐ l. Copper Forming (468)		☐ yy. Phosphate Mfg. (422)	
☐ m. Dairy Products Processing (405)		☒ zz. Photographic Processing (459)	
☐ n. Drum Reconditioning		☐ aaa. Plastic Molding and Forming (463)	
☐ o. Electrical and Electronic Components (469)		☐ bbb. Porcelain Enameling (466)	
☐ p. Electroplating (413)		☐ ccc. Printing and Publishing	
☐ q. Explosives Mfg. (457)		☐ ddd. Pulp, Paper and Paperboard Mfg. (430)	
☐ r. Ferroalloy Mfg. (424)		☐ eee. Q.C. Laboratory	
☐ s. Fertilizer Mfg. (418)		☐ fff. R & D Laboratory	
☒ t. Food Preparation		☐ ggg. Radioactive Materials Processing	
☐ u. Fruit and Vegetable Processing (407)		☐ hhh. Repair Shop, Garage	
☒ v. General Offices		☐ iii. Rubber and Rubber Products Mfg. (428)	
☐ w. Glass Mfg. (426)		☐ jjj. Seafood Processing (408)	
☐ x. Grain Milling (406)		☐ kkk. Soap and Detergent Mfg. (417)	
☐ y. Gum and Wood Chemical Mfg. (454)		☐ lll. Solvent Recycling	
☐ z. Haz. Waste Treatment, Storage or Disposal		☐ mmm. Steam Electric Power Generation (423)	
☐ aa. Health Care or Hospital (460)		☐ nnn. Sugar Processing (409)	
☐ bb. Industrial Laundry		☐ ooo. Textile Mills (410)	
☐ cc. Ink Formulating (447)		☐ ppp. Timber Products Mfg. (429)	
☐ dd. Inorganic Chemicals Mfg. (415)		☐ qqq. Transportation Equipment Cleaning (442)	
☐ ee. Iron and Steel Mfg. (420)		☐ rrr. Transportation Services	
☐ ff. Leather Tanning and Finishing (425)		☐ sss. Used Oil Reclamation	
☐ gg. Machine Shop		☐ ttt. Vehicle/Equipment Washing	
☐ hh. Machinery Mfg. or Rebuilding (438)		☐ uuu. Warehousing	
☐ ii. Meat Processing (432)		☐ vvv. Waste Combustors (444)	
☐ jj. Metal Finishing (433)		☐ www. Waste Recycling	
☐ kk. Metal Molding and Casting (464)		☐ xxx. Others (Describe) _____	
☐ ll. Mineral Mining and Processing (436)		☐ yyy. Others (Describe) _____	
☐ mm. Nonferrous Metals Forming/Metal Powders (471)		☐ zzz. Others (Describe) _____	

6. Are your activities subject to seasonal variation? If "Yes," explain and indicate the month(s) of peak activity:

◯ Yes ☒ No _____

RECEIVED
NOV 24 2009
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035594

Company Name: Jim Cardinal Glennon Child Hosp
Premise Address: 1465 S. Grand Blvd.

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

RECEIVED
NOV 24 2009
DEPT. OF ENVIRONMENTAL COMPLIANCE

1. Raw Water Source(s):
   - [x] City of St. Louis Water Div.
   - [ ] Missouri American Water Co.
   - [ ] Other municipal source _____
   - [ ] Hauled by contractor
   - [ ] Surface water
   - [ ] Private well
   - [ ] Other (describe) _____

2. Water Bill Addressee: Cardinal Glennon

3. Water Service Account Numbers: 0022 6070

4. List past twelve months water usage from: [x] Water Bills [ ] Other Sources

				Water Bills	Other Sources
1st 3 mo period	12/08	through	02/09	17,769 Ccf	_____ Ccf
2nd 3 mo period	02/09	through	05/09	10,974 Ccf	_____ Ccf
3rd 3 mo period	05/09	through	08/09	7,401 Ccf	_____ Ccf
4th 3 mo period	08/09	through	11/09	14,874 Ccf	_____ Ccf

Water Bills and Other Sources Total: 50,778 Ccf = 0 GPD-calendar = 0 105,505 GPD-work

5. Describe any treatment or conditioning process performed on the raw water before use (list regeneration/reject water volume in 6h below):

_____

6. Identify all water uses within your facility:

Water Uses	Estimated Average Daily Use (Gal per workday)
a. Sanitary	33,750
b. Irrigation & lawn watering	
c. Non-contact cooling water	
d. Contact cooling water	
e. Process water - Hospitals	46,648
f. Plant & equipment washdown	
g. Boiler - CT	17,107
h. Regeneration/reject water	
i. Other uses	8,000
j. Total of USES (6a through 6h):	105,505

(6a through 6i must equal total at item 4)

7. Identify all water losses and wastewater discharges from your facility:

Water Uses	Estimated Average Daily Loss/Discharge (Gal per workday)
a. Municipal sewer	83,350
b. Watercourse, storm drain, surface	12,379
c. Haulers	
d. Evaporation	9,776
e. Contained in product	
f. Total of LOSSES & DISCHARGES:	105,505

(7a through 7e must equal total at 6j)

8. For each activity you listed in Sections B.1 and B.5, list the average water usage and average wastewater discharge per workday. Attach additional sheets, if needed. (Total Avg. Water Use must equal total for 6e)

Item No	Activity	Type of Discharge: Cont	Batch	None	Avg. Water Use (GPD)	Avg. Discharge to Mun Sewer (GPD)	Date when activity first commenced at this facility
		○	○	○			
	Hospital Waste	☒	○	○	46,648	46,648	
	Sangen	☒	○	○	33,750	33,750	
		○	○	○			
	Boiler - Cooling Tower	○	☒	○	17,107	7,331	
		○	○	○			
	Kitchen	○	☒	○	8,000	8000	
		○	○	○			
				Total:			

Company Name: Cardinal Glennon Child Hosp
Premise Address: 1465 S. Grand Blvd.

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise, which shows (for permit renewals, highlight any changes since last application):
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or watercourse.

2. List each sampling point identified in 1c, d and e above and each connection for which there is no sampling point. Assign a sequential reference number to each location, starting with No. 1. Attach additional sheets, if needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection. (Vent, manhole, valve, other appurtenance. Indicate size & location)	Upstream to other point? Yes / No	List Ref. No.	Total avg flow per workday(GPD)
1		MH on Sidewalk S of Vista	○ ○		77,748
2		East of overhead walkway Flow	○ ○		
3		from SE.	○ ○		
4		MH 3 feet W from SW corner	○ ○		8,000
5		~~of EP~~ MH 12' N 10 FT E from	○ ○		10,000
6		north W corner of West Building	○ ○		
7			○ ○		

Grand Total Average Flow per Workday: 0

SECTION E - WASTEWATER INFORMATION

1. For each point listed in Section D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets, if needed.

Type of Wastewater	Discharge Quantity (GPD-workday) for each sampling point or connection listed in D.2: 1 upstream to	2 upstream to	3 upstream to	4 upstream to	5 upstream to	6 upstream to	7 upstream to	Facility Total (See instr.)
a. Sanitary	28,350			4000	1400			0
c. Non-contact cooling water	220				600			0
d. Contact cooling water	~~3150~~ DNK 11/24/09				~~600~~ DNK 11/24/09			0
e. Process (From C.8)								0
Hospital waste	34,648			4000	8000			0
								0
Cooling Tower Blowdown	2930							0
								0
								0
								0
								0
								0
f. Plant & equipment washdown								0
g. Boiler blowdown	3600							0
h. Regeneration/reject water								0
i. Other Kit waste.	8000							0
Totals (Same as D.2)	77,748			8000	10,000			

Est only

RECEIVED
NOV 24 2009
DEPT. OF ENVIRONMENTAL COMPLIANCE

2. If any of the above points discharge to a watercourse or to a separate storm sewer, complete the following:
   NPDES Outfall Number
   NPDES Permit Number

3. Do any of the above sampling points also convey stormwater from your premise ?
   yes yes yes.

4. Do you pretreat any of the wastes discharged through any of the above points ? NO
   yes. yes ~~yes~~

These are Est. Separated NCCW - Aux. Valve + Cooling tower blowdown 11/24/09 DNK

MSD 035596

Company Name: Cardinal Glennon
Premise Address: 1465 S Grand.

SECTION E - WASTEWATER INFORMATION (Continued)

5. Describe the type of wastewater pretreatment you employ prior to each point for which you marked "Yes" in E.4.

Ref. No.	Pretreatment System Description
001	silver recovery
004	Silver recovery
001	Grease Trap.

RECEIVED
NOV 24 2009
DEPT. OF ENVIRONMENTAL COMPLIANCE

6. Does your facility have a written:

a. Spill control plan ? (X) Yes ( ) No
b. Waste minimization plan ? (X) Yes ( ) No
c. Solvent management plan ? (X) Yes ( ) No
d. Slug discharge control plan ? ( ) Yes (X) No

7. If any wastewater analyses have been performed on the wastewater discharges from your facility attach copies of the most recent data. Be sure to specify the locations from which the samples were collected. Attach sketches, plans, drawings, etc. as necessary. Permit renewal applications, only, may skip this item.

8. Priority Pollutant Information: Check one of the four boxes by each listed chemical to indicate whether it is: "Suspected Absent", "Known Absent", "Suspected Present" or "Known Present" ON YOUR PREMISE. Any chemical which is used in your manufacturing or service activity or is generated as a product or as a by-product should be marked "Known Present." Some pollutants are known by other names. Refer to the instruction booklet for synonyms 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.	chloroethane *				
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 *				

Company Name: Wm Cardinal Chile Airport
Premise Address: 1460 W. Broad Oklo

SECTION E - WASTEWATER INFORMATION (Continued)

Priority Pollutant Information (Continued)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
71.	(cis and trans) 1, 3-dichloropropene *		✓		
72.	dieldrin		✓		
73.	diethylphthalate *		✓		
74.	2, 4-dimethylphenol *		✓		
75.	dimethyl phthalate		✓		
76.	di-n-butyl phthalate		✓		
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 *		✓		✓

Item No	PRIORITY POLLUTANT	SA	KA	SP	KP
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" or "Suspected Present", list and provide the following information for each: (Attach additional sheets, if needed.)

Item No.	PRIORITY POLLUTANT	HOW USED (for KP) or WHY SUSPECTED (for SP)	ANNUAL USAGE for KP(lbs)	LOSS TO SEWER for KP(lbs)
10	- Mercury		0.1	0.0
13	- silver		unknown	0.0
49	- Chloroform		30.0	0.0
79	2-4 Dinet Hydlphenol		0.1	0.0
99	Methyclene Chloride		5.0	0.0
116	- Phenol		30.0	0.1

RECEIVED
NOV 24 2009
DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035598

Company Name: Cardinal Glennon Chil Hosp
Premise Address: 1465 S. Grand Blvd

SECTION F - NON-SEWERED WASTES

1. Do you generate any liquid wastes or sludges, as described in item 2 below, which are not disposed in the sewer system?

☒ Yes ○ No

If "Yes" complete items 2 and 3 below. Note: Be sure to include wastewaters listed in Section C.7.c.
If "No" skip remainder of this section.

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			☐	☐	☐
☒ Equipment Oils and/or Grease	30	gal	☒	☐	☒
~~☒ Infectious Waste~~	~~5,700~~	~~LBS~~	~~☒~~	~~☐~~	~~☒~~ Once 12/1/09
☐ Inks/ Dyes			☐	☐	☐
☐ Kitchen/Food Service Grease			☐	☐	☐
☐ Organic Compounds			☐	☐	☐
☐ Paints or Paint Sludges			☐	☐	☐
☐ Pesticides			☐	☐	☐
☐ Pretreatment Sludges			☐	☐	☐
☐ Radioactive Waste			☐	☐	☐
☐ Solvents/Thinners			☐	☐	☐
* ☒ Other Medical waste	2554	lbs/yr	☒	☐	☒
* ☒ Other Chemical waste	506	lbs/yr	☒	☐	☒
☐ Other			☐	☐	☐

3. List your USEPA and/or MDNR Hazardous Waste generator numbers:

USEPA MOB075904839 MDNR 001310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. Provide the following analytical information for each sampling point or each connection to the public sewer only if your water usage exceeds 80 Ccf per month (1,995 Gal per calendar day). Representative samples of the wastewater in each sewer must be collected and analyzed for the listed parameters. Report the daily average concentrations in mg/l for each point. Permit renewal applications, only, may skip Section G regardless of water usage volume.

Parameter	Sewer Reference Numbers (Refer to Section D.2) If more than 7, attach additional sheets						
	1	2	3	4	5	6	7
Date Sampled							
Sample Start Time (eg. HH:MM PM)							
Sample End Time (eg. HH:MM PM)							
Type of Sample							
Flow (GPD)							
Biochemical Oxygen Demand (5 day)							
Chemical Oxygen Demand							
Total Suspended Solids							

Collected By (Name of organization):

Analyzed By (Name of organization):

RECEIVED
NOV 24 2009
DEPT. OF ENVIRONMENTAL COMPLIANCE

Ver. 5/2007

last quarter permit

* waste report received from Dwt Frederick 12/01/09 OK

MSD 035599

Company Name: [illegible]
Premise Address: [illegible]

SECTION H - CERTIFICATION AND SIGNATURE

1. The following individual may be contacted regarding the information contained in this questionnaire:

Name of Contact Person: Bud Frederick

Title: Team Leader Phone Number 577-5327

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 of Signing Official: Bud Frederick

Title: Team Leader Phone Number 577-5327

Signature: Bud Frederick Date: 11/24/09

This certification, along with any other reporting documents, must be signed by an individual described as follows: a responsible corporate officer if the user is a corporation; a general partner if the user is a partnership; the proprietor if the user is a sole proprietorship; a duly authorized representative of the individual just described, if that individual submits a written authorization which specifies a person or position within the company, having responsibility for the overall operation of the facility from which the discharge originates, such as a plant manager, or overall responsibility for environmental matters at the company.

List attachments included with this questionnaire:

RECEIVED

NOV 24 2009

DEPT. OF ENVIRONMENTAL COMPLIANCE

MSD 035600

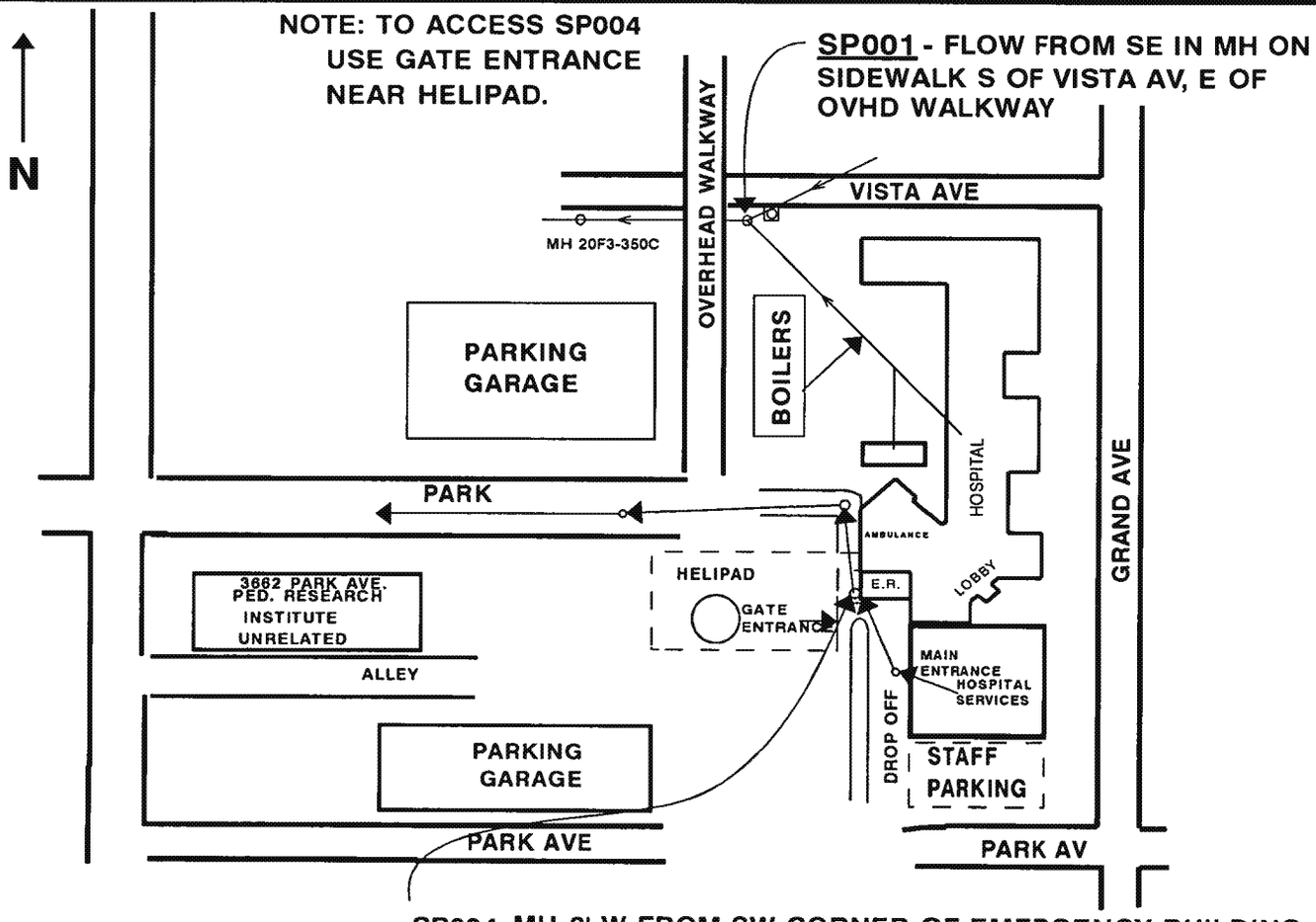
M[illegible]D-DEC INDUSTRY SAMPLING M[illegible] MSD

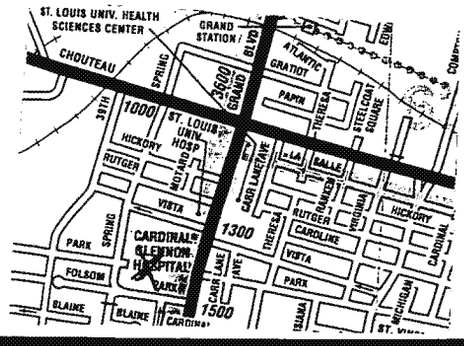
Company Name: SSM CARDINAL GLENNON HOSP.
Premise Address: 1465 S. GRAND
Zip Code: 63104
Nearest Intersection: VISTA
Wunnenberg: H21-38 Base Map: 20F-03
MSD Account No.: 41121954-00
Total No. of Active Sample Points: 2
Active SP Nos: 001, 004

Facility Contact: BUD FREDRICK
Secondary Contact: MARK STEWART
Must contact prior to sampling: Yes ____ No X
Reason: ____
Company wants to split samples: Yes ____ No X

Special Sampling Requirements or Instructions:
TO ACCESS SP004, YOU MUST GO THROUGH THE GATE ENTRANCE BY THE HELIPAD.

Map Effective Date: 01/15/04 By: DWK
Map Revision Date: 11/01/05 By: DWK
Map Revision Date: ____ By: ____
Map Void Date: ____ By: ____





O:\PRETREAT\SPMAPS\SK-STLC\SSMCRDGL

SP MAP DMM-1/95-1

MAP IS INVALID IF NOT DATED AND INITIALED OR IF VOID DATE IS FILLED IN

MSD-DEC INDUSTRY SAMPLING MAP

MSD

Company Name: SSM CARDINAL GLENNON HOSP.

Premise Address: 1465 S. GRAND

Zip Code: 63104

Nearest Intersection: VISTA

Wunnenberg: H21-38 Base Map: 20F-03

MSD Account No.: 41121954-00

Total No. of Active Sample Points: 2

Active SP Nos: 001, 004

Facility Contact: BUD FREDRICK

Secondary Contact: MARK STEWART

Must contact prior to sampling: Yes ____ No X

Reason: ____

Company wants to split samples: Yes ____ No X

Special Sampling Requirements or Instructions:
TO ACCESS SP004, YOU MUST GO THROUGH THE GATE ENTRANCE BY THE HELIPAD.

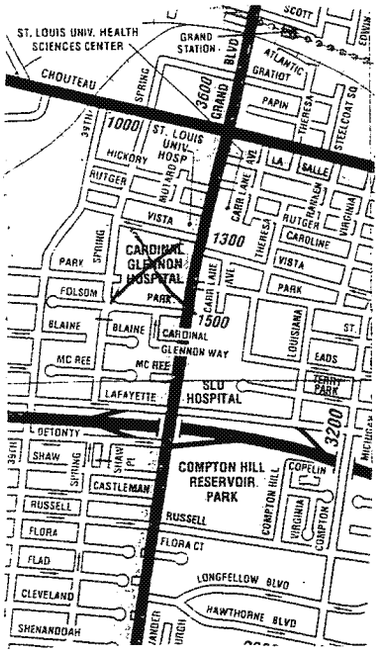
Map Effective Date: 01/15/04 By: DWK

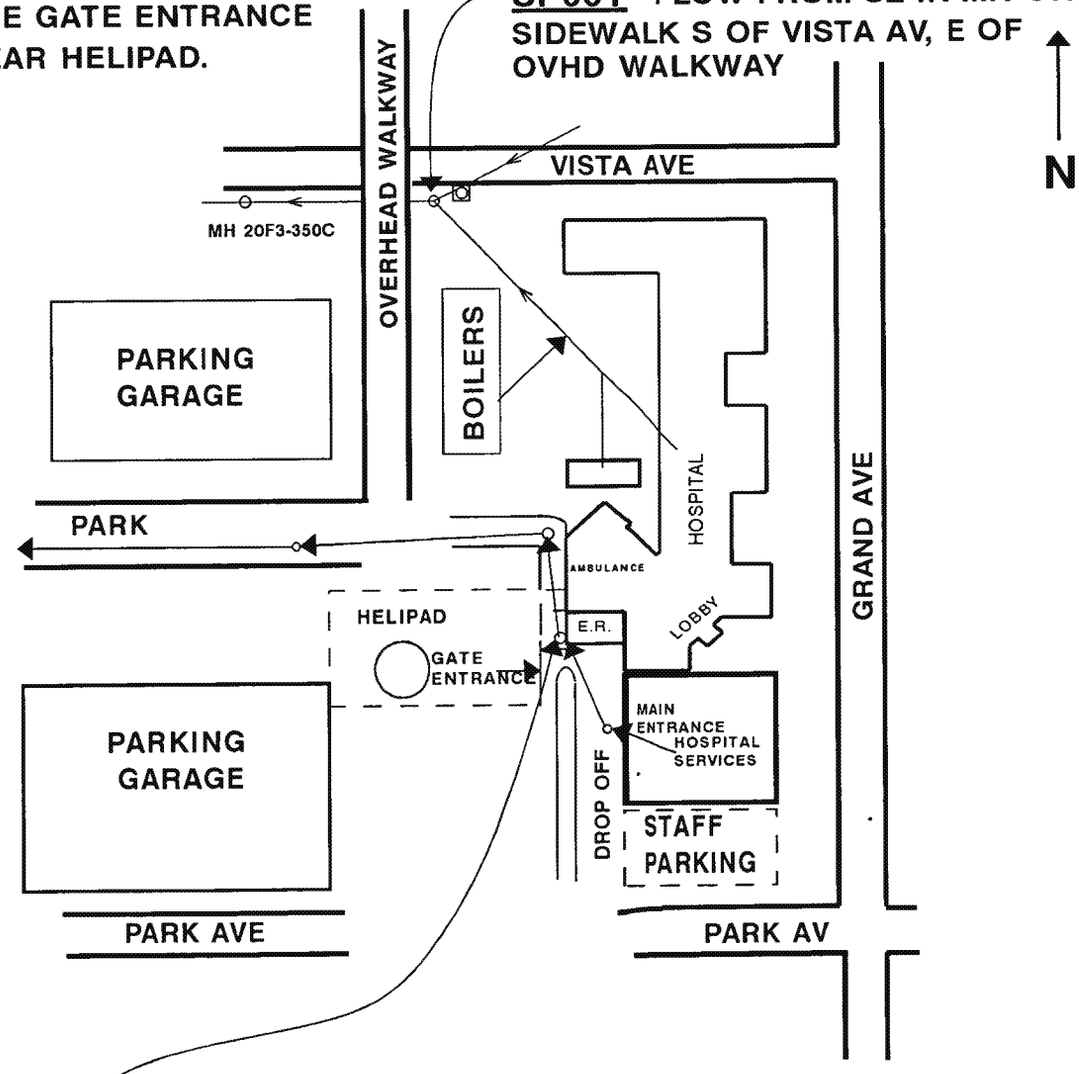
Map Revision Date: ____ By: ____

Map Revision Date: ____ By: ____

Map Void Date: 11/01/01 By: DWK

NOTE: TO ACCESS SP004 USE GATE ENTRANCE NEAR HELIPAD.





SP004-MH 3' W FROM SW CORNER OF EMERGENCY BUILDING

SP MAP DMM-1/95-1

MAP IS INVALID IF NOT DATED AND INITIALED OR IF VOID DATE IS FILLED IN

METROPOLITAN ST. LOUIS SEWER DISTRICT **MSD**
INDUSTRIAL FACILITY REINSPECTION REPORT

Company: SSM Cardinal Glennon Children's Hospital Account #: 41121954-00
Premise Address: 1465 South Grand Boulevard Zip Code: 63104-
Last Inspection Date: 12/20/04
MSD Categories: SIU ☒ CIU ☐ Surcharge ☐ Potential Toxic Waste ☒
Non-Toxic Waste ☐ No Process Flow ☐ Multi User ☐ IIU ☐
Company Representative: Mark Stewart
Title: Maintenance Mechanic Phone#: 314-577-5307
Inspector: D. Kupke
Others Present: None
Inspection Date: 11/1/05 Time of Inspection: From 08:50 AM To 10:10 AM

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL ACCOUNT NUMBERS? Yes☒ No☐
   List them, note any changes: secondary account 41124853-01 S part of building the water usage is billed under the main account 41121954-00.
   B. WERE ALL ACCT NUMBERS VERIFIED AS CORRECT & ACTIVE ON BILLING SYSTEM? Yes☒ No☐

2. PROCESS & CLEANUP/WASHDOWN:

	Cont/ Batch		Water Used?	Frequency of discharge	Sample pt.
Kitchen waste	Cont		Yes	daily	SP001
Hospital waste	Cont		Yes	daily	SP001, SP004
Boiler blowdown, Cooling tower blowdown	Batch		Yes	1-daily	SP001
	(None)		N/A		
	(None)		N/A		
	(None)		N/A		

3. PRETREATMENT (describe):

	Sample pt.
Silver recovery	SP001, SP004
Grease trap	SP001

4. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSP? Yes☐ No☒
   A. List pollutants & process: _____
   B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☒
   C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☒
   (MSD must notify MDNR if B or C is yes and discharge will continue.)
   D. Comments: _____

5. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS? Yes☒ No☐
   A. If yes, list reg. & describe (including any discharge):
   40 CFR 460 (general standards)-Waste from hospital operations such as the laboratory, x-ray, and kitchen waste from dietary.

6. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CAT. WW PRIOR TO SAMPLING? Yes☐ No☒
   A. At which points? _____
   B. Current applied factor: _____ Is it correct? Yes☐ No☐
   C. If no, what is the correct factor & explain change? _____

7. IS ANY WASTEWATER SUBJECT TO PRODUCTION OR MASS BASED STANDARDS? Yes☐ No☒
   A. At which points? _____
   B. Since calculation of the current limits, has the long term average production rate or discharge volume changed by 20% or more? Yes☐ No☐
   C. If yes, explain: _____

8. ARE ANY RADIOACTIVE MATERIALS HANDLED? Yes☐ No☒
   A. Describe operations & disposal: _____
   B. Does company have MSD authorization to disposal to sewer? Yes☐ No☐
   C. Date of Authorization: _____ Annual amt approved: _____
   D. Has company exceeded the approved quantity? Yes☐ No☐
   E. If yes, explain: _____

9. DOES WATER USE APPEAR EXCESSIVE? Yes☐ No☒
   A. Explain how verified & needed changes: Tour of the facility revealed that there were no excessive water usages. Significant amounts of water is used in tit dietary operations and its kitchen wast discharge.

10. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE THE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS? Yes☐ No☒
   A. If yes:

Pollutant	When	Sample Points	Is problem resolved? Yes/No	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

   B. Comments: _____

11. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS? NA☒ Yes☐ No☐
   A. If yes:

Pollutant	When	Sample Points	Is problem resolved? Yes/No	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

   B. Comments: _____

12. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☐ No☒
   A. Upsets? ☐ Bypasses of pretreatment facilities? ☐
   Spills? ☐ Slug discharges? ☐ Other? _____
   B. Explain any marked: _____

13. ARE ANY SOLVENTS USED? Yes☒ No☐
   A. If yes:

List solvents	Used for?	How disposed?	413/433/469 Process?
Methylene chloride	laboratory reagent	Hauled offsite	Yes☐ No☒
Acetone	laboratory reagent	Hauled offsite	Yes☐ No☒
Xylene	histology-slide prep	Hauled offsite	Yes☐ No☒
Phenol	component used to sanitize	evaporates	Yes☐ No☒

14. COULD SPILLS OR LEAKS OF STORED CHEMICALS, WASTES OR PROCESS MATERIALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒
   A. If yes, what needs to be done? _____
   B. If no, how are they controlled? Infectious and hazardous waste is contained in a segregated area. There is no spill potential for this material to get into the sewer. Laboratory reagents are stored in flammable and laboratory cabinets.

15. DOES COMPANY HAVE ANY SPILL,SLUG OR SOLVENT MANAGEMENT PLANS(SMP)? Yes☒ No☐
   A. If yes:

Title	SMP? 413/433/469		Last Update		Copy in File? (SMP only)	Update needed? Explain if yes
Hazardous Materials and Management plan	No		7/25/97		Yes	No
	N/A				N/A	N/A
	N/A				N/A	N/A

   B. Are any Plans needed in addition to those listed in Part A? (write company and request) Yes☐ No☒

16. HAZARDOUS WASTES:
   A. Was the company informed/reminded that solid & hazardous waste management regulations (RCRA) exist and may potentially apply to industrial users? Yes☒ No☐
   B. Is there any discharge to the sewers of hazardous waste which has not been previously reported to MSD (under 40 CFR 403.12(p))? Yes☐ No☒
   C. If yes to B, list haz wastes: _____
   D. Was the company provided with a "Public Notice/Haz. Waste Discharge Notification" form for the above regulations (regardless of whether there are any discharges)? Yes☒ No☐
   F. Comments: _____

17. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED? Yes☒ No☐
   A. Are MSD contacts listed? Yes☒ No☐
   B. If no to either, describe how handled: _____

18. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐
   A. If yes, requirement is contained in permit ☒ or other document ☐.
   B. If other document, date & description: _____
   C. How frequently is sampling required? Quarterly
   D. How frequently are reports required? Quarterly
   E. Have reports been on-time, complete & signed by proper person? Yes☐ No☒
   F. If no, explain: Not listing flow at the sample points.

19. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐
   A. Is the self-monitoring required by MSD? Yes☒ No☐
   B. Are representative grab/comp samples collected? Yes☒ No☐
   C. Does sample collection time period match company's production shifts (is it representative)? Yes☒ No☐
   D. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
   E. If no to B, C or D, explain needed changes: _____

20. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒
   A. If yes, type and date: _____
   B. Have the reports & actions been on-time & complete? Yes☐ No☐
   C. If no, explain: _____

21. DOES MSD CATEGORY NEED TO BE REVISED? Yes☒ No☐
   A. Indicate correct categories:
   SIU ☒ CIU ☐ Surcharge ☐ Potential Toxic Waste ☒
   Non-Toxic Waste ☐ No Process Flow ☐ Multi User ☐ IIU ☐
   B. Explain changes: _____

22. SAMPLE POINTS

						DJ(y/n)
SP #	001	Fed.Reg.		Components:	Sanitary, Hospital waste, Kitchen waste, Non Contact cooling water, Boiler blowdown, Cooling tower blowdown	No
SP #	004	Fed.Reg.		Components:	Hospital waste, Sanitary	No
SP #		Fed.Reg.		Components:		N/A
SP #		Fed.Reg.		Components:		N/A
SP #		Fed.Reg.		Components:		N/A

23. ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

24. WERE ALL SAMPLE POINTS OPENED AND INSPECTED? Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

25. REVIEW THE SAMPLE POINT MAP! Last map revision date: 11/1/05

A. Is the map correct and accurate in all its details? Yes☐ No☒

B. If no, what changes are needed? additional layout around hospital property

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

_____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **4112195400**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

INDUSTRIAL USER CLASSIFICATIONS

03/06/1997	SIU
03/06/1997	PTW

WUNNENBERG INFO.

Base Map 20F3
Wun: St. Louis City & Co.
Grid: H 21 Page 38

SIU CRITERIA

POTM Reasonable potential for adverse affect

GENERAL INFORMATION

Office Mailing Address
1465 South Grand Blvd
St. Louis, MO. 63104-1095

INSPECTION INFORMATION

Next Due
Insp Rslt
11/01/2005 RIN David Kupke

PERMIT INFORMATION

Issue Date: 05/01/2005
Expire Date: 04/30/2010
Extended Date:
Writer Fabian Grabsk

IUQ INFORMATION

IUQ Recvd Date: 10/29/1999
Reviewer: Fabian Grabski
IUQ Recvd Date: 12/20/2004
Reviewer: David Kupke

CONTACTS

FLD1	Bud Fredrick	Maintenance Supervisor	OFF	(314) 577-5327 Ext.
FLD2	Mark Stewart	Maintenance Mechanic	OFF	(314) 577-5307 Ext.
FLD3	Jack Mitchell	Maintenance Mechanic	OFF	(314) 577-5600 Ext.
OFF1	Rich Cunningham	Director of Safety & Security	OFF	(314) 268-4117 Ext.
OFF2	Dodie Purcell	Risk Manager	OFF	(314) 577-5600 Ext.

OPERATIONAL INFORMATION

Work Days: 7

				S	M	T	W	T	F	S
1	600	08:00AM	8.0	Y	Y	Y	Y	Y	Y	Y
2	400	04:00PM	8.0	Y	Y	Y	Y	Y	Y	Y
3	350	12:00AM	8.0	Y	Y	Y	Y	Y	Y	Y

Total Emp: 1,350 **Hrs:** 24.0

OTHER AGENCIES INFORMATION

09/29/1997	EPA - Hazardous Waste Program	MOD075904839
11/03/1997	Nuclear Regulatory Commission	24-00196-07
11/10/2000	MDNR - Hazardous Waste Program	001310
09/28/2005	MSD - Billing Account Number	00208068

NON-SEWERED WASTE

On-Site Storage **On-Site Disposal** **Off-Site Disposal**

COMMENTS

RAW MATERIALS

EFF DATE	MATERIAL_DESCRIPTION	QUANTITY	UNIT

SIC INFORMATION

SIC	DESCRIPTION
8069	Specialty Hospitals, Except Psychiatric

PRODUCTS

EFF	DESCRIPTION	UNIT	AVG_PROD	MAX_PROD
05/07/2004	Service: general hospital			

SEWER ACCOUNTS

Sewer Accounts
4112195400
4112485301

WATER CONSUMPTION AND WASTEWATER DISCHARGE

Start Date = 12/08/2004 **End Date =** 12/08/2005 **Wdays** **Cdays**

Acct. No.			Consumption					Discharge	
4112195400			**CCF's**	**Gallons**				**Gal/ Wday**	**Gal/ Cday**
4112195400	11/16/2004	02/11/2005	9,472	9,472	A	88	88	88	
4112195400	02/12/2005	04/28/2005	12,399	21,871		76	76	164	
4112195400	04/29/2005	08/05/2005	7,016	28,887		99	99	263	
RF 0.79	**Acct. Total**		28,887	21,608,978		263	263	64,909	64,909
	Facility Total		28,887						

Report No. PIMS012A 12/08/2005 9:46:25 am
Data Date & Time: 12/08/2005 9:46:25 am

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL DATA SHEET - FACILITY INFORMATION

INDUSTRY NAME **SSM CARDINAL GLENNON CHILDREN'S HOSPITAL**
PRIMARY MSD ACCOUNT NO. **4112195400**

Premise Address 1465 South Grand Blvd.
St. Louis MO. 63104

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
01	Sanitary Or Combined	20F3	350C	Trunk Sewer	Old Mill Creek

Description LIne from building northwest to Vista Av.

Sewer Route West on Vista to 39th St, continuing West

SAMPLE POINT NO. 001 Ordinance **NPDES Outfall No.**

Description MH on sidewalk S of Vista Ave., E of overhead walkway, Flow from SE

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Sanitary		34,000	GPD		GPD	D	12/20/0
Non Contact Coolir	Autoclaves	220	GPD		GPD	D	12/20/0
Cooling Tower Blo		3,555	GPD		GPD	D	12/20/0
Hospital Waste		25,115	GPD		GPD	D	12/1/05
Kitchen Waste		8,000	GPD		GPD	D	12/1/05
	Total Flow Avg =	**70,890**		**Max =**			

CONNECTION and SAMPLE POINT INFORMATION

LATERAL NO.	Lateral Type	DSMH		Treatment Area	Bissell Point
03	Sanitary Or Combined	20F3	399C	Trunk Sewer	Old Mill Creek

Description 8" line exiting NW from SW main hopsita

Sewer Route N along Spring, W along Vista,to 39th St,

SAMPLE POINT NO. 004 Ordinance **NPDES Outfall No.**

Description MH 3' W from SW corner of emergency building

Discharge Components	Process Description	Avg Flow	Unit	Max Flow	Unit	RUD	Effective Date
Hospital Waste	X-ray, and laboratory services	3,000	GPD		GPD	D	12/1/05
Sanitary		4,000	GPD		GPD	D	12/1/05
	Total Flow Avg =	**7,000**		**Max =**			

PRETREATMENT TYPES

SP	EFF DATE	TYPE	DESCRIPTION
001	12/29/1998	DC20	Electrolysis
001	12/29/1998	DC32	Metallic Replacement
001	02/20/2003	DC28	Grease Trap
004	03/03/2004	DC32	Metallic Replacement

PRIORITY POLLUTANTS

Pollutant Description	Status	Pollutant Description	Status	Pollutant Description	Status
Silver (Total)	KP	Mercury (Total)	KP	Phenol	KP
2,4-Dinitrophenol	KP	Methylene Chloride	KP	Chloroform	KP

EXTRA STRENGTH SURCHARGE INFORMATION

Report No. PIMS012A 12/08/2005 9:46:25 am
Data Date & Time: 12/08/2005 9:46:25 am

PIMS FACILITY CONTACTS

For Account Number **4112195400** **SSM CARDINAL GLENNON CHILDRE**
Located at 1465 South Grand Blvd.
St. Louis MO 63104

Address Type

Contact Type	Contact Name		Contact Title	Phone	Number	Ext.
Office Mailing Address						
Office Contact - Primary	Rich	Cunningham	Director of Safety & Security	OFF	(314)268-4117	
Office Contact 1st Alt	Dodie	Purcell	Risk Manager	OFF	(314)577-5600	
Premise Address						
Field Contact - Primary	Bud	Fredrick	Maintenance Supervisor	OFF	(314)577-5327	
Field Contact 1st Alt	Mark	Stewart	Maintenance Mechanic	OFF	(314)577-5307	
Field Contact 2nd Alt	Jack	Mitchell	Maintenance Mechanic	OFF	(314)577-5600	

PIMS
RE[illegible]RT OF FIELD SAMPLING REQUIREME[illegible]
SSM CARDINAL GLENNON CHILDREN'S HOSPITAL

Account No Entered **4112195400**

SPN	PREMISE ADDRESS	CITY	ST	ZIP
	1465 South Grand Blvd.	St. Louis	MO	63104

001 Project Code: IM= IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2006
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2006
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2006
	T237000	pH	Once/year	Grab	06/30/2006
	T247000	Temperature	Once/year	Grab	06/30/2006
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2006
	T283000	2,4-Dinitrophenol	Once/year	Comp-Time 04 Hrs	06/30/2006
	T332000	Chloroform	Once/year	Grab	06/30/2006
	T371000	Methylene Chloride	Once/year	Grab	06/30/2006
	T388000	Phenol	Once/year	Comp-Time 04 Hrs	06/30/2006
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2006
LGRIV (Starts - 08/14/199	T999000	Total Toxic Organics	Once/year	Grab	06/30/2006

004 Project Code: IM= IPD - Company - MSD

Pollutant Group	Poll Code	Pollutant Description	Frequency	Sample Type	End Date
	T208000	Biochemical Oxygen Demand (5 Day)	Once/year	Comp-Time 04 Hrs	06/30/2006
	T213000	Chemical Oxygen Demand	Once/year	Comp-Time 04 Hrs	06/30/2006
	T234000	Oil and Grease (Total)	Once/year	Grab	06/30/2006
	T237000	pH	Once/year	Grab	06/30/2006
	T247000	Temperature	Once/year	Grab	06/30/2006
	T256000	Total Suspended Solids	Once/year	Comp-Time 04 Hrs	06/30/2006
	T283000	2,4-Dinitrophenol	Once/year	Comp-Time 04 Hrs	06/30/2006
	T332000	Chloroform	Once/year	Grab	06/30/2006
	T371000	Methylene Chloride	Once/year	Grab	06/30/2006
	T388000	Phenol	Once/year	Comp-Time 04 Hrs	06/30/2006
	T393000	Silver (Total)	Once/year	Comp-Time 04 Hrs	06/30/2006
LGRIV (Starts - 08/14/199	T999000	Total Toxic Organics	Once/year	Grab	06/30/2006

FOR MSD USE ONLY	
Account Number: 4112 1954-00	Category: SIU CIU SUR HIFL NOTXWST TXWST NOPRFL MULTI
TA: Bigwell	
TS: old mill creek	Reviewer: [signature] Date: 12/30/04

METROPOLITAN ST. LOUIS SEWER DISTRICT
OFFICE 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 develop the permit.

SECTION A - GENERAL INFORMATION

1. Company Name: SSM Cardinal Glennon Childrens Hospital
2. Mailing Address: 1465 S. Grand Blvd.
   St. Louis MO Zip Code: 63104-1095
3. Premise Address: 1465 S Grand & 1505 South Grand
   St. Louis MO Zip Code: 63104-1095
4. Person Authorized to Sign Reporting Documents:
   Name and Title: Bud Frederick Facilities manager.
   Tel. No.: (314) 577-5327
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 ACTIVITY	SIC NUMBER
a.	Health Care Hospital	8062
b.		
c.	DEC 2 1 2004	
d.		

MSD 035611

Company Name: Sisters Cardinal Glennon Children's Hosp
Premise Address: 1465 S Grand Blvd
Account Number: 4112 1954-00

SECTION B - PRODUCT OR SERVICE INFORMATION (Continued)

2. Are primary activities generally batch or continuous processes ? [] batch [X] 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.

ACTIVITY	SIC NO.	ACTIVITY	SIC NO.
[] Adhesive and Sealants Mfg.		[] Mineral Mining and 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		[X] Photographic Processing	
[] Explosive Mfg.		[] Plastic Molding and Forming	
[] Feedlots		[] Porcelain Enameling	
[] Ferroalloy Mfg.		[] Printing and Publishing	
[] Fertilizer Mfg.		[] Pulp, Paper and Paperboard Mfg.	
[X] Food Preparation		[] Q.C. Laboratory	
[] Fruit and Vegetable Processing		[] R & D Laboratory	
[X] General Offices		[] Radioactive Materials Processing	
[] Glass Mfg.		[] Repair Shop, Garage	
[] Grain Milling		[] Rubber and Rubber Products Mfg.	
[] Gum and Wood Chemical Mfg.		[] Seafood Processing	
[] Hazardous Waste Treatment, Storage or Disposal		[] Soap and Detergent Mfg.	
[] Health Care or 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 (Describe) _____	

6. Are your activities subject to seasonal variation? [] Yes [X] No
If "Yes," explain and indicate the month(s) of peak activity: _____

DEC 21 2004

MSD 035612

Company Name: SSM Cardinal Glennon Children's Hosp.
Premise Address: 1465 S. Grand Blvd.
Account Number: 4112194-00

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s):
   - [X] City of St. Louis Water Div.
   - [ ] St. Louis County Water Co.
   - [ ] Other municipal source ______
   - [ ] Hauled by contractor
   - [ ] Surface water
   - [ ] Private well
   - [ ] Other (describe) ______

2. Water Bill Addressee: SSM Cardinal Glennon Childrens Hospital
3. Water Service Account Numbers: ______
4. List past twelve months water usage from: [ ] Water Bills [ ] Other Sources

Period	From		Through		Water Bills	Other Sources
	Mo	Yr	Mo	Yr	Ccf	Ccf
1st 3 mo period	01	04	04	04	16076	
2nd 3 mo period	04	04	07	04	11605	
3rd 3 mo period	07	04	10	04	10294	
4th 3 mo period	10	04	12	04	12195	

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	38,000
b. Irrigation & lawn watering	11,874
c. Non-contact cooling water	2620
d. Contact cooling water	
e. Process water	
f. Plant & equipment washdown	
g. Boiler	14,487
h. Other uses Hospital waste	36,115
i. Total of USES (6a through 6h):	103096

7. Identify all water losses and wastewater discharges from your facility:

Water Losses & Discharges	Estimated Average Daily Loss/Discharge (Gallons per Day)
a. Municipal sewer	81,446
b. Watercourse, storm drain, ground	11,874
c. Haulers	
d. Evaporation	9,776
e. Contained in product	
f. Total of LOSSES & DISCHARGES:	103,096

(7a through 7e must equal total at 6i)

8. For each activity you listed in Sections B.1 and B.5, list the average water usage and average wastewater discharge. Attach additional sheets, if needed.

Item No.	Activity	Type of Discharge			Avg. Water Use (GPD)	Avg. Discharge to Mun Sewer (GPD)	Date when activity first commenced at this facility
		Cont	Batch	None			
	Sanitary	[ ]	[X]	[ ]	38,000	38,000	
	Lawn irrigation	[ ]	[ ]	[X]	11,874	0	
	Hospital Waste	[ ]	[X]	[ ]	36,115	36,115	
	NCCW, Boilers Cool. Tower Blowdown	[ ]	[X]	[ ]	17,107	7,771	
		[ ]	[ ]	[ ]			
		[ ]	[ ]	[ ]			DEC 2 1 2004

7/00

MSD 035613

Company Name: St. Jude Cardinal Glennon Children's Hospital
Premise Address: 1465 N. Grand Blvd
Account Number: 4112 1954 00

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise, which shows:
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or watercourse.

2. List each sampling point identified in 1.c, d and e above and each connection for which there is no sampling point. Assign a sequential reference number to each location, starting with No. 1. Attach additional sheets, if needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection (Vent, manhole, valve, tank or other appurtenance. Indicate size and location)	Total Daily Average Flow (GPD)
1		MH on sidewalk S of Vista Ave	74,445
2		E of overhead walkway Flow SE	
3			
4		MH 3' W from SW corner emergency Bld.	7000
5			

SECTION E - WASTEWATER INFORMATION

1. For each point listed in D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets, if needed.

Type of Wastewater	Discharge Quantity (GPD) for each sampling point or connection listed in D.2					Facility Total (See instr.)
	1	2	3	4	5	
a. Sanitary	34,000			4000		38000
b. Irrigation & lawn watering						
c. Non-contact cooling water	220					220
d. Contact cooling water						
e. Process (From C.8) DMK						
Hospital Waste	~~38000~~			3000		3000
f. Plant & equipment washdown						
g. Boiler blowdown						
h. Other (Cooling Tower Blowdown)						
Regeneration waste (C.5)						
Totals (Same as D.2):	74445			7000		81446

2. If any of the above points discharge to a watercourse or to a separate storm sewer, complete the following:

NPDES Outfall Number					
NPDES Permit Number					

3. Do any of the above sampling points also convey stormwater from your premise ?

☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☒ Yes ☐ No	☐ Yes ☐ No

DEC 2 1 2004

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

MSD 035614

Company Name: Wm S[illegible]al Clemens Children Hospital
Premise Address: 1426 W. Grand Blvd
Account Number: 4112 19[illegible].00

SECTION E - WASTEWATER INFORMATION (Continued)

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
001	Silver recovery unit.
004	Silver recovery unit

6. Does your facility have:
   a. A spill control plan ? [X] Yes [ ] 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 analyses have been performed on the wastewater discharges from your facility attach copies 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 one of the four boxes by each listed chemical to indicate whether it is: "Suspected Absent," "Known Absent," "Suspected Present" or "Known Present" ON YOUR PREMISE. Any chemical which is used in your manufacturing or service activity or is generated as a product or as a by-product should be marked "Known Present." 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)	[ ]	[ ]	[ ]	[ ]
4.	arsenic (total)	[X]	[X]	[ ]	[ ]
5.	beryllium (total)	[ ]	[X]	[ ]	[ ]
6.	cadmium (total)	[ ]	[ ]	[ ]	[ ]
7.	chromium (total)	[ ]	[ ]	[ ]	[ ]
8.	copper (total)	[ ]	[X]	[ ]	[ ]
9.	lead (total)	[ ]	[ ]	[ ]	[ ]
10.	mercury (total)	[ ]	[X]	[ ]	[ ]
11.	nickel (total)	[ ]	[X]	[ ]	[ ]
12.	selenium (total)	[ ]	[X]	[ ]	[ ]
13.	silver (total)	[ ]	[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				
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.	chloroethane *	[ ]	[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				
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]	[ ]	[ ]

Continued on next page

Company Name: NM Cardinal Glennon Children's Hosp.
Premise Address: 1465 S. Grand Blvd
Account Number: 4/12/1954.00

SECTION E - WASTEWATER INFORMATION (Continued)

Priority Pollutant Information (Continued)

SA = "Suspected Absent" KA = "Known Absent" SP = "Suspected Present" KP = "Known Present"

Item No.	PRIORITY POLLUTANT	SA	KA	SP	KP
71.	(cis & trans) 1, 3-dichloropropene *	[]	[✓]	[]	[]
72.	dieldrin	[]	[✓]	[]	[]
73.	diethylphthalate *	[]	[✓]	[]	[]
74.	2, 4-dimethylphenol *	[]	[✓]	[]	[]
75.	dimethyl phthalate	[]	[✓]	[]	[]
76.	di-n-butyl phthalate	[]	[✓]	[]	[]
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 *	[]	[✓]	[]	[]

Item No.	PRIORITY POLLUTANT	SA	KA	SP	KP
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 information for each: (Attach additional sheets, if needed.)

ITEM No.	PRIORITY POLLUTANT	HOW USED	ANNUAL USAGE (lbs)	LOSS TO SEWER (lbs)
10	mercury		0.1	0.0
13	silver		Unknown	0.0
49	Chlorodform		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

DEC 2 1 2004

7/00 * Not on site verified with contractor and S/S monitoring results. [illegible]

Company Name: St. Louis Cardinal Glennon Children's Hosp.
Premise Address: 1465 S. Grand Blvd.
Account Number: 4112195F-00

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. Note: Be sure to include wastewaters listed in Section C.7.c.
   If "No" skip remainder of this section.

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			[]	[]	[]
[X] Equipment Oils and/or Grease	30	gal.	[X]	[]	[X]
[X] Infectious Waste	5,700	LBS	[X]	[]	[X]
[] Inks/ Dyes			[]	[]	[]
[] Kitchen/Food Service Grease			[]	[]	[]
[] Organic Compounds			[]	[]	[]
[] Paints or Paint Sludges			[]	[]	[]
[] Pesticides			[]	[]	[]
[] Pretreatment Sludges			[]	[]	[]
[] Radioactive Waste			[]	[]	[]
[] Solvents/Thinners			[]	[]	[]
[] Other			[]	[]	[]
			[]	[]	[]
			[]	[]	[]

3. List your USEPA and/or MDNR Hazardous Waste generator numbers:
   USEPA MOD 075904839 MDNR 001310

SECTION G - INDUSTRIAL WASTE SURCHARGE INFORMATION

1. Provide the following analytical information for each sampling point or each connection to the public sewer only if your water usage exceeds 80 Ccf per month. Representative samples of the wastewater in each sewer must be collected and analyzed for the listed parameters. Report the daily average concentrations in mg/l for each point.

Parameter	Sewer Reference Numbers (Refer to Section D.2) If more than 5, attach additional sheets				
	1	2	3	4	5
Total Solids					
Total Suspended Solids					
Biochemical Oxygen Demand (5 day)					
Chemical Oxygen Demand					
Flow (GPD)					
Date Sampled					
Time Sampled					
Type of Sample					

Collected By (Name of organization):
Analyzed By (Name of organization): DEC 21 2004

last quarter permit results.

Company Name: St. Louis Cardinal Glennon Children's Hosp.
Premise Address: 1465 S. Grand Blvd
Account Number: 4112 1954-00

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: Bud Frederich
   Facilities manager. Tel. No.: (314) 577-5327

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: Bud Frederich
   Facilities manager. Tel. No.: (314) 577-5327

   Signature: Bud Frederich Date: 12/20/04

List attachments included with this questionnaire:

DEC 8 1 2004

MSD 035618

MSD

Metropolitan
St. Louis Sewer
District

FOR MSD USE ONLY		
ACCOUNT NUMBER: 4112 1954-00	CATEGORY: 1 2 3 4 5 6 9	
TA: BP		
TS: OLD MILL CK	FG Reviewer's Initials	11/5/99 Date

RECEIVED
OCT 29 1999
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, MO. Zip Code 63104-1095
3. Premise Address: 1465 SOUTH GRAND & 1505 SOUTH GRAND
   ST. LOUIS, MO. Zip Code 63104-1095
4. Person Authorized to Sign Reporting Documents:
   Name and Title: KEVIN R. JULIUS, DIRECTOR OF SAFETY & SECURITY
   Tel No. 314-268-4117
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.		

MSD

Company Name: CA[illegible]NAL GLENNON CHILDREN'S HOSP.
Premise Address: 1465 SO. GRAND
Account Number: 41121954-00

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		[X] Photographic Processing	
[] Explosive Mfg.		[] Plastic Molding and Forming	
[] Feedlots		[] Porcelain Enameling	
[] Ferroalloy Mfg.		[] Printing & Publishing	
[] Fertilizer Mfg.		[] Pulp, Paper & Paperboard Mfg	
[X] Food Preparation		[] Q. C. Laboratory	
[] Fruits and Vegetable Processing		[] R & D Laboratory	
[X] General Offices		[X] 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.

REC[illegible]
OCT 2 9 1993
Environmental Compliance

MSD

Company Name: SSM Cardinal Glennon Childrens Hospital
Premise Address: 1465 South Grand Blvd.
Account Number: 4112 1954.00

SECTION C - WATER CONSUMPTION AND WASTEWATER DISCHARGES

1. Raw Water Source(s):
   - [x] City of St. Louis Water Div.
   - [ ] St. Louis County Water Co.
   - [ ] Other municipal source _____
   - [ ] Hauled by contractor
   - [ ] Surface water
   - [ ] Private well
   - [ ] Other (describe) _____

2. Water Bill Addressee: SSM Cardinal Glennon Childrens Hospital

3. Water Service Account Numbers: S-22637000

4. List past twelve months water usage from:

									[x] Water Bills	[ ] Other Sources
1st 3 mo period	01	Mo	03	Yr through	08	Mo	03	Yr	15464 Ccf	Ccf
2nd 3 mo period	08	Mo	03	Yr through	10	Mo	03	Yr	17,850 Ccf	Ccf
3rd 3 mo period	10	Mo	03	Yr through	01	Mo	04	Yr	12,529 Ccf	Ccf
4th 3 mo period		Mo		Yr through		Mo		Yr	Ccf	Ccf

5. Describe any treatment or conditioning process performed on the raw water before use: Water softener

6. Identify all water uses within your facility:

Water Uses	Estimated Average Daily Use (Gallons per day)
a. Sanitary	38000
b. Irrigation & lawn watering	10,850
c. Non-contact cooling water	2,619
d. Contact cooling water	
e. Process water	
f. Plant & equipment washdown	
g. Boiler	9,735
h. Other uses Hospital waste	33,000
i. Total of USES (6a through 6h):	94,204

7. Identify all water losses and wastewater discharges from your facility:

Water Losses & Discharges	Estimated Average Daily Loss/Discharge (Gallons per Day)
a. Municipal sewer	74421
b. Watercourse, storm drain, ground	10,850
c. Haulers	
d. Evaporation	8,933
e. Contained in product	
f. Total of LOSSES & DISCHARGES: (7a through 7e must equal total at 6i)	94,204

8. For each activity you listed in Sections B.1 and B.5, list the average water usage and average wastewater discharge. Attach additional sheets, if needed.

Item No.	Activity	Type of Discharge: Cont	Batch	None	Avg. Water Use (GPD)	Avg. Discharge to Mun Sewer (GPD)	Date when activity first commenced at this facility
	Sanitary	[ ]	[x]	[ ]	38000	38000	
	Lawn Irrigation	[ ]	[ ]	[x]	10850	0	
	Hospital Waste	[ ]	[x]	[ ]	33000	33000	
	NCCW Boiler Blowdown, C.T. Blowdown	[ ]	[x]	[ ]	12,354	3,421	
		[ ]	[ ]	[ ]			
		[ ]	[ ]	[ ]			

Bud Frederich
3-9-04

reflects expansion of hospital during inspection
1/15/04

7/00

MSD 035621

MSD

Company Name: Cardinal Glennon Children's Hosp.
Premise Address: 1465 So. Grand
Account Number: 41121954-00

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	7-23 1998	through	10-18 1998		11535 Ccf	_____ Ccf
b. 2nd quarter	10-20 1998	through	1-27 1999		4700 Ccf	_____ Ccf
c. 3rd quarter	1-27 1999	through	4-23 1999		10476.7 Ccf	_____ Ccf
d. 4th quarter	4-19 1999	through	7-29 1999		11812 Ccf	_____ Ccf

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	53800
b. Irrigation & lawn watering	10,850
c. Non-contact cooling water	4225
d. Contact cooling water	—
e. Process water	9871
f. Plant & equipment washdown	—
g. Boiler	—
h. Other uses Soft. Regen.	220
i. Total of USES (6a through 6h):	78946

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	64296
b. Watercourse, storm drain, ground	10850
c. Haulers	—
d. Evaporation	3800
e. Contained in product	—
f. Total of LOSSES & DISCHARGES: (7a through 7e must equal total at 6i)	78946

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	None	Avg Water Use (GPD)	Avg Discharge to Mun sewer (GPD)	Date When Activity First Commenced At This Facility
B1	Healthcare & Hospital	X			54000	54000	1957
B5	Surgical Operations	X			3297	3297	1957
B5	Food Prep.	X			6574	6574	1957

RECEIVED
JAN 28 2000
Environmental Compliance

MSD

Company Name: Cardinal Glennon Childrens Hosp
Premise Address: 1465 So. Grand
Account Number: 41121954-00

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 Childrens Hospital
3. Water Service Account Numbers: 407328-227084, 407331-227086, 405153-226370
4. List past twelve months water usage from:

				[✓] Water Bills	[] Other Sources
a. 1st quarter	7-22 1998	through	10-18 1998	11535 Ccf	_____ Ccf
b. 2nd quarter	10-18 1998	through	1-25 1999	4700 Ccf	_____ Ccf
c. 3rd quarter	1-25 1999	through	4-17 1999	10476.7 Ccf	_____ Ccf
d. 4th quarter	4-17 1999	through	7-17 1999	1182.3 Ccf	_____ Ccf

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	—
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	2762
e. Contained in product	
f. Total of LOSSES & DISCHARGES: (7a through 7e must equal total at 6i)	

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	None	Avg Water Use (GPD)	Avg Discharge to Mun sewer (GPD)	Date When Activity First Commenced At This Facility
1	Healthcare & Hospital	[]	[]	[]	33114	33114	unknown
		[]	[]	[]			
		[]	[]	[]			
		[]	[]	[]			
		[]	[]	[]			
		[]	[]	[]			

SEE PG 3 DTD 1/28/00 FG

RECEIVED
DEC 29 1999
Environmental Compliance

MSD

Company Name: CARDINAL GLENNON CHILDRENS HOSP.
Premise Address: 1465 So. Grand
Account Number: 41121954-00

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 CHILDREN'S HOSPITAL
3. Water Service Account Numbers: 407328-227084, 407331-227086, 405153-226370
4. List past twelve months water usage from:

					[✓] Water Bills	[] Other Sources
a. 1st quarter	7-23 1998	through	10-18 1998		11535 Ccf	_____ Ccf
b. 2nd quarter	10-20 1998	through	1-27 1999		4700 Ccf	_____ Ccf
c. 3rd quarter	1-27 1999	through	4-23 1999		10476.7 Ccf	_____ Ccf
d. 4th quarter	4-19 1999	through	7-29 1999		11812 Ccf	_____ Ccf

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	—
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	2762
e. Contained in product	
f. Total of LOSSES & DISCHARGES: (7a through 7e must equal total at 6i)	

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	None	Avg Water Use (GPD)	Avg Discharge to Mun sewer (GPD)	Date When Activity First Commenced At This Facility
1	HEALTHCARE & HOSPITAL	[]	[]	[]	33114	33114	UNKNOWN
		[]	[]	[]			
		[]	[]	[]			
		[]	[]	[]			
		[]	[]	[]			
		[]	[]	[]			

SEE PG 3 DTD 1/2

MSD Hospital

Company Name: South Cardinal Glennon Children's Hosp
Premise Address: 1465 South Grand Blvd.
Account Number: 41121954-00

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise, which shows:
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or watercourse.

2. List each sampling point identified in 1.c, d and e above and each connection for which there is no sampling point. Assign a sequential reference number to each location, starting with No. 1. Attach additional sheets, if needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection (Vent, manhole, valve, tank or other appurtenance. Indicate size and location)	Total Daily Average Flow (GPD)
1		MH on sidewalk S of Vista Ave E of overhead walkway, flow from SE.	67,241
2			~~7,000~~
3			
4		MH 3'W from SW corner of emergency building	7000
5			

SECTION E - WASTEWATER INFORMATION

1. For each point listed in D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets, if needed.

Type of Wastewater	Discharge Quantity (GPD) for each sampling point or connection listed in D.2					Facility Total (See instr.)
	00 1	2	3	00 4	5	
a. Sanitary	34000			4000		38000
b. Irrigation & lawn watering						
c. Non-contact cooling water	161					161
d. Contact cooling water						
e. Process (From C.8)						
Hospital waste	30,000			3000		33000
f. Plant & equipment washdown						
g. Boiler blowdown	1630					1630
h. Other (Cooling tower blowdown	1650					1650
Regeneration waste (C.5)						
Totals (Same as D.2):	67,421			7000		74,421

2. If any of the above points discharge to a watercourse or to a separate storm sewer, complete the following:

NPDES Outfall Number					
NPDES Permit Number					

3. Do any of the above sampling 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

Bud Frederick 3-9-04 changes reflect hospital expansion during inspection DNR

MSD 035625

MSD

Company Name: [redacted]linal Glennan Childrens Hosp.
Premise Address: 1465 So. Grand
Account Number: 4112195 4-00

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or water course.

2. List each sampling point identified in 1.c, d and e above and 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 needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection (Vent, manhole, valve, tank or other appurtenance. Indicate size and location)	Total Daily Average Flow (GPD)
1	24"	Manhole in Vista Ave. Sidewalk, NE Corner of Property	62596
2	8"	Vent on Parking Lot, west side of Glennan Office Bldg.	1700
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. For each point listed in D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets if needed.

Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection listed in D.2					Facility Total.
	Main 1	Office Bldg. 2	3	4	5	(See Instructions)
a. Sanitary	52017	1700				53717
b. Irrigation & Lawn Watering	–					
c. Non-Contact Cooling Water	488					488
d. Contact Cooling Water	–					
e. Process (From C.8)						
Surg. Ops	3297					3297
Food Prep	6574					6574
f. Plant & Equipment Washdown						
g. Boiler Blowdown						
h. Other (_____)						
Regeneration Waste (C.5)	220					220
Totals (Same as D.2)	62596	1700				64296

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					

RECEIVED
JAN 28 2000
Environmental Compliance

3. Do any of the above sampling points also convey stormwater from your premise ?

[] Yes [X] No	[] Yes [X] No	[] Yes [] No	[] Yes [] No	[] Yes [] No

4. Do you pretreat any of the wastes discharged through any of the above points?

[X] Yes [] No	[] Yes [X] No	[] Yes [] No	[] Yes [] No	[] Yes [] No
Silver Recovery				

MSD

Company Name: [redacted]INAL GLENNON CHILDRENS
Premise Address: 1465 SO GRAND
Account Number: 4112954-00

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or water course.

2. List each sampling point identified in 1.c, d and e above and 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 needed.

Reference Number	Sewer Size (Inches)	Description of sewer sampling point or connection (Vent, manhole, valve, tank or other appurtenance. Indicate size and location)	Total Daily Average Flow (GPD)
1	24"	MANHOLE IN VISCA AVE SIDEWALK, NE CORNER OF PROPERTY	32256
2	8"	HOLE ON PARKING LOT, WEST SIDE OF GLENNON OFFICE BLDG	858
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. For each point listed in D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets if needed.

Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection listed in D.2					Facility Total.
	MAIN 1	OFFICE BLDG 2	3	4	5	(See Instructions)
a. Sanitary	28000	858				
b. Irrigation & Lawn Watering	2170					
c. Non-Contact Cooling Water	0488					
d. Contact Cooling Water						
e. Process (From C.8)						
	1836					
f. Plant & Equipment Washdown						
g. Boiler Blowdown						
h. Other (_____)						
Regeneration Waste (C.5)						
Totals (Same as D.2)	32494	858				

2. If any of the above points discharge to a watercourse or a separate storm sewer, complete the following: N/A

NPDES Outfall Number					
NPDES Permit Number					

3. Do any of the above sampling points also convey stormwater from your premise ? N/A

	[] 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?

	[X] Yes [] No	[] Yes [] No	[] Yes [] No	[] Yes [] No	[] Yes [] No

Silver Recovery

SEE PG 4 DTD 1/28/00 FG

RECEIVED OCT 29 1999 Environmental Services

MSD

Company Name: Cardinal Glennon Children's Hosp.
Premise Address: 1465 So. Grand
Account Number: 41121954-00

SECTION D - SEWER CONNECTION INFORMATION

1. Attach a scale drawing of your premise which shows:
   a. All buildings, structures, alleys, streets and other pertinent features.
   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. A sampling point for each connection to the public sewer.
   d. A sampling point for each discharge from a federally regulated categorical process.
   e. A sampling point for each discharge to a separate storm sewer or water course.

2. List each sampling point identified in 1.c, d and e above and 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 needed.

Reference Number	Sewer Size (inches)	Description of sewer sampling point or connection (Vent, manhole, valve, tank or other appurtenance. Indicate size and location)	Total Daily Average Flow (GPD)
1	24"	Manhole on Vista Ave Sidewalk, NE Corner of Property	32256
2	8"	Hole on parking lot, west side of Glennon Office Building	858
3			
4			
5			

SECTION E - WASTEWATER INFORMATION

1. For each point listed in D.2 above, list the wastewater discharge corresponding to each water usage listed in Section C.6. Attach additional sheets if needed.

Type Wastewater	Discharge Quantity (GPD) for each sampling point or connection listed in D.2					Facility Total.
	Main 1	Office Bldg. 2	3	4	5	(See Instructions)
a. Sanitary	28000	858				
b. Irrigation & Lawn Watering	2170					
c. Non-Contact Cooling Water	0488					
d. Contact Cooling Water						
e. Process (From C.8)						
	1598					
f. Plant & Equipment Washdown						
g. Boiler Blowdown						
h. Other (_____)						
Regeneration Waste (C.5)						
Totals (Same as D.2)	32256	858				

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 sampling 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

RECEIVED
DEC 29 1999
Environmental Compliance

SEE PG 4 DD 1/28/00 FG

MSD 035628

MSD

Company Name: Cardinal Glennon Children's Hosp
Premise Address: 1465 So Grand
Account Number: 41121954-00

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
001	Silver recovery equipment

RECEIVED OCT 29

6. Does your facility have:
   a. A spill control plan? [X] Yes [] 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 analyses have been performed on the wastewater discharges from your facility attach copies 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 one of the four boxes by each listed chemical to indicate whether it is: "Suspected Absent", "Known Absent", "Suspected Present", or "Known Present" ON YOUR PREMISE. Any chemical which is used in your manufacturing or service activity or is generated as a product or as a by-product should be marked "Known Present". 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				
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					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

MSD

Company Name: Cardinal Glennon Children's Hosp
Premise Address: 1465 So Grand
Account Number: 41121954-00

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.

RECEIVED
OCT 29 1999
Environmental Compliance

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

* Silver Bromide generated in Diagnostic Imaging Dept. is recovered & sold to Central States Refining Co. Four Silver Recovery Units are currently in use

3/96

MSD 035630

MSD

Company Name: Cardinal Glennon Children's Hosp
Premise Address: 1465 So Grand
Account Number: 41121954-00

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. Note: Be sure to include wastewaters listed in Section C.7.c.
If "No," skip remainder of this section.

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			[]	[]	[]
[X] Equip. Oils and/or Grease	30	GALLONS	[]	[]	[X]
[X] Infectious Waste	5,700	LBS	[]	[]	[X]
[] Inks/Dyes			[]	[]	[]
[] Kitchen/Food Service Grease			[]	[]	[]
[] Organic Compounds			[]	[]	[]
[] Paints or Paint Sludges			[]	[]	[]
[] Pesticides			[]	[]	[]
[] Pretreatment Sludges			[]	[]	[]
[] Radioactive Waste			[]	[]	[]
[] Solvents/Thinners			[]	[]	[]
[] Other			[]	[]	[]
			[]	[]	[]
			[]	[]	[]

3. List your USEPA and/or MDNR Hazardous Waste generator numbers:

USEPA MOD 075904839 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 wastewater 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	176				
Biochemical Oxygen Demand$_5$	285				
Chemical Oxygen Demand	519				
Flow (gpd)					
Date Sampled	7-30-99				
Time Sampled	7:30AM-4:30pm				
Type of Sample					

RECEIVED
OCT 29 1999
Environmental Compliance

MSD 035631

MSD

Company Name: Cardinal Glennon Children's Hosp.
Premise Address: 1465 So. Grand
Account Number: 4112195 4-00

SECTION G - INDUSTRIAL WASTE (Cont'd)

2. **Sample handling information:** **Organization Name and Address**

   a. **Samples collected by:** Midwest Testing Laboratories - 2645 Gravois Ave, St. Louis, Mo 63118

   b. **Samples analyzed by:** Midwest Testing Laboratories, 2645 Gravois Ave, St. Louis, Mo. 63118

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: Kevin R. Julius, Director, Safety & Security

   Tel No. 314-268-4117

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: KEVIN R. JULIUS, DIRECTOR OF SAFETY & SECURITY

   Tel No. 314-268-4117

   Signature Kevin R Julius **Date** 10-28-99

List attachments included with this questionnaire:

MSD-DEC Sampling Map

RECEIVED
OCT 29 1999
Environmental Services

MSD

FOR MSD USE ONLY

ACCOUNT NUMBER: 4112954-00 CATEGORY: 1 2 3 4 5 6 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: ~~xxxxxx~~ 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 035633

MSD

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 1996
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.

MSD

Company Name:
Premise Address:
Account Number:

REVISED

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:
3. Water Service Account Numbers:
4. List past twelve months water usage from:

			5/13	■ Water Bills	[] Other Sources
a. 1st quarter	3- 19	through 4-21 1995	73	3400 Ccf	Ccf
b. 2nd quarter	4-20 1995	through 7-21 19	80	4330 Ccf	Ccf
c. 3rd quarter	7-22 1995	through 10-23 1995	73	4960 Ccf	Ccf
d. 4th quarter	10-24 1995	through 1-25 1996	77	3050 Ccf	Ccf

303 + 15,740 = 16,043 X 748. = 12,000,164.

5. Describe any treatment or conditioning process performed on the raw water before use:

6. Identify all water uses within your facility:

Water Uses	Estimated average daily use (Gallons per Day)
a. Sanitary 25000 958	25858
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): 858 + 32,256	33,114

31,278

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	
b. Watercourse, storm drain, ground	2170
c. Haulers	—
d. Evaporation	3250
e. Contained in product	—
f. Total of LOSSES & DISCHARGES: (7a through 7e must equal total at 6i)	

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
		[]	[]			
		[]	[]			
		[]	[]			
		[]	[]			
		[]	[]			

** TOTAL PAGE.002 **

MSD 035635

MSD

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.	Type of Discharge Batch	Avg Use (GPD)	Avg Discharge (GPD)	Date When Activity First Commenced At This Facility
1	Health Care & Hospital	[ ]	[ ]	33114	33114	unknown
		[ ]	[ ]			
		[ ]	[ ]			
		[ ]	[ ]			
		[ ]	[ ]			

RECEIVED
MAR 1 1 1996
Environmental Compliance

3/94

MSD 035636

MSD

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	0488					
d. Contact Cooling Water	xxxxx					
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				

MSD

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 1 1 1995
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*	[ ]	[ ]	[ ]	[ ]
2.	cyanide (total)	[ ]	[X]	[ ]	[ ]	40.	bromomethane*	[ ]	[ ]	[ ]	[ ]
3.	antimony (total)	[ ]	[X]	[ ]	[ ]	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.	diethylphthalate*	[ ]	[ ]	[ ]	[ ]
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

MSD

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

Company Name: Cardinal Glennon Children's Hosp
Premise Address: 1465 So. Grand
Account Number: 112195400

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	xxxxx 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 11 1995
Environmental Compliance

MSD

Company Name: Cardinal Glennon Children'
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

MSD

4112 1954-00M
CARDINAL GLENNON CHILDREN'S HOSPITAL
1465 SOUTH GRAND BLVD.
ST. LOUIS, MO 63104-1095

OLDER INDUSTRIAL QUESTIONNAIRES HAVE BEEN REMOVED AND PLACED INTO BROWN FOLDER BEHIND THIS FILE