

DEPARTMENT of ENVIRONMENT and NATURAL RESOURCES

PMB 2020

JOE FOSS BUILDING 523 EAST CAPITOL AVENUE PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

July 17, 2015

Mayor City of Harrisburg PO Box 26 Harrisburg, SD 57032

RE: Surface Water Discharge Compliance Inspection (SWD Permit Number: SDG823728)

Dear Mayor Ramstad:

The South Dakota Department of Environment and Natural Resources conducted a Surface Water Discharge Compliance Inspection of the city's wastewater treatment facility on June 17, 2015. I appreciate Dan Fink and Toby Huizenga's time and cooperation in supplying the requested information.

I have attached an inspection summary and a copy of the inspection report. Please pay special attention to the Inspection Summary tables and implement the required corrective actions as soon as possible. All corrective actions taken will be reviewed during our next inspection at your facility.

Thank you for your continued efforts to protect the environment and natural resources of South Dakota. Please review this report for accuracy, and respond within thirty days with any needed corrections. If you have any questions about this letter or the inspection reports, please contact me at (605) 362-3543.

Sincerely,

Ŧ

Jill M. Riedel, E.I.T. Engineer II Surface Water Quality Program

Enclosures

cc: Dan Fink, City of Harrisburg, Public Works Director SWD File - Pierre

INSPECTION SUMMARY

Facility: City of Harrisburg WWTF

SWD Permit: SDG823728

Inspection Date: June 17, 2015

The following comments and corrective actions are *recommended* and are items that will improve the operation of your facility.

COMMENTS	RECOMMENDED CORRECTIVE ACTIONS
There is some weed growth in the riprap on the stabilization ponds.	Continue efforts to eliminate weed growth to prevent dike damage from erosion. This vegetation also tends to inhibit the air action on the ponds, which in tum inhibits the biological action necessary to treat the wastes and keep odors to a minimum.
We would like to encourage you to give Mr. Fink, Mr. Huizenga, or another representative of Harrisburg the opportunity to attend the wastewater training courses sponsored by the state to upgrade skills and share knowledge concerning the operation and maintenance of municipal wastewater systems.	For more information as to dates and locations of upcoming courses in your area, contact South Dakota Association of Rural Water Systems, under contract with DENR, at 5009 W. 12th Street, Suite 5, Sioux Falls, SD 57106. Phone: (605) 336-7219 Website: htt12://www.sdarws.com.



NO DISCHARGE INSPECTION CHECKLIST

SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

I. GENEID\.L IN	FORMATIC	<u> </u>			
Name <u>C</u>	ty of Harrisburg				
Location <u>20</u>	3 S Prairie	3 S Prairie			
SWD Permit No. SI	DG823728				
Contact Person / Title	Dan Fink, '	Dan Fink, WW Operator Phone Number			(605) 767-0075
Responsible Party/Title	Reed Rams	stad, Mayor	Pho	one Number	(605)743-5872
Persons present during	the inspection	:			
Name		Title	I Phone Number		Affiliation
Dan Fink		Public Works	Director <i>I</i> (605) 2	01-6570	City of Harrisburg
Toby Huizenga		Wastewater Su	upervisor I (605) 2	31-6168	City of Harrisburg
Jill Riedel		Enginee	r II <i>I</i> (605) 773-33	51	SDDENR
Mailing Add ress	PO Box 26 H	arrisburg, SD 5′	7032		
Inspection Date	June 17 2015	<u> </u>	Last Inspection	Date	Onsite: August 15, 2011
Entrance Time	10:15 AM		Exit Time		11:45 AM
Permit Effective Date	October 01, 2	October 01, 2011 Permit Expiration Date		September 30, 2016	
Type of "No Dischory					
Type of "No Discharg	ge Facility:				
Stabilizatio	on Ponds Only	D Oth	ier:		
	5				
	• • •	1 000			250.000 1
Design Population Ec	uvalent	4890	Average De	sign Flow	250,000 gpd
Present Population Se	erved	4,089 (2010 cer	nsus)		
				2008 -floati	na serators
		Dat	es of Facility		tation to pump WW to
Date Facility Began Operation 1999_Upgrades Sioux Falls					
Industrias Conved to	Eagility				
(list names of industri	Industries Served by Facility (list names of industries) None				
(inst numes of industri					

Facility Description:

The city of Harrisburg operates a wastewater treatment facility located about 112 mile south of the city in Lincoln county. The wastewater treatment facility serves a population of 958 (2000 Census), with no known industrial contributions. Wastewater flows by gravity to the three-cell stabilization pond system, which was designed for total retention. The wastewater enters cell one (10.21 acres) and flows in series to cell two

(10.18 acres) and cell three (19.60 acres). The city constructed this system in 1999. The collection system consists of 20,000 linear feet of sanitary sewer and a collection system pumping station. In 2010, the city constructed a lift station and piping to pump excess wastewater to the city of Sioux Falls.

Does the facility match the above description? Yes

Is a permit modification needed? No

II. PERSONNEL AND BUDGET REVIEW

3

Number of Personnel:

Certification	Class I	Class II	Class III	Class IV
Treatment	Χ,Χ			
Collection	Х	Χ, Χ		
Stabilization Pond	Х, Х			
State certification requirements (if required)	Class I Wastewater Treatment Class IIWastewater Collection			

Budget: FY 2014

\$66 <u>6,417</u> .23	Residential _Sewer Use Fee	gallons water used; +\$3.06/1,000 gallons water used for surcharges
\$ 760,424.95	Commercial Sewer Use Fee	Same as Residential
-	• • •	Pond 3 to Pond 1, relining
<u>Budg.et</u> a <u>ndsavin</u>	. <u>g.s</u>	
	\$ 760,424.95 Installing a recisome manholes	\$ 66 <u>6,417</u> .23_Sewer Use Fee Commercial

\$15.91 flat rate +\$3.83/1,000

Comments: No additional comments

III. PERMIT VERIFICATION

		Yes	No	NIA
1.	A current copy of the permit is on site.	Х		
2.	Operator is aware of permit conditions (especially unauthorized release procedures).	Х		
3.	O&M manuals for the treatment facility and the lift stations are available.	Х		
4.	Facility is as described in permit. If no, what is different?	Х		
5.	Facility, address and contact information is correct in the SWD Database?	Х		
	(Including: Fees, SSO's, PTD's, Inspections, PDF's, Flooding Reports, etc.)			
6.	Facility, address and contact and permit information is correct in the ICIS Database?	Х		
	(Including: Monitoring and Limits, Inspections, Construction Schedules, etc.)			
7.	Have there been any new, different, or increased loadings to the WWTF since the last inspection? Ifyes, describe.	Х		

Comments: No additional comments

IV. RECORDKEEPING AND REPORTING EVALUATION

- 1. An inspection notebook is maintained for the treatment facility.
- 2. A notebook is maintained for lift station inspections, and/or hour meter readings?
- 3. Discharge Monitoring Reports have been submitted as required (for land application facilities only).
- 4. Information is maintained for the required 3-year period.

If overflows occurred from this facility, the information from questions 5-7 should be entered in the SSO Data base.

- 5. Facility has experienced an emergency release, such as overflows (pond or sanitary sewer) or bypasses (internal, collection system, total). Ifyes, describe the release (dates, total volumes, receiving waters, etc.): On May 27, 2013 <u>heavy rains</u> caused a detention pond overflow and sewer line break that went into the storm sewer
- 6. DENR was notified of any emergency releases (treated and/or untreated). Ifno, why not? Yes
- 7. Samples were collected for all emergency releases/bypasses . Ifyes, list sampling results in the following table. If no, why not? *Yes*

Yes	No	NIA
Х		
Х		
		Х
Х		
entered	in th	e
		-
Yes	No	NIA
Х		

Yes	No	NIA
Х		
Х		
Х		

Comments: No additional comments

V. FACILITY PROCEDURES REVIEW

		Yes	No	NIA
I.	A water balance has been done for the facility. Describe the results.		Х	
•				
2.	Written emergency procedures are established (in the event of a major storm	Х		
2	event, a chemical release into the sewer system, a sewer main break, etc.)		v	
3.	Modifications to the facility have been made since the last inspection. Describe the modifications:		Х	
4.	Facility can be bypassed (internal, collection system, total). Describe bypass procedures:		X	
5.	Sludge has been disposed of at this facility. If yes, describe disposal procedures :		Х	
6.	Hauled waste (septage) or industrial waste is accepted at this facility. If yes,		Х	
	list contact information:			
7.	Chemicals or enzymes are added to the wastewater. If yes, list products:		X	
8.	The facility has experienced problems with industrial or hauled wastes. If yes, ex lain:			Х
-				
9.	Does the facility have sampling kits in case of a discharge or SSO?	Х		

Comments: The facility does pump wastewater from the ponds to the city of Sioux Falls and has sent 33MG to Sioux Falls so far in 2015.

VI. COMPLIANCE SCHEDULE STATUS REVIEW

- 1. Is the facility subject to a compliance schedule either in its permit or in an enforcement action? If yes, note date and type of enforcement action.
- 2. List milestones that remain in the schedule:
- 3. Has facility has missed milestone dates? If yes explain:
- 4. Will the facility meet or do they plan to meet final compliance schedule date?

Comments: Facility is not subject to a compliance schedule.

Yes	No	NIA
	Х	
		Χ
		Х

vn. collection system reew

Pip	ing and Manholes					
Тур	be of Collection System:	DCombined	W Separate	Ο	Both	1
		DOther (explain):				
				Yes	No	NIA
1.	A routine sewer-cleaning schedule is what type of equipment is used? A	•		<u>X</u>		
2.	Sewer backups into basements occur	during high flows. Ifyes, exp	lain:		Х	
3.	The community has a sump pump or Checks sump pump hook up when	•		<u> </u>		
4.	Testing for inflow/infiltration sources inspection. Ifyes, describe testing and problems: <u>Stockwell Engineering</u> issues with the entire town		ix	X , ,		2
5.	Miles of collection system, if known:	20,000 ft (from Facility	Description)			I

Comments: No additional comments

Lift	Stations
1110	Diations

Item	Comments
Number of lift stations	6 area, 1to Sioux Falls
Type of lift stations (wetwell/drywell or submersible)	Wetwell/d rywell for all
List areas served	See below
Inspection frequency	Weekly onsite, continuous Omnisite monitoring
Condition of lift stations	Good, clean
Alternative power source available for each lift station	Yes, backup generators onsite for each and are tested every Tuesday
Wetwell baskets (quantity)	Basket in Coyote only
Cleaning schedule	As-needed
Bar screens (quantity)	None
Cleaning schedule	NA
Screening disposal method	Lagoons
Dehumidifier working properly (if applicable)	Yes
Ventilation system working properly (if aoolicable)	Yes
Type of alarm system	Visible light and Omnisite has alarms for high/low wetwell, pump fail, 2enerator runnin2, etc.
Alarm system working properly	Yes
Lift station have hour meters	Yes
Hour meters are logged in an inspection notebook	Yes logged through Omnisite
Pump ratings	Various, main is 150 HP
Pump calibration schedule	Yearly or as needed. Last calibration was March 13, 2014. See attached

Comments: The Neilson, Honeysuckle, and Main lift stations were physically inspected during the inspection and notes are below. Coyote is the only lift station with flushable wipe issues. See Attachment 1 for sample maintenance notes on Coyote lift station from Omnisite, as well as a copy of the latest pump calibrations for the area lift stations.

Neilson – newest and biggest area lift station serves Legendary Estates. The drywell looked very good, clean, and well maintained. Wetwell also looked good. The vac truck is used 2-3 time s year to remove grease on an as-needed basis.

Honeysuckle – Wetwell looked a little greasy, but not bad. The drywell was clean and looked well maintained.

Main lift to Sioux Falls – has portable hoists, gas monitors, looked clean and well maintained. The city has sent 33 MG to date in 2015 to the city of Sioux Falls.

VIII. TREATMENT PROCESS REVIEW

Stabilization Ponds

Item	Comments		
Inspection frequency	At least monthly		
Weeds and/or trees growing on the dikes	Some weeds in riprap		
Vegetation growing in the ponds	No		
Pond dikes protected from erosion with riprap	Yes		
Pond seepage surfacing reported	No		
Dike structure failure (sloughing and/or sa!!!!ing)	No		
lfaerators are used, number per cell	14 in Pond #1, floating aerators, 1HP power generated blowers each		
Aerator information and comments	In good condition		
Condition of fencing	Good		
All access gates are kept locked	Yes		
Signs legible and properly located	Yes		
Facility accessible in all weather conditions	Yes		
Evidence of burrowing animals	No		
Evidence of grazing animals	No		
Odor problem (except seasonal turnover)	For about one month in the fall and spring is all		
Inter-pond piping valves are working and used	Yes		
Flow measurement (weir, flume, etc.)	Flow meter		
Depth indicator(s)	Yes - concrete slabs		
Effluent destination	City of Sioux Falls WWTF		
Discharge structure (valve control, overflow, etc.)	Valve		
Latest discharge (date)	Discharged to Sioux Falls in May 2015		
Duration of discharge	As-needed		
Cells operated in series or parallel	Series		

Cell information

	Cell #1	Cell #2	Cell #3
Maximum operation depth (feet)	5.0 ft	6.0 ft	8.0 ft
Current operating depth (feet)	3.8 ft	4.2 ft	6.0 ft
Minimum operating depth (feet)	2.0 ft	2.0 ft	2.0 ft
Surface area at maximum depth (acres)	10.21 acres	10.18 acres	19.60 acres

Comments: The city sludge judged the ponds since the last inspection and found an average of 6" of sludge. City is also planning on installing a recirculating pipe from Pond 3 to Pond 1.

For Office Use Only				
Rating: [XIS DMDU	Other: MOD D	ASSIST D SEV D	ENFD	
Name of Inspector	Signature	Affiliation /Phone	Date	
Jill M. Riedel, E.L T.	AA 12	SDDENR I (605) 362-3543	07/15/2015	
Name of Reviewer	Signature	Affiliation /Phone	Date	
Albert Spangler, P.E.		SDDENR I (605) 773-3351	7/16/2015	

ATTACHMENT 1

Lift Station Information

Toby Huizenga

From:	Gabe Laber <glaber@stockwellengineers.com></glaber@stockwellengineers.com>
Sent:	Thursday, March 13, 2014 3:07 PM
To:	dan.fink@harrisburgsd.gov; Toby Huizenga
Subject:	Lift Station Calibration

Hi Dan and Toby,

Below is a table showing the pumping rates that we calibrated today. Iwas really surprised to see how close the bottom three stations were. Thanks for your help.

理想 远远的	MC street result potent in the second strength of the second strength of the second strength of the second street strength of the second			. Antika	
			्रिक के बि	"信道"了	Stat in the state
Tiger	2002	Wet/Dry Well	332	302	9%
Honeysuckle	2002	Wet/Dry Well	367	371	1%
Coyote	2004	Wet/Dry Well	198	245	23%
Stencil	2005	Wet/Dry Well	362	362	0%
South Cliff	2006	Wet/Dry Well	493	494	0%
Nielson	2008	Wet/Dry Well	215	215	0%

Gabriel Laber, P.E.

600 North Main Avenue, Suite 100 Sioux Falls, SD 57104 Office: 605.338.6668 Cell: 605.261.0360 Fax: 605.338.8750 glaber@stockwellengineers.com www.stockwellengineers.com

STOCKW ELL

ENGINEERS

This e-mail may contain confidential and/or privileged information. **f** you are not the intended recipient (or have received this email in error).please notify the sender immediately and destroy this e-mail. Any unauthorized copying, disclosure or distribution of the material in this e-mail is strictly forbidden.



Generator

Running

Alam

Main

eves

Notifications

21057

B3

ICopyright©2012OmnlSite

1_11

Tue - 6/16/2015

8:35:35 AM

C ----- +5how+|

Coyote Uft Station

Tue - 6/16/15

8:34:55 AM

DigItal

Input 6



Notifications

//





Info

Setup

City of Harrisburg Wed - 6/17/15 **&** hardan

Partly Cloudy, 68° F



21057 - Coyote Lift Station (21057)

Analyzer

Status

............ Help

_	O AddSt	ation Note	t e ti	Jump <u>1</u> 2 To:	1057 - Coyote Lift StatlorOl
			Commands Charts Options Export us!	'lg SCADABridge"'	
_	Edit	Title	-Station Notes-	Last Modified	Modified By
_		The	Note	Last Modified	Modified By
_	,0	pump 1 rags new off	pulled pump 1 for rags	5/5/2015 -4:40 PM	hardan
	# 0	and lead	no cycles on 1 pump. put new leadfloat on and still wouldnt alternate. put new <i>off</i> float on and Itworks.	3/30/2015 - 3:43 PM	hardan
		basket	cleaned basket and added dawn	3/27/2015 -4:50 PM	
	,0	transfer switch fall	hardan generator ran all day after gen test. was notic still running. went up and transfer switch sald aux switch open. transferred manually and then lights came on h can.pulled pumps and both pumps had rags Inthem when we pulled them.put pumps together and Ittook about 45 minutes to get wet well down to normal level.	ed at 2:53 that gen was 12/30/2014 - 4:41 PM	hardan
	\mathcal{O}	basket	cleaned trash basket w/vactor	12/22/2014 -3:08 PM	hardan
	,0	1 ²⁻¹⁶⁻¹⁴	neighbor called and said generator had been running for last 4 hours then got call on high wetwell. both pumps running and in high wetwell when we anived. pulled both pumps. rags in pump 2. transfer switch stuck intest. reset and it transferred back to normal power.	12/22/2014 - 11:14 AM	hardan
	41'0	generator	set generator to test on the transfer switch. hasnt been starting on test day for a couple weeks.	8/19/2014 - 11:52 AM	hardan
	ρ	pulled pumps	pulled pumps due to excessive runtime on pump 1. small amount of rags. pulled pump 2 and found no rags.	8/14/2014 É2:07 PM	hardan
	0	deaned basket	cleaned basket out on 6-18-14	6/19/2014 - 11:28 AM	hardan
	# 0	deaned trash basket	cleaned trash basket 1/2 full of rags	3/17/2014 - 4:21 PM	hardan
Þ	deaned	basket	vacuumed out trash basket	3/7/2014 - 4:15 PM	hardan
P	pulled	pump 2	1 minute runtime difference. pulled pump. rags under impeller	2/7/2014 - 4:50 PM	hanlan
		Bullled 2	noticed pump 2 was kicking out after a few seconds pulled pump 2	1/31/2014 - 4:34 PM	hardan
P		generator alarm	heighbor called dan about alarm on gen. overcrank. called paul and he adjusted carb. bad fuel mixture	1/24/2014 - 11:13 AM	hardan
	11'all	sump pump	hstall 1rawsam'i&!lr-af1II'fWI!ll!DS:£? on "1daynightmp-pump-had-a-leak-lfl-lhe-rubbe • • here electrical ls	1/16/2014 - 8:20 AM	hardan
_	-@	deaned basket	⁻ c1 eane <fḃisket< td=""><td>-17 61:10T4 - ∶fa"AM-</td><td>fiardan</td></fḃisket<>	- 17 61:10T4 - ∶fa"AM-	fiardan
	,,0	pulled pumps	noticed pumps short cycling. pulled both pumps and had rags h both pumps. turned pumps on and both pumps kicked h. opened wet well and lag float wrapped around lead float and wetweli was pumped all the waydown"	1/10/2014 - 12:56 PM	hardan
	.¢7 @	filters	changed filters and cleaned cooling lines	12/17/2013 - 4:33 PM	hardan
	6'@	replaced off and lead floats	replaced floats due to uneven cycles	10/4/2013 - 11:44 AM	hardan
	Bf @	pulled pumps on oct 30	pulled pumps due to long runtimes. rags in both pumps.	10/3/2013 - 12:17 PM	hardan
	""0	pulled pumps	pulled both pumps. rags inboth, barely pumping.	9/23/2013 -4:43 PM	hardan
	#'@	pulled pumps	pulled pumps. found weedeater sbing and rags Inpump 2. some rags In pumpl.	9/19/2013 - 3:27 PM	hardan

'10	pulled hardan pu	pulled pumps due to running times on 8-9 and 8-13 mps	8/13/2013 - 4:42 PM	
#@	manged lead float	changed lead float on 4-3 due to cycles.	4/17/2013 - 3:07 PM	
0	deaning	hardan cleaned wet well and added dawn. due to cycles. start on test tuesday. cranked about 5 seconds before start.	alsogeneratordidnot 4/17/2013 - 3:04 PM	harclan
#@	Pulled pump 1 and 2	had 43 starts on pump 1and 21 starts on pump 2. pulled both pumps. had rags h both pumps	4/2/2013 - 3:19 PM	hardan
#0	pulled pump 1	pulled pump 1 and found rags. 3rd week In a row. pulled pump 2, rag floating in water right below pump.	3/20/2013-11:11AM	hardan
# 0	pulled pump 1	pulled pump 1and found rags.	1/9/2013 - 1:48 PM	hardan
<i>t</i> #0	pulled pumps	pump runtimes were doubled for 1pump. pulled pumps and found rags in pump	12/19/2012 - 11:34 AM	harclan
$\mathcal{J}_{\mathbf{v}}$	Fiters	changed white filters and cleaned cooling lines	12/7/2012 - 2:56 PM	hardan
r1P O	pulled pump 1	PULLED PUMP 1AND 2 AND REMOVED RAGS ON 11-13-12	11/20/2012 - 4:41 PM	hardan
t# O	Cleaning	cleaned wet well and added 1gallon Dawn	8/29/2012 - 5:00 PM	hardan
# 0	deaning	cleaned grease and added dawn	5/23/2012-4:47 PM	hardan
Pulled	pump 1	pump one kicked out when backflushed. pulled and found rags.	4/24/2012 - 10:44 AM	hardan
.sPO	sump pump	took sump pump apart. line to wet well Was plugged. cleaned with power hose. put pump back together. washed down station and cleaned out basket.	3/22/2012 - 3:06 PM	hardan
) Pulle	d Pumps	pulled pumps and cleaned rags out of both pumps. sump pump plugged	3/19/2012 - 5:12 PM	hardan
\mathcal{O}	deaning	cleaned wet well and basket and added 2 gallons of dawn	3/12/2012 - 11:54 AM	hardan
#@	I-13-12 Bad<	Dakota Pump changed back plate on pump and put new seals and or1ng on pump $^{\#1.}$	1/13/2012 - 12:35 PM	hardan
# 0	wet well	pumped down and cleaned wet well of grease chunks and basket. added 1gallon of dawn to wet well and 1gallon to manhole In ^{street.}	12/14/2011-3:45 PM	hardan
) , ,	12-13-11			<u>_</u>
/ bait {)'@	£14	put new bait In generator	12/6/2011 - 4:27 PM	hardan
0	filters	changed filters	12/5/2011 - 4:35 PM	hardan
# 0	deaning	cleanedbasketandwetwell.added2 gallonsofdawn.	10/11/2011 - 4:30 PM	_
rJ'0	hardan gen not calling in on test days	erator checked out generator and started fine. looked at omni site and no no signal strength or status lights on. signal strength was at -114. played with antenna and got it to -94. checked on 8-24 am and it was back to -104. replaced antenna with used one and signal strength went to -98.	9ticed 8/24/2011 - 4:23 PM	hardan
.sfO	mouse bait	added mouse bait to generator	8/24/2011 - 4:18 PM	hardan
pump	aad <s in<br="">noticed crae</s>	noticed no runtime on pump 1. checked and switch was off. also on pump 1by mounting bolt and also by adjustment bolt on northwest side of pump.	8/18/2011 - 1:13 PM	hardan
a;f 0	deaning	cleaned wet well and basket on 8-12 and added 2 gallons of dawn upstream 2 manholes	8/15/2011 - 12:34 PM	hardan
#@	Filters	Changed Filteis 4-5-11	4/6/2011 - 7:35 AM	
0	hardan dea	5		
#0	and pulled pumps	cleaned basket and pulled pumps on both. pulled down and sucked to bottom. cleaned dry well with power hose and sump pump.	2/15/2011 - 4:53 PM	hardan
tif O	pulled	pulled both pumps and got rags out of both 2-14-11	2/15/2011 - 4:51 PM	hardan
df @	1-19- 2011	pulled both pumps and changed 3 filters and changed shut off float cleaned wet well	1/22/2011 2:05 PM	hardan

Status > Logs > Station Notes

Copyright @ 2012OmniSite