

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 · (217) 782-3397 JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

DATE: June 30, 2022 TO: Todd Bennett, Manager BOW/DWPC/FOS FROM: Gregg Sanders, BOW/DWPC/FOS - Collinsville SUBJECT: Cahokia Heights **Collection System Inspection**

I conducted a collection system inspection on June 9, 2022, as a result of a complaint reported on the afternoon of June 8, 2022, for the residence of the second s complaint inspection led to observing 3 separate temporary bypass networks and road subsidence, which the city reported as being caused by sewer lateral damage. Within one block of the subsidence, on the same street of Price Street near Miskell Boulevard, the city had begun upgrading a submersible lift station and associated wiring; both buried beneath the road.

Three sanitary sewer overflows (SSOs) were observed: (1) an active SSO behind along Blue Water Lane; (2) a recent, but inactive SSO behind and (3) an older, inactive SSO behind The residents of and these addresses estimated that these three separate temporary bypasses had been in place ranging somewhere between 3 and 6 years.

There are several homes and a golf course located between the SSOs and the nearest water body; referred to as Blue Water. Due to poor drainage in the area, there was no connection observed between the SSOs and the nearest water body. The active SSO accumulated in a low-lying portion of a ditch; the city repaired the active bypass while present.

Geographically, the Blue Water Stormwater Pumping Station is located south and to the southwest of these sewer bypass areas. The station sets on a levy south of the golf course and on the south side of the nearest surface water body. The levy runs east and west. The Metro East Levy Trail runs beside the pump station, and below the trail lies the Prairie DuPont Creek. Aerials of these locations are attached.

On the way to

, the following circumstances were observed near the road at : a debris pile, temporary fencing, and an open hole in the ground. Upon further inspection it was determined: (1) a collapsed sewer was present; (2) an above ground bypass pipe dumps into an adjacent downstream manhole; and (3) the receiving manhole drains underground to another nearby manhole under Lazarcheff Drive. The bypass pipe was traced upstream to the corner backyard; where it was connected to the effluent side of a gasoline powered portable pump. The contents on the ground and adjacent to the pump were indicative

2125 S. First Street, Champaign, IL 61820 (217) 278-5800 1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120 9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000 595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200 412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022 4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

of recent wet and dry sewage and other sewage debris, but no active SSO was occurring at the time. Significant sewer odor was present. While there, the resident complained of unbearable sewer odor that routinely makes its way into the house from outdoors. The resident communicated the following additional concerns related to the sewer and bypassing: (1) she has a young child whom could potentially come in contact with the sewage; (2) sewage has overflowed into the backyard in the past; (3) she was stressed regarding the intensity of the outdoor odors entering the house and whether the sewer would be repaired; (4) the fencing surrounding the sewer collapse is insecure allowing easy public access; (5) there is a pile of debris located next to the collapsed sewer; and (6) solids are collected along the concrete gutter in front of the house. At the time of the inspection, the upstream manhole was not surcharged. Both the resident and the city reported that the city runs the pump daily.

In a follow-up discussion with the City, the City agreed to: (1) put up a more secure fence surrounding the collapsed sewer; (2) remove sewage solids from the ground and mix powdered chlorine into the remaining soil; (3) remove the debris located between the collapse and the road; (4) remove the solids from the concrete street gutter in front of the house; and (5) reconfigure and seal the upstream and downstream manholes as necessary to reduce sewer odors surrounding the house. The resident was made aware of these agreements and encouraged to develop an odor log having dates and times to: track odors; rate the odors; and note any activities the odors prevent the residence from performing. The resident was informed that the city commented that they had this section of sewer on a list for permanent repairs; as part of using a future grant source.

, and , Inspection of the backyard of revealed a collapsed sewer/manhole on the opposite side of the resident's chain link fence and adjacent to where four adjacent back properties meet. Bypass piping runs downstream through the homeowner's backyard and dumps at a sewer manhole in the backyard of a neighbor; located at . The downstream manhole at the second address is very close to both houses, and a strong odor was present there at the time of the inspection. The rest of the bypass piping behind runs: upstream; northeasterly; and behind the homes leading to the , where a submersible pump in a manhole exists. The pump pulls backyard of sewer from the southwesterly underground sewer, due to the collapse, and then returns it back southwesterly by above ground bypass line to the aforementioned manhole at the residence. Although this network runs behind homes on the other side of the road from

emptying into the same manhole in the middle of the road near state of the road norm , which flows by gravity to the Blue Water Lift Station. There is also a white PVC pipe present in the same area as the collapse behind street. The city agreed to determine what this pipe is connected to; there was no active flow from it at the time of the inspection. The resident at street area communicated that the outdoor odors that come into the house are unbearable. The sewer was on their list of

permanent repairs and being considered to be moved up higher on the priority list for grant repairs. There was no contact made with the upstream **sectors** resident; this being the location where the city uses the submersible pump in the backyard. However, the pumping manhole was observed from a distance outside of the resident's fence, and there was no active SSO from the manhole.

The residence at **a second of the and a second of the bypass piping and pumping worked; so, it was explained.** The **second of the bypass piping and pumping worked; so, it was explained.** The **second of the bypass of the bypass. The second of the bypass of the bypass.** The **second of the bypass of the bypass.** Both residences on **second of the bypass of the bypass**

While in the area, a resident located at **a seven the seven and a seven line** in the back of the yard; along Blue Water Lane. Upon inspection, an active SSO was accumulating in the ditch of the backyard; a break in a bypass line had occurred. A photo of the ponding SSO is attached. The separation of the bypass line was observed to occur, within high weeds, and sewer made its way through the weeds to a low open area of the ditch. The pumping manhole was found behind the neighbor's backyard fence. The electric pump was powered through an electrical outlet in the garage at **a seven manhole**. The bypass line was followed to the end of Blue Water Lane to where it dumps into another manhole, which is downstream of another observed collapsed sewer. This downstream manhole also takes flows from nearby Andrew Street and gravity feeds the Blue Water Sewer Lift Station. The resident at **a seven manhole** is the strong odor had entered her house routinely in the past.

After discovering the SSO at **Control of SSO** at **Control of SSO**

Mr. Culpepper lifted manhole covers at: the **second second** residence; the **second** backyard location; and near Bluewater Lane behind the neighboring resident to the **second** resident. None of the manholes were surcharged, but all lids were laying on top of the bypass lines running down into the center of the manholes. This leaves relatively large, unsealed, open-atmosphere gaps that release sewer odors. The use of tarps to cover some of the manholes may not have had the desired outcomes that the city initially intended.

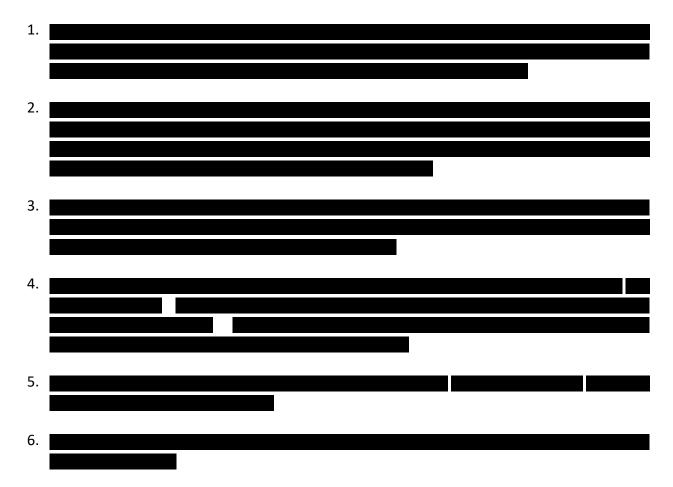
SUMMARY

The following apparent violations were noted during my June 9, 2022, Complaint Investigation.

Apparent Violations:

- 1. Overflows from sanitary sewers are expressly prohibited; Section 306. 304 of Subtitle C.
- 2. No effluent shall contain settleable solids, floating debris, scum, or sludge solids. Color, odor, and turbidity must be reduced to below obvious levels; Section 304.106 of Subtitle C.
- 3. All treatment works and associated facilities shall be reliable and operated as to minimize violations of applicable standards by appropriate measures; Section 306.102 (a) of Subtitle C.

<u>Recommendations</u>: Based upon the apparent violations observed, the following recommendations are offered to help ensure compliance:



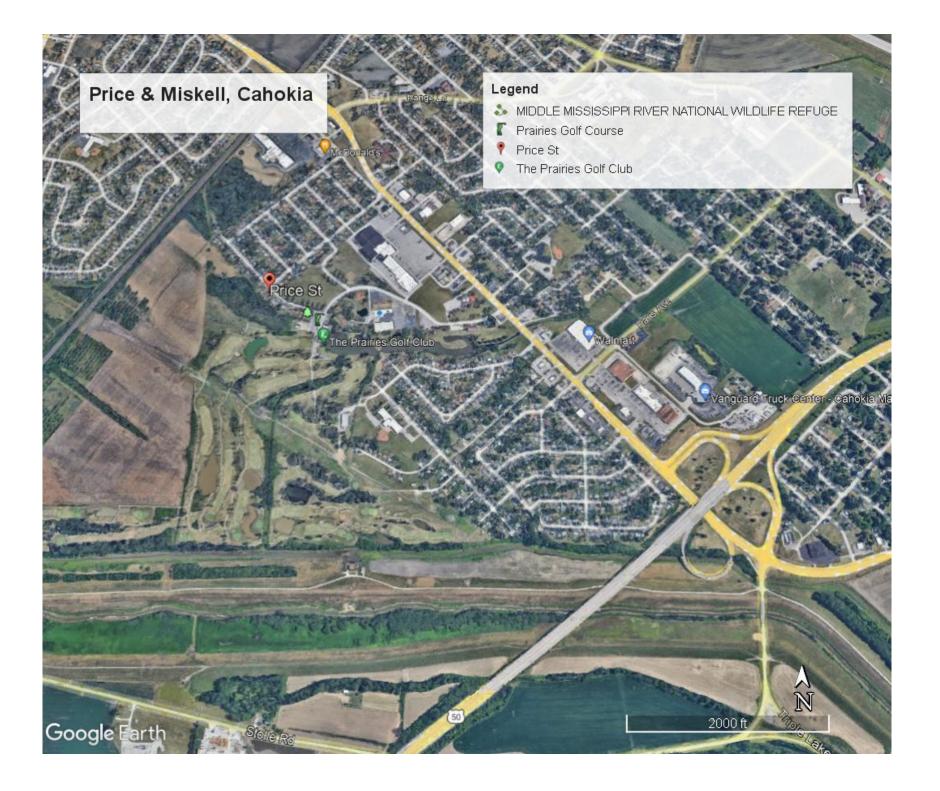
7.

MGS: Cahokia/June 2022 Bypasses/Complaint Memo 2022

Attachments

cc. BOW/DWPC/FOS – Collinsville BOW/DWPC/RU







St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File

DIGITAL PHOTOGRAPHS





Date: 6/9/2022 Photo by: Gregg Sanders Bypass Manhole, Pump & Solids on Ground at

Date: 6/9/2022 Photo by: Gregg Sanders Bypass Line at





St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File

Date: 6/9/2022 Photo by: Gregg Sanders Sewer Collapse, Receiving Manhole, Debris, Vegetation, Temporary Fencing At ______.

Date: 6/9/2022 Photo by: Gregg Sanders **Manhole in Road Receives Temporary Bypass Discharges from:** (1) Parklane Drive Collapse & Lazarcheff Connected Network and (2) the Collapse Network.



<image>



St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File

Date: 6/9/2022 Photo by: Gregg Sanders Sewer/Manhole Collapse Behind

6/9/2022 Photo by: Gregg Sanders

Pipe of Unknown Use Behind

Near the Sewer Collapse/Manhole. The Pipe Extends from Neighbor's Yard on **Sector**.



St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File





Date: 6/9/2022 Photo by: Gregg Sanders Bypass Behind and Runs Toward

Connection is Behind

Which is Further in the Background and Not in the Picture.

Date: 6/9/2022 Photo by: Gregg Sanders Bypass Receiving Manhole Location at Backyard. Picture

Taken from

Backyard.



St. Clair County/Cahokia Heights Temporary Bypasses & SSOs FOS File



Date: 6/9/2022 Photo by: Gregg Sanders Bypass Receiving Manhole at Backyard – Tarp Removed.

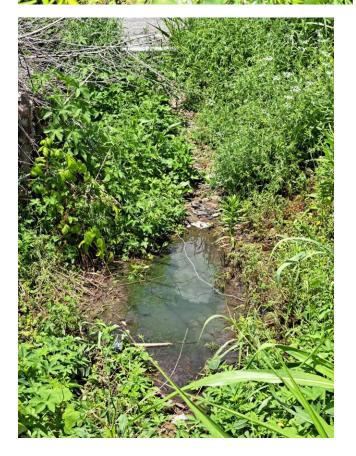
Date: 6/9/2022 Photo by: Gregg Sanders Bypass Pumping Manhole at for Residences on

Parklane Drive &









St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File

Date: 6/9/2022 Photo by: Gregg Sanders Bypass Line Break Behind & Along Blue Water Lane – Accumulated in Ditch Behind

Date: 6/9/2022 Photo by: Gregg Sanders Accumulated SSO from Line Break. SSO Traveled Through Heavy Vegetation to This Ponding Point. Intact portion of Bypass Line is in the Background.







St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File

Date: 6/9/2022 Photo by: Gregg Sanders Bypass Pump Location Behind and Next To Along Blue Water Lane.

Date: 6/9/2022 Photo by: Gregg Sanders Bypass Pump Opened Manhole Behind and Next to & Along Blue Water Lane.





St. Clair County/ Cahokia Heights Temporary Bypasses & SSOs FOS File

Date: 6/9/2022 Photo by: Gregg Sanders Bypass Line Towards Sewer Collapse & Receiving Manhole Along Blue Water Lane.

Date: 6/9/2022 Photo by: Gregg Sanders **Receiving Bypass Manhole Along Blue Water Lane.**



Temporary Bypasses & SSOs FOS File



Date: 6/9/2022 Photo by: Gregg Sanders Blue Water Lift Station Receives Flows from All 3 Bypass Networks.

St. Clair County/ Cahokia Heights



Date: 6/9/2022 Photo by: Gregg Sanders **More Bypass Pipe Along Blue Water** Lane.