



Memo

To: Clay Pearson, City Manager

From: Trent Epperson, Assistant City Manager

CC: Jon Branson, Deputy City Manager
Eric Wilson, Director of Public Works
Darrin Coker, City Attorney
Sparkle Anderson, Director of Communications

Date: April 22, 2016

Re: Shadow Creek Ranch Area Odor Complaints

This memorandum provides updated information regarding the odor complaints in the Shadow Creek Ranch (SCR) area since last week's update. This update focuses on progress on the communications plan and new information.

SCR Odor Task Force

A meeting between City staff and HOA Representatives is scheduled for Monday, April 25, 2016. The purpose of the meeting is to discuss the best ways to communicate with the residents, including who, what, when, how, and how frequently we communicate. Actions that are in progress or completed in preparation for the meeting include:

- Establishing an "Opt-In" web page for residents to sign up for email updates as new information is published – **Completed**
- Develop a Frequently Asked Questions (FAQ) page for the web site – **In Progress** (Input needed from Monday's meeting to make sure we have all the questions and that the FAQ will meet the needs of the residents)
- Establish a regular meeting with HOA representatives and the TCEQ – **In Progress** (Frequency, location, and time to be discussed at Monday's meeting)

Air Sampling and Testing by the City

The City has acquired air sampling canisters and is prepared to take air samples during an odor event.

EMS Respiratory Calls

During the Public Comments at the Council meeting on April 11th, a concern was raised regarding respiratory issues caused by the odor events. The Fire Department tabulated the number of EMS calls for respiratory issues in the SCR area during the period of August through March for both 2014/2015 and 2015/2016. The totals by month are below.

	2014-2015	2015-2016
	Calls	Calls
August	7	3
September	2	3
October	3	7
November	3	6
December	9	7
January	8	3
February	4	4
March	11	4
Total	47	37

While the information does not indicate an increase this year over the previous year, it obviously does not rule out the odor events exacerbating or creating new respiratory issues.

City's Reflection Bay Water Reclamation Facility (RBWRF) – Odor Control Measures

Staff continues to monitor and tweak the programming of the Odor Control System. The following additional measures have been taken to reduce any odors produced by the plant:

- We have covered a majority of the open grating at the headworks, which is the most significant location of odors at all wastewater treatment plants. This should help keep odors within the confines of the plant site. This is typically not done because the corrosive nature of the wastewater and associated gases will damage the concrete structure if trapped within the structure. However, with the headworks planned to be replaced with the plant expansion, it will not cause any issues with the remaining amount of time that the existing headworks will be in operation.
- Floating materials within the collection system were building up from the influent lift station to the last few manholes in the system. These were removed on 4/14. The rains on 4/18, flushed the system resulting in additional floating materials collecting again. They were removed on 4/22. Once removed the odors at the lift station and plant were reduced.
- The frequency of manhole and lift station inspection and clean-out for this area will be increased.

The issue with build-up in the collection system is most likely associated with the newness of the entire area, meaning all low flow toilets and shower heads. The

“low flow” allows solids to build up within the sanitary sewer collection system. An additional problem is a buildup of grease within the collection system. This buildup is coming from residential connections. The commercial establishments are monitored by the Pretreatment Group with Public Works and there are not currently any issues with these establishments within the SCR area. By monitoring and cleaning more frequently we can manage this issue.

City’s Shadow Creek Ranch Sanitary Sewer Lift Station

The SCR area is served by one regional lift station located north of Broadway on Biscayne Bay Drive. Based on periodic but localized odor complaints, staff is getting quotes to install a Granular Activated Carbon (GAC) odor control unit to replace the existing odor control system. The GAC system is a more advanced, higher cost, more effective means of odor control at a lift station. The equipment plus installation is estimated to be approximately \$70,000 plus \$7,000 every 15-18 months to replace the GAC media. In our efforts to eliminate City sources from contributing to the SCR odor issues, we expect to present this expenditure to the Council in May.

Blue Ridge Landfill

The Blue Ridge Landfill is currently constructing a new cell for waste disposal. Per the City’s settlement agreement with Blue Ridge, they must provide fourteen (14) days notice to the City when they will be installing and constructing a liner for the landfill. The City has the right to observe the installation and construction of the liner. Based on the notification, we have retained Cobb-Fendley, Inc. to provide the observation services and daily construction reports to the City to ensure the liner is built per the design. We have utilized Cobb-Fendley, Inc. in this capacity twice in the past.

Staff has met with Blue Ridge personnel on multiple occasions over the past two weeks. They have indicated that they are in the process of purchasing and installing an additional odor control system, which will neutralize the odors instead of masking them with fragrance, as is currently done. They have also indicated a willingness to communicate their odor mitigation efforts and have offered a tour of their facility, which we will be scheduling over the next few weeks.

Leachate Connection to the City’s Sanitary Sewer System

The letter terminating the agreement with Blue Ridge Landfill was sent by certified mail on 4/8. Based on the 90 day cancellation period, the cancellation will be effective on 7/8.

Natural Gas Odors

On 4/22, there was a strong natural gas odor noticed near Shadow Creek Parkway and Reflection Bay Drive. CenterPoint Gas was called and a field technician arrived at the site prior to 8:00am. Utilizing line locate equipment and a gas detector, he could not pinpoint the source.

However, he did communicate that they have several mercaptan injection stations in the area, including at SH288/FM2234, FM521, and in the Country Place area. Mercaptan is

the gas added to natural gas to give it its distinctive smell. These mercaptan injection stations have to be refilled periodically. He related that they always receive calls for gas leaks when the refilling occurs and that the odors can linger for several hours to a day, depending on weather conditions. Staff will be contacting CenterPoint Gas to request a map of exact mercaptan injection stations and records of when the stations have been filled to see if it correlates to any of our odor complaints by time and location.

In addition, CenterPoint Gas often receives calls for gas leaks that based on their investigation, they believe come from the landfill. We intend to request this call information also to see if it corresponds to our dataset.

A final piece of information shared by the CenterPoint Gas technician was that there are frequent natural gas line purges and line pigging that occur within the SCR area to accommodate the new construction. These activities are associated with new lines and line size increases to serve the additional customers. When these occur CenterPoint Gas receives many calls to investigate gas leaks.

Other Potential Odor Sources

Akzo Nobel
Lone Star Disposal and Recycling Facility
Other Industrial Facilities west, northwest, and north of the City

External Meetings

A meeting was held by the Fort Bend Houston Super Neighborhood Council 41 at the Ridgemont Club House on Thursday, April 21, 2016 to address air quality and water quality. The area covered is basically west of FM521 and south of Beltway 8. It was hosted by State Representative Ron Reynolds and attended by representatives from the TCEQ, City of Houston, Sierra Club, and City of Pearland. In addition, the EPA was conferenced in via telephone. The TCEQ has had 37 odor complaints in this particular area this year for mostly natural gas and landfill odors. TCEQ said that they do not have any active investigations in this particular community. The meeting was attended by several SCR residents. Most of what was communicated was that TCEQ was responsible for investigating odors and that City of Houston was responsible for water quality, thereby distinguishing who to call for complaints.

A meeting is currently planned for 6:30pm on May 3, 2016 at the Reflection Bay Event Center with Commissioner Richard Morrison and State Representative Ed Thompson.