

Community Engagement At Leaking Underground Storage Tank Sites*

**Community engagement activities at LUST sites vary, depending on site conditions and remedies.*

Graham 66 Service
I-70 & Highway 212
Gove County
Quinter, Kansas

History And Site Activities

In 1998, Quinter city staff reported to Kansas Department of Health and Environment that petroleum odors were emanating from the well house of one of the public water system wells in Quinter, Kansas. To mitigate the problem, a granular activated carbon treatment system was installed on the well, which is located approximately 500 feet from Graham 66 service, an active gasoline station. Investigations at the Graham 66 service station revealed significant soil and groundwater contamination near the dispenser islands and underground storage tank basin. To address this problem, a remediation system was installed at the Graham 66 service station.



Public water system well and granular activated carbon treatment system

The granular activated carbon system, in operation on the affected well since 1998, treated benzene, toluene, ethylbenzene, and xylenes. However over the last five years, Quinter city officials reported a more than 60 percent drop in water flow from the well. Frequent attempts to rehabilitate the well lasted only a few months because of a recurring native bacteria mixture, fueled by the petroleum hydrocarbon plume. Because the bacteria colonized rapidly and clogged the well screen and filter pack, repeated attempts to increase the pumping rate were temporary. Kansas Department of Health and Environment determined the need for a replacement well and approached Quinter city officials, proposing to share costs for relocating the affected public water system well. This would eliminate the need for the granular activated carbon treatment system.

Community Engagement Activities

Quinter's water superintendent convened a special city council meeting where representatives from Kansas Department of Health and Environment provided the Kansas Bureau of Water, Quinter city council, Kansas Department of Agriculture, and local groundwater management district officials with information about the new well proposal. Attendees discussed numerous issues that affected identifying a location for a new public water system well, such as:



Location of new public water system well

- water rights held by Quinter could not be moved beyond a defined distance
- all other water right owners in the area of a new public water system well would have to agree to allow the infringement
- proposed location would have to be purchased or the new well would need to be located on city property
- test well would have to be drilled and the location approved by the Kansas Bureau of Water
- new well would have to be located beyond the radius of influence of the contamination plume from Graham 66 gasoline station

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Affected domestic well owners realized they had the opportunity to help their city acquire significantly more water and relieve some of the water supply system stress that existed during summer peak demand months. As a result, Quinter city officials obtained approval from affected domestic well owners in the area of the new well location, as well as approval for test well drilling. The test well indicated the proposed location was suitable in both the quantity and quality of the groundwater produced. All local and state officials approved the proposed location; the new public water system well is to be drilled in July 2010. After the new public water system well is on-line, the granular activated carbon treatment system on the contaminated public water system well will be removed and that well will be properly plugged and abandoned.

Community Engagement Lessons Learned

- **Ask for the community's help** – after the idea of relocating the well was brought forward, city officials and local residents worked diligently to locate a new site and obtain all the approvals.
- **Bring everyone together early** – the face to face meeting held early on in the process brought all the stakeholders together in once place. In a single meeting, all the obstacles were brought out in the open and solutions were discussed. We were able to get the project moving forward much faster than would have been accomplished through other forms of communication.

For More Information

[Kansas LUST Program](#)

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