City Council Work Session
Crest Hill, IL
June 30, 2025
6:00 PM

2090 Oakland Ave., Crest Hill, IL 60403

Agenda

1. Update and Presentation Regarding The City's Water System-PFAS

2. Public Comments
3. Mayor's Updates
4. Committee/Liaison Updates
5. City Administrator Updates

The Agenda for each regular meeting and special meeting (except a meeting held in the event of a bona fide emergency, rescheduled regular meeting, or any reconvened meeting) shall be posted at the City Hall and at the location where the meeting is to be held at least forty-eight (48) hours in advance of the holding of the meeting. The City Council shall also post on its website the agenda for any regular or special meetings. The City Council may modify its agenda for any regular or special meetings. The City Council may modify its agenda before or at the meeting for which public notice is given, provided that, in no event may the City Council act upon any matters which are not posted on the agenda at least forty-eight (48) hours in advance of the time for the holding of the meeting.

Agenda Memo

Crest Hill, IL

Meeting Date:	June 30, 2025
Submitter:	Ronald J Wiedeman
Department:	Engineering
Agenda Item:	Update and Presentation Regarding The City's Water System-PFAS

Summary: Agenda below for Meeting Agenda.

- Mayor Opening Remarks
- Water System Discussion Regarding PFAS-Engineer
- Public Works Director Comments
- Council Comment
- Public Comment

Recommended Council Action: n/a

Financial Impact:

Funding Source: TBD

Budgeted Amount: TBD

Cost: TBD

Attachments:

Workshop PFAS Discussion June 30th

Hello Everyone, I am Ron Wiedeman, City Engineer,

First, I will provide a history of what the city has been doing over the past ten years regarding its water supply and what we are currently doing to address PFAS and all other water quality issues.

The city's existing water supply uses 8 wells located throughout the city that are approximately 300-350 ft in deep. Since 2015 the city has been working to expand its shallow groundwater supply with the construction of new wells to adequately supply city residents and businesses with enough quality water.

Due to environmentally sensitive habitats and potential interference with existing wells created limitations to the locations where new wells could be constructed.

Another issue that the city was dealings with due to its existing water supply is the increasing levels of chloride due to the use of road salt.

In 2019, the city joined neighboring municipalities and other users that obtained its water from shallow wells along with the Illinois State Water Survey to fund a study to determine the longevity of the aquifer as a continued source of potable water supply.

The results of this study suggested that the city should review options of a new water supply and in 2020 hired a consultant to complete an Alternative Water Supply Evaluation.

Around the same time this study was being prepared, in 2021 the IEPA began testing PHAS levels statewide and posted results on their website.

At that time, Maximum Contaminant Levels for PFAS had not been established by either the USEPA or IEPA.

While not knowing what levels the USEPA and IEPA would establish for PHAS, the alternate water supply analysis to into account that an advanced treatment process, or new technology compared with the traditional filtration used by the City would be necessary for PFAS removal.

The results of the alternative water supply study available to the city showed that construction of additional wells and new filtration treatment facilities that could handle the new technology to purify the water and reduce PHAS, chlorides and other contaminants was approximately twice the amount of switching to a new Lake Michigan water supply.

PHAS is a very small particle, most contaminants are regulated to the billion while PFAS is regulated to the trillion. **An example would be that there are 461 billion feet between the earth and the sun, so one part per trillion is 6 inches between the earth and the sun**.

In 2021 the estimated costs per the study were $175 to $190 million compared to $90 million for already treated Lake Michigan water as a member of a new Regional Water Commission.

Since that time the city's estimated share of costs to go to a Lake Michigan water has increased to approximately $120 million.

Also, as part of the conclusion of the water supply study, the estimated timelines for completion of each of the alternatives were roughly the same. Around 2030.

Prior to the city council making the final decision to move to a new water supply the city held public meetings at four separate locations (Richland School, Chaney-Monge school, Carillion Lakes and PW) to inform and solicit feedback on the study's finding and direction the city was going to go to address their water supply needs. These meeting were held in early 2022.

In 2022 the City joined Joliet, Shorewood, Romeoville, Minooka and Channahon to create a new Water Commission that will construct all required infrastructure to bring water purchased from the City of Chicago Department of Water Management by mid-2030 to this area.

On April 10, 2024, the USEPA announced their final ruling on new PFAS Maximum Contaminant levels.

Then on April 11, 2025, IEPA published their amendments to the state regulations and matched the USEPA limits. Since the City is governed by the IEPA this is the exact date the city was notified that the water supply used by the city had PHAS levels in some of its wells above the new regulated limit and based in these new regulations has until April 2029 to meet the new limits.

As a follow-up to the USEPA Guidelines for PFAS the current federal administration of the USEPA have begun discussions on extending the date to meet the new PHAS regulation to 2031 while also reevaluating the regulatory limits.

Once the USEPA makes a decision the IEPA would then need to determine whether they will match or revise their regulations.

What is the city doing prior to the switch to the new Lake Michigan water supply?

Since the city was notified in the middle of April of 2025 of the newly adopted IPEA regulations on PFAS, the city has been reviewing our options on how to address wells within our system that have PFAS levels above regulatory limits.

Even though the new regulatory limits for public water systems on PFAS are not required to be in compliance until 2029 we have been working as a team with our consultants, city water operators and other staff on how we can reduce or limit the levels of PFAS in our water supply prior to 2029. As part of our plan, we will work with the IEPA to coordinate and gain approvals

from them because any temporary treatments the city offers will need to be approved by the IEPA.

We have put in place a plan to analysis and coordinate with the IEPA to review possible options to temporarily reduce or limit these pollutants. A final line memo report will be completed and presented to the council in in mid-August or early September. The options we are reviewing are as follows:

1. Can we interconnect our existing water supply with water supplies of surrounding communities.
2. Can we throttle or reduce water supplied from the two wells showing higher PFAS reading during non-peak times.
3. The city is currently on schedule to have a new 2.5 million gallon above ground storage tank constructed to meet the requirements of going to a new water supply, can we move up construction of this tank to have additional storage available? If this is possible, will it help us by providing additional storage of water from wells with lower PFAS reading. This additional stored water would then be mixed with water from the higher levels of PFAS to bring the level of concentration to lower levels.
4. Are there any temporary water filtration units that can be rented or purchased that can be used to filter or reduce out these contaminants that the IEPA will approve at wells with high levels of PFOS.
    a. Will these temporary units have any noise Issues?
    b. Working in the winter
5. What is the cost and timeframe to completely upgrade the two wells with high levels of PFOS.
6. What is the timeframe to install a deep well along with construction costs. This deep well would need to be designed to be large enough to reduce our PFAS levels and also control Radium levels. The water from this new well will be mixed with our current water supply to reduce PFAS levels. If approved by the IEPA.
7. Investigate a program where the city could provide a point of use treatment for residents that will work to filter out PFAS. Will need to determine, cost, eligibility requirements and city liability to provide or not provide.

Additional testing the city is undertaking as part of this study:

- Will have an independent company test all of the city's wells. The water will be tested before and after treatment. We will also be testing drinking water at least two faucet locations in each of the city's four ward. These tests will then be compared to the well-reading to see the effects that blending of our water supply has on our entire system.

Please be aware that any costs associated with implementing any of the items above are currently not included in any cost analysis that the city has performed and these costs will need to be evaluated to address if the current rate structure for water can handle any additional fees while still paying our obligation to the Grand Prairie Water Commission and operating the city's current water system.

PFAS are particles that have built up over time in the human body to cause increased potential for issues. PFAS has been in our environment since the early 1940's and can be found in meat, vegetables, fast food containers, waterproof materials and drinking water both from public water supply and bottled water.

The IEPA is currently giving until April 2029 for public water supplies to correct. Acute concerns which cause immediate adverse health effects, would not be given such lax deadlines for correction. They would have insisted that effect water supplies be immediately shut down and alternative water supplies be acquired.

Everyone is encouraged to check out and read the information regarding PFAS on the USEPA and IEPA websites.