

**Pleasant Grove City
City Council Meeting Minutes
Work Session
September 7, 2021
4:30 p.m.**

Mayor: Guy L. Fugal

Council Members: Dianna Andersen
Brent Bullock
Eric Jensen
Cyd LeMone
Todd Williams

Staff Present: Scott Darrington, City Administrator
Tina Petersen, City Attorney
Kyler Ludwig, HR Director
Deon Giles, Parks Director
Marty Beaumont, Public Works Director
Mike Roberts, Police Chief
Drew Engemann, Fire Chief
Daniel Cardenas, Community Development Director

Excused: Denise Roy, Finance Director

The City Council and staff met in the Community Room, 108 South 100 East, Pleasant Grove, Utah.

4:30 P.M. WORK SESSION

1) High-Level Debrief on the Water Boil Order.

City Administrator, Scott Darrington, provided the Council and citizens with a summary of recent events related to the Water Boil Order. Pleasant Grove experienced the need for a Water Boil Order last year, although it was in a different zone. The current affected area is in the Battle Creek Zone. Normally, water sampling occurs monthly by taking 40 sample tests, with 20 tests in each zone over a period of a few days, as required by the Utah Division of Administrative Rules (“UDA”).

Last Monday, routine water sampling of three testing sites was conducted. The following day the City was advised that one of the homes tested came back with a positive finding for *Coliform*. Such notice required taking additional water samples from that same home and two other homes, checking both downstream and upstream water. The determination was also made to test one of the homes across the street. The laboratory also began testing for *Escherichia Coli (E. Coli)* which

takes 24 hours. At that time, the City knew only that there was a positive test for *Coliform*, which meant contamination.

On Wednesday, at 11:00 a.m., the initial positive testing came back positive for *E. Coli*. This finding triggered the need to notify the State and the public and make sure certain protocols were followed. The Public Works Department went into action by starting to flush the system and looking for potential cross-contamination to locate a source. The City began preparation of a Water Boil Order to be submitted to the State for approval. Public Works Director, Marty Beaumont, contacted the State and was advised that a Water Boil Order was required. The City also made sure that the valve that allows cross-connection between the two main water systems was closed thereby protecting the water for most of the commercial business locations in the City from contamination and Water Boil Order requirements. Administrator Darrington noted that last year, the area affected by the Water Boil Order was mainly residential but also included our commercial businesses. This valve closing was beneficial for the City, as it was initially thought that the Water Boil Order would have covered the entire City.

Materials were compiled to inform the public of the issue, including the Utah County Alert Notification System, "Everbridge Reverse 911" information, and the Water Boil Order was prepared. Additionally, phone numbers from utility accounts were obtained to allow text information to be sent to the public. Materials were prepared for social media accounts such as Facebook, Twitter, and Constant Contact (an email list of citizens who have provided that information to the City).

That afternoon, Human Resources Director, Kyler Ludwig, reported that an interactive map could be prepared so the public could quickly determine if their home was in the Water Boil Order area. An interactive map was not available last year, but rather the public had a static map with boundaries showing the zones. For some, it was difficult to determine if their home was in or out of the area, which caused confusion. The interactive map was a key component in helping people identify whether their home was involved. Time was taken to get that tool prepared.

The Boil Order, prepared by City Attorney Tina Petersen, was submitted to the State and approved. Press releases were written. Employees were asked to stay overtime and answer citizen phone calls about the Order. Those calls were all directed to the Public Works Department. Word went out to the public about 5:30 p.m. When an *E. Coli* positive test occurs, the State requires the City to disclose the information within 24 hours. In this case, the City had a turnaround from notice to public disclosure of 6.5 hours, which was a good response time.

One of the questions they get right away is usually asking why notice was not given to the public when the City learned of the results. Administrator Darrington explained that the main reason was that immediately there would be numerous questions regarding information they had not yet gathered. The more prudent course was to take the time to make sure the City is prepared to answer the questions and give the best information possible, which was done.

Administrator Darrington further noted that he notified the School Districts and charter schools in the Boil area in the late afternoon to let them know so they had time to prepare for the next day. He also indicated that once the Water Boil Order went out, a local company, Enevive, which is a

water filtrating company, made contact and offered their service to filter any size containers of water brought to it by City residences who might need such service. That information was given to the public by way of social media. The service was found to be very helpful, as it was used by many over the next few days.

Administrator Darrington pointed out that people had access to water. It simply had to be boiled. For some, however, they wanted bottled water, which disappeared from store shelves within a 20-mile radius. Boiling water makes some uncomfortable. Work that Wednesday evening involved research to determine the source of the contamination. Chlorine residuals were examined in the culinary water with employees performing chlorine residual testing until about midnight in an effort to find a pattern or mechanism to determine the source.

On Thursday, the City received the testing results for the additional three homes tested on Tuesday, which were all positive for *E. Coli*. The decision was made to extend testing to a couple of homes that day a few blocks away, which was done in the morning before any flushing occurred. The decision was made to open a valve that would take water with higher chlorine residuals from the upper zone within the Battle Creek Zone to the affected area. While opening that valve, it malfunctioned, resulting in a leak that needed repairs and took a few hours. Once that was corrected, they were able to flush the system, get good water to the area, and perform further testing late in the day. Water sample testing is normally done either at Richard's Lab, which takes 48 hours, or Chemtech Lab, which takes 18 hours. Administrator Darrington commented on the frustration with having to wait for test results.

On Friday, extensive testing of 26 sites was done, primarily in the same area where the initial problem arose and get an overall view about the whole zone. On Saturday, a potential source of cross-contamination was identified. That source was investigated and found to not be the cause, as there were proper check valves in the system and no secondary water was getting back into the culinary water system. All of those 26 tests done Friday were reported clean on Saturday, including the Gibson well. Administrator Darrington indicated that the Gibson well had on Friday, tested positive for *coliform*. So with this additional negative test, they thought whatever the source had been, it had been flushed out through the system and that the issue was resolved.

On Sunday, the City was advised that the Gibson well had tested positive for *Coliform*, but all the other tests were negative. Administrator Darrington reported that the Gibson well had been off-line for the last few days, except for a nine-minute period when the well was run to obtain the test sample. So, even though the Gibson well had been off-line because it had been run for that short period of time, the State thought it appropriate to extend the Water Boil Order for one more day. They had been expecting to lift the Water Boil Order on Sunday. The next round of testing was done with the Gibson well remaining off-line. On Sunday, all tests were negative, and they were allowed to lift the Water Boil Order on Sunday. They also did a deep chlorination clean on the Gibson well.

Administrator Darrington, that same day, mistakenly indicated he thought the source of the contamination was the Gibson well because of the positive *Coliform* test results. Director Beaumont explained that normally when the Gibson well is to be turned on for testing, it takes water currently in the system and backflushes it into the well for lubrication. In theory, because

E. Coli was in the system, it was kicked back into the well, which explained the positive test for *Coliform*. For the past three days, the tests of the Gibson well have been clean, making it possible that the State might allow the City to bring it online in the next day or two. The source of the contamination was determined to not be the Gibson well or the water in the aquifer. The Gibson well contamination was believed to come from the water backflushed into the well at the time of testing. If the aquifer had been compromised, such would create a whole different situation.

The source of the contamination remained undetermined. The best theory was that there was construction, hooking homes up to the main line in that area, and something got into the system. Also, that area has a dead-end line, which did not have proper chlorine usage, thereby allowing *E. Coli* to flourish. One possible solution was to make sure that the City's chlorine usage rules are higher within the system. For the most part, the system is fine but in that particular part of the City, the chlorine residuals were found to be low. Monitoring needs to be better, and good residual levels need to be maintained.

In order to bring the Gibson well online, they have received approval to put a chlorinator on it, as a short-term fix. The long-term fix was to build a chlorination system onto the Gibson which will take a few months to engineer, design, and manufacture. The short-term fix will get them through the next few months but is not a permanent solution. The State will require the City to have that on its system to get the well back online, even though the well water has tested clean for the past few days.

Administrator Darrington distributed a handout of FAQs to help answer questions from the community. He identified the many things done correctly during this event. Public communication was a strength. The notification system for the Water Boil Order, last year, was not strong, but this one was. The Everbridge system and the use of the utility account phone numbers to contact people were effective. Information on social media and use of the employees answering questions on the phone was helpful. Internal communication worked well. Director Beaumont remained isolated from the communication system so he could concentrate on resolving the problem. Rather, Administrator Darrington served as the point person for the communications with the City Council. Updates were given as promised, which gave the community comfort in knowing they were being kept up to date. Questions were answered online and the City's webpage was continually updated. The employees stepped up, staying and working late into the night. Intern McKenna, did an exceptional job of performing duties that Director Beaumont might otherwise have done. The first three days were intense.

Improvements identified included getting additional chlorination into the system, which was being addressed. It was also necessary to make sure that residual numbers were tracked, so that early intervention could occur if needed.

Council Member Williams reported that he understood that the State had mandated that Gibson well be chlorinated, which was probably necessary. He wanted to know what was being done to address the low residual chlorination levels in certain parts of the City, including a timeline for getting things done. Administrator Darrington stated that staff was looking into the issue. The discussion, at this time, was that they will probably need to chlorinate all water sources. Council

Member Andersen asked if that would be required even if the State does not mandate it. Administrator Darrington indicated affirmatively.

Council Member Williams asked if it was the areas at the end of line where findings of positive testing occurred. Director Beaumont reported that Utah does not require a groundwater source to be chlorinated unless it is found to be low-quality water. If water is tested and comes back as low-quality water source, then there could be some form of chlorination required on groundwater wells. Very few cities have such conditions and it is not common in the U.S. It is also not common to have chlorination in a well. He noted that when Administrator Darrington said they were looking at all wells, they are more interested in getting more chlorination into the system. The wells the City have been fairly well protected, in very deep aquifers with water coming from the mountains. They are very good, clean sources. Again, when looking at this issue, it was not believed that the well was the problem. Had it been a problem, they would have seen issues with the other wells coming from that same aquifer. He further indicated that there is a known potential for contamination from water flush backs. The Gibson well is required to have such a system, which will be helpful in maintaining more chlorine for that zone, which will be critical.

Related to the question about last year, one of the requirements from the State was to put on an online monitoring device that automatically measures the actual residuals. The concern is about keeping chlorine residuals higher all the way out into the zones. When talking about areas such as down by the Boulevard which is far from where the chlorine is injected, residuals are difficult to keep up without over-chlorinating the well. Therefore, one of the other wells they are looking into using a chlorinator on is the Boulevard well. There are always issues regarding the selection of a site and where to have chlorinated water. For the Gibson well, they have about six months to get the chlorinator approved, constructed, and operable. A temporary emergency chlorinator is a temporary system that will work.

Council Member LeMone asked about the process of how homes are chosen for testing and about the actual testing procedure. Director Beaumont stated that the water system plan approved by the State has been in place for many years. The City chooses 40 sample sites in advance from the approved locations to safeguard the process and assure that the entire City is monitored. The same homes are used year after year, which over time may cause strain on the property owner.

The specific procedure at the sample site involves a trained employee taking the water sample typically from an outside hose bib site. Director Beaumont reported that there is occasionally a need to identify system issues versus an issue in a particular home, which is why they do the upstream and downstream testing to rule out an issue with a particular home. They are working to get sampling hydrants installed. Currently, a \$20,000 budget has been approved that will provide five to six hydrants. That mechanism will take the actual home environment out of consideration. Once taken, the water sample is sent to the lab for analysis. The sample is tested for 24 hours for *Coliform*, which indicates that other bacteria may be present. If that test is positive for *Coliform*, the sample is tested for *E. Coli*, and houses upstream and downstream are sampled as well. The testing for *E. Coli* takes an additional 24 hours. Council Member Bullock suggested that the process of testing, including the length of time required, be included in the information provided to the public.

Council Member Anderson asked if additional chlorine will affect the taste of the water. Director Beaumont stated that the level of chlorine typically does not impact either taste or odor of the water.

When asked how to determine if a person's location is within the affected area, Administrator Darrington stated that the interactive map can identify locations by address. The map had 60,000 to 100,000 views.

Director Beaumont was asked to explain "cross-connection." Pleasant Grove originally used a system for culinary water which had a "stop and waste" valve to service the home and irrigation. At the end of the season, the "stop and waste" valve would be turned off and the irrigation system would be drained. The problem with a "stop and waste" system, is that they can push water back. When the City went to a secondary water system, the intent was to make sure that the valve system was cut and capped. The general system cannot be connected to an irrigation system due to the risk of back pressure from the secondary system on one side and culinary water on the other, which causes a backflow and the mixing of waters. As a result, a cross-connection connects both systems but is usually isolated with a valve. Such a connection is not guaranteed to be leak-free, which makes it important to know where the cross-connections are and if they have approval. Above the canal, there is no secondary water, but a reduced pressure zone valve is required to ensure that when they blow out irrigation at the end of the season, it will not blow something back into the system. Such valves require yearly inspections, per State law. The goal is to make sure that potable water systems are completely isolated from any potential for contamination.

The City inspects the physical disconnects. It was thought to be unlikely that someone would come back in and reconnect the system. Most of the issues pertain to people being unaware of the potential for contamination. Also, all meters have a dual check valve to make sure water cannot be pushed back. As the systems age, however, the potential for leaks increases. Cross-connections present a high risk. Council Member Williams thought most of the problems were where originally service was culinary water and the hook up to secondary water was done without the cross-connection being severed. When asked about the likelihood of someone hooking into the secondary from the "stop and waste" valve, Director Beaumont stated that such an occurrence was unlikely as the "stop and waste" valves are located four feet deep.

Council Member Jensen asked what kind of safeguards are in place when the City water system is accessed, such as during construction. Director Beaumont reported that they have a process in place that includes contractors not being allowed to touch any City valve. The contractor is required to notify the City of any actions involving the water lines. Public Works personnel are on-site at the time of hook-up connections to turn the City valves off. There also are "hot pack" valves that require the pipe to be drilled when the line is still hot to get the water out. Although this procedure creates a potential risk for water contamination, it is not likely. Public Works personnel are present during this procedure and have control of the valve. The City is also present when the two-day testing procedures are done. Director Beaumont stated that there is good protection for the water system. Public Works is heavily involved to ensure that everything is in place before connections are made.

Council Member Jensen asked about the capabilities available through Everbridge. Administrator Darrington stated that they are discussing the possibility of using it more as a resource and disseminating the information to the public. Director Ludwig will help the City use the Everbridge system more robustly, as it is a good resource. Council Member Andersen stated that a power outage also occurred that same night. Council Member LeMone, recognizing that it took the City five to six hours to provide notice, asked if they should have provided an interim notice. Administrator Darrington stated that the State requires a 24-hour window for notification. He noted the need to quickly notify the public but stated that the City needs to be ready to answer questions and have information readily available. It takes time to mobilize and get information to pass on. They do their best and move as quickly as possible. Director Beaumont remarked that this event was managed better with Administrator Darrington being the point person.

2) **Staff Business.**

Park Director, Deon Giles, reported that he met with the trail builder, who will provide additional numbers for consideration. They received \$25,000 in grant funding from Utah County and need to have some construction done by March 1.

Police Chief, Mike Roberts, reported that Tanner Edwards' last day was Thursday. Staff has received 10 to 12 applications to fill that position. They had a busy week, with an aggravated assault and other assault incidents. One involved two high school students at the high school who were fighting over a Facebook issue. Their fathers got involved and made the children go to the high school to "duke it out." Ultimately, the fathers were arrested because they refused to provide the requested information. There were also several Driving Under the Influence ("DUI") incidents.

Community Development Director, Daniel Cardenas, reported that new RAP sheets are available. He was also in the process of conducting interviews for two new employees.

Human Resources Director, Kyler Ludwig, read an e-mail from a parent regarding the positive impact of swim lessons on his daughter. He also reported that the pool closed the previous day and the year went well. Staff was commended for their efforts.

Deputy Fire Chief, Drew Engemann, reported that the new ambulance will be delivered in a few weeks. The Department remains very busy. There were 160 calls received in June; 180 calls in July; and 169 in August. American Fork came to the City 39 times last month performing six to 11 transports that Pleasant Grove was unable to do due to staffing and equipment issues. There is a need for paramedics, which are difficult to find, to allow for better coverage.

3) **Adjournment.**

MOTION: Council Member Jensen moved to ADJOURN the Work Session at 5:33 p.m. Council Member Bullock seconded the motion. The motion carried unanimously with Council Members Andersen, Bullock, Jensen, LeMone, and Williams voting "Aye".

The City Council Work Session minutes of September 7, 2021, were approved by the City Council on September 21, 2021.



Kathy T. Kresser, MMC
City Recorder

(Exhibits are in the City Council Minutes binders in the Recorder's office.)

