MINUTES OF MEETING

COMMUNITY ADVISORY BOARD HAVEN WELL CONTAMINATION

Portsmouth City Hall 1 Junkins Avenue Conference Room A

8:00 a.m. September 29, 2015

ATTENDEES:

Community Advisory Board
Robert Lister, Mayor - Portsmouth
Rich DiPentima, Chairman
James Heinz, Deputy Fire Chief - Portsmouth
Kim McNamara, Health Officer - Portsmouth
John Stowell, Health Officer - Newington
Andrea Amico, Resident - Portsmouth
Shelly Vetter, Owner - Discovery Child Enrichment Center

City Staff

Brian Goetz, Deputy Director, Department of Public Works – Portsmouth

<u>Members Absent</u> Councilor Stefany Shaheen

1 CALL TO ODDED

1. CALL TO ORDER

Chairman Rich DiPentima called the meeting to order at 8:03a.m and welcomed everyone. He introduced the Community Advisory Board (CAB) and reviewed the agenda for the meeting.

Mayor Lister requested that the Committee discuss (at some point) their continuing role of as they move forward.

Chairman DiPentima stated that that he has that discussion on his agenda as well. He felt it was best to hold this discussion after the meeting with the Agency for Toxic Substances and Disease Registry (ATSDR).

2. DISCUSSION FOLLOW-UP ON MEETING WITH THE AIR FORCE

Chairman DiPentima stated that a lot has happened since the meeting with the Air Force (AF). Rumors about the AF contesting the Environmental Protection Agency (EPA) order have been circulating. He stated that the AF will not be contesting the EPA order. There is a plan moving forward to treat all three wells. In addition, the Haven as well as the Smith and Harrison Wells will be tested.

Mr. Goetz stated that the Portsmouth Department of Public Works (DPW) has met with the AF. The City presented their request and the AF stated that they will act per the City request. They will begin work on the design of the system. There is a meeting next Thursday with the engineers to discuss designs. They will look at other facilities and how they have been designed.

Chairman DiPentima asked how long it would take to install the filtration system.

Mr. Goetz stated that he would get back to the Chairman next week. There are many factors involved including remediation which complicates matters from the City perspective. Site 8 is part of the Fire Training Center (not the Haven Well). He felt that the approach taken by the AF(drinking water treatment method) will fit with what works for the City. Mr. Goetz has spoken with many facilities that have the treatment system in place and the DPW engineer identified other water systems that have installed treatment systems. For the most part, it has been charcoal. The change out of the carbon filtration must be kept current. One of the pit falls of this type of treatment system is that the carbon will take out the other organics as well as the PFC's so it will have an effect on the length of effectiveness for the carbon. The good part is that it will remove contaminants in addition to the PFC's.

Ms. McNamara wondered whether installling individual systems might not be necessary with what the AF and City are doing with carbon filtration.

Mr. Goetz stated that it probably would not be necessary. It might be a band-aid in the meantime until the larger carbon system is installed. Individual systems may come into play if the larger carbon system fails or becomes saturated, but the system will be very closely monitored so a smooth operation is anticipated. Most systems, though, have more than one charcoal filter so the chance of complete saturation is low. He stated that in Minnesota (Air National Guard installation) they change the carbon filters every 16 months. They have 10 filters and change out 5 filters every 16 months. There is very good data on the Haven Well as far as what other contaminants could be in the system. They want to be assured that the system that is installed will take out those contaminants as well.

Chairman DiPentima inquired about whether the AF would pay for the operation of the system.

Mr. Goetz stated that he is uncertain about that at this point. They are not quite there in terms of that discussion. For the one in Minnesota, it is covered by 3M. The Air Force has to get a sign-off first by the EPA. The cooperative agreement will then be decided upon. There are other treatment technologies, but carbon seems to be the best for this application.

When cleaned, the carbon is vacuumed out and the waste gets incinerated, so it is handled as a "hazardous waste" by a company that specializes in handling of that type of waste, but the City would not end up having to deal with a concentrated waste.

Ms. Amico inquired as to whether the AF would still be following the EPA order on time for installation.

Mr. Goetz stated that they would, but the matter shouldn't be rushed. It has to be designed correctly first. He stated that he would like to have the system installed tomorrow, but it shouldn't be installed until there is certainty that it is going to work properly, and that takes a bit of time.

Ms. Amico clarified that the details are not clear at the moment, but she inquired if they could expect that within 1-1.5 years the system would be operational.

Chairman DiPentima stated that they have to be cautious in terms of defining a time frame. The original EPA order stated that they will be treating the Haven Well. Two wells (Smith and Harrison) have been added. It is best to add the two wells, but from an engineering and construction perspective, it made add to the time frame.

Ms. Amico stated that it would be helpful to have additional details.

Mr. Goetz stated that the Air Force had meetings with the City last week, and then they met with the EPA. Then they sent a letter (on Friday) that confirmed what was discussed in the meetings. He received the letter yesterday. In the next few weeks, more detail will be forthcoming.

Mr. Goetz stated that he appreciated everything the Committee had done and they really have kept the issue at the forefront. From the very first communication with the Air Force in June of 2014, the City was clear that treatment was needed. It took some time, but the path is now set and there is no fight to be had attempting to get treatment.

Deputy Fire Chief Heinz inquired about whether there would be any water volume loss for available fire flow.

Mr. Goetz stated that there will be no loss. The intent is to design the system so that it will treat the maximum yield of the wells. The Haven Well has a safe yield (which is what the well can sustain) of 534 GPM. The other wells are about half of that. So the entire system can sustaini roughly 1,000 GPM.

Deputy Fire Chief Heinz inquired as to whether there would be any pre-filter, mid-filter and end filtration sampling.

Mr. Goetz stated that they will be conducting sampling at all stages of filtration.

Mr. Goetz stated that there is a residential well in Newington that has been in operation for a year and it can give us information as sort of a pilot. They know what volumes are going through. The existing tank is 400,000 gallons and the new tank is 600,000. Between this and the AF, there is over a million gallons of storage.

Ms. McNamara inquired as to whether the question was answered about the Newington location and whether it has been served by Portsmouth.

Chairman DiPentima stated it was not served by Portsmouth.

Ms. McNamara inquired as to whether the person that asked that question has been informed of the answer.

Chairman DiPentima stated that they did know.

Ms. Amico inquired about the PFC's in the Collins and Portsmouth Well.

Mr. Goetz stated that they will track this, but the PFC's are very low in those wells, almost non-detect.

Ms. Amico inquired as to why the PFC's are in the Collins and Portsmouth Well in the first place. She wondered if the PFC's might have migrated to those wells.

Mr. Goetz stated that it is a complicated situation and more technical in nature. He stated that there are a number Hydrogeologists looking at this; doing modeling, analysis, etc.

Mr. Goetz stated that the levels are going down in the Collins and Portsmouth Wells.

Chairman DiPentima stated that the Pease Golf Course used the Haven Well until it was shut off. It was his understanding that they have now installed a private well. There is no other well serving the Pease Golf Course.

Mr. Goetz stated that this is correct.

Ms. Vetter stated that there were plans to treat all three wells. She inquired as to why that plan has changed.

Mr. Goetz stated that the AF accepted the City rationale that migration could happen, so if they treat at the source, migration won't be an issue. Secondly, the regulatory levels could come down. The AF has informed the Committee that they still have the foam and they are going to use it. They need it for firefighting. There is no good substitute.

Ms. Vetter stated that she had been asking for help obtaining clean water at her daycare center. The AF let her know that legally they cannot pay for water treatment when there is nothing wrong with the Smith and Harrison Wells. The personnel that informed her of this was the person that met with the parents (she didn't have the name).

Mr. Goetz stated that he cannot speak for the Air Force to that extent. They accepted the rationale of the Committee and the City.

Courtney Carignan posed a question regarding seasonal fluctuation and whether the levels of the PFC's go down in the summer thereby tracking with seasonal fluctuations.

Mr. Goetz stated that there hasn't been a long enough time period to know if the levels go down seasonally. That is what the hydrogeologists are analyzing, but he stated it was a good question.

Ms. Carignan stated that with regard to replacements for PFOS containing foams, she has been communicating with people in Sweden. The Swedish government conducted an analysis on AFFF foams that can replace PFC containing foams. They are using these foams in Sweden. She contacted the AF, sent the links on the subject and they stated that they would look into the matter. For actual fires, she believed the Swedish Air Force was still using the PFC containing foams, but for training they were using the AFFF foams.

Ms. McNamara stated that she thought the AF made a statement that they will not use the PFC containing foams for training.

Deputy Fire Chief Heinz stated that he interpreted the AF statement that they have backed off on the training.

Ms. Carignan inquired as to whether the Fire Department was considering using those replacement foams.

Deputy City Fire Chief Heinz stated that they have considered it. In fact, he purchased 20 gallons of it for training, but no one is using it. This is unusual because they do quite a bit of training.

Ms. McNamara stated that there is a large gap of information for any chemical that is brought on board. The new chemical could be something that poses more of a risk than what it is replacing. Reliable information has to be sought prior to use. She asked whether Sweden was doing (or planning to do) a full complement of health studies prior to advocating for a compound that doesn't have PFC's in it.

Ms. Carignan stated that she didn't read the report, but felt fairly safe with the assessment done by Sweden.

Mayor Lister asked Ms. Carignan to send the links to the Committee.

Chairman DiPentima stated that it is important to look at the substitute chemicals to ensure they are safe. Scientific steps must be taken to ensure this.

3. DISCUSSION FOLLOW-UP ON PEDIATRIC TEST RESULTS MEETING –

Chairman DiPentima stated that he thought the meeting regarding the release of the children's blood test results went as well as it could have. Everyone did a wonderful job given the difficulty of the situation and the emotion involved. The public was terrific in responding to Dr. Chan and everyone had the chance to voice their opinions. It was a very productive and useful meeting. Dr. Chan did an outstanding job of presenting the known information. He added that future testing may or may not happen. Almost everyone had a

chance to get their questions answered. He acknowledged and apologized that Ms. Amico felt that she did not get all her questions answered.

Mayor Lister clearly stated his advocacy for continued check-ups/follow-ups down the road. He will continue to advocate for that as a City Councilor, and as a resident. He doesn't want this matter to get lost in the shuffle once the Committee's work is finished and the wells are cleaned up.

Chairman DiPentima stated that this is why this subject matter should be discussed with ATSDR. Then it will be on record and it (studies) will hopefully be something that ATSDR would be committed to. The future City Council and Mayor will have to hold their (ATSDR and DHHS) feet to the fire. He thought that Ms. McNamara, as the City Health Officer, would have a key role in monitoring the situation.

Ms. McNamara wondered whether there was still a chance for Ms. Amico to get her questions answered.

Ms. Amico said that she spoke with Dr. Chan after the meeting and her questions were answered, but the answers were not public. She stated that the questionnaire put out for the pediatric population was inadequate. It did not ask if children were breast fed, formula fed, or if their mother worked on base. The questionnaire only asked how many days daycare was attended and how much water was consumed. She would like to ask that DHHS put out an additional questionnaire for the pediatric population asking certain questions that she felt were critical in determining the exposure of the pediatric population.

Chairman DiPentima stated that he would hold off on what Ms. Amico is referring to in order to avoid duplication of efforts; we do not yet know what ATSDR will be doing. ATSDR may go back and ask the questions that Ms. Amico was posing.

Ms. Amico wondered what the time frame would be. It may be a year or two down the road before it is known what ATSDR is going to do. It would be helpful to discern now whether children on base have been breast feeding, drinking formula made with base water or bringing in their own water. She handed out a sample of the current questionnaire. She felt that the questions she was suggesting to ask were pretty simple questions without thinking of this as a large research study. She felt it was not an unreasonable request to ask for another questionnaire. It (questionnaire) was not well thought out and they (DHHS) acknowledged that. They stated that they had put it together prior to any public input. She brought this concern to the attention of Dr. Chan and he stated that it is something to think about. Even though she felt that he acknowledged her thoughts, he also felt that the questionnaire was perhaps inadequate.

Ms. Amico stated that another item she spoke with Dr. Chan about was the Texas Study. He had said that he reached out to the author of the study. He told her that the author didn't have the data anymore. She asked of him if it could be ensured that the Pease data will be maintained and that it will be available 5 years from now. She stated that proper handling of the data is very important. She stated that he told her that this was a good point. She

wants to ensure that the data does not get lost in the shuffle. She asked Dr. Chan if the blood samples are being kept. He pointed out that the consent form stated that blood samples will not be kept. She posed the concern and question that if ATSDR would like to test for something additional down the road and the samples have not been kept, that will pose a problem.

Chairman DiPentima stated that the samples were sent to the CDC. He does not know what they do with the blood. There may be a storage limitation protocol/policy.

Ms. McNamara stated that there are consent issues with a study such as this that are not insignificant and that is why ATSDR needs to be the lead agency. It began with taking blood samples; DHHS went to bat for that and the CDC graciously agreed. The other issue gets into research design, proper consent, data management plans, so ATSDR involvement is critical. The Committee can recommend what things they (ATSDR) take on, but the City or Committee is not the appropriate agent to take on the liability/scientific responsibility of conducting a study.

Ms. Amico wondered what would happen if ATSDR chose not do this. She felt that the Committee must stay on top of this.

Chairman DiPentima concurs that they need to stay on top of this, but ATSDR must be given the chance to present what they are going to do first. He would like to give them the opportunity to speak about this on October 14 at the meeting.

Ms. Amico stated that she felt that the Committee was putting a lot of eggs in the ATSDR basket.

Chairman DiPentima stated that they are the official research branch and that the Committee should let them do their job.

Ms. Carignan stated that she spoke with ATSDR yesterday and they were very interested in what questions the community had. They stated that this wasn't the only community impacted by this type of exposure in the country. There are 10 communities nationwide and they expect the number to grow. Given the fact that there is more water testing now, they felt that it would be a likely scenario that more communities like Pease will be discovered. She stated that what ATSDR decides to do will largely be influenced by what the questions are from the community. The first step is to figure out the questions, and then design the study.

Ms. Carignan stated that she felt conflicted about the blood test results that Dr. Chan presented. In the first meeting discussing adult blood test results, he presented a comparison of the geometric means and also what percentage of the Pease Tradeport population was above the 95% percentile. It was generally more than 5%; the results actually showed 14-20%. At the meeting for the pediatric results, he presented the median, the maximum and the range. She felt that it was a bit misleading if the question was, are the levels at Pease Tradeport higher than the general population. The data analysis didn't really answer that

question. She felt that there were people at that meeting that felt the answers/data analysis was not right, or complete.

Chairman DiPentima stated that there was also a discussion of the median and arithmetic mean at the meeting, not just the range.

Ms. McNamara stated that she doesn't know that they can answer the question as to if the children didn't drink the water, what would their exposure have been. Complete health assessments would have to be done. There is no control group. From the very beginning, DHHS was asked to assist the community in obtaining blood samples and they have worked hard to do so. They are responding to the community. However, they are not in a position to be able to answer all the questions.

Deputy Fire Chief Heinz stated that they have to be certain to ask the right questions.

4. PLANS FOR MEETING WITH ATSDR on OCTOBER 14, 2015

Chairman DiPentima stated that the deadline for the second round of testing (sign-up) is Friday, October 2, 2015. The number to call to get tested is: 603-271-9461.

Ms. McNamara received two calls recently from people that stated that they read in the paper that blood testing was "recommended" when there has never been a medical recommendation for blood testing. When these folks called the state, the state confirmed that there was never a "recommendation".

The reporter present from the Portsmouth Herald stated that "recommendation" did not appear in his article.

Ms. McNamara inquired as to whether it could be stated somehow that there was never a medical recommendation to have a blood test.

Chairman DiPentima stated that it was a personal decision whether or not to get tested.

Ms. Amico stated that she received questions from blood donors. She asked them to forward them on to the Committee.

Chairman DiPentima stated that they will forward them on to the American Red Cross. Blood donation is for emergencies and to save lives. He is uncertain that at the point of saving a life if there would be worry about PFC's. It is an important issue to think about.

Ms. McNamara noted that one of the categories that tested higher than the Pease Tradeport population was American Red Cross blood donors so they do have some data.

Chairman DiPentima stated that with regard to notification of people on Pease Tradeport for the second round of blood testing, he reached out to Dave Mullen. Yesterday, 2 electronic notices were sent to everyone at Pease Tradeport.

Ms. Amico and Ms. Vetter stated that they did not receive the notification.

Ms. McNamara asked Ms. Amico and Ms. Vetter if they received the community newsletter, from the City last Friday letting people know about the second round of testing.

Chairman DiPentima stated that they don't have the ability or control to get notice to everyone and they don't have the control over the head of the agencies at Pease Tradeport in terms of distribution of the notification.

Ms. McNamara stated that she is hoping that with ATSDR studies there will still be future opportunities for testing.

Chairman DiPentima stated that the State, the CDC and Portsmouth Hospital will have a logistical challenge on their hands. The deadline is the 16th for blood to be drawn. People may get restless with not having the test results for a couple of months. There will be people that will let us know that they didn't know about the testing. Future activities in research may include people not tested.

Ms. McNamara stated that there is the unresolved issue of golfers on Pease (she received calls from two golfers) to think about. The golfers stated that the person at the state level told them to call her. The golfers that she heard from have been golfers at Pease Tradeport for years. Apparently, there are stations on the course in which people can fill their water bottles. From the perspective of DHHS, these people do not meet the criteria (of working or living on Pease) for having blood drawn.

Chairman DiPentima stated that it is a seasonal exposure issue. It is a difficult thing to draw the boundaries with criteria. Whether those incidental exposures are significant, we do not know. We know that the golf course did use the Haven Well until it was shut off. If they want to be included in the group being tested, why not include them. He will send an email to Dr. Chan to ask that they be included in the group being tested.

Ms. Amico reiterated what the Governor had said that "anyone exposed that wants to be tested should be tested".

5. OTHER BUSINESS

Chairman DiPentima reminded everyone about the October 14, 2015 meeting with ATSDR. Tarah Somers, Regional Director, from Region 1 Boston office of ATSDR is requesting questions. He asked that the Committee forward questions for ATSDR to him by the 7th of October, 2015. ATSDR requested a conference call with Chairman DiPentima tomorrow at 9:30am. He asked Ms. McNamara to be present for the call. He stated that no decisions will be made and anything that comes out of that call, he will share with the Committee. There are expectations that there will be ongoing studies about exposure to PFC's. That is part of what is considered to be their role (charge from the federal government).

Mayor Lister stated that there must be a common language when talking about studies and monitoring, etc. It is not the responsibility of the City, but has potential to get lost. He is advocating for monitoring. It is very important in terms of progress.

Chairman DiPentima stated that a study may take 15-20 years and comparing that to the general population can help. We will get statistically significant data.

Mayor Lister stated that he is not talking about control groups; that means money, resources, etc. Monitoring seems a no-brainer in his mind. All the work the City is doing should payoff in a positive way. The City does not want to lose this opportunity.

Chairman DiPentima stated that this is what will be discussed at the meeting on the 14th with ATSDR. A study must be scientifically sound and be able to stand up to scientific scrutiny.

Ms. Amico stated that she is trying to understand the role of ATSDR. Will they will take everything into perspective and make a decision or is it more of a continuing collaborative process.

Chairman DiPentima stated that it will be more of a collaborative process. In the end, though, they will decide on the study and it will be their responsibility to conduct the study.

Ms. Amico stated that it sounds like it is multi-dimensional. There is the study piece, the monitoring piece, as well as other pieces.

Chairman DiPentima stated that it is all part of one function.

Ms. Amico inquired about communicating with people 5-10 years from now.

Chairman DiPentima stated that it falls under the study protocol and the relationship DHHS has with ATSDR for providing updates. They will need to provide progress reports.

Ms. McNamara stated that when ATSDR asks a research question, they may ask for community input. They will then design the study based on the input. It is beneficial to Portsmouth to keep an open mind to what ATSDR wants to do (as the experts), particularly as the testing goes national. The City and Pease Tradeport can benefit from the information and their expertise on the subject matter. Also, what may come down the pike with testing is an unknown at this point. If the relationship with them is established, they will keep us in the loop with what they are doing elsewhere.

Chairman DiPentima reiterated a reminder to provide questions to him for the ATSDR meeting on October 14, 2015.

Ms. Carignan stated that this has been a unique opportunity for her to be involved in a community effort. She went back to school because she was working as an environmental consultant on a site where there had been exposure to Trichloroethylene (TCE) in

Pennsylvania. She was in close contact with the community. They did not understand what the exposure meant in terms of health. At the time, TCE was not a known carcinogen. She knows now what she would've done in the other situation in retrospect. On site, one of the women in the community was diagnosed with liver cancer right after she left. She had to have a significant portion of her liver removed. She questioned why there was not the recommendation that that there will be some sort of monitoring with the Pease Tradeport situation so that people can detect cancer early. The state is not going to do that. The impetus for it needs to come from the community. We must act without having all the answers at hand because it will never be the case that we know all the answers. She wondered how to take the information at hand and do something meaningful with it and not make people wait 20 years. There is some evidence to the effect that PFC's have something to do with increasing cholesterol levels. One question is whether people at Pease Tradeport have high cholesterol levels. The study shows that there is a pretty strong effect on the immune system so immune titers are being monitored (before and after vaccination) in that particular study. She wondered whether titers in the Pease Tradeport community could be taken. Some children come out with an antibody effect that is below what would be effective for protection with vaccination. This is a very relevant public health question. She wondered whether the children at Pease Tradeport are experiencing ineffective vaccines. This is a question that the Committee could pose. Another difficult question to answer is with regard to cancer. There are things that perhaps could be recommended now such as getting tested for those cancers that PFC's may spark. Children that are exposed prenatally, may be predisposed to kidney cancer, etc. She felt it was important to pose these questions now. She also has been looking in the firefighter literature and the cancers from PFC exposure are often not statistically significant. It seems that this might be due to the fact that some firefighters use AFFF and some use PFC containing foams so the statistical cancer information becomes distilled or diluted (when looking at the entire populations).

Deputy Fire Chief Heinz concurred that the information/statistics for firefighters is diluted.

Chairman DiPentima asked Ms. Carignan to summarize questions and send them along to him and he will present them to ATSDR.

Chairman DiPentima stated that they are awaiting release of all other blood tests so there might be a hiatus between now and the results of the blood work. After the meeting on the 14th, there will need to be a follow-up meeting with the CAB to talk about the role of the Committee and the final recommendations to the City. The work will need to be turned over at some point to the people that will continue long-term monitoring.

Ms. McNamara clarified that recommendations are not being discussed right now.

Chairman DiPentima stated that this was correct. He stated that Ms. McNamara, as Portsmouth Health Officer, will have an ongoing role beyond the life of the CAB.

Mayor Lister wanted to provide a report to City Council about the work of the CAB. He wants to ensure they do not make recommendations that make work for Ms. McNamara and

Mr. Goetz. Everyone has gone beyond the call of duty. He'd like to end at a point where they are not saying this is a City issue.

Ms. McNamara stated that she is concerned about bio-monitoring in the general population. PFC's have brought this to the forefront. She stated that in general our bodies are likely bearing a chemical burden and the burden may be bio-accumulative. She would like the Committee to recommend public education about the chemical body burden we may be experiencing, as well as the bio-accumulative and health aspects. If the Committee could end this process with an educational piece that will help the general populace understand the chemical body burden they are under from numerous environmental exposures even beyond PFCs, it would be a great public health benefit.

Ms. McNamara asked that when Ms. Carignan sends her summary of questions to Chairman DiPentima, could she also look at TSH as a potential indicator.

Ms. Carignan agreed to do this.

6. ADJOURNMENT

The meeting was adjourned at 9:33 a.m.

Respectfully submitted,

Toni McLellan Recording Clerk, City of Portsmouth