



**US Army Corps  
of Engineers®**  
New York District

**Former Raritan Arsenal; Edison, New Jersey  
Formerly Used Defense Site (FUDS)**

**Public Information Meeting  
13 January 2014  
Centre Place at Edison Club House  
1 Stanley Swiderski Avenue • Edison, New Jersey**

## **Meeting Summary**

### **Introduction**

The meeting started at 7:20 PM. Attendance: 14 Centre Place residents and two local officials. Sandra Pietto, U.S. Army Corps of Engineers project manager, welcomed everyone and gave a brief overview of the former Raritan Arsenal, where the Army Corps has been conducting investigations and cleanup actions for more than 20 years. Before Centre Place was built, it was completely remediated. Additional work is now being done on the Middlesex County College property next door to Centre Place. Ms. Pietto introduced Mark Callaghan, the project manager from CH2M HILL (the Army Corps' contractor).

### **Presentation**

Mark Callaghan asked if attendees had received notice of the previous meeting in October (yes). He then went through the presentation explaining the three phases of the remedial investigation, the results of Phase 1, and the plans for Phase 2 starting later this month. The key point to emphasize is that the Army Corps is very committed to keeping the public informed about what is going on, which is why they hold public meetings, distribute flyers, mail letters, and so on. The following is a brief summary of the presentation. (See **Attachment 1** for a copy of the slides that were presented.)

Investigation Area 18D is adjacent to Centre Place at Edison. In 2005 and 2006, while Centre Place was under construction, the Army Corps removed hundreds of practice or inert bombs (not filled with explosives). In 2012, the college was using ground-penetrating radar for a utilities survey and found some unexplained anomalies (metallic objects) beneath their parking lot next to Centre Place. Because munitions had been found nearby in 2005, the college asked the Army Corps to investigate.

Mark described the work that was conducted in Phase 1 (Nov – Dec 2013): surface clearance, digital geophysical mapping (DGM), and data analysis. The DGM in Area 18D was conducted on December 18<sup>th</sup> and a total of 432 anomalies were mapped in a 1-acre portion of the college parking lot. A total of 205 anomalies were randomly selected for further investigation.

In Phase 2, in multiple locations throughout the former arsenal, unexploded ordnance (UXO) technicians will use metal detectors to find and flag those 205 anomalies, dig them up, and dispose of them. These anomalies could be anything: trash, pipes, fence posts, construction debris, or they could be munitions.

Exclusion zones will be established to keep non-essential personnel away while anomalies are being dug up. Although any munitions under the parking lot would probably be inert, like those that were removed in 2005-2006, we have to assume they could be dangerous until we know for sure. The size of the safety buffer (exclusion zone) is based on the distance that fragments from the largest potential munition might travel if that munition exploded accidentally.

To minimize disruption to the public, USACE first plans to use advanced electromagnetic equipment called TEMTADS to determine what shape the metallic items are. There is now a library of TEMTADS data that analysts can compare and know whether or not items are munitions and if so, what kind. Anything that can be identified as not a munition item doesn't need to be dug up.

If the data are inconclusive (many items are jumbled together or there is other interference), then we will have to dig that up. If so, we will communicate with individual residents who live within the exclusion zone and will need to leave their homes for several hours. By using TEMTADS, at least we know we are not asking people to leave while we dig up a hubcap.

Jay Elliott (Edison Township Health Department) added that if anyone needs to be relocated for a few hours, they can go to the Senior Center while they are out of their homes; if transportation is needed, it can be provided.

### **Questions from Community Members and Answers Provided**

Q: How much notice will we get?

A: Tonight is the notice for doing the TEMTADS survey. The intrusive work will not start after that.

Ginny Farris (CH2M HILL) explained that, if any residents will need to be relocated while munitions are being dug up, they will get a personal notification in advance telling them the date and time of day, followed by a notice on their door the day before work starts. On the morning before work starts, contractor personnel will knock on doors to make sure the homes are empty. Another notice will be posted on doors to let people know when the work is complete.

Q: Who says that an item is inert?

A: We have senior Unexploded Ordnance (UXO) specialists with 20 or more years of experience as military explosive ordnance disposal technicians, who know munitions very well. They will make that determination.

Q: How deep would munitions be?

A: We're not sure yet, but the munitions removed in 2005-2006 were 20 to 25 feet below the ground surface.

Q: What part of Centre Place is affected?

A: The location was pointed out on a map, in reference to the club house, where the public meeting was held. We will provide notes of this meeting to Robert Rommel, the Centre Place property manager, who can help identify which building numbers are shown on the slide.

Q: How accurate and fast is the TEMTADS machine? How soon will it be done?

A: TEMTADS is very quick, a day or two. The initial analysis is available within minutes. After the TEMTADS work is done, the data will be reviewed by senior munitions technicians to confirm.

Q: If some items are munitions, will you have to dig up the rest?

A: No. We will look at some of the individual anomalies, measure 287 feet around that location, and see if any homes will have to be evacuated when we dig. We will let the community know, either way.

Q: Why not look at all the anomalies?

A: With random sampling, if we find no munitions at all, then we can be 95% sure that munitions are not present without looking at every single piece of metal.

Q: If you find something, would you go back and analyze the others to be sure they are not munitions?

A: If we do find any munitions, then the sampling approach can no longer provide 95% confidence about the other munitions. In that case, we might have to examine other anomalies that were not selected for investigation.

Q: How soon will you start?

A: In next few days, we will start spray painting the locations of the selected anomalies on the parking lot. Around the 20<sup>th</sup>-26<sup>th</sup> of January, TEMTADS will start. To schedule the intrusive work after that, we will need to coordinate with the college to have the least impact on their operations.

Mark went over the general schedule for Phase 2 investigation (Jan-Feb 2014), which will follow Phase 3 sampling. He stressed that the Army Corps is committed to both safety and communicating with the public every, so everyone knows what is happening and when. For more information residents can contact Sandra Pietro or visit the project website (see Attachment 2)

Jay Elliott added that this is a very transparent process; phone calls and emails are answered. Sandra Piettro is at Raritan Arsenal (also close to the investigation area) more often than at her home office. The township has been very satisfied with how Army Corps has kept them informed. For example, when a Raritan Center company found a munition when constructing a parking lot, the Army Corps responded and kept the Township informed. Because of the history of the arsenal, any construction project on the former Raritan Arsenal is reviewed by the Army Corps and a UXO expert is on hand whenever a shovel goes into the ground, if the area hasn't been dug up before.

Q: What was found recently?

A: That munition also was inert.

Q: How were the munitions at Centre Place found?

A: During construction, the developers found something. They called the Army Corps, who came right away and reallocated resources to remove everything in the construction area.

Q: Is there a danger of chemicals in the soil or water?

A: Inert munitions have very little or no explosives, so there is not much that can leach into soil or groundwater. During Phase 3, the contractor will take soil samples if any degraded munitions were found. Also, the groundwater under the arsenal is not used for drinking water.

Jay Elliott added there was extensive soil sampling done at Centre Place because the state requires that soil at child care facilities be tested to be sure it's safe. Some houses with basements have a fan in the basement to ensure that the natural radon in the soil doesn't build up inside homes. That is now standard in new construction because of the geology in the Edison area. At Centre Place, fan systems were required to be added because there was a prior industrial use of the site and also because some of the fill dirt had been brought in from the former Ford Motor Company property and it wasn't clean soil. The construction project was held up for several years during these precautions. The developer was also required to put down several feet of clean soil on top of that fill, to make sure residents can't come into contact with contamination in the fill dirt.

As there were no more questions, the meeting was adjourned at 8:25 PM.

## **Attachment 1 – Public Meeting Presentation for Centre Place Residents**