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DEPARTMENT OF THE ARMY
SENECA ARMY DEPOT ACTIVITY
ROMULUS, NEW YORK 14541-5001

REPLY TO
ATTENTION OF

SDSTO-SEI-PE

01 Jul 94

MEMORANDUM FOR:

Ms. Carla Struble, P.E., Project Manager, Federal Facilities Section, Room 2930, Region 2, U.S. Environmental Protection Agency, 26 Federal Plaza, New York, NY 10278

Mr. Kamal Gupta, Project Manager, Federal Projects Section, Bureau of Eastern Remedial Action, Division of Hazardous Remediation, NYS Department of Environmental Conservation, 50 Wolf Road, Albany, NY 12233-7010

SUBJECT: Quarterly Report

1. The emphasis of this quarterly report is on the events occurring between April 9, 1994 and July 1, 1994.

2. In accordance with para 26.1 of the Interagency Agreement (IAG) between the Army, United States Environmental Protection Agency (EPA), and New York State Department of Environmental Conservation (NYSDEC), the following quarterly report is submitted:

a. **Minutes From Formal Meetings Held During the Reporting Period.**

On May 18, 1994, the seventh meeting of the Technical Review Committee (TRC) was held at the Seneca Army Depot NCO Club. The recorded proceedings from the seventh TRC are enclosed as Appendix 1.0. This TRC meeting was preceded by a quarterly meeting of the project managers. The minutes from the project managers meeting are enclosed as Appendix 2.0.

The minutes of the May 17-18 Project Manager's meeting indicate agreement on several issues. Some of these issues were discussed at length, and specific agreement on issues or courses of action may not have been clear to all parties. The Army has indicated its understanding of agreements and actions, and indicated these as "agreed to" or "open issues". Some issues discussed at length, such as future use, may be in agreement after review of materials presented at the meeting.

If you disagree with any noted agreements or courses of action, please submit your position in writing no later than August 1, 1994. The Army will then have three weeks prior to the next project manager's meeting. Final discussions and resolution can then take place in the PM meeting.

b. Milestones Met on Schedule, Explanation of Milestones Not Met on Schedule.

(1) IAG Milestones:

(a) IAG Schedule 5.0: A proposed revision to Attachment 5.0 by Seneca Army Depot Activity (SEDA) has yet to be resolved.

(b) An extension until July 5, 1994 has been requested by SEDA for the submission of the Ash Landfill Draft-Final RI.

(2) Ash Landfill RI/FS Milestones:

(a) A report prepared by Engineering Science (ES), Inc. on First Quarter Groundwater Monitoring for 1994, Ash Landfill was received during the reporting period and enclosed as Appendix 3.0.

(b) The Final Action Memorandum Ash Landfill Removal Action was submitted on May 12, 1994.

(3) Open Burning Grounds RI/FS Milestones:

No reports were received this quarter.

(4) Solid Waste Management Unit Investigation Milestones:

(a) The Draft-Final SWMU Classification Report was submitted on June 3, 1994.

(b) The Pre-Draft Expanded Site Investigation at Three Moderate Priority SWMU's- SEAD-11, 13, and 57 was submitted on May 18, 1994.

(c) The Pre-Draft Expanded Site Investigation at the Seven High Priority AOCs was submitted on April 29, 1994.

c. Inspection Reports, Audits and Administrative Information.

FY-94 Funding Status:

Funding for the projects identified in the FY 94 Obligation Plan is available for the CERCLA program.

FY-95 Funding Status:

The FY 95 1383 Report has been submitted. The Workplan received from HQ does not reflect the updated 1383 Report. SEDA

is in the process of having the changes made.

d. Permit Status as Applicable.

There was no change in Seneca Army Depot Activity's RCRA facility permit status during this reporting period.

e. Personnel Staffing Status

(1) SEDA Staffing Update:

The Environmental Protection Specialist position was filled by Bob Huneau, who started work on April 18, 1994. He is currently working on RCRA and NEPA projects.

(2) Training:

No training took place this quarter.

f. Community Relations Activity Update

(1) Ash Landfill Administrative Records Milestones:

SEDA has updated the Ash Landfill Administrative Record File. A revised index is included as Appendix 4.0.

(2) OB Grounds Administrative Records Milestones:

SEDA has updated the OB Grounds Administrative Record File. A revised index is included as Appendix 5.0.

(3) SEAD Administrative Record Milestone:

SEDA has created this new category to include documents and reports associated with the CERCLA program for multiple sites and general information. The revised index is included as Appendix 6.0.

3. Point of contact for additional information is Janet Fallo or Thomas Enroth, telephone number 607/869-1450.

FOR THE COMMANDER:

Stephen M. Absolom
Chief, Public Works

Encls

CF (no Encls):

Legal Office, SEDA

Commander, U.S. Army Corps of Engineers, Huntsville Division, Attn: CEHND-PE-E (Mr. K. Healy), P.O. Box 1600, Huntsville, AL 35807

Mr. Michael Duchesneau, P.E., Engineering Science, Inc., Prudential Center, Boston, MA 02199

Commander, U.S. Army Depot Systems Command, Attn: AMSDS-IN-E (Mr. J. Biernacki), Chambersburg, PA 17201-4170

APPENDIX 1.0

MINUTES FROM THE

TECHNICAL REVIEW COMMITTEE

MEETING

COUNTY OF SENECA
STATE OF NEW YORK

TECHNICAL REVIEW COMMITTEE MEETING

HELD AT: Seneca Army Depot
Romulus, New York

HELD ON: May 18th, 1994

REPORTED BY: PATRICIA A. NELK

MR. ABSOLOM: Okay. If we can get started, I am going to kick this thing off as close to twelve thirty as I can today. For those who don't know, I am Steve Absolom. I am chief of public works here at Seneca Army Depot. The commander of the Army Depot, Colonel Johnson, is away in training this week. He's unable to attend and be here.

A few opening things I want or opening remarks is, first off, I would like to make sure that everybody understands that we will answer all questions but I would like them one at a time so we can answer them one at a time. This is so that we can properly record the question and the answer. So please be patient if we say, "time out, one question, please." That is the purpose for it. We passed out an agenda for today. We are going to make one slight change on that. Because of the way we are going to present it Mr. Healy is not going to give a presentation. Engineering Science will give the overall presentation. So that will be the one change we will have in the agenda.

I do see a few new faces. What I would

am the project manager at Seneca.

CPT. RAIMONDO: I am Captain Raimondo, the command judge advocate here at the Seneca Army Depot.

MR. GERAGHTY: Dan Geraghty, New York State Department of Health.

MR. ENROTH: Tom Enroth, project manager.

MR. NELSON: Bruce Nelson with Malcolm Pirne providing technical assistance to the EPA.

MS. STRUBLE: Carla Struble, project manager for USEPA.

MS. RAFFERTY: Lani Rafferty, State Health Department.

MR. GUPTA: Kamal Gupta, project manager for New York State Department of Environmental Conservation Division.

MR. MEHTA: Manmohan Mehta, New York State Department of Environmental Conservation. I am out of Region 8 in Avon

MR. SCOTT: Robert Scott, DEC permit administrator, Avon, New York.

MR. COOL: Bill Cool, Seneca County Soil and Water Conservation and councilman for the

MR. LAFFIN: Alan Laffin, Lozier Labs out of Rochester.

MR. BURNS: Chuck Burns, Lozier Engineers, Rochester, New York.

MR. ABSOLOM: Very good. Welcome, everybody. With that we are going to get started right in with some briefings from Mike.

MR. DUCHESNEAU: Sure. I would like to welcome you all here to the presentation. We will begin with an overview of the organizational project. Many of you have seen this before. On the top here is Rick Suever. You have already met Rick. He's the project manager. And technical manager for this project for the Corps of Engineers, Huntsville is Kevin Healy. I am the engineering science project manager. And Kamal, who you have met, represents the State of New York. Carla represents EPA Region Two. And Randy represents the Seneca Army Depot. We have been working together here for almost three years. Now we are fairly comfortable with each other. I think that is a very positive aspect of the project that we

the SWMU has been identified as an AOC, area of concern, or no action SWMU -- let me step back a second. Once it is listed as an AOC it enters the site investigation phase. For a no action SWMU, there would be no further action and it will be deleted from any further action investigation. The site investigation phase involves potentially site investigation. But also possibly if there is enough information to assure that a threat doesn't exist or it could possibly. We just make a completion report and that will be the end of it. However, if there is sufficient information and a removal action can be performed, that is done at the Army's discretion. To perform a removal action, say for a localized area, we have to eliminate the threat and prepare the completion report and that will be done with it.

Some SWMU's are AOC's that have a sufficient threat and additional work is required or additional large scale remediation would be required. That would enter the RI/FS phase. What this is intended to do, this whole process, is to blend the

a summary of this. Just to point out also that several of these -- I think there is seven, as a matter of fact, that have been identified on these sheets as TBD, to be determined. We met yesterday, our group project managers group which includes NYSDEC, New York State Department of Environmental Conservation, as well as EPA and Seneca. And we have agreed to classify all of these to be determined SWMU's as low priority AOC's. So when we revise this we will include all of those TBD's, or to be determined, as low priority SWMU's. I am not going to spend a lot of time here identifying any particular one. It is all shown in your handout but I want to provide you with a listing of the 72 and where they currently are classified. But what's interesting is the summary of all of the classifications of all the SWMU's. This is an overview picture -- again this is in your handout -- of where we stand on all the SWMU's.

Now, just to make sure there is no confusion here. There are 13 high priority SWMU's that have been identified in the SWMU

listed as low priority which will bring the number to twenty. We are investigating at this point seven. There are thirteen low priority AOC's that we have to consider at this point. There are twenty-five no action AOC's or SWMU's.

That pretty much is a summary of where we currently stand in the investigation and identification of all of the SWMU's or AOC's at the Seneca Depot.

One of the primary documents that is identified in the IAG is the SWMU classification report. As the name implies, it is a report that identifies all of the SWMU's, classifies them in one of the groups that we just discussed.

We have performed limited sampling recently. The limited sampling was intended to provide us with preliminary information to help support classification of several of these SWMU's that were teetering on whether they were no action or low priority. We have collected that information. And based on that information, as I said, those to be determined SWMU's have been classified as low

a busy week for us.

What I am going to show you today are some of the figures that will be included in that high priority AOC site investigation report. And I made copies of these overheads so you can follow along. Although they are not color I think you can hopefully follow along with what's happening here.

This is SWMU -- what we call SWMU four. It is SWMU four. It is the old munitions or break out washout plant. What was performed here was the spent casings of the shells, like Howitzer (phonetic) shells and whatnot, still had residual propellant in there. It would come to this plant and be washed out with steam and the wash water was discharged through leach fields. Our investigation was to try to ascertain the extent, if any, of the impacts caused by the operations. I guess the interesting thing on this facility is that we had expected to find some residual amounts of PEPS. Well, we haven't found that much. We found low levels of TNT. What I show here is we were surprised to find copper at the levels that we did find here. And we

small arms were deactivated or rendered harmless through the process of heating inside a large steel rotary kiln tube. This is the old facility. Subsequent to this a newer facility was built and that is SEAD 17 that we will discuss in a minute. What we found here was not surprising. We found some elevated levels of lead in a lot of the surface soils, which is the picture I am showing you now. The highest being upwards of nine thousand parts per million of lead in the surface soil. Lead was known to be a component of, you know, the bullets and some of the propellant material.

The next AOC that we have investigated is what we call SEAD 17. That is the existing deactivation furnace. This facility is currently being applied as part of the permit to operate under the part B permit. A trial burn has been prepared. But we identified this as a SWMU and subsequently did an investigation to identify the potential threat to human health and the environment. Again what we find here are lower levels of lead but nonetheless what we

surprising. We don't understand why arsenic would be at the levels that we found it at. Because arsenic is not typically associated with the operations that went on here; in other words, burning of powder, of munitions.

MR. DURST: Could this have come from farming pesticides?

MR. DUCHESNEAU: Yes. I believe arsenic is a component of pesticides. In some cases it could have been spread there. I guess the issue that we are concerned with is why is it so localized in this area. It is kind of unusual.

The next one is SEAD 25, this is the fire demonstration pad. What went on at this facility was, as the name implies, fires were ignited and then, you know, subsequently put out by the fire department at the facility. We have found BTEX -- Benzene, Toluene, Ethylbenzene and Xylene, otherwise known as BTEX -- at levels approaching -- the highest in this one boring is about 15,000 parts per billion micrograms per kilogram. It coincides almost exactly with the location of what we find in the groundwater for these

bentonite lined pit so the oil wouldn't seep down into the ground. The pit was ignited and then subsequently extinguished by the fire training folks. What we found here is not inconsistent with what we expected. What I am showing you are the PAH's. PAH's are poly-aromatic hydrocarbons. Those PAH's are products of the combustion process as it occurred. It was totally consumed. As a result of that, there are PAH's. They are deposited had over the surface of those soils. What we are finding is elevated levels of these particular compounds. These are the same kind of compounds that you probably inhale through cigarette smoke and the like. In this case they are deposited on the surface of the soils.

The last of the high priority SWMU's that I will be talking to you about today is SEAD 45. This is the open detonation area. This is a facility that is an active RCRA facility. The subpart X has been submitted to the DEC and we are currently in the stages of negotiating the permit for that facility. But again while that permit is being applied

of the land and the infiltration of the run off of the rain from this we found, you know, the highest concentration of explosives in the low lying area down in this spot here. So we think that what we believe is happening is some of the rainfall is basically washing some of that material down into the low lying spots.

Just to move on to what we call the moderate priority SWMU's. Again we set up this criteria of identifying these SWMU's and our investigations have been focused on worst first type of priority. The seven priority SWMU's are fairly far along in the process. The three moderate priority SWMU's are lagging along in a couple months. We will get to them in the degree of completion as the other ones are.

This is SEAD 11. It is the old construction debris landfill. And what we found here is material that was construction debris and that kind of stuff was deposited in this landfill. It is a well defined landfill. Actually I think I have this turned somewhat around here. I guess it goes

results of our geophysical and photogrametric survey. It identifies areas in the ground that are highly conductive. This produces a salt. The salt obviously increases the conductivity of the ground. As a result of that we have been able to identify the mound of this dissolved salt plume which seems to be consistent where the IRFNA pits were neutralized. This area here, the organic here is associated with dissolved salt -- nitrates from the nitric acid, calcium from the lime stone, sodium from probably the nitric acid also -- which is causing us this high conductivity area. So we think we have pretty well delineated the extent of this salt plume.

The last of the three is SEAD 57. And it is the EOD area, explosive ordnance disposal area. This is SEAD 57. At this point we don't have all our data back. I can't show you any nice color graph of this. This would obviously be for the next time we met. I will show you the map that we have produced from the photogrametric work that we have done and identify this as the area where

process as well as the investigation of the AOC's. What we generally begin by doing after we have done a thorough literature search of the history of the site is to perform geophysical; that includes EM surveys to try to identify magnetic anomalies. We try to find pits or any other anomalies. In the geophysical work we do seismic surveys. The intention of the seismic survey is to find the depth of the bedrock. From that information we believe -- and its been consistently shown throughout the investigations to date -- the slope of the bedrock or the shale defines the slope of where the groundwater flows. From that information we are able to place our wells from the upgradient and downgradient of the area. And it helps us space so we don't space them too far apart or in the wrong location so we don't miss where the downgradient location is. Its been very successful to date.

Although I have in the book identified all of the SWMU's, I am not going to bore you to death here going through each one

again following behind the moderately low priority AOC investigations. And I mean it is almost a repetition of what you have seen. They are probably a week or so lagging behind the moderate priority, the moderately low priority AOC's. We also expect this report to follow shortly thereafter. Sometime in early fall after the eight moderately low priority AOC's having completed.

I have also included in your handout again work plan cuts showing the location of the wells, soil samples that we are planning on taking. We are currently involved in completing these investigations and I am simply not going to go through every single SWMU here and show you where the wells are. I mean, it is all defined in there. I mean, unless there is a need to do that.

MR. DURST: Could I ask one question on a couple of the moderately low sites? It was radioactive waste burial sites. I was just curious what the wastes were and how were they buried? Were they containerized in some way?

MR. DUCHESNEAU: I think -- could we

that we call the bend in the road that we have identified through Phase I. Through the soil gas surveys there was a concentration of volatiles as well as through our monitoring well a source of dissolved chlorinated organics pretty much originating from this spot. We think it is responsible for the source of this groundwater plume that we have identified as the ash landfill RI/FS. We will get into talking about that briefly. On a close up of this area there are basically two areas of contaminated soil that is the focus of our interest here that we would like to remediate. It constitutes approximately 23,000 cubic yards of material or roughly 35,000 tons of material that need to be remediated in some way.

The proposed strategy here involves excavation, low temperature thermal desorption followed by thermal oxidation of off gases. It is to remove the existing threat and streamline the RI/FS process and eliminate the source of continual leaching to the groundwater plume. Treatment goals are the NYSDEC tag, technical action guidance

the gases be thoroughly oxidized. Vinyl chloride does not oxidize through carbon and we are concerned about the emissions from the stacks of that.

Just a picture of a similar process that I was involved in. It is pretty much what you see here. I don't know if you can see it in your book there but here is the conveyer. Right here is the rotary kiln. Off gases are swept through the bag house. In this case there is a wet scrubber. What you can't see is the cyclone and the activated carbon absorber. They are in the background. The soil in this case was taken out and actually put back in the ground with concrete.

Moving on to the RI/FS at the ash landfill. Again we have touched on this just briefly as part of the action memorandum. We have scheduled a submission of the draft final RI on June 22nd. The reason that has been somewhat delayed -- the reason is to put in two additional monitoring wells and the ash landfill operation unit being made operable was combined in here. We have needed to install two additional wells so

44, which is right in the middle of where that contaminated soil that we identified was. And it is a fairly extensive groundwater plume heading off towards the west. What our proposed remedial action for that problem is is a series of collection interceptive trenches strategically located; one immediately downgradient in this area and another one down at the toe. We believe because of the nature of the geologic material there -- the till, which doesn't yield a lot of water -- that the most effective way of capturing that plume is installing trenches -- trench drains to go down to the bedrock 10 feet down, back filling with gravel and at the bottom of the gravel filled trenches, you know, using PVC perforated pipe to allow the water to collect in and move off into a sump. That material would be pumped to a holding tank and treated with either air stripping or UVO zone. We are not sure exactly which alternative at this point. We are currently looking into doing treat-ability studies with UV0 zone. Those are the two alternatives that we have

and basically you cannot really destroy a metal. You can't change lead to gold. You can't change lead to Co2. It is lead and it will always stay lead. What the alternatives involved in doing something with metals are basically isolation or solidification or somehow binding the metals in a matrix that would prevent it from leaching into the groundwater, for example, or prevent it from getting on people's skin and that kind of thing. So the alternatives that we are looking at are excavation and consolidation of the areas; off site treatment of some of the more elevated levels of lead and possibly capping in place. You can see the list here. Off site landfill is another one. Constructing solidifying material. The solidification phase is a process that involves mixing the soil with the heavy metals in some type of cement based material; basically form an analytic structure. Disposing on site or off site. Soil washing is another innovative technology. That is potential application soil washing. It could separate the fine material from the course

the radio chemical one. In the case, for example, of the calcium nitrate where you got rid of the red fuming nitric acid, that was rated firstly high priority, I guess.

MR. DUCHESNEAU: Moderate.

MR. DURST: Why? Neither of those things are really toxic insofar as the nitrate? If anything, it is going to make vegetation grow better.

COMMITTEE MEMBER: There is a primary drinking water standard for nitrate. That is one of the reasons. And, in fact, we did find concentrations in excess of that drinking water standard.

MR. DUCHESNEAU: The other thing would be the concept of mixing a strong acid with a base. Not all of the acid was neutralized. Some of that acid could slip through the cracks and maybe change the pH and maybe do ecological damage. Those were some of the issues that may have gone through, you know, the people that decided upon the range. I think it was Randy and EPA.

MR. DURST: Another question I had was on your diagrams where you had the color

of the risk assessment process simply as we are doing for both the ash landfill and the OB ground, which were the last two sites we talked about.

MR. DURST: Okay. One other question on the chlorinated organics, especially at this plume that you are just discussing at the old landfill. Have you had enough time to determine whether that plume is continuing or is natural bio-remediation holding it in place?

MR. DUCHESNEAU: Seneca has been groundwater monitoring for about eight years. Actually, to be honest with you, the concentration and the extent of that thing has not changed. All the time we have been involved we haven't seen a real shift in that plume. My personal opinion is exactly what you suggested here. Is that by the time the plume gets down that far -- because the groundwater is so slow in moving here -- that it is essentially bio-remediated pretty much by the time it gets to that point. Now, will it ever move an additional 10 or 15 feet? I mean, who is to say? We don't have wells in

whole process.

MR. CHAPLICK: The other issue is how far is that from the edge of the plume? There is a drinking water well a thousand feet downgradient.

MR. DUCHESNEAU: A trench is not going to be that big of a destruction to the environment. It is basically about this wide and going down about eight feet. So we are not talking about excavating the entire site to get that. Certainly, the excavation of the soil is going to cause some environmental damage to the critters, the worms that live in the soil at that particular spot. But we would like to eliminate that source of contamination.

COMMITTEE MEMBER: Just a quick question. You basically have 10 feet of glacial till over bedrock?

MR. DUCHESNEAU: Correct.

COMMITTEE MEMBER: The depth to groundwater is?

MR. DUCHESNEAU: For the ash landfill, for example, there are times during the year where the groundwater is six inches from the

our augering, we do auger essentially to compensate bedrock. We can generally auger with no problem. We may break a few bits off here and there. It is fairly soft.

COMMITTEE MEMBER: These wells are screened in the weathered bedrock?

MR. DUCHESNEAU: The majority of the wells are screened in the overburden, the till. We have conducted at the ash landfill a fairly extensive bedrock investigation, which has included down to 100 feet; also packer tests at 20 foot intervals. And we are screening the wells at the zone that we found most permeable in the rock. That has all been completed at the ash landfill. The bedrock has not detected volatiles in the competent rock. So we are not focusing our remediation efforts at this point in the bedrock because there is hardly any water there. The permeability that we are getting through the rock through the packer test are ten to the seventh and up. So there is essentially no water there. And the water that is there is uncontaminated.

MR. HEALY: Ten to the seventh or ten to

to remediate and difficult to find and really get it out. We have, in fact, done several borings of the hot spot and have not, as of yet, discovered the presence of DNAPL's. That doesn't say we have elevated soil concentrations. We have not found through the boring program that we have done or through the existing monitoring that has been installed the presence of a DNAPL's. My answer is no. There are some transfers of the solvent in the pore space of the soils. Maybe there is a displacement of the water in the saturated pore space by some of this TCE material. But we haven't found enough evidence to say that exists as of yet. I think we have done enough borings out there that if it was there we would have hit it.

COMMITTEE MEMBER: Is there any reason to believe that the source would generate such a pool or substantial residual contamination?

MR. DUCHESNEAU: I am sorry.

COMMITTEE MEMBER: Not understanding the exact source of the TCE, would the quantities lend itself to generating the pools or

MR. CHAPLICK: Of the saturation?

MR. DUCHESNEAU: Right.

MR. CHAPLICK: I think they got 10 percent but I am not sure what the value is.

MR. DUCHESNEAU: I thought it was less than one percent. TCE is what? Seventeen hundred ppm? I don't think we are finding upwards.

MR. BATTAGLIA: Eighteen was 9.8.

MR. CHAPLICK: I don't remember what the numbers were.

MR. DUCHESNEAU: We have gone through this with the EPA. Although it is getting close to that magic number of ten percent of the saturation, this case would be 170 parts per million of TCE. One-tenth of the saturation, which is about 1700 ppm. We still have not yet found evidence that there is a DNAPL present. We have well 44 that is right smack dab in the middle of this thing at the hot spot. And that well does not indicate the presence of DNAPL. We have used clear balers (phonetic) to locate. If there is a separate phase, we haven't found that. But I mean, be that as it may, we are

encompass any of this potential area of these pits. Subsequent to this we did our geophysical investigation again to try to focus on a large area down to a small area. Although I haven't, you know, shown you the information here we have, in fact, done an EM and radar and identified the location of these underground buried pits. We just recently completed that work. So we knew that there was one pit marking out there. You could see that. We also suspected there were other pits. Through the use of geophysical techniques we have been successful in identifying those locations. Therein lies the focus of our test pits. Not throwing a dot out on this huge area. To go and do it right at the spot where we found the geophysical evidence to suggest there is a pit there.

MR. BATTAGLIA: Rob, is this the one that you are talking about?

COMMITTEE MEMBER: Yes.

MR. BATTAGLIA: When you walk around this field, it is a moot field. By the terrain it is hard to tell as far as where.

Seneca Army Depot was the last one to be built in 1956. That is an important point. A lot of details I got to hold until I get the document prepared because there is a fine line on whether something can be public information or not because of the technical information that is going into it. So the things that are over the line we can't really release. We are going to get a historical description of the activities that went on at those facilities. That is what we are going to do. The people at Sandia are helping us. We got people from the Atomic Energy Commission back in the 40's and 50's. They had people that worked here when the Army took over, too. It is also very similar across the country at these places. They had similar disposal areas associated with these buildings. Building 804 -- they called it A structure and C structure. Building 804, which is the C structure, has the waste water tank to the north of that building. We had no idea what that waste water tank was for. After those discussions with Sandia they told us in case there was a problem in the

of off site. There is other areas. This whole field really was blocked off as being suspected because we really didn't know where or how much in that area they had buried things. We did know the Army buried a lot of miscellaneous parts that they generated from de-militarization activities. They just buried the parts. I don't know if they got it handy here or not. We have found a couple areas.

MR. DUCHESNEAU: You want the miscellaneous components?

MR. CHAPLICK: Twelve A, the big one.

MR. DUCHESNEAU: It would be oriented something like this. Although I am sure you can't see it back there. What this is is a geophysical output.

MR. BATTAGLIA: Show the pits here. Right here is the pit area that I am talking about next to the woods. And after we did the electromagnetic surveys we found the other burial areas over in here, which would be over in this area here. Also, to get your bearings, building 803 and 804 are over here.

COMMITTEE MEMBER: Where are the ponds?

Do they have long lives or are these --

MR. BATTAGLIA: We may say that in the document. The problem is when you are talking about sensitive things as far as whether something is classified or not, if you can add one and one equals two you can infer it equals two. You can't really say it completely like that. So what you do is you filter out some things so you can still tell the story without telling one and one equals two. Okay. That is basically what Sandia had to do for us. They really couldn't tell us everything AEC did down there. We are still working with them. They are going to come out on site. They are studying all these sites in the country. And they are going to be out here when we do the field work. My document, when it is done, is probably going to be detailed enough. You are really going to see everything they did back then when the AEC was here.

MR. COOL: What watershed is that in, Seneca or Cayuga?

MR. BATTAGLIA: Kenda (phonetic) Creek. The duck ponds feed down through there. It

MR. BATTAGLIA: This fence line here is the perimeter of the special weapons area.

MR. CHAPLICK: That is on the inside?

MR. DUCHESNEAU: Yes.

MR. CHAPLICK: That is on the inside of the fence.

MR. BATTAGLIA: And if it is done in time, it will go into the SWMU classification on June 10th. But if it is not done and if the report is not done in time for that, it will go in the SI report with the finding of the investigation as far as the historical information about the site. And the SI reports the work plans. And the SWMU classification report would be added in the record down at Willard. Okay. Does that answer your question good enough?

MR. DURST: Yes. Thank you.

MR. BATTAGLIA: Okay. Anything else?

MR. COOL: You said you found barrels on that one site. Can you tell us what was in the barrels?

MR. BATTAGLIA: They told me it was lab waste. That is what they told me. They were disposed of in a radioactive waste burial

materials. I would say not 100 percent dry but they were not liquid materials in the drums. They were solids.

MR. BATTAGLIA: As far as what I know. Another thing --

MR. DUCHESNEAU: That is what they tell us.

MR. BATTAGLIA: When they are out there burying parts and things, who knows if they threw a drum of solvent in there. We are also looking for chemical contaminants, also porous.

MR. COOL: When you removed the materials, was the integrity of the barrels all right, though?

MR. BATTAGLIA: I don't know. They didn't tell me anything about it. If no one else has any questions, we can set the date for the next meeting.

MR. CHAPLICK: If you look at that same figure, there are three surface water and sediment sampling locations along the creek that is indicated there.

MR. DUCHESNEAU: You want me to put that up, 12?

conflicts with that. It is usually far enough ahead.

MR. ABSOLOM: Is that agreeable to everyone? Seventeenth of August it shall be. Does anybody have anymore questions? If not, thank you all for coming. I think it was an informative meeting. I look forward to seeing you all on the 17th of August at twelve thirty.

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APPENDIX 2.0

MINUTES FROM THE

PROJECT MANAGERS MEETING

APPENDIX 3.0

ASH LANDFILL GROUNDWATER MONITORING

APPENDIX 4.0

ASH LANDFILL INDEX

APPENDIX 5.0

OB GROUNDS INDEX

APPENDIX 6.0

SEAD INDEX