

MEMORANDUM FOR RECORD

SUBJECT: Fort Detrick Restoration Advisory Board (RAB) Meeting Summary, 17
November 2010

1. Summary Contents.

Items addressed at the meeting are listed below, with corresponding section numbers indicated in the column on the right.

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Please note: PowerPoint presentations were utilized during the RAB meeting. A copy of the presentations are attached to these minutes and incorporated into these minutes by this reference.

Text contained within brackets [] has been added for clarification purposes.

2. Attendees.

Members Present:

LTC James St. Angelo, Director, Safety and Environment and Co-Chair
Mr. Robert Craig, Chief, Environmental Management Office
Mr. Joseph Gortva, Environmental Restoration Program Manager
Mr. John Fairbank, Maryland Department of the Environment
Dr. Henry Erbes, Community RAB Member
Ms. Laurie Haines, Army Environmental Command
Dr. Gary Pauly, Community RAB Member
Ms. Helen Miller-Scott, Community RAB Member
Mr. Thomas Wade, Community RAB Member
Mr. Cliff Harbaugh, Community RAB Member
Ms. Karen Harbaugh, Community RAB Member

Others Present:

Mr. Gary Zolyak, USAG/OSJA (Ft. Detrick Environmental Attorney)
Mr. Rob Thomson, U.S. Environmental Protection Agency, Region III
Mr. William Hudson, U.S. Environmental Protection Agency, Region III
Mr. Keith Hoddinott, USAPHC
Mr. Randal Curtis, U.S. Army Corps of Engineers
Ms. Barbara Vichot, USAPHC
Mr. Kenneth Miaduski, USAPHC
Ms. Katie Murphy, USAPHC
Mr. Tim Llewellyn, ARCADIS
Mr. John Cherry, ARCADIS
Ms. Katrina Harris, Bridge Consulting Corp.
Mr. Paul Gordon, Community Observer
Ms. Pat Wolfe, Community Observer
Mr. Jerry Wolfe, Community Observer
Mr. Frank Anastasi, Community Observer
Mr. Gerald Koehl, Community Observer
Ms. Christine Demas, Community Observer
Ms. Anne Heavner, Community Observer
Ms. Violet Rice, Community Observer

Members Absent:

Mr. Charles Billups, Community RAB Member
Ms. Alicia Evangelista, Frederick County Health Department
Mr. Barry Kissin, Community RAB Member
Ms. Linda Robinson, Community RAB Member and Co-Chair
Mr. Gerald Toomey, Community RAB Member
Mr. Craig Toussaint, Community RAB Member

3. Meeting Opening / Remarks.

LTC James St. Angelo convened the meeting at approximately 6:30 p.m., on Wednesday, November 17, 2010, at the Hampton Inn and Suites, 1565 Opossumtown Pike, Frederick, Maryland. LTC St. Angelo welcomed everyone to the meeting and thanked everyone for their participation. LTC St. Angelo advised that the community co-chair, Ms. Linda Robinson, could not be present for the meeting. LTC St. Angelo asked the Board to introduce themselves, which they did. Mr. Craig asked a few other Army staff and contractors, as well as U.S. Environmental Protection Agency staff, to introduce themselves, which they did.

4. Purpose of RAB Meetings presented by LTC St. Angelo.

LTC St. Angelo referred to two documents, the RAB's Purpose and the RAB's Ground Rules, which were summarized on PowerPoint slides. He asked everyone to review the information so all could be familiar with how the Board operates. He noted the information would be shown at the start of each meeting.

LTC St. Angelo reviewed the characteristics of a RAB, stating the Board is jointly chaired by the installation and a community member. He noted that it is not a decision-making body, but takes feedback and comments which are used by the decision-makers. He stated that the Board is a good forum to exchange information with the community.

LTC St. Angelo reviewed four purposes of the RAB starting with providing an opportunity for stakeholders to be involved in the environmental restoration process and for that involvement to occur early in the process. He noted the RAB also provides an opportunity for RAB members to review progress and participate in a dialogue with the installation to ensure there are not any course corrections which need to be made in the program. LTC St. Angelo stated the fourth purpose is to have meetings, which are open to the public, for addressing issues associated with environmental restoration activities being conducted under the Defense Environmental Restoration Program. He said other topics not applicable to the RAB can be handled separately by Fort Detrick's public affairs office representative, who is present at the meetings to answer questions on other topics or to take down contact information to get back to a person with an answer.

LTC St. Angelo also encouraged everyone to sign-in at the front table and help themselves to a variety of handouts.

5. Meeting Minutes presented by Mr. Joseph Gortva.

Mr. Gortva stated that he had sent a draft of the meeting minutes to the RAB members. He noted that the community co-chair, Ms. Linda Robinson, had advised him that she did not have any comments, and comments had been received from Dr. Henry Erbes. Mr. Gortva asked for any other comments, and after receiving none, stated the minutes would incorporate Dr. Erbes' changes and the final version would be posted on the Fort Detrick web site and sent to the RAB members.

6. RAB Membership presented by Mr. Joseph Gortva.

Mr. Gortva stated that he had distributed a new application a few weeks ago from Ms. Shelly Luehring and had heard in favor of accepting the application from a number of Board members. Mr. Gortva asked for any other comments from the RAB. Upon hearing no other comments, Mr. Gortva recommended the applicant to LTC St. Angelo. LTC St. Angelo advised that the Army accepted and welcomed the proposed applicant as a member.

7. Introduction to ARCADIS presented by Mr. Tim Llewellyn, ARCADIS.

Mr. Gortva reminded the Board at the last meeting there was discussion about implementation of the groundwater work plan for Area B, which work will be done through a contract with ARCADIS. He stated that ARCADIS had been asked to do a brief presentation to allow the RAB members to become more familiar with the company, their capabilities, and the work they will be performing at Fort Detrick. He introduced Mr. Tim Llewellyn from ARCADIS.

Mr. Llewellyn stated that ARCADIS is very pleased to be working at Fort Detrick and coordinating with the RAB on the upcoming work. He stated that he is the Project Manager for the Fort Detrick work. Mr. Llewellyn introduced Mr. John Cherry from ARCADIS and stated that Mr. Cherry would also be heavily involved with the work at Fort Detrick.

Mr. Llewellyn advised that he had designed his presentation around questions he thought the RAB might have about ARCADIS, including: Who is ARCADIS?; What is ARCADIS' experience with Army installations and groundwater studies?; What will ARCADIS be doing at Fort Detrick?; and What is the Path Forward?

Mr. Llewellyn said ARCADIS is a global international consulting company providing services in four areas: environmental, infrastructure (roads, bridges, tunnels), water (wastewater treatment plants, municipal water supply plants), and architectural services associated with buildings. He advised that ARCADIS is publicly traded on the European stock exchange since they are a Dutch-held company. Mr. Llewellyn stated that ARCADIS has offices across the globe, but is heavily focused in the United States with corporate U.S. Headquarters in Denver, Colorado. He said that ARCADIS employs approximately 15,000 people in 300 offices worldwide, with 6,000 people being in the United States. Mr. Llewellyn advised that ARCADIS has more than \$1.2 billion in annual revenue across its U.S. offices and has been ranked the third largest hazardous waste firm in the U.S..

Mr. Llewellyn noted that while ARCADIS will reach out to experts across the company as needed, the majority of the work at Fort Detrick will be done by the more than 300 staff members in five Maryland offices. He said that Mr. Cherry and he work out of the Millersville office. Mr. Llewellyn advised that ARCADIS has been in Maryland since the 1970s and thus very familiar with the geology, as well as the regulatory environment. He noted that ARCADIS had merged with Malcolm Pirnie in 2009, and Malcolm Pirnie staff may also be supporting the Fort Detrick work.

Mr. Llewellyn said that ARCADIS likes to think of themselves as a leader in providing environmental investigation and remediation services, having over \$350 million in current

contracts with the Army and providing complex environmental services at more than 30 Army installations nationwide. Mr. Llewellyn mentioned ARCADIS' work at four nearby Army installations. He advised that he and Mr. Cherry had just completed a project at Aberdeen Proving Ground involving the installation and operation of an in-situ groundwater remediation system to treat solvents in groundwater. Mr. Llewellyn said that ARCADIS has been working for a number of years at Radford Army Ammunition Plant in Virginia addressing site-wide groundwater issues and surface impoundment investigation and remediation in a Karst environment, as well as some building demolitions. He discussed ARCADIS' work at Picatinny Arsenal in New Jersey over the past four or five years, stating that ARCADIS is responsible for all of their environmental work, including several complicated groundwater issues. Mr. Llewellyn stated that ARCADIS is also working at Fort Meade, Maryland and most recently began working on a landfill remediation project, as well as extensive groundwater investigations and remediation work involving solvent contamination.

Mr. Llewellyn noted that ARCADIS also likes to think of themselves as a leader in the development and application of groundwater remediation and investigation techniques. He explained that ARCADIS likes to focus on the knowledge behind the technology and holds approximately 30 patents for groundwater remediation technologies. He continued explaining that ARCADIS' staff have authored numerous books and displayed a photo of the most recent book, "Remediation Hydraulics." Mr. Llewellyn noted that ARCADIS' senior geologist being assigned to Fort Detrick, Keith White, leads ARCADIS' national technical discipline for Karst hydrogeology. He summarized Mr. White's background and ARCADIS' experience with projects similar to Fort Detrick.

Mr. Llewellyn next discussed what ARCADIS will be doing at Fort Detrick, stating that ARCADIS will be implementing the 2010 Area B groundwater workplan. He reminded the Board that Jeff Parks of Shaw had discussed the workplan in detail at the last meeting. Mr. Llewellyn said he anticipated initiating field work in January 2011, which would include installing up to 37 new monitoring wells up to 325 feet in depth. He stated that the well installation work would take several months, and upon its completion, ARCADIS would be collecting analytical data from 69 wells. Mr. Llewellyn explained other field work included assessing deep groundwater flow patterns under Carroll Creek and assessing vapor intrusion potential on nearby off-site properties.

Mr. Llewellyn stated that the immediate path forward includes developing safety and health plans and quality assurance plans. He noted that ARCADIS is planning the initial partnering meeting with EPA and the Maryland Department of the Environment for early December 2010. Mr. Llewellyn discussed the development of public information fact sheets and rights of entry forms for use at off-site properties where work will be conducted. He stated that other current work includes preparation for drilling rig mobilizations in March 2011.

Mr. Llewellyn closed his presentation by providing his contact information and inviting questions.

Mr. John Fairbank from the Maryland Department of the Environment asked if ARCADIS will be responsible for the dye trace studies. Mr. Llewellyn confirmed that ARCADIS will be

responsible for the entire approved workplan and will be using Ozark labs for the dye trace studies.

Mr. Tom Wade asked if the RAB would be invited to the partnering meeting. Mr. Gortva said that the first meeting would be mostly an introductory meeting, but it might be appropriate in the future for the RAB to be invited.

A member of the audience asked if ARCADIS would be identifying patterns as they exist today or in the past, for example, will the study show the groundwater flow pattern in the 1970s or just today. Mr. Llewellyn responded that science is only able to show current conditions, but some inferences can be made from the data, both backwards and forwards.

Dr. Henry Erbes asked if the off-site properties had been selected for the vapor intrusion studies. Mr. Gortva responded that they were, but that the Army needs to obtain the property owners' permission. He noted the Army can ask the regulators to help explain the purpose of the study to the property owners to gain entry and that the Army will take steps to minimize the disruption to the property owner.

Dr. Erbes asked Mr. Llewellyn for a more detailed explanation of the work that will be done to assess the deep groundwater flow patterns under Carroll Creek. Mr. Llewellyn stated that dye would be injected into a deep well and then samples will be collected for a network of wells over a period of time. He said that before the dye is injected, background samples will be collected from about 45 locations (springs and seeps). Mr. Llewellyn continued to explain that small charcoal devices will be installed, and after the dye is injected, the charcoal devices will be periodically sent to the lab for analysis over a six-month period. Ms. Helen Miller-Scott asked if some of the 45 locations would be off-post, and Mr. Llewellyn confirmed some would be off-post. Ms. Miller-Scott asked if permission had been obtained yet for the off-post locations, and Mr. Llewellyn said that ARCADIS and the Army will be coordinating with property owners and municipalities to obtain needed access and permission.

8. Interview Project Update presented by Ms. Laurie Haines, Army Environmental Command.

LTC St. Angelo introduced Ms. Laurie Haines from the U.S. Army Environmental Command. Ms. Haines stated that she wanted to give the RAB a brief update on the interview project discussed at the last meeting. She reminded the Board that this project involved interviewing former and current Fort Detrick workers and community members who might have information about historic activities, testing, research, or material handling at Fort Detrick, which may have led to environmental contamination.

Ms. Haines stated that the interviews were not being conducted by anyone from Fort Detrick, but were being done by a company, One Stop Environmental, LLC, under contract to the U.S. Army Corps of Engineers. She continued explaining that the identity of those interviewed would be kept confidential and not shared with Fort Detrick unless the person gives their permission, primarily for any follow-up questions Fort Detrick might have in the future.

Ms. Haines said that the hotline went live on September 27, the web site went live on October 11, and a public announcement was published in the newspaper on October 12. She explained that interview requests began being collected on October 12 and will continue through December 30. Ms. Haines said that the interviews (by phone and in person) will start in mid to late December. In response to a question from LTC St. Angelo, Ms. Haines confirmed that the interviews will not be conducted on Fort Detrick and will be conducted in a manner to maintain the person's anonymity. She confirmed that a summary report will be prepared, and then anything identified as being a potential environmental concern will be included in the archival search report and possibly result in a field investigation.

Ms. Haines provided the web site (www.detrickcommunity.com) and the hotline number (888-203-2912).

Ms. Haines stated that there is also a mechanism for the sharing of classified information. She explained there is a place on the web site to note whether the information may be classified that a person wants to share, and the request will be handled appropriately.

9. Archival Search Report presented by Mr. Randal Curtis, US Army Corps of Engineers.

Mr. Gortva introduced Mr. Randal Curtis from the St. Louis District of the U.S. Army Corps of Engineers.

Mr. Curtis outlined what he would be discussing, including what an archive search report is, how the founding of Fort Detrick during World War II relates to the type of documents generated, and a discussion of Federal government records in general, such as how they are kept and where they are kept. He explained that he would then discuss testing at Fort Detrick with the chemical 2,4,5-T, which was used to manufacture Agent Orange.

Mr. Gortva stated that some of the information Mr. Curtis would be presenting is highly technical and may generate questions. He asked that questions be held until the end of the presentation as they may be answered later in his presentation or in the next presentation by Ms. Barbara Vichot.

Mr. Gortva asked Mr. Curtis to first discuss the two outcomes which are part of the archival search—the preliminary report and the final report.

Mr. Curtis explained that the initial report would address 2,4,5-T, to the extent possible, with a more thorough report developed later, which would address all potential environmental releases.

Mr. Curtis discussed what an archival search report compiles information from installation records and assesses what environmental hazards might exist based on those records of historic activities. He noted that he had been doing archival search reports for more than 16 years at a number of installations.

Mr. Curtis stated that Camp Detrick was established in World War II by the Army Chemical Warfare Service, which established the Special Project Division whose purpose was to develop

the offensive and defensive biological research and development weapons for the war effort. He stated that Camp Detrick was one of several installations which served as a testing location.

Mr. Curtis explained that because the Special Projects Division was a research and development organization, there are many detailed reports written by PhDs on what was being studied and their findings. He stated that these formal reports are typically distributed to a number of libraries of like nature so these documents are generally available, along with occasional lab notebooks. He advised that because of the nature of the work being done at Fort Detrick, all of the information was classified at one time; however, most but not all of the information has been de-classified.

Mr. Curtis stated that a garrison-wide Detrick Technical Library existed on-post at one time, but no longer exists; tenants now maintain their own technical libraries. He said that most of the report holdings which would have received copies of any documents still exist. He noted that they are collecting these reports where Fort Detrick is the corporate author. Mr. Curtis advised that the reports are numbered so it is easy to determine if any are missing.

Mr. Curtis advised that other government records are supposed to be boxed when no longer needed and a process is in place for how long they are retained; he stated the keeper of these records is the National Archives and Records Administration. He noted that the records are kept at a number of facilities, including a major facility in College Park, Maryland, which maintains primarily military records from World War II and later. Mr. Curtis explained that archives are available to the public, while record centers belong to the installation, or whoever sent the documents to the center, and permission needs to be obtained to view these documents.

Mr. Curtis discussed some general facts about the chemical compound 2,4,5-T, noting that it was one of two compounds used in the herbicide Agent Orange. He noted that the two compounds were developed during World War II and were manufactured and sold commercially in the late 1940s as weed killers. He said that in the late 1960s, it became evident that as part of the manufacturing of 2,4,5-T it was contaminated with a by-product that was a dioxin, the health concern issue associated with Agent Orange, not the 2,4,5-T. Mr. Curtis stated that the use of 2,4,5-T in most agriculture was halted in the 1970's, and EPA banned all uses in 1985. He said that the other compound (2,4-D) is still in use today as a weed killer.

Mr. Curtis noted that the questions about Agent Orange have come up in the past to the Department of Defense. He advised that a 2006 response to Congress became the basis of the Department of Veterans Affairs web site which has information about where testing occurred in the United States. He advised that Fort Detrick named its reports "Special Reports" with numbers, and he showed a list of relevant reports. Mr. Curtis advised that the reports had been located and reviewed.

Mr. Gortva clarified that Fort Detrick was not looking just where Agent Orange had been tested, but anywhere 2,4,5-T had been tested. Mr. Curtis concurred and added that Agent Orange was not developed until the 1960s, but 2,4,5-T was tested starting in World War II. He advised that these plant growth inhibitors were called "LN agents." Mr. Curtis explained that the mission of the Crops Division was to reduce the value of crops by limiting their growth, not to kill the crops

completely, and that was the intent of the research. He explained that the difference is significant because different amounts of chemicals are needed to inhibit growth versus defoliation.

Mr. Curtis explained that the testing process involved initial evaluations with small, petri dish amounts in a laboratory. He stated that the ones that passed this test would then be evaluated in slightly larger greenhouse tests. He continued explaining that the most successful World War II inhibitor was 2,4-D, which became the chemical against which everything else was measured. Mr. Curtis said that the next step after the greenhouse test was small field trials, which were conducted at Fort Detrick and then larger field trials, which were conducted at other installations and not at Fort Detrick.

Mr. Curtis discussed the purpose of the crops field research at Fort Detrick from 1944 to 1951, noting it included finding the most effective chemical, determining how best to apply it by either spraying or mixing it with a petroleum product, evaluating the quantities and the size of the droplets needed to be effective, and deciding when to apply the chemical, along with other factors.

Mr. Curtis displayed a graphic showing a 250 foot by 250 foot area representing the general layout of the field crop trials. [The layout included many small crop plots within the area] He also showed several pictures of how testing was conducted with handheld sprayers, noting that a movable shelter was used to limit the drifting of the spray. He discussed a photo from 1953 showing a truck-mounted spray test conducted in Area B along a 240 foot path. [This is the only known trial of an herbicide at Fort Detrick that did not use hand held sprayers.] He stated that the next presentation by Ms. Barbara Vichot would discuss this test in more detail.

Mr. Curtis summarized a test conducted in 1968 to evaluate how the chemical migrated once it was added to the soil. He stated that Agent Orange was applied with hand-held sprayers to grasses in two 20 by 20 foot plots in Area B and observed and sampled over a one-year period.

Mr. Curtis discussed the locations of the historic testing, noting that the 1944 to 1951 tests were conducted at Fields A, C, D, E and F plus two other grass locations, and by examining aerial photos, the locations of Field C and D have been identified in present day Area A. He stated that Field B was in present day Area B.

Mr. Curtis stated that the estimate of the total amounts of 2,4,5-T compounds tested at Fort Detrick would be on the order of 7.63 kilograms or 17 pounds. He advised that the compounds were applied in milligram dosages, which are very minute quantities. He compared the usage to the 1969 average usage in agriculture of 48 pounds per year or more on a 100-acre farm.

Mr. Curtis summarized the 2,4,5-T preliminary findings and noted that they are limited to unclassified documents identified and other documents reviewed to date. He stated that findings will be refined as more information is located. He stated that a draft 2,4,5-T Preliminary Report is being reviewed and a full Archive Search Report will be prepared after more documents are reviewed.

10. Area B Phase I Herbicide/Dioxin Sampling Plan presented by Ms. Barbara Vichot, USAPHC.

Following Mr. Gortva's introduction, Ms. Vichot stated that she is an Environmental Scientist with the U.S. Army Public Health Command. Ms. Vichot said that she would be discussing the Site Investigation workplan for identifying any herbicide and dioxin concentrations in soil and sediment in the south central portion of Area B resulting from the testing activities discussed by Mr. Curtis. Ms. Vichot displayed an aerial photo and pointed out the location of the investigation.

Ms. Vichot advised that the draft workplan was developed in collaboration with the regulators and incorporated the latest EPA guidance. She stated that the Army was in the process of incorporating comments on the workplan from the regulators and wanted to present the information to the RAB members to also obtain their comments.

Mr. Gortva explained to the RAB members that since the workplan was a unique sampling plan, the Army had developed a very preliminary draft that was shared with the regulators for their input. He stated that a draft final workplan is now being prepared and will be available in about a week for the RAB to review and provide comments at the same time it is being reviewed by the regulators. Mr. Gortva said that an exception had been made to the usual procedure of the draft documents going to the RAB simultaneous with submission to the regulators since Fort Detrick had not developed this type of sampling plan in the past and wanted to have some input from the regulators on the approach before having the RAB members spend time reviewing a draft.

Ms. Vichot explained that when the sampling plan was initially developed, the Preliminary Report, referred to by Mr. Curtis, was not yet available. She continued explaining that the Army decided to move forward with a Phase I Site Investigation of areas where they were fairly certain testing had been conducted, specifically the 1953 tactical grade herbicide testing. She stated that this testing was done to determine the effectiveness of herbicides used in the anticrop agent to inhibit plant growth. Ms. Vichot said the anticrop agent was a mixture of 2,4-D and 2,4,5-T. [Applied at a rate of 0.05 lb per acre over two acres]

Ms. Vichot displayed aerial photographs from 1952 and present day and explained that they were used in determining the sampling area. Mr. Erbes asked to be able to view the actual photos from 1952.

Ms. Vichot showed a list of constituents that the laboratory would be analyzing the samples for, including 17 dioxin and furan compounds. Ms. Vichot stated that the sampling rationale was developed using EPA sampling protocols. She said that 35 soil samples will be collected from the site. She also explained that the analytical results will be compared to EPA standards and background sample data.

Ms. Vichot showed an aerial photograph with the soil locations marked within a grid and said that 35 discrete soil samples will be collected. She noted that 22 composite soil samples will also be collected. She explained that five surface (zero to six inches deep) samples will be collected from each grid, the five samples will be combined, and the composite sample submitted

for analysis. Ms. Vichot advised that eight sediment samples will be collected from the creek located just south of the site.

Ms. Vichot discussed the background samples that will be collected to evaluate local herbicide and dioxin concentrations in surface soil related to sources other than the testing at Fort Detrick. She said that the background samples would be collected from three areas tentatively identified and located north of Area B, with ten surface soil samples collected at each background area. She advised that the background areas were selected because they are public land or a park. Ms. Vichot displayed an aerial photograph showing the sampling areas. Mr. Gortva noted that a Right of Entry would still need to be obtained before the samples could be collected.

Ms. Vichot stated that the samples will be analyzed in accordance with EPA approved methods and protocols by a third-party independent laboratory. She said that the data will be submitted to the regulators for scientific review.

Mr. Gortva added that the EPA will also be collecting samples concurrent with the Army and sending them to a different laboratory.

Ms. Vichot reiterated that the Phase I work she had discussed was formulated in advance of the preliminary archive search report; any additional sampling needed as a result of the archive search will be addressed through future phases.

Mr. Gortva invited questions from the RAB and then from the general public.

Mr. Robert Craig asked Mr. Curtis if the preliminary findings were based only on documents found at College Park and Suitland. Mr. Curtis responded that very little came from these two locations, and most of the information came from the Defense Technical Information Center, which is the warehouse for formal Department of Defense reports.

Dr. Gary Pauly asked Ms. Vichot if the soil in the grid where the sampling is planned had been disturbed or tilled. Ms. Vichot responded that it is not known if the soil has been disturbed, but is confident that the sampling to be conducted will provide the information needed. Mr. Gortva added that the EPA aerial photograph study shows ground scars for many years later if an area has been disturbed. Mr. Gortva said that the photographs do not indicate the area was disturbed after the 1953 testing, and in fact, is probably the least disturbed location on Fort Detrick.

Dr. Pauly said it is his understanding that the bad player here is 2,3,7,8-TCDD, which is a by-product of overcooking 2,4,5-T in the manufacturing process. He asked if it is likely that the archives will provide analytical data on the quality of 2,4,5-T because if it was high quality it would be much less of a concern. Mr. Curtis responded that it is unlikely the archives will provide this type of data. Mr. Gortva added that it is for this reason that the investigation will address any areas where there was testing regardless of the quality of the agent.

Ms. Helen Miller-Scott asked if disposal information from the documents reviewed during the archive search is being captured. Mr. Curtis responded that disposal information is not found in the test reports as that was not the purpose of the reports, which focused on the testing. He said

that they are hoping to find disposal information in other documents, perhaps as a standard operating procedure, as suggested by Ms. Miller-Scott. Mr. Gortva added that disposal information may also be obtained through the interview process.

Dr. Erbes asked if USDA records would be searched for additional information about 2,4,5-T, and Mr. Curtis said they would be reviewed. Mr. Gortva mentioned that there were copies of two USDA documents available on the front table discussing the use of 2,4,5-T for roadside brush control on Eastern National Forests and Restricting the Use of 2,4,5-T: Costs to Domestic Users. LTC St. Angelo asked Mr. Curtis to confirm that the estimated 17 pounds of 2,4,5-T used at Fort Detrick was over two decades, and Mr. Curtis agreed. Mr. Gortva emphasized that Mr. Curtis had presented preliminary findings which may change as additional documents are located and reviewed.

A member of the general public identified himself as a former Mayor of Frederick and expressed a concern that the archive search would not find all the information needed as some information was not put into a document, including more recent activities. He said that a significant piece of information might be found that was reported differently in one of the environmental impact statements and asked whether the archive report would record the data exactly as found. Mr. Curtis stated that the direction he has gotten from the Army has been to develop a good, defensible report so he does not foresee any significant information not being included in the report. Mr. Gortva added that the work was being done through a third party, the Corps of Engineers, and the report would become part of the administrative record, which is available to the public. Ms. Haines noted that the draft report would be shared with the regulators and the RAB and anyone else who is interested.

The former Mayor asked if something significant was found that would represent a hazard to the land off-post near the site, which is proposed for development, would the information be retained until the final report or would it be immediately released. Mr. Gortva responded that the information would be shared immediately with the regulators and appropriate action would be taken to address any immediate hazard. He added that this was why the Army wanted a preliminary report on the 2,4,5-T as quickly as possible. Mr. Gortva said that he has a responsibility to be protective of human health and the environment and would not be doing his job if he did not share such information and take appropriate action. Mr. Craig asked Mr. Gortva for confirmation that the homes with wells had been connected to public water in the early 1990s, and Mr. Gortva confirmed Mr. Craig's statement was correct.

A member of the general public asked if the Army and regulators had considered sampling off-site south of Area B. Mr. John Fairbank of the Maryland Department of the Environment responded that the typical process would be to determine if there had been an impact on the installation first and then expand the sampling as needed.

A member of the general public asked if only dioxins or Agent Orange were being looked for, and Mr. Curtis said that any compounds that might have an environmental impact are being looked for during the archival search report. He explained an example are the chemicals a dry cleaning shop might use in its operations and have released to the environment. Mr. Gortva said that the scope of the archival search report is fence-to-fence and to look at all past activities that

may have led to environmental contamination. Mr. Gortva stated that much environmental investigation and remediation has already been completed at Fort Detrick with remedies in place or response complete at 42 sites, and the archival search is intended to ensure nothing has been missed.

A member of the general public suggested a fact sheet on the persistence and mobility of the compounds being investigated might be helpful and put many of the concerns to rest. Mr. Craig asked Ms. Vichot to confirm that her report would discuss the fate and transport of any compounds found, and she confirmed her report would contain such information. Mr. Fairbank asked Mr. Thompson from the EPA if he had any fact sheets on dioxins, and Mr. Thompson said there were several he could make available. Mr. Gortva said he would add them to the Fort Detrick web site and make them available at RAB meetings.

[Since the presentation, two of the three parks that were initially identified as possible candidates for background evaluations were determined to have had significant soil disturbances in the recent past which negated their use for determining background. The Monocacy Battlefield is currently being evaluated as an alternate potential background location. Once the background locations are finalized and Right of Entries are obtained, the draft final workplan will be made available to the RAB, EPA and MDE for review and comment.]

11. General Restoration Questions.

A member of the general public asked how the public was being notified of the interview process and whether there had been sufficient notices. Mr. Gortva responded that information had been distributed at neighborhood association meetings, at county health department meetings, through local newspapers, and is on the Fort Detrick web site.

A member of the general public noted that the most recent RAB minutes on the web site are February 2010. Mr. Gortva responded that minutes were not prepared for the July meeting as the RAB was not able to proceed with its presentations that evening. Mr. Gortva said that the September minutes had just been approved at this meeting and would be posted in a few days. The member of the general public suggested some documentation of the July meeting be done, and LTC St. Angelo advised that a record of the meeting being held would be developed.

12. Next RAB Meeting.

LTC St. Angelo said that the next proposed meeting date is February 16. Mr. Gortva added that the preferred meeting location is the same location as this meeting so the meeting date may be adjusted if needed to obtain the same room.

The meeting adjourned at approximately 8:40 p.m.

Reviewed by:

//Signed//

//Signed//

James St. Angelo, III
Lieutenant Colonel, US Army
Co-Chairman

Vacant
Community RAB Member
Co-Chair

Approved/Disapproved:

//Signed//
Judith D. Robinson
Colonel, US Army
Commander, US Army Garrison

Enclosures:

Fort Detrick Installation Restoration Program Introduction to ARCADIS
Fort Detrick Installation Restoration Program Interview Project Update
Fort Detrick Installation Restoration Program Preliminary Archives Search Report Findings
Fort Detrick Installation Restoration Program Area B Phase I Herbicide and Dioxin Site
Investigation
Meeting Sign-In Sheet

DISTRIBUTION:

Each RAB Member (w/o enclosure)