



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON
4551 LLEWELLYN AVENUE, SUITE 5000
FORT GEORGE G. MEADE, MARYLAND 20755-5000

IMND-MEA-PWE

July 17, 2014

MEMORANDUM FOR Restoration Advisory Board Members

SUBJECT: Minutes for the July 17, 2014 Restoration Advisory Board Meeting

1. The Restoration Advisory Board (RAB) meeting was held on July 15, 2014, at 7:00 p.m. at the Holiday Inn Express located at 7481 Ridge Road, Hanover, Maryland, 21076. The next RAB meeting will be **Thursday, September 18, 7 p.m.**, at the Holiday Inn Express, 7481 Ridge Road, Hanover, Maryland, 21076.

2. The following RAB members were present:

Mr. John Burchette, U.S. Environmental Protection Agency
Mr. Mick Butler, Fort Meade Co-Chair
Ms. Kellyann Few, Community Member
Mr. George Knight, Acting Fort Meade Installation Restoration Program Manager
Mr. Martin Madera, Community Member
Mr. David Tibbetts, Community Co-Chair
Mr. Bill Deck for Ms. Kerry Topovski, Anne Arundel County Health Department

3. Members not present:

Mr. Rusty Bristow, Community Member
Mr. Wayne Dixon, Community Member
Mr. Harry Neal, Community Member
Mr. Howard Nicholson, Community Member
Mr. Fred Tutman, Community Member

4. Others present were:

Mr. Steve Cardon, Fort Meade BRAC (Versar, Inc.)
Mr. Walt Chahanovich, Fort Meade, Office of Staff Judge Advocate
Mr. Bill Eaton, URS
Ms. Sarah Gettier, URS
Ms. Elisabeth Green, Maryland Department of the Environment (MDE)
Ms. Katrina Harris, Bridge Consulting Corp.
Mr. Jerry Kashatus, URS
Mr. Tim Llewellyn, ARCADIS
Ms. Denise Tegtmeier, Fort Meade Environmental Division (Osage of Virginia, Inc.)

5. Announcements and Minutes:

- a. Mr. Mick Butler welcomed everyone, and Mr. David Tibbetts called the meeting to order. Mr. Butler invited all present to introduce themselves and sign in.
- b. Mr. Tibbetts made a motion to approve the May 15, 2014, meeting minutes. The motion was seconded and unanimously adopted to approve the May 15, 2014, minutes.

6. Old Business:

- a. Mr. Butler announced Ms. Kellyann Few had been approved as a community member by Fort Meade's Commander. He encouraged anyone knowing other interested community members to have them apply to be a Board member.
- b. Mr. Butler reminded the Board of Fort Meade's web page address (www.ftmeade.army.mil/environmental).

7. Preliminary Assessment/Site Inspection Update:

- a. Mr. Butler introduced Mr. Jerry Kashatus of URS, an Army contractor.
- b. Mr. Kashatus stated he would be giving an update on the Southeast Sites included under a Preliminary Assessment/Site Inspection (PA/SI). Mr. Kashatus said he would first briefly discuss the overall PA/SIs occurring at Fort Meade.
- c. Mr. Kashatus advised he had last updated the Board in November 2012. He explained a PA is conducted by looking at information from a site, including historical reports, aerial photographs, charts, figures, and graphs, and assessing whether the information is sufficient to reach a decision that the site is clean enough to recommend no further action; if there is uncertainty and more information is needed, the site moves into the SI phase. He noted during the SI phase groundwater and soil samples are reviewed to determine if the site can be recommended for no further action, or if there is the possibility of contamination being present, the site moves on to the Remedial Investigation phase.
- d. Mr. Kashatus displayed a graphic depicting the Superfund/Comprehensive Environmental Restoration, Compensation and Liability Act (CERCLA) process. He pointed out these sites were at the very initial stage of the CERLA process.
- e. Mr. Kashatus noted more than 100 sites were examined during the PA/SI process. He explained the sites were divided geographically to make reporting more manageable. He stated the golf course sites were given priority because of construction. He explained the other sites were divided into North, Southeast, Southwest, and South of Route 32. Mr. Kashatus displayed a map showing how the sites were divided into geographic areas.

f. Mr. Kashatus next discussed the Southeast sites. He advised 31 areas of interest were identified, and eight sites were determined to need no further action during the PA phase. Mr. Kashatus said field work for the remaining 23 sites was completed during the SI phase, with additional samples being collected according to a work plan reviewed by the Army and the regulators. He noted laboratory data had been received and validated, and risk-based screening had been performed on the results. He stated the main factor in determining whether these sites should be recommended for no further action or advanced to the Remedial Investigation stage are the results of the risk-based screening. Mr. Kashatus said the draft report for the Southeast Areas of Interest had been submitted for review by the regulators.

g. Mr. Kashatus displayed a list of the 31 Southeast Areas of Interest and a map showing the locations. He noted they included buildings, former motor pools, and possible vehicle service areas. He said he would not be talking specifically about each site, but would be discussing a common factor in all these sites that is causing the risk numbers to be a little high.

h. Mr. Kashatus next discussed the risk-based screening process, noting the Board had been briefed on the process in January 2010. He explained the process begins with the Regional Screening Levels (RSLs) produced by EPA for soil, groundwater, and air, which includes more than 700 chemical compounds. He continued explaining that EPA calculates values based on cancer risk or non-cancer health effects; the calculations take into account whether the site will be used for residential or industrial purposes and whether the water is potable. Mr. Kashatus said the RSLs are updated twice a year. He noted the RSLs are based on a cancer risk of 1×10^{-6} and a non-cancer hazard quotient of 0.1 for individual compounds. He explained when the risk-based screening process is performed, a site specific threshold is used as agreed to by EPA and Fort Meade of 5×10^{-5} for total cancer risk and 0.5 for total non-cancer hazard using the maximum detections of compounds. Mr. Kashatus explained that if there are results from seven different wells showing detections of five different chemicals, a risk would be calculated for each of those chemicals and then all the numbers added together to get the total risk. He noted that detections are usually averaged for a site, but for this process the maximum detections are used. He noted residential and tap water values are used even though the sites are not anticipated to be used as residential nor will people be drinking the water. He said these calculations provide the most conservative calculations. He said if the values are below the threshold numbers, it is pretty clear the site does not need further action and can be designated for unrestricted use. He noted if the process calculates a value above these numbers, it does not mean it is dirty. He continued explaining that if the site moves onto the Remedial Investigation phase, a Risk Assessment will be performed using values that are not as conservative, but the assessment is much more detailed and comprehensive.

i. Mr. Kashatus stated the review of the data is showing certain compounds, mostly metals in groundwater, are pushing the risk above the threshold levels. He noted at a few sites the same metals in soil are pushing the risk above the threshold levels. He said the metals typically driving the risk are chromium, thallium, cadmium, arsenic, and cobalt with occasional detections of polycyclic aromatic hydrocarbons (PAHs).

j. Mr. Kashatus said to demonstrate the conservative nature of this approach; he calculated the concentration at which the metals will exceed the site-specific thresholds and the comparable EPA Maximum Contaminant Levels (MCLs). Mr. Kashatus displayed a chart showing the two values for chromium, arsenic, thallium, cobalt, and cadmium. He noted in all cases the MCL is higher, and in some cases, the MCL is an order of magnitude higher. He noted the groundwater at these sites is cleaner than the water at residential homes.

k. Mr. Kashatus stated that metals are naturally occurring in rocks and soil. He said if the concentration of metals is less than background that metal drops out of the Risk-Based Screening Process. Mr. Kashatus said background numbers are available for metals in soil, but there are no background numbers for groundwater. He advised Fort Meade currently is conducting a groundwater background study for metals.

l. Mr. Kashatus said he would next discuss a few of the sites to show how metals are driving the risk.

m. Mr. Kashatus first discussed Building 546. He explained Building 546 was identified as a potential site because the Solid Waste Management Unit study showed the building had a photo shop and a silver recovery system. He noted samples had been collected 14 years ago, and after examining the data and performing risk-based screening, it was decided more data was needed. Mr. Kashatus said groundwater wells were installed, and sampling found groundwater has compounds above the threshold levels. He displayed a chart showing the sampling results, and noted the 2000 data in the top row was collected using direct push technology while the bottom showed data collected from monitoring wells. He explained the difference is important as direct push samples tend to contain sediment which has higher concentrations of metals.

n. Mr. Kashatus next discussed Building 2227, a former maintenance shop with an oil-water separator and wash rack. He advised there had been samples collected in the past, and additional sampling was done during the PA. He noted a couple metals in groundwater are driving the risk at this site.

o. Mr. Kashatus reviewed the results for Motor Pool 7. He stated a few stained areas observed in 1950s aerial photographs had not been previously sampled, so they were sampled during this study. He said the samples were analyzed for volatile organic compounds and petroleum products as well as metals and other compounds, and again metals in groundwater were found to be driving risk.

p. Mr. Kashatus reviewed the results for Building 2482, a boiler plant where petroleum products were used and a waste oil tank was nearby. He advised the site was investigated a few years ago, but it was determined more sampling data was needed. Mr. Kashatus said this is one of a few sites where soil numbers exceed the threshold values for metals and PAHs, which is logical for a boiler plant where the burning of petroleum products would produce PAHs. He noted there are also groundwater issues if the maximum concentrations are used as opposed to the average. He explained the chart showing the sampling results shows a number of blanks where there were no detections and, thus, averaging would make a difference.

q. Mr. Kashatus said the next site he would discuss, 6th St. and Chisholm Avenue, is both an EPA site and a State (MDE) site. He said the site was first identified during the digging of a ditch for a communication line, and some stained soils were found. He said a study was done and samples collected. The soil has some arsenic driving risk, but GRO and DRO (petroleum products) were also detected at elevated levels. Mr. Kashatus said metals and PAHs are also driving risk at the site. He explained the data is being reviewed by EPA, while concurrently the site is also under a MDE order because of the potential there was a spill. Mr. Kashatus said the groundwater monitoring wells have been gauged on a monthly basis and have been sampled quarterly for the past year. He stated in well TWP-7 there is some free product floating on top of the groundwater. He explained Fort Meade tried to remove the free product which was successful in the levels decreasing temporarily but then increasing. Mr. Kashatus stated only the one well has product in it. He said the area geology includes a 30-foot clay layer, and wells drilled below the clay layer were fairly clean.

r. Mr. Kashatus summarized by reiterating that all the sites are pretty similar with certain metals in groundwater driving risk. He said there are not any real sources for these metals, and the metals are found at just about every site. He said the background study may eliminate some of the sites. He stated draft reports are being reviewed for the Southeast and Southwest sites, comments from the regulators are being addressed on the North sites report, and the Golf Course sites report is complete.

8. Update on the Nevada Avenue Investigation:

a. Mr. Butler introduced Ms. Denise Tegtmeier of Osage of Virginia to give an update on the Nevada Avenue investigation.

b. Ms. Tegtmeier advised she would be giving an update on the monthly sampling results. She displayed a table showing monitoring results from the last 12 months through June 2014. She advised July samples had been collected, but the results were not yet available. She stated the data has leveled out over the past few months, to around 2 parts per billion of tetrachloroethene compared to the EPA standard of 5 parts per billion. Ms. Tegtmeier displayed a map showing the well locations.

c. Ms. Tegtmeier said the next steps in the project include the groundwater investigation report which is draft, and comments from EPA and MDE have been received and are being addressed. She said more information is being collected from other Army studies and non-Army sources to get a better picture of what is happening near Nevada Avenue. Ms. Tegtmeier said the Army's contractor will be doing some maintenance on one of the off-post monitoring wells. She noted the Army will continue to provide bottled water service and monitoring through March 2015, with the potential to extend these services under a new contract after that point.

11. Open Discussion/New Business:

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a. Mr. Butler advised there would be a public meeting on the Architect of the Capitol Proposed Plan on August 7, at 7 p.m. at the Marriott Courtyard off of Route 32. He advised there would be a legal notice in the newspapers next week. Ms. Tegtmeier stated a copy of the legal notice and a fact sheet are posted on Fort Meade's website, and she also had hard copies available.

b. Mr. George Knight noted the Board's charter had not been updated in some time. He stated there had been some discussion on updating it a few years ago. Mr. Knight said he would be preparing a revision and sending it out to the Board for review. Ms. Tegtmeier noted the current version dated 2004 is on Fort Meade's web site.

c. Mr. Butler invited Board members to contact him with any suggestions for topics for the next meeting.

d. The meeting was adjourned at 8:07 p.m.

MICHAEL P. BUTLER
Chief, Environmental Division

CF:
RAB MEMBERS
FGGM GARRISON COMMANDER
PUBLIC AFFAIRS OFFICE