

St. Juliens Creek Annex Restoration Advisory Board Meeting Summary: November 12, 2014 Meeting

Meeting Attendees

Krista Parra	Naval Facilities Engineering Command Mid-Atlantic	Dave Koubsky	Elizabeth River Project
Robert Stroud	United States Environmental Protection Agency Region III	Pat Burns	Restoration Advisory Board Community Member
Karen Doran	Virginia Department of Environmental Quality	Barbara Brumbaugh	City of Chesapeake
Mary Stuck	Naval Facilities Mid-Atlantic	Janna Staszak	CH2M HILL
Kevin Lew	Restoration Advisory Board Community Member	Adrienne Jones	CH2M HILL

Location: Major Hillard Library, Chesapeake, Virginia

Meeting Date: November 12, 2014

From: Adrienne Jones/CH2M HILL

Minutes Date: February 16, 2015

Restoration Advisory Board Welcome and Introductions

At 4:00 p.m., Ms. Parra presented opening remarks and introductions to the restoration advisory board (RAB). Ms. Parra explained that she is the Naval Facilities Engineering Command Mid-Atlantic Remedial Project Manager for St. Juliens Creek Annex (SJCA). The other RAB members and guests introduced themselves. All presentation handouts were distributed.

Fiscal Year 2015 Goals

Ms. Parra led the presentation. The objectives of the presentation were to provide an overview of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process; provide an update of the Environmental Restoration Program (ERP) sites and fiscal year (FY) 2015 goals for the ERP sites and facility-wide ERP activities; and answer any questions.

Ms. Parra provided a summary of the CERCLA process. Ms. Parra reviewed the ERP goals for SJCA. ERP goals for SJCA are established yearly by FY; FY 2015 started on October 1, 2014, and ends on September 30, 2015. The goals serve as a budgeting tool for allocating funds, as a prioritization tool to determine sequencing of sites to be investigated and remediated based on their potential risk to human health and the environment, and as a tool to keep remediation projects on schedule. To date, 55 sites have been closed with no further action (NFA) required through desktop audits or investigations, and four Installation Restoration Program (IRP) sites are currently active in the ERP (Sites 2, 4, 5, and 21). A figure showing the locations of the ERP sites at SJCA was projected.

Ms. Parra reviewed the status of IRP Site 2 and presented the FY 2015 goals for the site. IRP Site 2, Waste Disposal Area B, is an unlined, inactive waste disposal area that was used from 1921 to 1942. Investigations conducted at the site identified concerns from waste; chlorinated solvents, one polycyclic aromatic hydrocarbon (PAH), and one pesticide in the shallow aquifer groundwater; chlorinated solvents and metals in the surface water; and PAHs, pesticides, polychlorinated biphenyls (PCBs), and metals in the sediment and soil. The selected remedy to address the concerns consists of enhanced reductive dechlorination, monitored natural attenuation, a cover, land use controls (LUCs), and sediment excavation. The remedial action (RA) is

currently in progress. The construction phase was completed in June 2014. The site is currently in the RA-operation phase, which consists of groundwater monitoring, LUCs, and five-year reviews. The first semi-annual groundwater monitoring event was conducted in September 2014 and the first five-year review is ongoing. The FY 2015 goals established for Site 2 are to finalize the LUC remedial design revision in October 2014, which has been completed; finalize the Construction Completion Report in December 2014, and finalize the Interim RA Closeout Report in June 2015.

Ms. Parra reviewed the status of IRP Site 4. IRP Site 4, Landfill D, is a landfill that was operated from 1970 to 1981. Investigations conducted at the site identified concerns from waste; metals, PCBs, and PAHs in soil; and mercury in drainage sediment. The selected remedy to address the concerns consists of soil cover installation, drainage ditch sediment removal, and LUCs. The RA was completed in 2005. A five-year review was completed for the site in 2010. That five-year review incorporated the results of voluntary groundwater monitoring conducted following completion of the RA to evaluate the site's impact on groundwater quality. The review concluded that the remedy at Site 4 is protective of human health and the environment. Currently LUCs are maintained, inspections are conducted annually, and five-year reviews are conducted every 5 years. The second five-year review is currently underway. No FY 2015 goals were established for Site 4.

Ms. Parra reviewed the status of IRP Site 5 and presented the FY 2015 goals for the site. IRP Site 5, Burning Grounds, was used as a burning ground from the 1930s to the 1970s. Various wastes were reportedly disposed of including solvents, paint sludge, pesticides, and refuse. Investigations conducted at the site identified concerns from waste and metals, pesticides, and PAHs in the surface soil and drainage sediment. The selected removal action alternative to address the concerns consisted of excavation and offsite disposal. The removal action was completed in 2012. A supplemental remedial investigation (RI) to evaluate metals in the shallow aquifer groundwater is ongoing. The supplemental RI field work was completed in March 2014, and the report is being reviewed by United States Environmental Protection Agency (USEPA) and the Virginia Department of Environmental Quality. The FY 2015 goals established for Site 5 are to finalize the Supplemental RI Report in January 2015, and to finalize the Proposed Plan in September 2015.

Ms. Parra reviewed the status of IRP Site 21 and presented the FY 2015 goals for the site. IRP Site 21, Industrial Area, comprises an industrial area of the base. Historically, buildings were used as maintenance and electrical shops and munitions loading facilities; outdoor areas were used for equipment and chemical storage; and a former fuel service station was operated. Investigations conducted at the site identified concerns from chlorinated solvents in the shallow aquifer groundwater and indoor air. The selected remedy to address the concerns consists of in-situ chemical reduction and enhanced reductive dechlorination. The RA is currently in the operation phase and consists of groundwater, storm water, and vapor intrusion monitoring; maintenance of LUCs; and five-year reviews. The FY 2015 goals established for Site 21 are to finalize the 6th RA-Operation Groundwater Monitoring Report in December 2014; finalize the Construction Closeout Report Addendum in December 2014; and finalize the 7th RA-Operation Groundwater Monitoring Report in April 2015.

Ms. Parra reviewed the facility-wide goals for FY 2015, which are to finalize the Five-Year Review Report by March 21, 2015; draft a Site Management Plan by June 15, 2015; and finalize the Community Involvement Plan in January 2015. The Site Management Plan (SMP) is a document that lays out the ERP plan for facility for the next 5 years; the SMP helps with funding and prioritization. A copy of the SMP will be located in the information repository.

Ms. Parra highlighted some of the SJCA ERP successes during FY 2014. One of the primary successes was the completion of the construction phase of the RA for Site 2, which was initiated in July 2012. The construction phase included many significant preparatory activities in order to complete the remedy components, including demolition of an existing building foundation and surface debris, modification of storm water and drainage systems, and construction of a compensatory mitigation wetland. There were no Occupational Safety and Health Administration recordables, lost time, or first aid accidents reported during the

approximately 46,000 man hours it took to complete the construction. Additionally, the Site 21 RA has continued to show great success. The area where the primary site contaminant, trichloroethene (TCE), exceeded the site cleanup goal was further reduced from approximately 8.1 acres before the RA to 0.41 acres.

Ms. Parra asked if there were any questions or comments. No questions or comments were received.

Site 21 Remedial Action

Ms. Staszak led the presentation. The objectives of the presentation were to provide background information on Site 21; review the RA for the site; present the RA progress; and answer questions.

Ms. Staszak summarized the conceptual site model of the site. Historically, railroad tracks were located within the site and TCE was disposed of along the tracks for weed control. As a result, a plume of TCE and its daughter products is present in the groundwater in the shallow aquifer. The deeper aquifer has not been impacted.

Ms. Staszak reviewed the timeline of the RA. An interim Record of Decision (ROD) was signed in May 2010. It selected an interim remedy to address risks from exposure of potential future residential users to chlorinated volatile organic compounds (CVOCs) in the groundwater while the vapor intrusion exposure pathway was further evaluated. The selected interim remedy was in-situ chemical reduction for the high concentration areas of the plume, enhanced reductive dechlorination for the lower concentration areas of the plume, LUCs to prevent use of the shallow aquifer groundwater, and long-term monitoring. Because VOCs can volatilize from the groundwater into the air and enter overlying buildings, an RI and Feasibility Study Addendum was completed in 2010 to investigate the vapor intrusion pathway. The investigation concluded that there were no unacceptable risks to current or future industrial workers or potential future residents from vapor intrusion. The interim RA-construction was conducted from November 2010 to September 2011. The final ROD for the site, which formalized the "interim" remedy as the final remedy, was signed in October 2011.

Ms. Staszak explained the in-situ chemical reduction remedy component. It is a process that causes a chemical reaction to break down TCE and its daughter chemicals to safe chemicals. Zero valent iron powder was mixed with water and injected with pressure using nitrogen gas to help push it into the aquifer. The injection points were placed in areas with the highest contaminant concentrations, outside of building footprints. Results are relatively fast, can be seen within 3 to 4 weeks to 3 to 4 months, and can remain active for up to 8 years.

Ms. Staszak explained the enhanced reductive dechlorination remedy component. It is a process where the naturally-occurring biological activity in the aquifer, in which native microbes are present and are breaking down TCE into harmless chemicals, is enhanced. Emulsified vegetable oil was mixed with water and injected into the areas of the aquifer with lower contaminant concentrations to create conditions favorable for the microbes to flourish. The results are not as fast, can be seen within months to years, and do not last as long (i.e., 1.5 years to 3 years), as zero valent iron. The injection layout consisted of a series of rows placed perpendicular to groundwater flow so that the groundwater is treated as it flows through the rows.

Ms. Staszak explained the long-term monitoring component of the remedy and the polishing treatment that was conducted in the spring of 2014. Groundwater monitoring is currently being conducted semi-annually to verify that the remedy is working. Polishing treatments may be completed to expedite treatment and/or address areas in which the treatment has stalled. Following the November 2013 monitoring event, a polishing treatment was planned to address areas in which the treatment was not as successful as others. The polishing treatment consisted of injecting emulsified vegetable oil into select areas of the site, and included installation of two injection points within Building 1556 to address the contamination under the building.

Ms. Staszak summarized the progress of the RA. The overall CVOC plume has been reduced by approximately 50 percent, from approximately 7.3 acres to approximately 3.5 acres. The primary

contaminant, TCE, has been significantly reduced; the TCE plume size has been reduced by 95 percent, from approximately 7.3 acres to approximately 0.4 acres. The cis-1,2-DCE plume has been reduced by 60 percent, from approximately 3.8 acres to approximately 1.5 acres. The vinyl chloride plume size has increased slightly, from approximately 3.1 acres to approximately 3.3 acres; however, this is expected because vinyl chloride is a breakdown product of TCE. The vinyl chloride plume is expected to start decreasing in the near future. Conditions in the aquifer are favorable for continued contaminant degradation.

Ms. Staszak asked if there were any questions or comments. Ms. Brumbaugh commented that the results of the RA are good news.

Community Involvement

Ms. Parra led the presentation. The objectives of the presentation were to discuss the Community Involvement Program, including the ongoing update to the Community Involvement Plan for the ERP at SJCA; and answer questions.

Ms. Parra reviewed the goal and implementation of the Community Involvement Program. The goal is to advocate and strengthen early and meaningful community participation during Superfund cleanups. The program is implemented through the Community Involvement Plan. Ms. Parra summarized the history of community involvement for the SJCA ERP. The RAB was established in 1999. The Navy completed the first Community Relations Plan (now called the Community Involvement Plan) in 2000. The Community Involvement Plan is currently undergoing its third update.

In order to increase awareness of the SJCA ERP and solicit feedback from the community in association with the ongoing Community Involvement Plan update, written questionnaires were mailed to randomly selected community members located within approximately 0.5 miles of SJCA, interviews were conducted with community members representing a variety of stakeholders, and fact sheets were distributed describing past and current ERP activities. The interviewees consisted of a representative from the city of Chesapeake, representatives from an environmental organization, a representative from a local civic league, a former businessman and city of Portsmouth elected official (who now works in community development), local residents (some of whom are also RAB members), and a Base employee. The feedback received was similar to previous feedback. There is general awareness of environmental contamination on the Base and the activities to address the contamination. There is low awareness of the RAB (except by RAB members and specific stakeholders), and the public notices advertising the RAB meetings are not being seen. There is general trust with the Navy to conduct environmental cleanup, and the feeling that the Navy has a satisfactory relationship with the public. The community would like to receive more information about the ERP at SJCA.

Based on the community feedback, the Navy has identified in the Community Involvement Plan update the types of information community members want to receive and how the Navy could best provide the desired information. Ms. Parra reviewed the following activities identified in the Community Involvement Plan.

Navy contacts have been designated to provide points of contact for the distribution of accurate, timely, and easy-to-understand information to community members. The key contacts for the SJCA ERP are Mr. Jeffrey Cunningham, the Public Affairs Officer, and Ms. Krista Parra, the NAVFAC Mid-Atlantic Remedial Project Manager. Mr. Cunningham can be contacted for general public information and media inquiries. Ms. Parra can be contacted for inquiries about the ongoing and upcoming field activities, site restorations, inspections, and anticipated schedules.

The administrative record file will be maintained to provide community members with a comprehensive record of documents, resources, etc., used by the SJCA Partnering Team in reaching decisions about ERP cleanup at SJCA. The administrative record file for SJCA will continue to be maintained at NAVFAC, which can be accessed by contacting the SJCA Public Affairs Office and through the SJCA ERP public Web site. A list of the documents included in the administrative record will be available in the information repository. The

administrative record will remain open until SJCA is de-listed from the National Priorities List (NPL) and will be updated as new information becomes available.

Information will be provided on the internet to enable community members to access accurate, timely, and comprehensive information on their own time and at minimal expense. The Navy will continue to maintain the ERP public Web site, which is currently maintained at <http://go.usa.gov/Dyn4>. The Web site will be updated semi-annually at a minimum, typically around the RAB meetings.

A contact list will be maintained to facilitate distribution of SJCA ERP information to stakeholders. The contact list will be updated as requests for inclusion on the list are received. Community members can request to be added to the list by contacting the Public Affairs Officer or Navy Remedial Project Manager.

An information repository will be maintained to provide convenient access to site-related information for community members. The information repository will continue to be maintained at Major Hillard Library. It will contain a reference collection of general and SJCA ERP site information, including documents for public review, the Community Involvement Plan, Superfund information, and fact sheets. The information repository will be updated semi-annually at a minimum and as needed for documents available for public comment.

Fact sheets will be distributed to provide stakeholders with current, accurate, and easy-to-understand information about the SJCA ERP activities. Fact sheets will be issued annually and as needed throughout the course of environmental activities (e.g., after completion of any remedial design and prior to the initiation of an RA).

A community event (e.g., a local neighborhood civic league meeting or a city council meeting) will be attended to inform community members about the SJCA ERP activities and increase awareness and attendance of RAB meetings. A meeting or event will be held in association with achievement of the construction completion milestone.

RAB meetings will be held to provide a forum for communicating information on the SJCA ERP, gaining effective input from stakeholders on cleanup activities, and increasing responsiveness to the community's concerns about the ERP. RAB meetings will continue to be hosted at Major Hillard Library. Announcements will be placed in the legal section of The Virginian-Pilot and in The Clipper and Currents approximately 2 weeks prior to the meetings; posted on the SJCA ERP public Web site; and distributed (via email and/or mail) to those on the contact list approximately 30 days prior to the meetings. RAB meetings will be held semi-annually until construction completion is achieved, after which meetings will be held annually. Construction completion means that all of the remedies for the facility are in place and functioning and that no further investigation is needed. That milestone is expected to be met within the next 18 months.

Technical assistance will be provided to RABs to better understand and provide input into ERPs. The Department of Defense established the Technical Assistance for Public Participation (TAPP) program as a mechanism for RABs to request technical support through the Navy RAB co-chair. Examples of TAPP projects include reviewing restoration documents and proposed remedial technologies; interpreting environmental health effects; participating in relative risk ranking exercises; and providing certain types of technical training. USEPA established a Technical Assistance Grant (TAG) program under which grants are made available to any group that may be affected by a release or threatened release at any installation on the NPL to obtain technical assistance in interpreting information about issues such as the nature of the hazard, selection and construction of a RA, operation and maintenance of a RA, and RA components. Additional information on the TAG program is available at <http://www.epa.gov/superfund/community/tag>.

Public comment periods and meetings will be held to provide stakeholders with an opportunity to provide input on SJCA ERP decisions. A public notice announcing a comment period for engineering evaluations and cost analyses (EE/CAs) and proposed plans will be published similar to how notices are published to announce RAB meetings. Notices will publicize the availability of the document in the information repository and on the ERP public Web site. A public meeting will be held for any proposed plan issued and for EE/CAs, if

requested by the public. The meeting will be publicized at the opening of the public comment period and will be held at the Major Hillard Library during the comment period. Written comments may be submitted during the public comment period.

Responses to public comments will be prepared to summarize significant comments received during public comment periods, document how the Navy has considered those comments during the decision-making process, and provide responses to those comments. For proposed plans, a responsiveness summary will be issued as part of the ROD that documents the selected remedy. The ROD will be available for public review in the information repository prior to the start of the clean-up action and placed in the administrative record file. A public notice will be issued after the ROD is signed and for any significant post-ROD changes. For EE/CAs, comments and responses will be documented in the action memorandum that documents the selected removal action, if significant comments are received; the action memorandum and final EE/CA will be added to the administrative record.

The Community Involvement Plan will be updated to present the facility-specific strategy to enable meaningful community involvement throughout the Superfund cleanup process. The plan will be made available in the information repository, administrative record, and on the SJCA ERP public Web site. An update of the Community Involvement Plan will be considered after a ROD is signed, if significant community concerns are discovered that pertain to the remedial design and construction phase, or as appropriate when there is a major change in the ERP at SJCA. Otherwise, the Plan will be updated every 5 years, or until SJCA is de-listed from the NPL.

Ms. Parra asked if there were any questions or comments. Ms. Brumbaugh suggested simplifying the fact sheet, potentially to one page. Mr. Lew suggested including an executive summary at the front of the fact sheet.

Roundtable / Question and Answer

Ms. Parra asked if there were any general questions or comments for discussion. Ms. Burns asked where the contaminated soils that are removed from the sites go. Ms. Parra responded that they go to CERCLA-approved waste disposal facilities. Ms. Doran explained that landfills are permitted for what types of waste they can receive. Mr. Koubsky asked if Site 4 is a lined landfill. Ms. Parra responded that it is unlined. Ms. Brumbaugh asked what the future plans are for the facility. Ms. Parra responded there are no known plans other than current use. Ms. Stuck indicated that there had been some discussion about moving hazardous storage to the facility. Ms. Doran asked if any of the RAB members use the ERP public Web site or review any of the documents. The members indicated that they do not. Mr. Koubsky said he was interested in the documents associated with the Area UXO 1 investigation because it was conducted in the river. Ms. Parra said that she will email the contact list about the documents that are available for review.

Next Meeting

Ms. Parra indicated that the next RAB meeting is scheduled for May 19, 2015, time to-be-determined. She asked if the RAB would prefer to do a site visit instead of a meeting; the RAB members responded that they would. The RAB site visit was scheduled for 12:00 p.m. Ms. Parra indicated that she would send emails to the RAB members to coordinate access. Ms. Parra noted that a city council briefing was being planned in conjunction with the next RAB meeting.

Meeting Adjourned