Former Sunflower Army Ammunition Plant

Restoration Advisory Board Meeting

Minutes of the Board Meeting

May 2025

The second Restoration Advisory Board (RAB) meeting for the Former Sunflower Army Ammunition Plant (FSAAP) in 2025 occurred on May 22, 2025, at 6 p.m. at the DeSoto City Hall Senior Center in DeSoto, Kansas.

Army Co-Chairman Present

Scott Smith (Army BRAC)

RAB Members Present

See the attached RAB Sign-In Sheet

RAB Members Absent

Kurt Preston

David Rhodes

Sergio Valenzuela

Devin Wetzel

Public Present

Jillane Hogard

John Ferris

Pam Ferris

Mary Guntert

Russell Seybert

Mary Beverly

Nancy Moneymaker

Teresa Wilke

Army Present in Person

Kathy Baker (U.S. Army Corps of Engineers)

Austin Hargadine (USACE Geologist)

Francis David Hufford (U.S. Army Environmental Command)

Call to Order

Scott Smith (Army Co-Chair and BRAC site manager) called the meeting to order at 6:14 p.m. He then proceeded to Old Business on the meeting agenda and requested the adoption of RAB meeting minutes from Feb. 27, 2025.

Mr. Smith called for a vote on the February meeting minutes and recognized unanimous approval by the board.

Moving to New Business, Mr. Smith asked the board to schedule the next RAB meeting for August 28 at 6 p.m. at the DeSoto Senior Center inside DeSoto City Hall. The board unanimously approved this recommendation.

Mr. Smith then presented the Environmental Update by introducing Austin Hargadine, a U.S. Army Corps of Engineers geologist. Mr. Smith displayed an updated map showing the Sunflower site's solid waste management units and their current remediation progress . Mr. Smith explained that pink on the map represented property that would be transferred to the University of Kansas. The purple on the map represents property that would be transferred to Kansas State University. Dark green identifies property that Johnson County parks will eventually receive.

Mr. Hargadine then discussed groundwater findings across the Sunflower site. Presentation displays showed Sunflower site cross sections from both north-south and east-west perspectives. Mr. Hargadine explained that the Army is studying groundwater in the overburden to bedrock interface and in the bedrock. The overburden is the soil layer above the bedrock. This layer is thinner along the site's northern, eastern and western edges. The overburden is thicker toward the middle and southern areas.

Mr. Hargadine explained that bedrock can be found as shallow as six feet to as deep as 45 feet below the ground surface. Monitoring wells are used to track groundwater and any possible contamination. Mr. Hargadine says the wells range from six feet to 90 feet below the ground surface. Most wells on site are located in the overburden and are about 20 feet deep. Mr. Hargadine said contamination has been found in the overburden layer and shallow sections of the bedrock.

John Neuberger asked how many wells are on site. Mr. Hargadine said there are between 250 and 300 wells on the Sunflower site. Dr. Neuberger asked a follow-up question about whether there are drinking water wells onsite and if the monitoring wells are drinking water wells. Mr. Hargadine responded that all the wells on site are monitoring wells, and that drinking water comes from the city of DeSoto water system, which draws its water from drinking water wells near the Kansas river. Water is pumped from the river, treated, and sent to the city's distribution system. An individual may have a personal well on their property, but no drinking water wells are on the former Sunflower installation property. Mr. Hargadine explained that monitoring wells measure changes in the groundwater over time.

There was some discussion about the depth of the water table. Mr. Hargadine explained the difference between overburden depth and bedrock depth. The average overburden depth is between 15 and 25 feet, while the bedrock depth ranges from 25 to 35 feet. Andrew Peterson, said that KDHE has a webpage where viewers can learn the depth profile of each monitoring well (https://maps.kgs.ku.edu/wwc5/index.thml?t=wwc5).

Mr. Hargadine explained a presentation slide showing the saturated thickness of the overburden. All of the monitoring wells are on the former installation site. He then explained that the tan color on the presentation map indicates no saturated thickness. Blue identifies increased saturated thickness. Hargadine explained that saturated thickness is a measurement of the availability of water within a specific area. Light blue on the map indicates a saturated thickness of between five and 10 feet.

In conclusion, Mr. Hargadine said that the groundwater flow at Sunflower is confined within most areas. Mr. Hargadine noted the Army has conducted multiple potability studies throughout the site to determine the usability of the overburden and shallow bedrock as a potable source of groundwater. Mr. Hargadine said that some areas are below the probability of usage. As more studies are completed, the Army will have more information. Mr. Hargadine emphasized that groundwater flow is limited in the overburden.

Dawn Buehler asked about an image that shows groundwater movement. She said groundwater appears to be moving toward Kill Creek and Captain's Creek. Mr. Smith and Mr. Hargadine responded that the groundwater in the overburden wasn't moving very much if at all. The overburden has some sandy areas that allow movement, but clay and silt do not allow water to move through it very well. An area dominated by clay will limit the amount of groundwater movement. The direction of groundwater flow is toward Kill Creek and Captain's Creek; whether groundwater from the installation reaches the creeks is based on lithology and its ability to retard flow.

Ms. Buehler asked if the Army had taken water samples from the creeks. Kathy Baker responded by saying that Solid Waste Management Unit (SWMU) 66 is the Army's site-wide stream study and this study is currently underway. Mr. Smith discussed a KDHE website referenced in the

February RAB meeting minutes. Mr. Smith says it has a lot of information about groundwater in general.

Kathy Baker updated current and ongoing Resource Conservation and Recovery Act (RCRA) facility investigations at SWMU 36 and the Operable Unit (OU) 5 area. Investigations found minimal concerns in the OU 5 area. Ms. Baker said at SWMU 36, the investigation found one exceedance of nitrates and exceedances of total arsenic, lead and manganese in four wells. Ms. Baker said water does not move through Sunflower in many areas. On the presentation map, Ms. Baker explained that yellow represented exceedances. Ms. Baker explained that the report is not yet complete. It must be reviewed and approved by KDHE before being available to the public. Ms. Baker explained that there might be long-term monitoring at this location.

A public member in the audience asked about potable water testing and Per- and Polyfluoroalkyl Substances (PFAS). Ms. Baker said the Army completed an initial PFAS assessment. Mr. Smith said that PFAS was only found in groundwater near the old fire station, in Area of Concern (AOC) 16 and near SWMU 26.

Ms. Baker proceeded to discuss surface water and sediment investigations at SWMU 66. Ms. Baker said drainage systems leaving Sunflower feed Captain's Creek, Kill Creek and Spoon Creek. The investigation examines whether soils at Sunflower have potential contaminants that have migrated and impacted the creeks. Ms. Baker said investigations have detected metals and pesticides in the surface waters in the past. Ms. Baker explained that surface water flowing over native soils will pick up metals naturally. Ms. Baker said the Army has removed the majority of contaminated soils and sediment. The final stage is examining drainage and the creeks. Ms. Baker said Army has collected surface water and sediment at 34 sites. The Army tested the samples for a list of chemicals. The Army is reviewing these reports to determine if there are any exceedances.

Ms. Baker discussed the removal of 20 sumps from AOC 17. Ms. Baker said 12 of the 20 are part of the first set to be removed. Removal involves draining and power washing the sumps. Most of the sumps are concrete and will be removed. Pond sumps that have liners will have their liners removed. The Army is testing for contamination within the former sump boundaries. After completion, the Army will grade the sump areas so that they drain.

After the formal presentation concluded, Mr. Smith offered to take questions from the public. Mr. Smith explained that the Restoration Advisory Board toured the Sunflower site before the meeting and wandered around the whole property. Mr. Smith said comments focused on the site looking like a field. The majority of buildings are gone. There are developer buildings remaining. Mr. Smith said nature is reclaiming the site. The Army is doing its part to clean up the soil.

Mr. Smith explained that this is only the second environmental update for the RAB and asked if there is anything the RAB would like presented. Mr. Smith said Tom Simpson had been to the plant and received additional information from the environmental library.

Mr. Smith moved to develop the agenda for the next RAB meeting. Old Business will be the approval of meeting minutes from this meeting. Mr. Smith said he would send the meeting minutes to RAB members at least one month before the next meeting.

Under the category of New Business, Mr. Smith said the November meeting date needs to be adjusted for the Thanksgiving holiday. As part of the Environmental Update, Mr. Smith said there will be a presentation on the Army's activities in the last quarter, new information the Army has, and a description of what investigations are currently ongoing.

Jennifer Hensley asked if the environmental update would include the stream study results. Mr. Smith said the Army must review the stream study internally. The Army will provide comments to the contractor. Once the Army is satisfied with the contractor's responses, the report will be sent to KDHE. The Army must then work through any KDHE comments. After approval, the stream study will be available to the public. Mr. Smith explained that this process usually takes a few months, about three months. Mr. Smith expects the stream study to be close to being ready for release by August.

Mike Pierce stated that the public's primary concern is contaminants reaching their properties. Who can people contact if they have that concern? Mr. Smith responded that Army studies have sought to delineate groundwater in each area. Based on everything we know today, no groundwater contamination at Sunflower is leaving the boundaries of Sunflower.

Chris Connell asked if testing is happening outside the Sunflower boundaries. Mr. Smith said the Army doesn't go onto private property unless there's a reason to do so. The investigations would move outside the Sunflower property if a boundary test showed contamination.

Mr. Smith said that long-term monitoring will occur within an area once delineation is complete and risk analysis shows a need to monitor groundwater in the area. Groundwater in most areas of SFAAP does not move or carry contamination to a great extent. Mr. Smith said nature does play a part in breaking down contaminants in groundwater over time.

Jennifer Hensley asked if the Army has tested water to the same depths as nearby wells on private properties. Mr. Hargadine said that residential wells are 100 feet deep or more. Most of the groundwater contamination at Sunflower appears to be limited to the overburden depth ranges of 20 to 40 feet.

Mr. Smith said Army has just finished delineation testing at AOC 17. Investigations detected nitrates in the northwest portion of that Area of Concern.

Dawn Buehler asked when the 30-year clock starts for landfill monitoring. Mr. Smith said it has begun for the landfill at Sunflower. The Army is not leaving the GW monitoring requirements on the property. Ms. Buehler asked if the Army is required to test for 30 years. Mr. Smith answered: Yes, testing will occur periodically as required.

Kathy Baker said the landfill is not a source of many contaminants. Investigations have detected nitrates and some manganese in one or two wells. Ms. Baker said the 30-year testing timetable starts after the landfill is officially closed.

Ms. Buehler asked if the Sunflower landfill had been closed. Ms. Baker said the landfill was closed at the end of 2023. Ms. Baker said the Army is still trying to determine the long-term testing requirements. Army won't continue to test if a well is continuously dry or has nothing in it.

Mike Pierce asked if Johnson County would take over the big landfill site. Mr. Smith said, "potentially yes, it's not unusual for beneficial reuse to occur on top of a landfill." Ken Herstowski said the landfill site is not flat. Mr. Smith responded that some ball fields in Kansas are located on former landfill sites.

Kathy Baker explained that the 30-year monitoring period is only for the landfill and does not apply to the remainder of the Sunflower site. In 2023, the monitoring period for the landfill began. Ms. Baker said the rest of Sunflower has no stipulated timeline for groundwater monitoring. No closure date has been set for the remainder of the former Sunflower installation. Ms. Baker explained that investigations need to identify where the groundwater is contaminated and locate the edges of that contamination. The Army must determine the risks, whether the water is potable, and the length and frequency of groundwater monitoring.

Mr. Smith said groundwater contamination outside the landfill has no time limit for monitoring. When investigations identify contamination, Mr. Smith says there will be a requirement for monitoring. A collaborative process involving the Army, state, and federal authorities will determine monitoring requirements. Mr. Smith said there is no predetermined table or timeline. The KDHE says it depends on the contamination found and how many people live nearby.

Mr. Smith said a deed restriction on Sunflower property prevents any owner from using the groundwater. No wells will be allowed for drinking purposes. The developer is responsible for maintaining the deed restriction on environmental use control.

Jennifer Hensley asked if the Army had found anything in the lake at AOC 14. Ms. Baker responded, "No, and a No Further Action request has been submitted for that area." Once the parkland is opened, it is slated to become part of Johnson County Parks.

Mr. Smith was asked to explain why groundwater should not be a concern to surrounding property owners. Mr. Smith explained that once contractors remove soil contamination, the source of groundwater contamination goes away. Mr. Smith said the Army is or has developed work plans for OUs 1, 2, 3, 4 and 5. The Army will continue to complete contaminant delineation. Currently, all data shows that contaminated groundwater is not leaving the SFAAP boundaries and impacting off-site areas. Areas with gross groundwater contamination will be monitored for the foreseeable future and if changes in the aerial extent occur additional actions

will be taken. Mr. Smith explained that contamination in the groundwater does not mean there's also contamination in the surface water.

Paul Oberle requested that the Army explain planned remediation efforts at the next RAB meeting, identify work that needs to be done but is unfunded, project future work, and explain the process for getting funding approved. Mr. Smith said he would try to project the work the Army knows or perceives will be next in line, subject to the availability of federal funds.

All RAB members in attendance voted to adjourn the meeting at 7:02 p.m.