

Board of Municipal Utilities



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Rick Landers, General Manager

Mark McGill, Plant Manager

March 1, 2022

Ms. Kristen Hillyer
U.S. Environmental Protection Agency
1301 Constitution Ave NW
Washington, DC 20460

RE: SBMU Response to CCR Part A Demonstration
Information Request

Dear Ms. Hillyer:

On behalf of Sikeston Board of Municipal Utilities (SBMU), we are in receipt of your February 14, 2022, electronic request for additional information (the Request) regarding SBMU's Demonstration for a Site-Specific Alternate to Initiation of Closure Deadline for the CCR Surface Impoundment (Bottom Ash Pond) at the Sikeston Power Station (Sikeston) under the Coal Combustion Residual (CCR) Rule, 40 CFR Part 257, Subpart D (the Part A Demonstration).

EPA asks for the following information in its Request:

- 1.) A narrative explaining the progress made and current activities and phase/step at the facility to achieve alternative capacity.
- 2.) A discussion of the issues that led to the delay (if a delay has occurred) to the requested date to cease receipt of waste.
- 3.) An updated requested date to cease receipt of waste (if the original date requested has changed).
- 4.) An updated narrative justifying the new date to cease receipt of waste (if the original date requested has changed).

We appreciate EPA's consideration of SBMU's Part A Demonstration and provide the following information, responsive to each request.

1. A narrative explaining the progress made and current activities and phase/step at the facility to achieve alternative capacity.

SBMU continues to make steady progress toward ceasing receipt of waste, consistent with the dates requested in the Demonstration. SBMU proposes a plan to convert to dry handling of CCR at Sikeston. SBMU is on schedule to meet the earlier deadline of May 1, 2023, assuming a new Low Volume Waste Water (LVWW)

Treatment Pond is not required. The following is a Table depicting the interim project deadlines and Sikeston’s progress.

SBMU Part A Demonstration Proposed Deadlines

Activity	Demonstration Proposed Deadline	Status
Reroute non-CCR wastestreams, boiler blowdown and oil water separator effluent to the existing Process Water Pond	April 29, 2022	On schedule
Cease sluicing of bottom ash, economizer ash, and pyrites to the Bottom Ash Pond by installing a compact submerged conveyor, storage bunker, and ancillary equipment	May 1, 2023	On schedule
Reroute non-CCR wastestream, cooling tower blowdown, to the existing Coal Pile Runoff Pond after CCR sluicing ceases	October 15, 2023	May 1, 2023, assuming a new LVWW pond will not be required.

SBMU provides a summary of its progress toward milestones, followed by a detailed narrative of its efforts. SBMU has updated the Status Column in Table 3-5 from the Demonstration for EPA’s ease of review (updated schedule attached).

Part A Demonstration, Table 3-5 : Compliance Project Progress Milestones

Year or Progress Reporting Period	Milestone Description	Status as of March 1, 2022	SBMU Notes
2020	Detection Monitoring Program and review of alternatives.	Completed	The bottom ash, economizer, fly ash, and pyrites wastestreams will be eliminated in the scheduled major outage in Spring of 2023.
2020	Front End Engineering Design (FEED) study and detailed scope development and specifications for dry bottom ash equipment. Sampling program initiated to determine if LVWW pond is needed	FEED Study Completed; ¹ LVWW review and NPDES permit in progress	

¹ FEED study was completed in 2021. Wastestream sampling and NPDES permitting are still underway.

Year or Progress Reporting Period	Milestone Description	Status as of March 1, 2022	SBMU Notes
January-March 2021	Complete Sampling Program to determine if LVWW pond is necessary; Begin work on MDNR/USACE permits if LVWW pond is required	Based on current sampling results, a LVWW will not be required unless future permit limits for Outfall 003 require additional treatment	
April 30, 2021	Award Limited Notice to Proceed (LNTP) for dry bottom ash equipment.	SBMU proceeded to Full Notice to Proceed	Detailed design for conveyors and BOP systems, fabrication release, and initiation of permitting activities
October 31, 2021	Award Full Notice to Proceed (FNTP) for dry bottom ash equipment; start fabrication of dry bottom ash equipment.	Completed	
April 30, 2022	Continue fabrication of dry bottom ash equipment.	On Schedule; In Progress	Pond design/permitting removed from milestone description, assuming this scope is no longer required; however, SBMU is still waiting on its next NPDES permit.
June-October 2022	Issue bids for construction contract, obtain pricing, review bids, and prepare notice of award	On Schedule	After June 2022, SBMU will be able to pursue a private loan with financial institutions to cover the remainder of the project. SBMU will work on financing concurrently with these tasks. LVWW Pond construction contracts removed from the milestone description.
October 31, 2022	Award construction contract to support pre-outage construction.	On Schedule	Allows contractor to procure necessary commodities to support pre-outage construction before the Spring 2023 major outage. At this juncture, SBMU anticipates receiving the bulk of financing to enable it to have the funds in place to award the contract.

Year or Progress Reporting Period	Milestone Description	Status as of March 1, 2022	SBMU Notes
May 1, 2023	Completion of dry bottom ash conversion and re-route of remaining non-CCR wastestreams.	On Schedule	Dry bottom ash conversion complete. Reroute of remaining non-CCR wastestream (cooling tower blowdown) to existing Coal Pile Runoff Pond complete (current design based on sufficient residence time for treatment with chemical feed once ash sluice flows cease).

Narrative of Progress

1. CCR Wastestreams

The project was approved by the SBMU Board of Directors with each year’s annual budget still requiring approval. SBMU has awarded the long-lead equipment contract for the dry ash conversion. Detailed equipment and balance of plant design is underway. Equipment deliveries and construction procurement efforts remain on schedule to support the Spring 2023 outage. The schedule included in the Demonstration has been updated to reflect current progress, including the following items:

- SBMU engaged Burns & McDonnell (BMcD) in October 2020 to begin development of equipment specifications to be utilized in the procurement of a compact submerged conveyor and ancillary equipment and development of preliminary engineering report to further refine the overall project budget. This Front-End Engineering and Design study was completed in July 2021.
- The bidding phase for the equipment began in late March 2021 with bids received in May 2021. The bidding phase was four months behind the original plan due to additional time required to develop the technical specifications and commercial terms. SBMU elected to forego the originally planned LNTP for engineering only and proceed directly to a FNTP for engineering and equipment fabrication. SBMU skipped the LNTP step to minimize impacts to the overall schedule that had resulted from unanticipated delays in the specifications/commercial term development and the bidding, evaluation, and awarding of the equipment contract. SBMU provides more details about this change, *infra*.
- Extended contract negotiations on the project equipment took place during the Summer and Fall of 2021. SBMU awarded the FNTP equipment contract to the successful bidder in late October 2021, consistent with the Demonstration schedule projection.

- Concurrently, SBMU awarded a contract to BMcD in October 2021 to provide detailed engineering services and construction drawings for the balance of plant equipment.
- The equipment supplier is currently performing engineering necessary to fabricate the equipment to customize it to Sikeston's unit and operations. The supplier has received approval from SBMU/BMcD on initial engineering submittals to allow them to continue with engineering and fabrication. The equipment supplier is currently on schedule to deliver the dry ash handling equipment in January 2023 in advance of installation planned in the Spring 2023 outage.
- BMcD prepared Site Survey specifications and geotechnical investigation specifications that SBMU utilized to procure these services. The site survey was finished in January 2022 and the geotechnical report was submitted in February 2022. The Site Survey and geotechnical report are being utilized to develop the balance of plant design and development of construction drawings.
- BMcD is on schedule to provide construction bid specifications and drawings for SBMU use by June 2022. With respect to the construction contracts to be awarded, SBMU continues to project a contract award by October 31, 2022.
- SBMU is coordinating with MDNR to receive an updated site discharge permit under the NPDES program.
- SBMU will be able to pursue financing options beginning in June 2022 and anticipates work on financing the project concurrently with bidding activities in Summer 2022.

With respect to the CCR wastestreams, there were several project changes since SBMU submitted the Demonstration. None of the changes have impacted the overall Demonstration timeline. For example, SBMU originally planned to complete the Site Preparation and Below Grade construction work for the bottom ash conversion in the Spring of 2022 to avoid conflict with previously planned High Energy Piping inspection related work in 2023. SBMU decided to perform the High Energy Piping inspections in the Spring 2022 and combine the Site Preparation and Below Grade construction related to the bottom ash conversion with the other bottom ash conversion work to consolidate the work. A single construction contractor will now be responsible for the entire scope of work. As a result, a LNTP to support the early equipment design efforts was not needed. Completion of the compact submerged conveyor, storage bunker, and ancillary equipment remains on schedule to be installed in order to allow SBMU to cease sluicing of bottom ash, economizer ash, and pyrites by May 1, 2023.

2. Non-CCR Wastestreams (Boiler blowdown & Oil Water Separator Effluent)

SBMU engaged Lambert Engineering & Surveying in January 2022 to provide detailed engineering services to route the boiler blowdown and oil water separator effluent from the Bottom Ash Pond to the Coal Pile Run-Off Pond. SBMU is in the process of identifying and procuring the equipment necessary to implement the design. SBMU will execute this portion of the project as part of the outage scheduled to begin in late March 2022. This scope of work is on schedule to be completed by April 29, 2022.

3. Non-CCR Wastestreams (Cooling Tower Blowdown)

In 2020, BMcD performed initial evaluations and study of the non-CCR waste streams based on the plant's process flow diagram and existing data. The goal of the analysis was to determine whether a new LVWW pond is required to comply with Sikeston's NPDES discharge permit limits. The initial study was inconclusive. In October 2021, SBMU engaged BMcD for further evaluation of Sikeston's non-CCR LVWW streams and water balance to provide solutions for reroutes of these lines. In December 2021, BMcD visited the site and reviewed the Plant's LVWW streams to develop a flow monitoring and sampling plan. BMcD is installing temporary flow meters to capture flow data for various streams. At this interim point in the analysis, the current plan is to reroute the cooling tower blowdown to the Coal Pile Run-Off Pond and use chemical treatment, if needed, to maintain the plant's NPDES Outfall 003 within allowable limits. The chemical treatment, if required, and piping reroute and tie-ins are on schedule to be completed by May 1, 2023, concurrently with the outage for the dry ash conversion. The cooling tower blowdown cannot be routed to the Coal Pile Runoff Pond sooner as this water is currently used for CCR sluicing. SBMU is expecting to receive a draft of a new NPDES discharge permit in the near future.

2. A discussion of the issues that led to the delay (if a delay has occurred) to the requested date to cease receipt of waste.

As previously stated, Sikeston is on schedule with respect to all key project deadline. SBMU outlined and explained all incidental project delays, *supra*, and SBMU's proactive response to ensure the overall deadline would not be impacted. The dry ash conversion is on track to meet the key outage date of Spring 2023.

3. An updated requested date to cease receipt of waste (if the original date requested has changed).

Not applicable.

4. An updated narrative justifying the new date to cease receipt of waste (if the original date requested has changed).

Not applicable.

SBMU appreciates EPA's review of its Part A Demonstration. Sikeston is SBMU's key asset to provide electricity to the City of Sikeston and neighboring communities of Columbia, Carthage, Fulton, and West Plains. Thank you for considering the gravity of SBMU's Part A extension request. Continued plant operation is essential to SBMU's ability to deliver reliable electricity to the City and neighboring communities. Significant financial repercussions would result should the plant be furloughed prior to project completion, which we outlined in more detail in our Demonstration.

We are happy to answer any questions regarding this update or any of the information in our Demonstration.

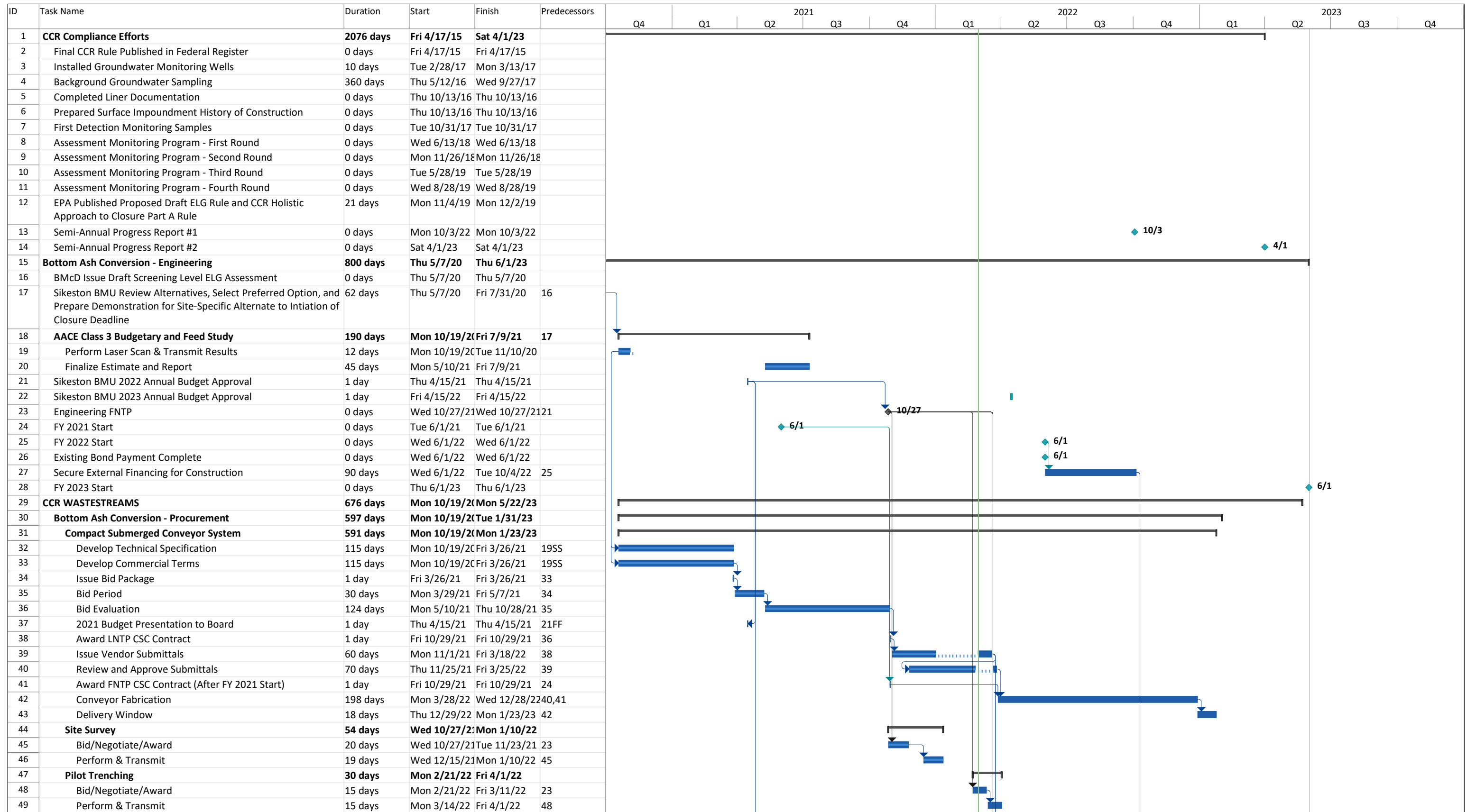
Best regards,

A handwritten signature in blue ink that reads "Mark E. McGill". The signature is written in a cursive style with a clear, legible font.

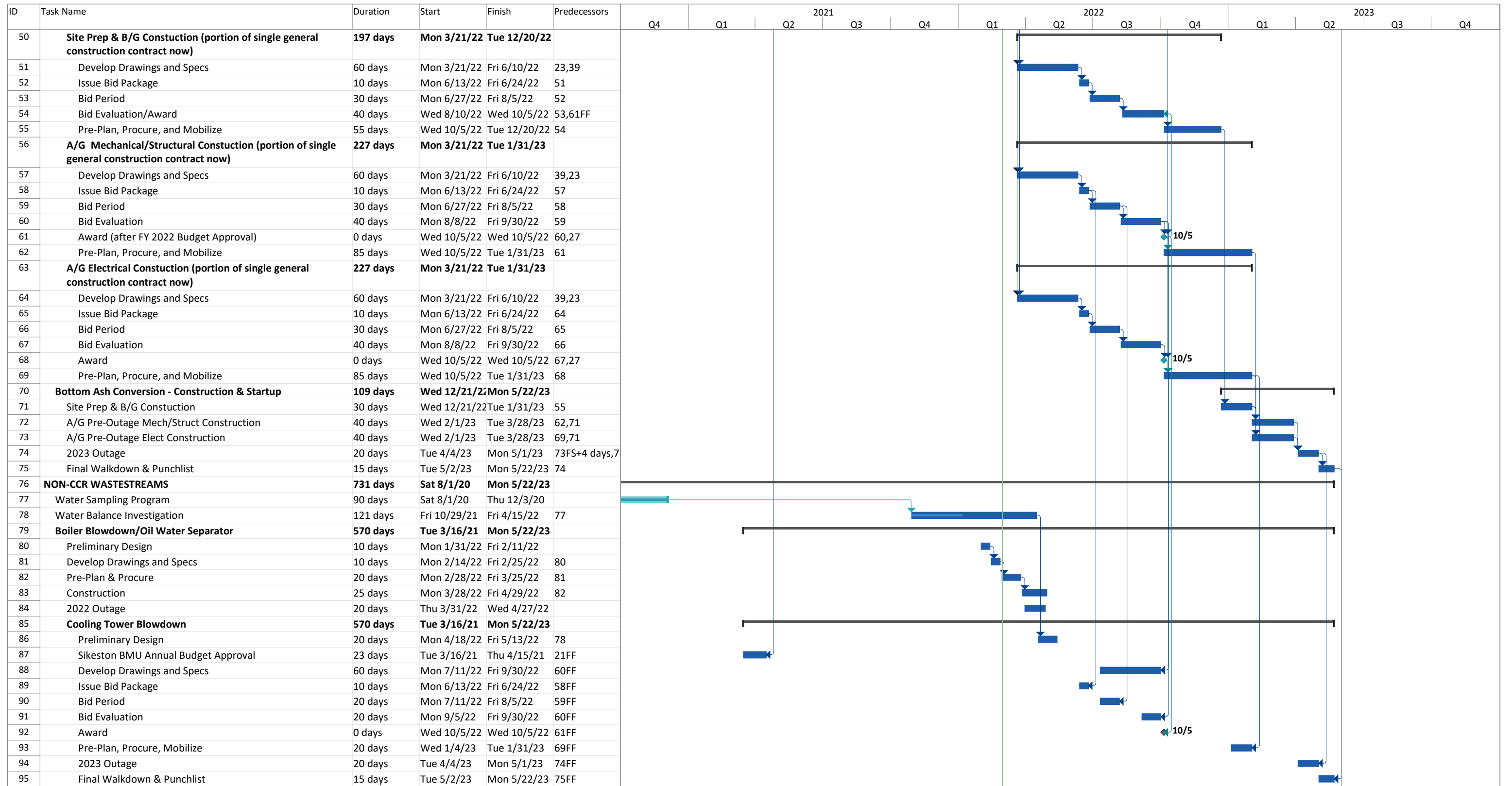
Mark McGill

Attachment: 1 (Sikeston CCR Extension Request Schedule, R3_Status Update.pdf)

Cc: Mr. Luke St. Mary (SBMU)
Mr. Timothy Schroeder (BMcD)
Mr. Jason Eichenberger (BMcD)



Project: Sikeston CCR Surface Impoundment Extension Demonstration Date: Tue 3/1/22	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
	Split		External Tasks		Inactive Summary		Manual Summary		Progress	
	Milestone		External Milestone		Manual Task		Start-only		Manual Progress	
	Summary		Inactive Task		Duration-only		Finish-only			



Project: Sikeston CCR Surface Impoundment Extension Demonstration Date: Tue 3/1/22	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline	
	Split		External Tasks		Inactive Summary		Manual Summary		Progress	
	Milestone		External Milestone		Manual Task		Start-only		Manual Progress	
	Summary		Inactive Task		Duration-only		Finish-only			