Prepared by

Georgia Power Company
241 Ralph McGill Blvd NE
Atlanta, Georgia 30308

LEGACY CCR SURFACE IMPOUNDMENT APPLICABILITY REPORT

PLANT KRAFT ASH POND 1 (AP-1)

November 8, 2024

CERTIFICATION STATEMENT INCLUDING CERTIFICATION STATEMENT FOR DEFERRAL PENDING A FUTURE PERMITTING ACTION

Pursuant to § 257.100(f)(1)(ii)(A) and § 257.101(g)(5), I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

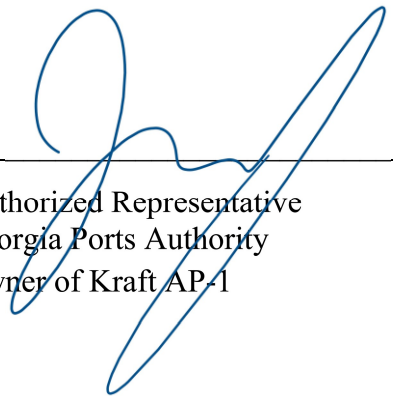
November 8, 2024

Authorized Representative
Georgia Power Company
Operator of Kraft AP-1

Date

CERTIFICATION STATEMENT FROM OWNER

The Georgia Ports Authority has reviewed this Applicability Report and Demonstration for a Deferral Pending a Future Permitting Action and consents to it being placed in the operating record for Kraft AP-1. Furthermore, the Georgia Ports Authority consents to allow this Applicability Report and Demonstration for a Deferral Pending a Future Permitting Action to be posted on the Georgia Power's CCR website.



November 8, 2024

Authorized Representative
Georgia Ports Authority
Owner of Kraft AP-1

Date

LEGACY CCR SURFACE IMPOUNDMENT APPLICABILITY REPORT

Legacy CCR Surface Impoundment Contact Information

Facility Name:	Plant Kraft
Legacy CCR Surface Impoundment:	AP-1
Identification number*:*	HSI Site No. 10415 (October 26, 2021)
Site Location:	155 Crossgate Rd Port Wentworth, GA 31407 Parcel ID: 1-0727-01-001 32.148056, -81.150556
AP-1 Operator:	Georgia Power Company
Operator Address:	241 Ralph McGill Blvd SE, Atlanta, GA 30308
Operator e-mail address:	Gpcenv2@southernco.com
Operator phone number:	404-506-4750

AP-1 Owner

Owner:	Georgia Ports Authority
Owner Address:	PO Box 2406, Savannah, Georgia 31402

Introduction

On April 17, 2015, the United States Environmental Protection Agency (EPA) published in the Federal Register requirements regarding the management and disposal of CCR titled "40 CFR Parts 257 and 261: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule" (i.e., 2015 federal CCR Rule). The 2015 federal CCR Rule, which became effective on October 19, 2015, established requirements regarding the design, operation, closure, post-closure care, monitoring, and corrective action for inactive, existing, and new CCR surface impoundments and existing and new CCR landfills.

In November 2016, the Georgia Environmental Protection Division (GA EPD) adopted amendments to the state's Rules for Solid Waste Management that incorporated the federal CCR Rule (GA EPD 391-3-4-.10, i.e., the State CCR Rule). On January 10, 2020, EPA issued notice of approval for Georgia's CCR permit program; and on February 10, 2020, the GA EPD was authorized by EPA to operate a partial CCR state permit program in lieu of the federal CCR program.

Plant Kraft ceased generation activities prior to October 19, 2015 (effective date of the State CCR Rule 40 CFR 257.50(e)) and Kraft AP-1 was closed by removal of CCR prior to November 22, 2016 (effective date of the State CCR Rule), thus it was not subject to the CCR Rule. However, based on detections of regulated substances in groundwater, the GA EPD Director concurred with Georgia Power's recommendation for Plant Kraft, including Kraft AP-1, to remain under

regulatory oversight of the GA EPD Response and Remediation Program (under the Hazardous Site Response Act (HSRA) and the Voluntary Remediation Program Act (VRP)) in a letter dated March 31, 2017 (Appendix B).

On May 8, 2024, EPA published in the Federal Register a final rule entitled, "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments" (i.e., Legacy Rule). The Legacy Rule establishes regulatory requirements for inactive CCR surface impoundments at inactive facilities that meet the definition of ''legacy CCR surface impoundment'' as defined in 40 CFR § 257.53.

This applicability report has been prepared for Plant Kraft AP-1, to meet regulatory requirements of 40 CFR § 257.100(f)(1)(i-ii). Plant Kraft AP-1 is considered a "legacy CCR surface impoundment" as defined in 40 CFR § 257.53 of the Legacy Rule. As discussed further below and as set forth in Appendix A, Kraft Ash Pond 1 also meets the requirements for the "deferral to permitting for closures conducted under substantially equivalent regulatory authority" established by 40 CFR § 257.101(g). Additionally, this submittal includes related milestone activities of the VRP overseen by GA EPD as appendices to this report for reference.[1]

Site Description and Background

Plant Kraft is located at 155 Crossgate Road in Port Wentworth, Chatham County, Georgia, approximately four (4) miles east of Interstate 95. Plant Kraft began commercial operation in 1958 under the ownership of Savannah Electric Power Company (Savannah Electric) and was later acquired and operated by Georgia Power. On January 17, 1995, a release of cresol to soil was reported near a former canal and waste disposal area on the northernmost portion of Plant Kraft. Shortly thereafter, Plant Kraft was listed on the Georgia Hazardous Site Inventory (HSI) and managed under HSRA.

Similar to CERCLA, Georgia's HSRA program requires property owners to notify GA EPD if they become aware of impacts to soil or groundwater above HSRA's reportable quantities. If GA EPD determines that a release exceeding a reportable quantity has occurred, the EPD Director lists the property on Georgia's HSI. Once a site has been listed on the HSI, the responsible party is directed to investigate the property and develop a Compliance Status Report (CSR) outlining necessary corrective action that must be completed to remove the property from the HSI.

In 2015, Georgia Power began decommissioning Plant Kraft. As part of decommissioning activities at Plant Kraft, CCR in AP-1 was removed through excavation between June 5, 2015 and August 22, 2016 and disposed of off-site in a permitted landfill. As a part of the AP-1 closure process, Georgia Power installed a dedicated groundwater monitoring network. Groundwater samples collected from monitoring wells at AP-1 exhibited detections of regulated substances

[1] This Applicability Report has been prepared in good faith in order to meet the requirements of 40 CFR 257.100 applicable to legacy CCR surface impoundments. Please note, however, that the unit at issue here was previously closed under active state oversight. Georgia Power respectfully submits that this unit should be exempt (and not simply deferred) from EPA's CCR rule, as amended. Georgia Power understands that the retroactive effect of EPA's rule is under review by the United States Court of Appeals for the District of Columbia Circuit in a series of consolidated cases styled, City Utilities of Springfield, Missouri, v. EPA, Case No. 24-1200, and Georgia Power respectfully reserves its legal position against retroactive application of the rule to the former CCR unit at issue here.

above HSRA's reportable quantities. Accordingly, on November 14, 2016, Georgia Power notified GA EPD of the release pursuant to HSRA's requirements.

On June 13, 2018, Georgia Power enrolled Plant Kraft into the Georgia VRP and submitted its CSR to GA EPD on June 15, 2018 (Appendix C). The CSR included an environmental investigation of the entire 73.88-acre Plant Kraft, evaluating potential impacts to soil, groundwater, surface water, and vapor intrusion as well as a site-specific risk assessment. As a part of the of the CSR process, Georgia Power also removed all CCR from AP-1 and closed the impoundment. A June 12, 2018 Certification of CCR Removal, confirming that all CCR had been removed from AP-1 was included in the CSR (Appendix F).

On October 2, 2018, GA EPD accepted the property into the VRP (Appendix D) and also provided comments on the CSR, requiring additional site investigation (Appendix E). Georgia Power conducted the additional investigation and submitted a revised CSR, dated March 1, 2019 (Appendix G). On July 18, 2019, representatives of GA EPD and Georgia Power met to discuss the revised CSR. At GA EPD's request, Georgia Power collected additional soil samples and submitted the results in an Addendum to the CSR, dated October 30, 2019 (Appendix H).

On June 25, 2020, GA EPD issued a conditional approval letter notifying Georgia Power that the property complied with the requirements of the VRP Act and could be removed from HSRA's HSI, pending the execution of Uniform Environmental Covenants (UECs) on the subject parcels. *See* June 25, 2020 VRP Approval, (Appendix L). UECs were signed by the GA EPD Director on April 13, 2021, and recorded in the Chatham County deed records on May 7, 2021 (Appendix O). The UECs limit future use to non-residential and restrict groundwater use for drinking water or any other non-remedial purposes. On October 26, 2021, the GA EPD Director reclassified Plant Kraft and removed it from the HSI, effectively closing Plant Kraft and Kraft AP-1 (Appendix P).

Georgia Power became the former owner of Plant Kraft after it donated a portion of the retired Plant Kraft property in late 2021, including the area encompassing the former Plant Kraft AP-1, to the Georgia Port Authority. This area is presently the location of critical infrastructure related to Georgia Port Authority's ongoing operations.

Closure Status – Deferral to Permitting Under 40 CFR § 257.101(g)

Plant Kraft AP-1 closure by removal was completed in accordance with GA EPD HSRA and VRP requirements of the, and it was approved by the GA EPD Director on October 26, 2021. Kraft AP-1 was closed under the HSRA and VRP requirements, which provide "equivalent protection of human health and the environment" meeting the Federal performance standards in 40 CFR § 257.102.[2]

As the EPA has noted, "State requirements [for closure], even where different, can result in closures that are equally as protective as those conducted in accordance with Federal requirements."[3] Accordingly, where a legacy CCR surface impoundment was previously closed "under standards that are different than the Federal CCR closure standards (e.g., if the closure were

[2] 89 Fed. Reg. at 39025.
[3] 89 Fed. Reg. at 39013.

conducted as part of a CERCLA cleanup or State order) but are otherwise equivalent in terms of mitigating the risks, the requirement to meet the § 257.102 standards will be deferred to permitting [under 40 CFR. § 257.101(g)], where a closure equivalency determination will be made."[4]

Specifically, under 40 CFR § 257.101(g), the owner or operator of a legacy CCR surface impoundment need not demonstrate compliance with the performance standards in 40 CFR § 257.102(c) or (d), provided that the owner demonstrates that the closure of the CCR unit met the standards specified in 40 CFR § 257.101(g)(1) through (g)(6). The information in Appendix A provides details demonstrating that the closure of Plant Kraft AP-1 conducted under GA EPD's HSRA and VRP programs has met the standards specified under 40 CFR § 257.101(g)(1) through (g)(4).

In accordance with 40 CFR § 257.101(g)(6) Georgia Power and/or the Georgia Ports Authority will submit appropriate documentation to the permitting authority. The closure of Plant Kraft AP-1 met the performance standards specified under 40 CFR § 257.101(g), and therefore AP-1 is eligible for deferral to permitting. Accordingly, Georgia Power and the Georgia Ports Authority defer any review of completeness to the Permitting Authority to determine if "equivalency" of the closure under a substantially equivalent regulatory authority has been successfully demonstrated in accordance with 40 CFR § 257.101(g) as required by 40 CFR § 257.100(i)(8).

CCR Rule Compliance Data and Information Website

Supporting information can be found at the Georgia Power CCR website located at: https://www.georgiapower.com/company/environmental-compliance/plant-list/plant-kraft.html

[4] 89 Fed. Reg. at 39028

Attachments:

Figure 1	Former Plant Kraft Site Map
Appendix A	Demonstration for Deferral Pending a Future Permitting Action Under 40 CFR § 257.101(g)(1) through (g)(4)
Appendix B	Release Notification Plant Kraft
Appendix C	VRP Compliance Status Report
Appendix D	VRP Application Approval Letter
Appendix E	Compliance Status Report EPD Comments
Appendix F	Certification of CCR Removal
Appendix G	VRP Revised Compliance Status Report
Appendix H	VRP Compliance Status Report Addendum
Appendix I	First VRP Progress Report
Appendix J	Second VRP Progress Report
Appendix K	Third VRP Progress Report
Appendix L	EPD Response to 1st, 2nd, and 3rd VRP Progress Reports (CSR Approval Letter)
Appendix M	Fourth VRP Progress Report and EPD Correspondence Letter
Appendix N	EPD Response to 4th VRP Progress Report
Appendix O	Recorded Environmental Covenants #1, #2, #3
Appendix P	Reclassification and Removal of Site from HSI Letter and Memorandum

N

0 150 300 600 900 1,200

Feet

Tract 3
~0.70 acres
Parcel ID 1-0727-01-004

Statesboro
Savannah
Hinesville

KMW-03

Parcel ID 1-0808-01-003

KMW-13

Tract 1
~42.4 acres
Parcel ID 1-0727-01-001

KMW-05

KMW-06

KMW-07

KMW-04

Railroad
Right-Of-Way

KMW-08

KMW-01

Tract 2
~26.5 acres
Parcel ID 1-0727-01-003

KMW-12

KMW-02

KMW-11

KMW-09

KMW-10

Chatham County Canal

Parcel ID 1-0728-01-001

Legend

- Monitoring Well
- Approximate Former AP-1 (Removed)
- Former Plant Property
- Property Boundaries

Notes:
Tract 1 property donated to Georgia Ports Authority. Tract 2 and Tract 3 properties retained by Georgia Power Company.

Resolute
Environmental & Water Resources Consulting

Woodstock, GA | November 2024

Applicability Report
Former Plant Kraft
Site Map
Port Wentworth, GA

Figure
1

APPENDIX A — DEMONSTRATION FOR DEFERRAL PENDING A FUTURE PERMITTING ACTION UNDER 40 CFR § 257.101(g)(1) through (g)(4)

Kraft Ash Pond 1 (AP-1) was closed by removal, as approved by the Georgia Environmental Protection Division (GA EPD) Director on October 26, 2021 under the Georgia Hazardous Site Response Act (HSRA), a substantially equivalent regulatory authority in the State of Georgia. "For any legacy impoundments that have completed closure by removal…of the unit pursuant to a State permit or order that meets the requirements of § 257.101(g) prior to the effective date of [Legacy Rule], United States Environmental Protection Agency (EPA) is requiring the owner or operator to attach such documentation to the applicability report required by § 257.100(f)(1) and post this documentation to its CCR website." 89 Fed. Reg. at 39006-39007. As detailed below, that closure met the standards specified under 40 CFR § 257.101(g), and is eligible for deferral.

Under 40 CFR § 257.101(g), the owner or operator of a legacy CCR surface impoundment need not demonstrate compliance with the performance standards in 40 CFR § 257.102(c) or (d), provided that the owner demonstrates that the closure of the CCR unit met the standards specified in 40 CFR § 257.101(g)(1) through (g)(6). This document provides details demonstrating that closure met the standards specified under 40 CFR § 257.101(g)(1) through (4) and supplements information provided in the Applicability Report that all standards specified in 40 CFR § 257.101(g)(1) through (g)(6) were met for AP-1.

As detailed below,

(1) The owner or operator of the CCR unit must document that a regulatory authority played an active role in overseeing and approving the closure and any necessary corrective action pursuant to an enforceable requirement. This includes a State or Federal permit, an administrative order or consent order issued after 2015 under CERCLA or by an EPA-approved RCRA State program.

In 2015, Georgia Power began decommissioning Plant Kraft. Coincident with retiring the power generation structures, CCR in AP- 1 was removed through excavation between June 5, 2015, and August 22, 2016 and disposed of in an offsite permitted landfill. As a part of that process, Georgia Power identified impacts to groundwater, which were reported under HSRA.[5] On March 31, 2017,

[5] November 14, 2016, HSRA Notification Appendix B. HSRA is overseen by the GA EPD Response & Remediation Program and requires property owners to notify GA EPD of any release to soil and groundwater above the program's reportable quantity. Ga. Comp. R. & Regs., R. 391 3-19-.04. If the GA EPD Director determines that a release exceeding a reportable quantity has occurred, the GA EPD Director is directed to list the property on Georgia's HSI. Ga. Comp. R. & Regs., R. 391 3-19-.05(1). Once a site has been listed on the HSI, the responsible party must submit a Compliance Status Report or "CSR," documenting the environmental status of the site. *Id.* As a part of the CSR, responsible parties are required to investigate and identify any appropriate corrective action. *Id.* The GA EPD Director then reviews the CSR and determines whether corrective action is necessary. Ga. Comp. R. & Regs., R. 391 3-19-.06. More information regarding GA EPD's HSRA program is available here: https://epd.georgia.gov/hazardous-site-response-act-guidance

the Director of GA EPD issued a letter informing Georgia Power that GA EPD would continue to regulate the closure of AP-1 under HSRA (Appendix B).

Similar to CERCLA, Georgia's HSRA Program requires property owners to notify GA EPD if they become aware of impacts to soil or groundwater above HSRA's reportable quantities. If GA EPD determines that a release exceeding a reportable quantity has occurred, the EPD Director lists the property on Georgia's HSI. Once a site has been listed on the HSI, the responsible party is directed to investigate the property and develop a CSR outlining necessary corrective action that must be completed to remove the property from the HSI.

On June 13, 2018, Georgia Power enrolled Plant Kraft into the Georgia Voluntary Remediation Program (VRP) and submitted its CSR to GA EPD on June 15, 2018 (Appendix C and D). The CSR included an environmental evaluation of the entire 73.88-acre Plant Kraft (including AP-1), evaluating potential impacts to soil, groundwater, surface water, and vapor intrusion as well as a site-specific risk assessment. As a part of the of the CSR process, Georgia Power also removed all CCR from AP-1 and closed the impoundment. A June 12, 2018 Certification of CCR Removal, confirming that all CCR had been removed from AP-1 was included in the CSR (Appendix F).

On October 2, 2018, GA EPD accepted the property into the VRP (Appendix D) and also provided comments on the CSR, requiring additional site investigation. Georgia Power conducted the additional investigation and submitted a revised CSR in March 2019 (Appendix G) On July 18, 2019, representatives of GA EPD and Georgia Power met to discuss the revised CSR. At GA EPD's request, Georgia Power collected additional soil samples and submitted the results in an Addendum to the CSR, dated October 30, 2019 (Appendix H) While GA EPD reviewed both the 2019 Revised CSR and CSR Addendum, Georgia Power continued to provide the agency with regular status updates on the progress of its environmental investigation (Appendices I, J, K, M).

On June 25, 2020, GA EPD issued a conditional approval letter notifying Georgia Power that the property complied with the requirements of the VRP and could be removed from HSRA's HSI, pending the execution of Uniform Environmental Covenants ("UECs") on the subject parcels. *See* June 25, 2020 VRP Approval, (Appendix L). UECs were signed by the GA EPD Director on April 13, 2021, and recorded in the Chatham County deed records on May 7, 2021 (Appendix O). The UECs limit future use to non-residential and restrict groundwater use for drinking water or any other non-remedial purposes. On October 26, 2021, the GA EPD Director reclassified Plant Kraft and removed it from the HSI in accordance with Subparagraph 391-3-19-.05(4)(b) of the Rules for Hazardous Site Response and §12-8-107(f) of the VRP Act, effectively closing Kraft AP-1 (Appendix P).

Throughout this closure process, GA EPD took an active role in reviewing Georgia Power's CSR and overseeing the complete removal of CCR from and closure of AP-1. GA EPD required

Georgia Power to conduct vapor, soil, and groundwater investigations to demonstrate that closure was appropriate (Appendix E). As part of this process, Georgia Power was also required to perform site-specific risk assessments of multiple potential exposure pathways as discussed in detail below and in Appendices H, I, J, K, and M. After reviewing the CSR documents, GA EPD documented that soil was in compliance appropriate, non-residential standards and approved Georgia Power's use of environmental covenants on the property to protect human health and the environment from potential risk from groundwater impacts (Appendix L) In light of GA EPD's active role in overseeing and approving the closure of AP-1 pursuant to enforceable requirements under Georgia's VRP and HSRA Acts, the standard in 40 CFR § 257.101(g)(1) has been met.

(2) The owner or operator of the CCR unit must document that the regulatory authority required or conducted a site-specific risk assessment prior to (or as part of) approving the closure and any necessary corrective action.

As a part of preparing the CSR and achieving regulatory closure for AP-1, Georgia Power was required to conduct a site-specific risk assessment. As explained in more detail in the 2019 CSR Addendum (Appendix H), Georgia Power was required to evaluate potential risks to human health and the environment posed by selected constituents via potential exposure pathways of soil, groundwater, surface water, and vapor intrusion at Plant Kraft. These evaluations included:

- Demonstration and Certification of Compliance to appropriate, non-residential (Type 3) Risk Reduction Standard (RRS) for on-site soils;
- Calculation of Type 2 and Type 4 site-specific RRS for select constituents in groundwater (Type 2 and Type 4 RRS are environmental standards that "pose no significant risk on the basis of a **site-specific risk assessment**" for residential and nonresidential land use, respectively. Ga. Comp. R. & Regs., R. 391-3-19.-.07);
- Modeling of groundwater discharge to surface water bodies, comparison of resultant modeled surface water concentrations to appropriate regulatory standards (In-Stream Water Quality Standards, or where not available, more conservative EPA "At the Tap" action levels for drinking water); and
- Modeling of groundwater transport and degradation of radionuclides in groundwater (radium 226 and 228) into radon, which is capable of migration and exposure via vapor phase. Modeling of the resultant radon vapor concentrations, evaluation of potential for vapor intrusion into buildings, and comparison of modeled vapor concentrations to appropriate risk standards.

The site-specific risk assessment activities showed that soil, surface water, and vapor concentrations at Plant Kraft met corresponding GA EPD or EPA standards for a non-residential site such as Plant Kraft. However, groundwater concentrations of arsenic in one monitoring well and radium in three monitoring wells near AP-1 exceeded site-specific risk-based standards. These risks were mitigated by GA EPD-approved environmental covenants prohibiting non-remedial

groundwater use. Therefore, risks have been evaluated and approved as compliant by GA EPD. Since a site-specific risk assessment was part of the AP-1 closure approval, the standard in 40 CFR § 257.101(g)(1) has been met.

(3) The owner or operator of the CCR unit must document that it installed a groundwater monitoring system and performed groundwater monitoring that meets all of the following:

(i) Was capable of accurately representing background water quality;

The groundwater assessment methodology and results, including background well locations and groundwater quality were approved by GA EPD in their approval of the Revised CSR and CSR Addendum. The groundwater monitoring system installed to investigate AP-1 was capable of accurately representing background water quality. Background groundwater monitoring wells were installed at locations upgradient of impacts from operations at Plant Kraft AP-1, and is further supported by analytical results for these wells. A groundwater sampling program meeting the requirements of GA EPD's HSRA and VRP programs, including quality assurance and quality control means and methods, was implemented to obtain groundwater quality data at each groundwater well location, including background locations.

(ii) Was capable of accurately representing the quality of water passing the waste boundary;

The groundwater assessment methodology and results, including the groundwater monitoring system installed to investigate AP-1 at the waste boundary, were approved by GA EPD in their approval of the Revised CSR and CSR Addendum and was capable of accurately representing the quality of water passing through the unit boundary.

The uppermost surficial aquifer at AP-1 is a shallow, unconfined to semi-confined aquifer comprised primarily of sand with discontinuous layers of clay. (Geologic cross-sections at AP-1 are presented in the Revised CSR and CSR Addendum, Figures 24 and 25). The surficial aquifer is underlain by a regional confining unit, the Hawthorn formation (primarily a dry, sandy, clayey silt), which was more than 100 feet thick beneath AP-1 and the Plant Kraft property, as documented by soil borings performed during the CSR assessment activities and shown on cross-section presented in the CSR (Figure 25). Due to the presence of this regional confining unit located approximately 25-35 feet below ground surface at the site, the surficial aquifer is a narrow band of sand with interbedded silt and clays that measures approximately 25 feet in saturated thickness at its maximum thickness. This regional confining unit provided vertical delineation for the surficial aquifer, as wells installed into this until would have been dry, as demonstrated by the soil borings and as approved by Georgia EPD.

In 2016 and 2017, five groundwater monitoring wells were installed at the waste boundary of AP-1 to both assess groundwater flow and quality at the unit boundary, with seven additional monitoring wells installed beyond the waste boundary. As illustrated in the Revised CSR and CSR Addendum, well screens were installed into the uppermost saturated sand of the surficial aquifer (boring logs are provided in Appendix F the CSR documents). The base of the groundwater monitoring well screens intersect or are adjacent to (within 10 feet) the Hawthorn formation, which provides vertical delineation. A groundwater sampling program meeting the requirements of GA EPD's HSRA and VRP programs, including quality assurance and quality control means and methods, was implemented to obtain groundwater quality data at each groundwater well location, including waste boundary locations.

As described in the Revised CSR, CSR Addendum, and AP-1 Closure Certification, the former AP-1 was a small, shallow unit covering approximately eight (8) acres with a maximum depth of approximately eleven (11) feet. Based on surrounding berm elevations of approximately 20 feet, surface water elevations in AP-1 would have been a maximum of approximately 3.5 to 6 feet, which is generally consistent with groundwater elevations in wells adjacent to the waste boundary. The small AP-1 footprint and pool elevation in general equilibrium with the surrounding groundwater provided limited hydraulic head for groundwater mounding beneath AP-1. As demonstrated in cross-sections provided in the CSR based on drilling conducted at the site, the surficial aquifer is approximately 25 feet thick. Therefore, the wells installed at the site and screened between approximately 3 feet and -20 feet elevation targeting preferential pathways in the sandier portions of the surficial aquifer, are ideally situated to accurately represent the quality of water passing the waste boundary of AP-1.

(iii) Was capable of detecting contamination in the uppermost aquifer; and

The groundwater monitoring well network detected contamination in the uppermost aquifer, as Appendix III and IV constituents were detected. Radium was detected at concentrations exceeding GWPS in four monitoring wells completed in the uppermost aquifer on the north and west boundaries of the former AP-1, but these exceedances were horizontally and vertically delineated in the surficial aquifer by monitoring wells farther downgradient from the unit (waste) boundary. In addition, arsenic was detected at concentrations exceeding GWPS in one monitoring well to the west of the former AP-1 and was likely not caused by AP-1. The arsenic detected was more likely caused by a thin layer of material observed near well KMW-02, that was excavated in 2018 during site closure activities. The groundwater monitoring system at the waste boundary, downgradient delineation wells, and associated groundwater monitoring met GA EPD's requirements under the HSRA and VRP programs, as demonstrated by GA EPD's approval of the Revised CSR and CSR Addendum.

(iv) Monitored all potential contaminant pathways.

As described above, the primary potential contaminant pathway from the former AP-1 is the uppermost, surficial aquifer, which is a shallow sand aquifer underlain by a massive regional confining unit. Given the simple nature of the hydrogeologic setting, the relatively small size and limited hydraulic head of AP-1, that dissolved metals are carried along with the flowing groundwater and do not preferentially float or sink, and the monitoring well network surrounding and extending beyond AP-1, the primary contaminant pathway was thoroughly assessed and monitored to the satisfaction and approval of GA EPD.

The potential for other contaminant pathways, and the potential risk associated with those, was evaluated in the Revised CSR and CSR Addendum. The other potential contaminant pathways identified were soil (and leaching to groundwater), surface water (including groundwater discharge to surface water), and vapor or vapor intrusion. Soil concentrations of constituents of concern remaining after extensive excavation complied with HSRA and VRP RRSs, addressed soil leaching to groundwater, and the soil pathway was monitored and found to be in regulatory compliance.

The potential surface water and vapor or vapor intrusion pathways were developed as extensions of the groundwater pathway, based on fate and transport modeling of groundwater. As described above, thorough evaluations of the surface water and vapor/vapor intrusion potential pathways and associated risks were performed under the VRP and presented in the CSR Addendum. These evaluations, which were subsequently reviewed and approved by GA EPD, found that the potential risks of these potential pathways were below applicable regulatory standards. Accordingly, all potential contaminant pathways were monitored as part of the VRP.

(4) Must document that the closed unit meets either:(i) The performance standard in § 257.60 (ash must be located at least five feet above the uppermost aquifer); or (ii) The performance standard in § 257.102(d)(2)(i) (control "post-closure infiltration of liquids")

The performance standards in 40 C.F.R. § 257.60 and § 257.102(d)(2)(i) apply only to units that have been closed where CCR remains in place. Because AP-1 was closed by removal, these performance standards were not applicable to Plant Kraft AP-1.

PROFESSIONAL ENGINEER CERTIFICATION FOR DEFERRAL PENDING A FUTURE PERMITTING ACTION UNDER 40 CFR § 257.101(g)

I, Morris L. Maslia, P.E., am a professional engineer and licensed in the State of Georgia. I hereby certify that this report and associated documents were prepared by, or under the direct supervision of, a Qualified Groundwater Scientist, in accordance with the Georgia Environmental Protection Division Rules of Solid Waste Management. According to 391- 3-4-.01, a Qualified Groundwater Scientist is "a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable individuals to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action." By affixing my professional seal and signature, I hereby acknowledge that this demonstration for deferral pending a future permitting action has been prepared in conformance with and meets the technical requirements of 40 CFR § 257.101(g).

November 8, 2024

Date