

September 10, 2025

<u>VIA REGISTERED MAIL – RETURN RECEIPT REQUESTED</u>

Jorge P. Young Cerecedo Chief Executive Officer Alpek Polyester USA, LLC 7621 Little Avenue, Suite 500 Charlotte, NC 28226

Thomas Winn Director of Operations Alpek Polyester USA, LLC – Columbia Site 570 K Avenue Gaston, SC 29053 Mark J. Costa Chief Executive Officer Eastman Chemical Company 200 South Wilcox Drive Kingsport, TN 37660

Site Manager Eastman Chemical Company 500 K Avenue Gaston, SC 29053

Re: Congaree Riverkeeper's Notice of Violations and Intent to File Citizen Suit Under the Clean Water Act and Resource Conservation and Recovery Act

Dear Mr. Cerecedo, Mr. Winn, and Mr. Costa:

This letter is sent to inform Alpek Polyester USA, LLC ("Alpek") and Eastman Chemical Company ("Eastman") that Congaree Riverkeeper has identified Clean Water Act and Resource Conservation and Recovery Act ("RCRA") violations at the industrial plant co-operated by Alpek and Eastman at or near 570 K Avenue in Gaston, SC, 29503 (the "Columbia Plant"). These violations stem from the Columbia Plant's ongoing discharge and release into the environment of substantial numbers of plastic pellets, known as "nurdles," and the toxic chemical 1,4-dioxane, as well as ongoing violations of the Plant's National Pollutant Discharge Elimination System ("NPDES") permit limits for biochemical oxygen demand. This unlawful pollution is causing significant harms to the Congaree River and the mission and members of Congaree Riverkeeper.

Congaree Riverkeeper hereby notifies you that, if these violations are not resolved within 60 days from the date of this letter as to the Clean Water Act and RCRA "open dumping" violations, and 90 days from the date of this letter as to the RCRA imminent and substantial endangerment violations, Congaree Riverkeeper is prepared to file a citizen suit in the United States District Court for the District of South Carolina pursuant to Section 505 of the Clean Water Act, 33 U.S.C. § 1365(a)(1), and Section 7002 of RCRA, 42 U.S.C. 6972(a)(1)(A)–(B). The suit will seek declaratory and injunctive relief requiring the Columbia Plant to abate its unlawful pollution, pay litigation costs and attorneys' fees authorized by statute, pay civil penalties of up to \$68,445 and \$93,058 per day for each of the Clean Water Act and RCRA violations, respectively, and may seek additional appropriate relief. Thank you for your prompt attention to these matters.

I. THE COLUMBIA PLANT

Alpek and Eastman co-operate an industrial plant located at 570 K Avenue in Gaston, South Carolina, 29503 (the "Columbia Plant" or "Plant"). The Plant sits on a roughly 1,400-acre property on the banks of the Congaree River shortly downstream of Columbia, South Carolina.

The Columbia Plant manufactures purified terephthalic acid ("PTA") which is used to produce polyethylene terephthalate ("PET") resins, which are then formed into polyester pellets —also known as "nurdles"—in a fully automated manufacturing process. Raw materials for nurdle production are delivered to the Columbia Plant by railcar or tank car on an off-shoot rail line operated by and exclusively serving the Plant, which enters the Plant from the northwest and terminates within the Plant's boundaries. Finished nurdles are loaded onto trains or trucks and shipped out to customers via the same rail line or via K Avenue, which runs along the western boundary of the Columbia Plant. Nurdles from the Plant are primarily used to make food and beverage packaging.

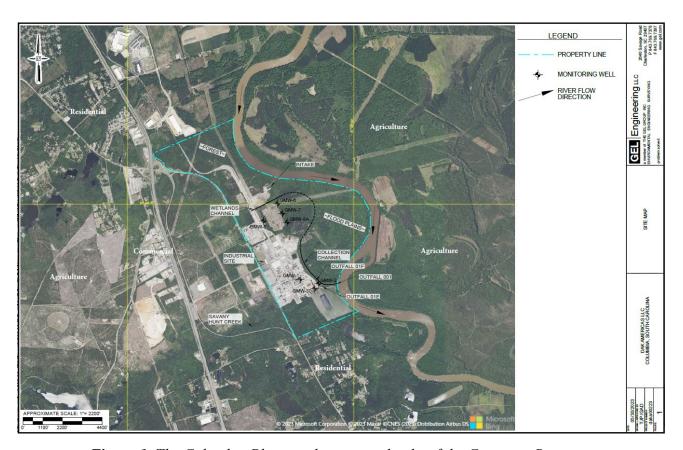


Figure 1. The Columbia Plant on the western banks of the Congaree River

II. THE CONGAREE RIVER AND CONGAREE NATIONAL PARK

The Columbia Plant sits on the banks of the Congaree River, spanning nearly three of the short River's 50 miles of riverbank. The Congaree River originates at the confluence of the Broad and Saluda Rivers in downtown Columbia, flowing several dozen miles before merging with the Wateree River to form the Santee River and emptying into Lake Marion. After passing the Columbia Plant, the Congaree River flows approximately 10 miles through mostly undeveloped bottomland hardwood forest habitat before reaching the Congaree National Park.



Figure 2. Aerial imagery of the Congaree River and Columbia Plant from the southeast (photo by Congaree Riverkeeper)



Figure 3. Congaree River bottomland forest (photo by Alan Cressler)

Congaree National Park (the "National Park") is the largest protected wilderness area in South Carolina, spanning over 20,000 acres of creeks, lakes, and floodplain forest on the banks of the Congaree River. Designated as a Globally Important Bird Area and a National Natural Landmark, the National Park has over 90 species of trees, including enormous bald cypress throughout the Park, and is the largest preserved tract of old-growth bottomland forest left in the United States.

The Congaree River and Congaree National Park support a thriving ecosystem and significant recreation, angling, and ecotourism activities. The floodplain forest surrounding the Congaree River is home to bobcats, deer, wild pigs, coyotes, turkeys, otters, alligators, many species of turtles and snakes, and various other animals. The Congaree River hosts dozens of fish species, including the annual migratory run of striped bass, the state fish of South Carolina, which draws anglers to the Congaree in large numbers each spring. Endangered Shortnose Sturgeon spawning sites have been identified in the Congaree River, and the endangered Carolina Heelsplitter mussel is believed to live in the River. The National Park and surrounding forests have nearly 200 bird species, including the state-listed endangered Swallow-tailed Kite, Anhinga, Pileated Woodpeckers, and Barred Owls, and have potential habitat for endangered Red-Cockaded Woodpeckers.

Congaree National Park attracts up to 250,000 visitors each year, and even more who paddle, fish, boat, and swim on the Congaree River upstream of the Park as it passes through scenic bottomland hardwood forests near the Columbia Plant. Visitors paddle, fish, walk, and bird watch along dozens of miles of trails and creeks off the Congaree River. Members of Congaree Riverkeeper regularly engage in and cherish these activities in and along the River.

III. POLLUTION AT THE COLUMBIA PLANT

a. Nurdle Pollution

Since at least February 28, 2025, and almost certainly before then, the Columbia Plant has been releasing nurdles in substantial quantities onto the lands and waters surrounding the Plant. On that date, Congaree Riverkeeper began collecting nurdles from the environment surrounding the Plant, and has collected and/or observed significant numbers of nurdles: (*i*) within the discharge channel for "Outfall 001" of the Columbia Plant; (*ii*) in the Congaree River and sandbars shortly downstream of the Outfall; (*iii*) at multiple points along K Avenue, which forms the western boundary of the Columbia Plant and which trucks use to haul nurdles made at the Plant; and (*v*) at multiple points along the rail line operated by the Plant, where rail cars haul nurdles made at the Plant (*see* Figures 4, 5 & 6). In addition to the nurdles collected and documented in the figures below, Congaree Riverkeeper has also observed countless thousands of nurdles littered on and around K Avenue in the immediate vicinity of the Columbia Plant.

Nurdle Map

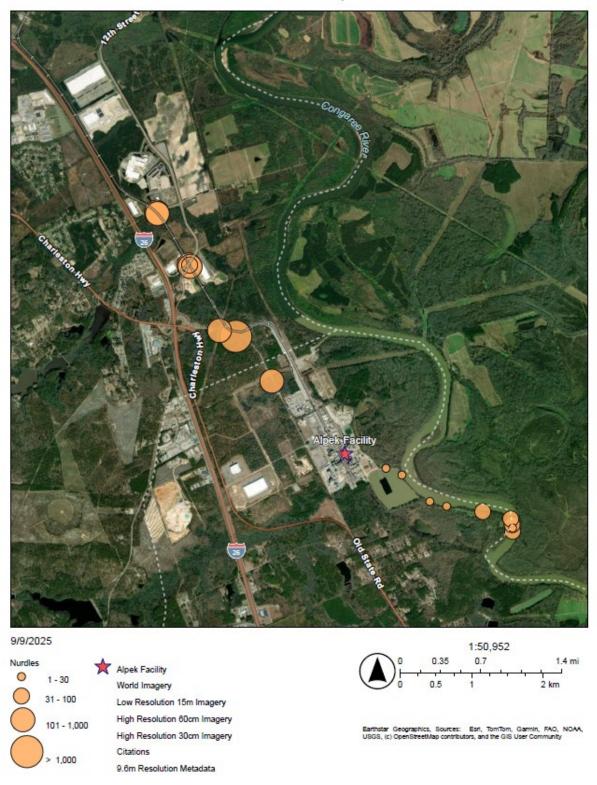


Figure 4. Map depicting locations where Congaree Riverkeeper collected and/or observed nurdles around the Columbia Plant, with circle size corresponding to the number of nurdles



Figures 5 & 6. Nurdles recovered along K Avenue by the entry sign for the Columbia Plant (above) and littering the grass along K Avenue immediately north of the Plant (right).



As reflected in the scientific literature, plastic pellet pollution poses significant threats to aquatic life and communities. Due to their durability and low density, plastic pellets are readily dispersed by water and wind. When discharged into the environment, these "nurdles" break up and multiply into smaller microplastic particles. A primary threat to wildlife from plastic pellet pollution is through ingestion of nurdles or their microplastic remnants. Studies have extensively documented plastics inside mammals, birds, and fish. When an animal ingests plastic pellets, it is potentially exposed to the "cocktail of contaminants" associated with this pollution, both from the chemical ingredients in the nurdles themselves, and from the heavy metals, organic pollutants (such as DDT and PCBs), and other toxins that "sorb" to nurdles from surrounding waters. ¹ Ingesting nurdles and microplastics also causes direct physical harms to wildlife, as microplastics can cause lacerations, starvation, and death, and may translocate through cell membranes into tissue and impair the circulatory, lymphatic, respiratory, and/or other systems. ²

¹ E.g., Chelsea Rochman, The Complex Mixture, Fate and Toxicity of Chemicals Associated with Plastic Debris in the Marine Environment, in Marine Anthropogenic Litter 117, 119 (Melanie Bergmann et al. eds., 2015); U.N. Env't Programme, UNEP Frontier 2016: Emerging Issues of Environmental Concern 38 (2016); Chelsea M. Rochman et al., Ingested plastic transfers hazardous chemicals to fish and induces hepatic stress, 3 Sci. Reports 1, 3263 (2013); Chelsea M. Rochman et al., Classify plastic waste as hazardous, 494 Nature 7436, 169–71 (2013).

² E.g., Chelsea M. Rochman, *Plastics and Priority Pollutants: A Multiple Stressor in Aquatic Habitats*, 47 ENV.TL SCI. & TECH. 6, 2439–40 (2013); Chelsea M. Rochman et al., *Long-Term Field Measurement of Sorption of Organic Contaminants to Five Types of Plastic Pellets: Implications for Plastic Marine Debris*, 47 ENV'TL SCI. & TECH 3, 1646 – 1654 (2013); Chel

Microplastics and the cocktail of associated chemicals are also likely bioaccumulative, meaning that these substance build up in the bodies of exposed animals faster than they can be excreted.³ Studies have shown that exposure to microplastics "can degrade the structure and functions of ecosystems. Key physiological processes of organisms (e.g., cell-division, immunity, secretion of hormones) can be disrupted, causing disease and reducing the ability to escape predators and reproduce."⁴

Nurdle pollution can also have serious impacts on human health. For example, eating fish contaminated with microplastics poses similar chemical and physical risks to people as it does to the fish themselves, particularly due to biomagnification up the food chain. ⁵ "Plastic never goes away—it just breaks down into finer and finer particles," with exposure in humans "suspected to harm reproductive, digestive and respiratory health" and potentially also causing "colon and lung cancer." In addition to the myriad of health risks, plastic pellet pollution also creates observable litter in the environment, harming the aesthetic and recreational enjoyment of recreators.

Congaree Riverkeeper's sampling reveals that untold numbers of plastic pellets are being discharged to and remain in the Congaree River and lands surrounding the Columbia Plant, with nurdles collected during time-limited sampling events reflecting only a tiny fraction of the actual pollution. The danger to the environment and human health posed by this pollution will persist until these pellets are cleaned up and Alpek and Eastman implement sufficient control measures to ensure that no additional releases of nurdles occur.

b. 1,4-Dioxane Pollution

1,4-Dioxane is a toxic chemical linked to a broad array of health problems in humans and animals. The U.S. Environmental Protection Agency ("EPA") and the South Carolina

Stephanie L. Wright et al., *Microplastic ingestion decreases energy reserves in marine worms*, 23 Current Biology 23, R1031–R1033 (2013); Dennis Brennecke et al., *Ingested microplastics* (>100 µm) are translocated to organs of the tropical fiddler crab Uca rapax, 96 (1-2) Marine Pollution Bulletin, 491–95 (2015); Mark A. Browne et al., *Ingested microscopic plastic translocates to the circulatory system of the mussel, Mytilus edulis (L.)*, 42 Environmental Sci. & Tech. 13, 5026–5031 (2008).

³ E.g., Brown et al., supra note 2; France Collard, Anthropogenic particles in the stomach contents and liver of the freshwater fish Squalius cephalus, 634 SCI. TOTAL ENV'TL 1, 1257–64 (2018).

⁴ Rochman (2015), *supra* note 1, at 132–33.

⁵ E.g., Maddison Carbery, Trophic transfer of microplastics and mixed contaminants in the marine food web and implications for human health. 115 Env't Int'l 1, 400–409 (2018); Samantha H. Campbell et al., Microplastics in the gastrointestinal tracts of fish and the water from an urban prairie creek, 2 FACETS 1, 395–409 (2017).

⁶ Katia Savchuk, *Microplastics and our health: What the science says*, STANFORD MEDICINE (Jan. 29, 2025).

Department of Environmental Services ("DES") classify 1,4-dioxane as a likely human carcinogen. EPA has set a health advisory for 1,4-dioxane of 0.35 parts per billion ("ppb") in drinking water based on cancer risk.⁷ This chemical, which is a common byproduct of plastic and polyester manufacturing, is highly persistent and mobile in rivers, having been documented to travel dozens of miles downstream from a discharge in North Carolina to taint a municipal drinking water intake.⁸

According to its discharge monitoring reports, the Columbia Plant routinely discharges large amounts of 1,4-dioxane into the Congaree River—at levels of up to 7,100 ppb in recent years, Ex. A, which is over *20,000 times higher* than EPA's human health advisory. With high concentrations of 1,4-dioxane in its effluent, and total discharge flow averaging over 30 million gallons per day, the Columbia Plant discharges tremendous quantities of 1,4-dioxane into the Congaree: over 30,000 pounds so far in 2025, with over 44,000 pounds discharged in 2023 according to EPA's ECHO database. According to a recent report by the Environmental Integrity Project, the Columbia Plant was the second largest discharger of 1,4-dioxane in the Nation in 2022.

In addition to direct discharges of 1,4-dioxane from its "Outfall 001," the Columbia Plant is also discharging 1,4-dioxane into groundwater from several unlined ¹¹ wastewater treatment ponds that sit near the banks of the Congaree River. According to Alpek's groundwater monitoring reports, 1,4-dioxane has infiltrated the groundwater surrounding the Plant's wastewater lagoons at levels of up to 566 ppb, Ex. B, over 1,600 times higher than EPA's human health advisory for the chemical. Upon information and belief, this contaminated groundwater flows a short distance from under the wastewater treatment system to discharge 1,4-dioxane into the Congaree River.

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⁷ See EPA, Technical Fact Sheet – 1,4-Dioxane, at 1, 3 (2017).

⁸ See, e.g., Lisa Sorg, PW Special Report Part Two: Lax Local Regulation Allows Toxic Carcinogen to Infiltrate Drinking Water Across the Cape Fear River Basin, NC NEWSLINE (July 23, 2020), https://ncnewsline.com/2020/07/23/pw-special-report-part-two-lax-local-regulation-allows-toxic-carcinogen-toinfiltrate-drinking-water-across-the-cape-fear-river-basin/.

⁹ https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?permit_id=SC0001333&year=2025.

¹⁰ Environmental Integrity Project, *Plastic's Toxic River*, at 19 (Nov. 14, 2024), https://environmentalintegrity.org/reports/plastics-toxic-river/.

¹¹ According to Alpek's permitting materials, several wastewater ponds or basins are "earthen lined" or "clay lined." However, such lining does not effectively contain 1,4-dioxane, which readily leaches through soils and such liners. With respect to 1,4-dioxane, the Columbia Plant's wastewater lagoons are effectively unlined, as further evidenced by the high levels of 1,4-dioxane in groundwater near these lagoons.



Figure 7. Map of the Columbia Plant, with the wastewater lagoons outlined in light blue at the bottom right of the property by the Congaree River.

1,4-Dioxane and other chemicals from the Plant's wastewater treatment system are also likely to enter the Congaree River via flooding. According to FEMA's National Flood Hazard Layer, several lagoons and other components of the wastewater treatment system and parts of the railway and other areas of the Columbia Plant lie within the 100-year floodplain of the Congaree River. With severe rainfall and flooding projected to increase, pollutants in and around the Columbia Plant, such as nurdles and 1,4-dioxane, are at a significant risk of washing into the Congaree River.

[continued on next page]





Figures 9 & 10. The components of the wastewater treatment system at the Columbia Plant (left), overlayed with FEMA's 100-year floodplain layer in teal (above).

The Columbia Plant's 1,4-dioxane pollution is a significant concern for members of Congaree Riverkeeper who swim, fish, and paddle in the Congaree River adjacent to and downstream from the Columbia Plant. Given the volume of its 1,4-dioxane pollution and the persistence and mobility of this chemical in rivers, the Columbia Plant's 1,4-dioxane pollution also raises concerns regarding potential impacts to the nearest downstream public drinking water intake—the Lake Marion Regional Water Plant, which draws water roughly 50 miles downstream of the Columbia Plant for several local communities. According to DES, the Columbia Plant's discharges have "the potential to affect" a drinking water intake even further downstream from Lake Marion operated by Santee Cooper on Lake Moultrie. Ex. C at 3.

The Columbia Plant utilizes a wastewater treatment system that is not designed or intended to remove 1,4-dioxane, and does not effectively remove 1,4-dioxane from the Plant's effluent. The utilization of unlined treatment basins, and the placement of those basins in the floodplain, ensures further 1,4-dioxane pollution by the Columbia Plant. Until the Columbia Plant implements treatment and control technologies to effectively remove 1,4-dioxane from its effluent, groundwater, and unlined treatment system, this pollution will remain a threat to river users downstream.

c. Biochemical Oxygen Demand Pollution

According to EPA's ECHO database, the Columbia Plant has repeatedly violated limits on Biochemical Oxygen Demand ("BOD") in its NPDES permit, with 21 separate BOD

violations reported since 2009.¹² BOD is a key indicator of water quality, representing the amount of oxygen it takes to for bacteria and other microorganisms to remove organic matter from water through decomposition. The higher the BOD levels, the greater the degree of organic pollution in the water, which threatens oxygen levels critical to maintaining aquatic life and healthy fisheries. The Columbia Plant's routine violations of BOD limits in its permit—which appear substantially likely to recur given their frequent recurrence for over 15 years—indicate unacceptable levels of pollution in the Plant's effluent. These violations pose yet another threat to fish and users of the Congaree River.

IV. CLEAN WATER ACT VIOLATIONS BY THE COLUMBIA PLANT

In 1972, Congress passed the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Congress established "the national goal that the discharge of pollutants into navigable waters be eliminated." *Id.* § 1251(a)(1).

To achieve these objectives, the Clean Water Act prohibits the discharge of "any pollutant" from a point source to "waters of the United States," *id.* §§ 1311(a), 1362(7), (12), except in compliance with, among other conditions, a NPDES permit issued under Section 402 of the Act, *id.* § 1342.

A pollutant may only be discharged by a permit holder if its presence in the discharge was adequately disclosed to the permitting agency in an application for a NPDES permit. "[T]o the extent that a permit holder discharges a pollutant that it did not disclose, it violates the NPDES permit and the CWA." *Piney Run Preservation Ass'n v. Cty Comm'rs*, 268 F.3d 255, 268 (4th Cir. 2001); *S. Appalachian Mtn. Stewards v. A&G Coal Corp.*, 758 F.3d 560, 565–68 (4th Cir. 2014).

If a facility discharges a pollutant without a NPDES permit, or a permittee discharges a pollutant not authorized by its permit, the Clean Water Act empowers citizens to sue for appropriate relief. Section 505(a)(1) of the Act provides that "any citizen may commence a civil action on his own behalf . . . against any person . . . who is alleged to be in violation of [] an effluent standard or limitation under this chapter." 33 U.S.C. § 1365(a)(1). The Act defines "effluent standard or limitation" enforceable via citizen suit to include "an unlawful act under subsection (a) of section 1311 of this title [prohibiting unpermitted discharges]." 33 U.S.C. § 1365(a)(1), (f).

Each discharge of a pollutant that is not authorized by a NPDES permit constitutes a separate violation of the Clean Water Act. *See* 33 U.S.C. § 1319(d). Persons in violation of this prohibition are subject to a civil penalty of up to \$68,445 per day for each violation, *id.*; 40 C.F.R. § 19.4, in addition to appropriate declaratory and injunctive relief. *See* 33 U.S.C. § 1365.

NPDES permit #SC0001333 authorizes the Columbia Plant to discharge certain pollutants at specified levels into the Congaree River—a "water of the United States"—from a channel designated as "Outfall 001." Ex. D (the "NPDES Permit" or "Permit"). However, the Permit does <u>not</u> authorize the Columbia Plant to discharge any plastic pellets or 1,4-dioxane from Outfall 001 or any other point source. Alpek (formerly Dak Americas, LLC) did not

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¹² https://echo.epa.gov/trends/loading-tool/reports/effluent-exceedances?permit id=SC0001333.

disclose discharges of any plastic pellets, nurdles, or 1,4-dioxane to DES in its application for the Permit. *See* Ex. E. Accordingly, discharges of those pollutants by the Columbia Plant into the Congaree River "violate[] the NPDES permit and the CWA." *Piney Run*, 268 F.3d at 268.

a. Nurdles Violations

As explained above, sampling by Congaree Riverkeeper has discovered significant numbers of nurdles within the discharge channel and in the Congaree River downstream. The Columbia Plant's discharges of nurdles from Outfall 001, which are ongoing, violate its NPDES Permit and the Clean Water Act. Further, given the large numbers of nurdles observed and recovered around the Columbia Plant and in the Congaree River, it is likely that Outfall 001 is not the only "point source" ¹³ of such pollution entering the River from the Plant. To the extent that nurdles are being discharged into the Congaree by the Columbia Plant via any "point source" other than Outfall 001—such as discharges from trucks, trains, boats, nurdle handling, storage, or loading equipment, ditches, pipes, or other conveyances at or near the Columbia Plant—such discharges also violate the Clean Water Act because the Plant does not have a NPDES permit for such discharges.

To the extent the Columbia Plant's discharges of nurdles are being carried through Outfall 001 or any other point source via stormwater, they also violate the NPDES Permit and the Clean Water Act. Section 301(a), in combination with Section 402(p), prohibit point source discharges of stormwater "associated with industrial activity" that are not authorized by a NPDES permit that specifically covers the pollutants found in the facility's runoff. 33 U.S.C. §§ 1311(a), 1342(p). The Columbia Plant has coverage for its stormwater discharges under its individual NPDES Permit, which does not authorize any discharges of nurdle-polluted stormwater. Ex. D at 37. The Columbia Plant does not have any other individual or general NPDES permit that authorizes its nurdles discharges. Thus, the Columbia Plant is violating the Clean Water Act each and every day it discharges stormwater containing nurdles into the Congaree River.

In addition, the significant nurdle discharges by the Columbia Plant indicate that the Plant is in breach of the Storm Water Pollution Prevention Plan Requirements in Appendix A of the NPDES Permit. Part VI.A.1 of Appendix A requires the Columbia Plant to "minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverages," with "particular attention" to be paid to specific spill prevention and collection systems. Ex. D at 40. Part VI.A.2 requires the Plant to "keep clean all exposed areas that are potential sources of pollutants," to keep closed the "lids of waste containers . . . when not in use," and contains specific requirements for "[f]acilities that handle pre-production plastic," like the Columbia Plant, which "must implement best management practices to eliminate discharges of plastic in stormwater," including "plastic resin pellets." Id. (emphasis added). Part VI.A.6 requires the Plant to "divert, infiltrate, reuse, contain, or otherwise

¹³ The Clean Water Act defines "point source" as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." 33 U.S.C. § 1362(14).

reduce storm water runoff, to minimize pollutants in your discharges." *Id.* at 42. Part VI.A.10 states that the Columbia Plant "must ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged." *Id.* at 43. And Part VI.C.1.a prohibits "[a]n unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit)." *Id.* at 44. Given the significant numbers of nurdles littered around the boundaries of the Columbia Plant and in the Congaree River downstream, it is highly likely that the Plant is discharging nurdles via stormwater and is not properly managing stormwater, in violation of one or more of the Storm Water Pollution Prevention Plan Requirements of the NPDES Permit.

Lastly, Congaree Riverkeeper has observed floating nurdles in and near the discharge channel and in the Congaree River downstream; such discharges separately violate Part V.A.1 of the NPDES Permit, which prohibits discharges of "floating solids" other than in trace amounts. Ex. D at 29.

Congaree Riverkeeper hereby gives notice of intent to sue under 33 U.S.C. § 1365(a)(1) based on the Columbia Plant's: (i) discharges of nurdles from Outfall 001 into the Congaree River; (ii) discharges of nurdles from other "point sources" at the Columbia Plant into the Congaree River; (iii) unpermitted stormwater discharges of nurdles via Outfall 001 and other "point sources;" (iv) violations of the Storm Water Pollution Prevention Plan Requirements in Appendix A of the NPDES Permit with respect to the Columbia Plant's nurdle/stormwater management practices; and (v) discharges of floating solids into the Congaree River, all in violation of Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), and the NPDES Permit. These violations have been occurring since at least February 28, 2025, the date when Congaree Riverkeeper began collecting nurdles around the Columbia Plant. Upon information and belief, discovery will show that unlawful nurdle discharges were occurring before that date and continue to occur.

b. 1,4-Dioxane Violations

As explained above, the Columbia Plant's discharge monitoring reports reveal significant and ongoing discharges of 1,4-dioxane via Outfall 001 into the Congaree River. Because the Columbia Plant did not disclose any discharges of 1,4-dioxane to DES in its application to renew its NPDES Permit, these discharges of 1,4-dioxane from Outfall 001 violate the NPDES Permit and the Clean Water Act, 33 U.S.C. § 1311(a). These violations have been occurring since at least July 1, 2020, the earliest date on which Congaree Riverkeeper possesses a discharge monitoring report indicating the presence of 1,4-dioxane in the Columbia Plant's effluent. *See* Ex. F. Upon information and belief, discovery will show that unlawful 1,4-dioxane discharges were occurring from Outfall 001 before that date and continue to occur.

Additionally, as evidenced by the Columbia Plant's groundwater monitoring reports, the Columbia Plant has been discharging 1,4-dioxane into groundwater through its wastewater treatment ponds and other conveyances, including but not limited to ditches, pipes, channels, conduits, and discrete fissures associated with its wastewater treatment system. *E.g.*, Ex. B. Given the proximity of these wastewater treatment conveyances and flowing groundwater to the adjacent Congaree River, *see supra* at 9–10, it is highly likely that this contaminated groundwater is discharging into the Congaree River. Thus, the Columbia Plant is likely discharging 1,4-dioxane into the Congaree River via groundwater in a manner functionally

equivalent to a direct discharge. See Cty. of Maui v. Haw. Wildlife Fund, 590 U.S. 165, 170 (2020). The Columbia Plant has no NPDES permit to discharge 1,4-dioxane into the Congaree River via groundwater from its wastewater treatment system. As a result, these discharges of 1,4-dioxane—separate from those from Outfall 001—are unpermitted and violate the Clean Water Act, 33 U.S.C. § 1311(a). These discharges have been occurring since at least January 2020, the earliest date on which Congaree Riverkeeper possesses a groundwater monitoring report indicating the presence of 1,4-dioxane in the groundwater under the Columbia Plant's wastewater treatment system. See Ex. B. Upon information and belief, discovery will show that unlawful 1,4-dioxane discharges were occurring to the Congaree via groundwater before that date and continue to occur.

Lastly, the Columbia Plant's five-plus years of leaking, seeping, spilling, and/or discharging 1,4-dioxane into groundwater from its improperly lined wastewater treatment system violates Part II.E.6.c of its NPDES Permit, which requires "all reasonable steps" to be taken "to stop and mitigate the impact of releases of wastewater to the environment." Ex. D at 8. As the Permit expressly states, such "permit noncompliance constitutes a violation of the Clean Water Act." *Id.* at 6.

Congaree Riverkeeper hereby gives notice of intent to sue under 33 U.S.C. § 1365(a)(1) based on the Columbia Plant's: (i) unpermitted discharges of 1,4-dioxane from Outfall 001 to the Congaree River, (ii) unpermitted discharges of 1,4-dioxane via groundwater from the wastewater treatment system to the Congaree River, and (iii) discharges of 1,4-dioxane from the wastewater treatment system to groundwater without taking reasonable steps to stop and mitigate these discharges, all in violation of Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), and the NPDES Permit.

c. Biochemical Oxygen Demand Violations

As noted above, the Columbia Plant has routinely violated its permit limits for biochemical oxygen demand for well over a decade. According to EPA's ECHO database, these violations have occurred on at least 21 occasions since 2009: 9/30/2009 (discharge of 15.70 mg/L from Outfall 001; permit limit = 11 mg/L daily maximum); 12/31/2009 (discharge of 15 mg/L from Outfall 001); 12/31/2009 (discharge of 375 kg/d from internal Outfall 01F; permit limit = 372 kg/d daily maximum); 1/31/2010 (discharge of 14 mg/L from Outfall 001); 3/31/2010 (discharge of 33 mg/L from Outfall 001); 12/31/2010 (discharge of 12 mg/L from Outfall 001); 1/31/2011 (discharge of 14 mg/L from Outfall 001); 2/28/2011 (discharge of 17 mg/L from Outfall 001); 3/31/2011 (discharge of 13 mg/L from Outfall 001); 8/31/2011 (discharge of 29 mg/L from Outfall 001); 8/31/2014 (discharge of 13 mg/L from Outfall 001); 12/31/2016 (discharge of 15 mg/L from Outfall 001); 3/31/2019 (discharge of 13 mg/L from Outfall 001); 9/30/2020 (discharge of 34 mg/L from Outfall 001); 10/31/2022 (discharge of 17 mg/L from Outfall 001); 12/31/2023 (discharge of 22 mg/L from Outfall 001); 3/31/2024 (discharge of 12 mg/L from Outfall 001); 12/31/2024 (discharge of 24 mg/L from Outfall 001); 1/31/2025 (discharge of 22 mg/L from Outfall 001); 2/28/2025 (discharge of 559 kg/d from internal Outfall 01F); 2/28/2025 (discharge of 186 kg/d from internal Outfall 01F; permit limit = 141 kg/d).

The frequency, duration, and consistency of these biochemical oxygen demand violations, for a period of over 15 years, indicates that they are substantially likely to recur and are thus continuing violations for Clean Water Act purposes. Congaree Riverkeeper hereby gives

notice of intent to sue under 33 U.S.C. § 13565a)(1) based on these continuing violations by the Columbia Plant.

V. RCRA VIOLATIONS BY THE COLUMBIA PLANT

RCRA "is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid and hazardous waste." *Goldfarb v. Mayor & City Council of Baltimore*, 791 F.3d 500, 504 (4th Cir. 2015) (quoting *Meghrig v. KFC Western, Inc.*, 516 U.S. 479, 483 (1996)). RCRA's "primary purpose . . . is to reduce the generation of hazardous waste and to ensure the proper treatment, storage, and disposal of that waste which is nonetheless generated, so as to minimize the present and future threat to human health and the environment." *Meghrig*, 516 U.S. at 483.

Relevant here, RCRA contains two central protections: (*i*) the prohibition on handling, storage, treatment, transportation or disposal of any solid or hazardous waste which "may present an imminent and substantial endangerment to health or the environment," 42 U.S.C. § 6972(a)(1)(B), and (*ii*) the prohibition on disposing of solid or hazardous waste in a manner that constitutes "open dumping," *id.* § 6945(a). RCRA empowers affected citizens to enforce these prohibitions in federal court through declaratory and injunctive relief, *id.* § 6972(a)(1), and civil penalties of up to \$93,058 per day for each violation, *see id.*; *id.* § 6928(g); 40 C.F.R. § 19.4.

The Columbia Plant is liable under Section 7002(a)(1)(A) and (B) of RCRA, 42 U.S.C. § 6972(a)(1)(A)–(B), because it is: (i) disposing of plastic pellets in a manner which may present an imminent and substantial endangerment of health and the environment, and (ii) disposing of 1,4-dioxane and plastic pellets in a manner that constitutes "open dumping" of these wastes.

a. Imminent and Substantial Endangerment

RCRA allows affected citizens to file suit against:

[A]ny person, . . . including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.

42 U.S.C. § 6972(a)(1)(B). RCRA defines "solid waste" as "any garbage, refuse, sludge from a waste treatment plant . . . and other discarded material . . . resulting from industrial . . . operations[.]" 42 U.S.C. § 6903(27). Although not defined in RCRA, the phrase "other discarded material" has been interpreted "expansive[ly]" by federal courts to include material released into the environment from an industrial site contrary to its intended use. *E.g.*, *Charleston Waterkeeper v. Frontier Logistics*, *L.P.*, 488 F. Supp. 3d 240, 254–57 (D.S.C. 2020) (plastic pellets released by facility into Charleston Harbor were "discarded material" under RCRA). RCRA defines "hazardous waste" as, among other things, a subset of solid waste that poses a "substantial present or potential hazard to human health or the environment when improperly

treated, stored, transported, or disposed of, or otherwise managed." 42 U.S.C. § 6902(5). An imminent and substantial endangerment claim under RCRA "may be predicated on a qualifying *past or present violation.*" *Goldfarb*, 791 F.3d at 504 (citation and quotations omitted, emphasis in original).

In this case, Alpek and Eastman's actions at the Columbia Plant have caused plastic pellets to enter and contaminate the lands surrounding the Plant and the Congaree River in large numbers. Congaree Riverkeeper has documented pellets littering the lands, roadways, rail lines, Outfall 001, and the Congaree River downstream of the Columbia Plant. These nurdles are released into the environment due to Alpek and Eastman's practices, which are insufficient to contain pellets throughout the production process, handling, and transportation that take place at the Columbia Plant. For example, diffuse stormwater, wind, or spills from rail cars and trucks likely carry nurdles onto the land and into waters surrounding the Columbia Plant. As discussed in Section III(a), plastic pellets are harmful to wildlife and pose a risk to humans who eat fish or other wildlife that have ingested the "cocktail of contaminants" associated with nurdle pollution. These issues are of particular concern given the residential neighborhood and pristine bottomland hardwood habitat immediately downstream of the Columbia Plant, and the proximity of the National Park.

Alpek and Eastman are thus contributing to the past or present generation, handling, storage, treatment, transportation, or disposal of solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment. These RCRA violations have been occurring since at least February 28, 2025, the date when Congaree Riverkeeper began collecting plastic pellets around the Columbia Plant. Upon information and belief, discovery will show that unlawful nurdle releases were occurring before that date and are continuing to occur.

b. Open Dumping

In addition to substantial endangerment, RCRA prohibits "any solid waste management practice or disposal of solid waste or hazardous waste which constitutes the open dumping" of that waste. 42 U.S.C. § 6945(a). An "open dump" refers to "any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 6944 of this title and which is not a facility for disposal of hazardous waste." *Id.* § 6903(14).

The Columbia Plant's industrial, manufacturing, and wastewater treatment areas are neither a "sanitary landfill" nor "a facility for disposal of hazardous waste." Nevertheless, the Columbia Plant is disposing of various solid and hazardous wastes at the Plant and the on-site wastewater treatment system, including but not limited to plastic pellets and 1,4-dioxane.

EPA has promulgated criteria to clarify what practices may violate RCRA's open dumping prohibitions. 40 C.F.R. pt. 257. The regulations provide that "[f]acilities or practices in floodplains shall not . . . result in washout of solid waste, so as to pose a hazard to human life, wildlife, or land or water resources." *Id.* § 257.3-1(a). The "washout" of solid waste is defined as the "carrying away of solid waste by waters" of at least a 100-year flood. 40 C.F.R. § 257.3-

1(b)(1), (3). "Carrying away" does not require ongoing human conduct. See Potomac Riverkeeperv. Nat'l Cap. Skeet & Trap Club, Inc., 388 F. Supp. 2d 582, 587 (D. Md. 2005). In fact, the movement of previously disposed solid waste may constitute a violation of RCRA. See United States v. Waste Indus., Inc., 734 F.2d 159, 164–65 (4th Cir.1984) (RCRA "disposal" does not require "active human conduct"); Nurad, Inc. v. William E. Hooper & Sons, Co., 966 F.2d 837, 845 (4th Cir. 1992).

As explained above, the Columbia Plant is disposing of 1,4-dioxane and nurdles in and around the Plant and its wastewater lagoons and railways, as evidenced by groundwater and discharge monitoring reports that indicate significant amounts of 1,4-dioxane is present in the wastewater treatment system and leaching into groundwater, and by Congaree Riverkeeper's recovery of significant amounts of nurdles around the plant and in downstream waters. Significant portions of the Columbia Plant's wastewater lagoons, treatment infrastructure, and rail lines lie within the 100-year floodplain. *Supra* at 9–10. The Columbia Plant's practices of disposing of wastes in these flood-prone areas constitutes an open dump and open dumping in violation of RCRA, 42 U.S.C. § 6945(a), because it creates a substantial risk of the "washout" of nurdles, 1,4-dioxane, and other wastes into the Congaree River by 100-year floodwaters.

These RCRA violations, with respect to 1,4-dioxane, have been occurring since at least January 2020, the earliest date on which Congaree Riverkeeper possesses a groundwater monitoring report indicating the presence of 1,4-dioxane in the groundwater under the Columbia Plant's wastewater treatment system. With respect to nurdles, these RCRA violations have been occurring since at least February 28, 2025, the date when Congaree Riverkeeper began collecting plastic pellets around the Columbia Plant. Upon information and belief, discovery will show that unlawful open dumping was occurring before these dates and is continuing to occur at the Columbia Plant.

VI. PERSONS RESPONSIBLE FOR VIOLATIONS

Both Alpek and Eastman conduct industrial operations at the Columbia Plant that produce nurdles, 1,4-dioxane, and/or biochemical oxygen demand. Both Alpek and Eastman send industrial wastewater to the on-site wastewater treatment system at the Columbia Plant. Both Alpek and Eastman are responsible for and control the trucks, trains, rail lines, buildings, containers, and other conveyances, equipment, and vehicles that load, unload, store, transport, package, or otherwise handle nurdles at and near the Columbia Plant. Pursuant to 40 C.F.R. §§ 135.3 and 254.3, Alpek and Eastman are identified as persons responsible for the violations described herein.

VII. PERSONS GIVING NOTICE AND LEGAL COUNSEL

In accordance with 40 C.F.R. §§ 135.3 and 254.3, Congaree Riverkeeper provides the name, address, and telephone number of the persons giving notice:

Congaree Riverkeeper P.O. Box 5294 Columbia, SC 29250 (803) 760-3357

The Southern Environmental Law Center is legal counsel for Congaree Riverkeeper in this matter and can be contacted at the mail and email addresses and phone number listed below.

VIII. CONCLUSION

As set forth in this letter, the Columbia Plant has been, and continues to be, in violation of the Clean Water Act and RCRA as a result of its discharges and releases of nurdles and 1,4-dioxane, and violations of its NPDES Permit limits for biochemical oxygen demand. If such violations are not adequately addressed within the applicable notice periods, Congaree Riverkeeper intends to file a citizen suit seeking the maximum remedies authorized by law.

Though prepared to initiate a civil action, Congaree Riverkeeper would welcome working collaboratively with you to address the violations described in this letter. If you wish to discuss such remedies in lieu of protracted litigation, please contact the undersigned counsel promptly.

We thank you for your attention to this matter.

Sincerely,

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Cal Paral

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